

LEGAL APTITUDE AND LOGICAL REASONING

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PART A
LEGAL APPTITUDE

Lesson 1

INDIAN CONSTITUTION

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens:

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

INTRODUCTION

The Constitution which lays down the basic structure of a nation's polity is built on the foundations of certain fundamental values. The vision of our founding fathers and the aim and objectives which they wanted to achieve through the Constitution are contained in the Preamble, the Fundamental Rights and the Directive Principles. These three may be described as the soul of the Constitution and the testament of founding fathers to the succeeding generations together with the later Part on Fundamental Duties.

The vision of socio-economic change through the Constitution is reflected in its Preamble. The Preamble expresses the ideals and aspirations of a renaissance India. At independence, emerging out of a long period of foreign domination and oppression under a feudal system, the people were grimly struggling to be reborn into a life of dignity and hope.

The scheme of the Constitution for realisation of socio-economic agenda comprises of both the justiciable Fundamental Rights as well as the non-justiciable Directive Principles. The judicial contribution to the synthesis and the integration of Fundamental Rights and the Directive Principles in the process of "constitutionalising" social and economic rights has been crucial to the realisation of the Directive Principles not only as a means to effectuate Fundamental Rights but also as a source of laws for a welfare state. (Source: Report of the National Commission to Review the Working of the Constitution, 31st March, 2002)

The Constitution places a pre-eminent emphasis on the values of liberty and justice, on treating all citizens as equal before law and on safeguarding the rights of minorities and the oppressed. The people of India derive their existence as a political community from the Constitution, which "we the people", gave to ourselves and, in the process established the Republic of India. It is because the country is Republic, and not a mere democracy, that the people are enjoined to nurture and indeed celebrate, their linguistic, ethnic, cultural and religious diversity and to ensure that the citizens do not suffer from want and indignity. Though the Indian tapestry of traditional multiculturalism nourished by many centuries of assimilative forces has been subjected to occasional fissures, the most diverse nation on earth has been able to overcome those crises and use the innate strength of Indian Republic to uphold the dignity and integrity of India.

Broad Framework of the Constitution

The Constitution of India came into force on January 26, 1950. It is a comprehensive document. Apart from dealing with the structure of Government, the Constitution makes detailed provisions for the rights of citizens and other persons in a number of entrenched provisions and for the principles to be followed by the State in the governance of the country, labelled as "Directive Principles of State Policy". All public authorities – legislative, administrative and judicial derive their powers directly or indirectly from the Constitution which in turn derive its authority from the people.

The preamble to the Constitution sets out the aims and aspirations of the people of India. It is a part of the Constitution. The preamble declares India to be a Sovereign, Socialist, Secular, Democratic Republic and secures to all its citizens Justice, Liberty, Equality and Fraternity. It is declared that the

Constitution has been given by the people to themselves, thereby affirming the republican character of the polity and the sovereignty of the people.

The polity assured to the people of India by the Constitution is described in the preamble as a Sovereign, Socialist, Secular, and Democratic Republic. The expression “Sovereign” signifies that the Republic is externally and internally sovereign. Sovereignty in the strict and narrowest sense of the term implies independence all round, within and without the borders of the country. As discussed above, legal sovereignty is vested in the people of India and political sovereignty is distributed between the Union and the States.

The democratic character of the Indian polity is illustrated by the provisions conferring on the adult citizens the right to vote and by the provisions for elected representatives and responsibility of the executive to the legislature.

The word “Socialist”, added by the 42nd Amendment, aims to secure to its people “justice—social, economic and political”. The Directive Principles of State Policy, contained in Part IV of the Constitution are designed for the achievement of the socialistic goal envisaged in the preamble. The expression “Democratic Republic” signifies that our government is of the people, by the people and for the people.

Federal or Unitary

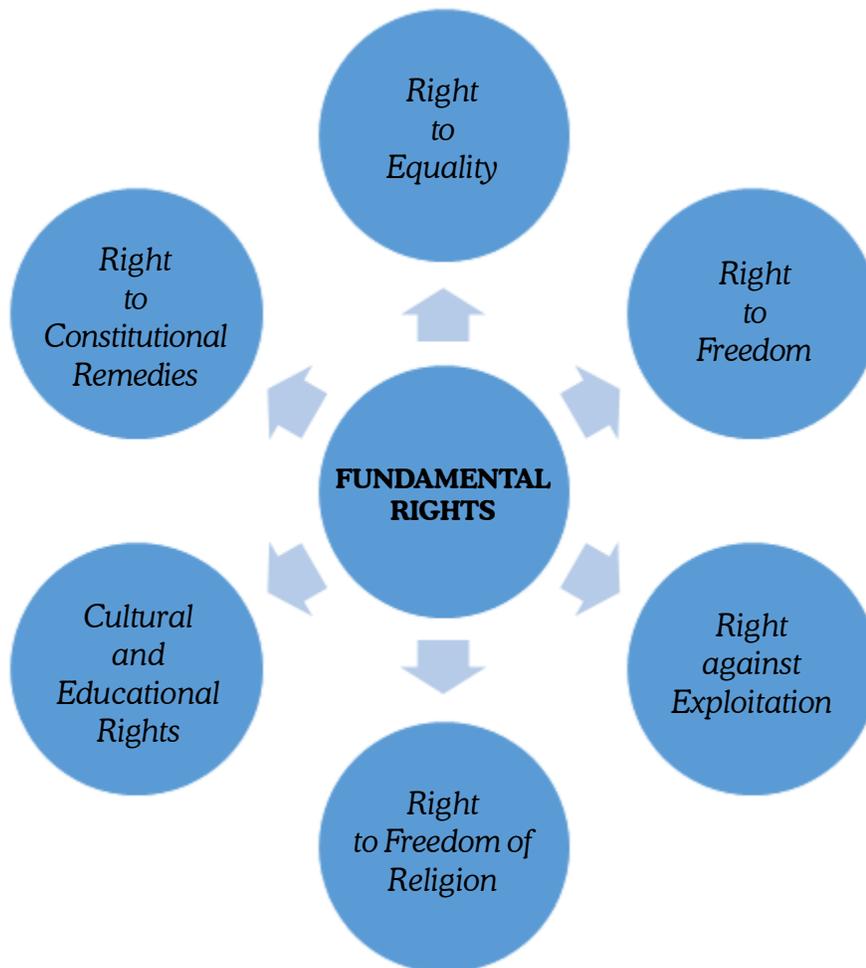
Constitution of India is basically federal but with certain unitary features. The majority of the Supreme Court judges in *Kesavananda Bharati v. State of Kerala*, AIR 1973 SC 1461, were of the view that the federal features form the basic structure of Indian Constitution. However, there are discussions as to whether the Indian Constitution establishes a federal system or it stipulates a unitary form of Government with some basic federal features. Thus, to decide whether Constitution is federal, unitary or quasi federal, it would be better to have a look at the contents of the Constitution.

The essential features of a Federal Polity or System are—dual Government, distribution of powers, supremacy of the Constitution, independence of Judiciary, written Constitution, and a rigid procedure for the amendment of the Constitution.

The political system introduced by our Constitution possesses all the aforesaid essentials of a federal polity as both the Union and the State Governments and their respective organs derive their authority from the Constitution and it is not competent for the States to secede from the Union. There is a division of legislative and executive powers between the Union and the State Governments. The Supreme Court stands at the head of our judiciary to guard against the violation of the constitutional provisions. The Supreme Court decides disputes between the Union and the States, or the States inter se and interprets finally the provisions of the Constitution.

The question as to whether the Indian Constitution has a federal form of Government or a unitary constitution with some federal features came up in various cases before the Supreme Court and the High Courts. But in most cases, the observations have been made in a particular context and

have to be understood accordingly. The question rests mostly on value judgement i.e. on one's own philosophy.



FUNDAMENTAL RIGHTS

The Constitution seeks to secure to the people “liberty of thought, expression, belief, faith and worship; equality of status and of opportunity; and fraternity assuring the dignity of the individual”. With this object, the fundamental rights are envisaged in Part III of the Constitution.

Part III of the Indian Constitution guarantees six categories of fundamental rights. These are:

- Right to Equality — Articles 14 to 18;

- Right to Freedom — Articles 19 to 22;
- Right against Exploitation — Articles 23 and 24;
- Right to Freedom of Religion — Articles 25 to 28;
- Cultural and Educational Rights — Articles 29 and 30;
- Right to Constitutional Remedies — Articles 32.

Previously the right to property under Article 31 was also guaranteed as a Fundamental Right which has been removed by the 44th Constitutional Amendment Act, 1978. Now right to property is not a fundamental right, it is now only a legal right.

Apart from this, Articles 12 and 13 deal with definition of 'State' and 'Law' respectively. Articles 33 to 35 deal with the general provisions relating to Fundamental Rights.

No fundamental right in India is absolute and reasonable restrictions can be imposed in the interest of the state by valid legislation and in such case the Court normally would respect the legislative policy behind the same. (People's Union for Civil Liberties v. Union of India, (2004) 2 SCC 476).

From the point of view of persons to whom the rights are available, the fundamental rights may be classified as follows:

- (a) Articles 15, 16, 19 and 30 are guaranteed only to citizens.
- (b) Articles 14, 20, 21, 22, 23, 25, 27 and 28 are available to any person on the soil of India—citizen or foreigner.
- (c) The rights guaranteed by Articles 15, 17, 18, 20, 24 are absolute limitations upon the legislative power.

State

With a few exceptions, all the fundamental rights are available against the State. Under Article 12, unless the context otherwise requires, "the State" includes—

- (a) the Government and Parliament of India;
- (b) the Government and the Legislature of each of the States; and
- (c) all local or other authorities:
 - (i) within the territory of India; or
 - (ii) under the control of the Government of India.

The expression 'local authorities' refers to authorities like Municipalities, District Boards, Panchayats, Improvement Trusts, Port Trusts and Mining Settlement Boards. In *Ajay Hasia v. Khalid Mujib*, AIR 1981 SC 481, the Supreme Court has enunciated the following test for determining whether an entity is an instrumentality or agency of the State:

- (1) If the entire share capital of the Corporation is held by the Government, it would go a long way towards indicating that the corporation is an instrumentality or agency of the Government.
- (2) Where the financial assistance of the State is so much as to meet almost the entire expenditure of the corporation it would afford some indication of the corporation being impregnated with government character.
- (3) Whether the corporation enjoys a monopoly status which is conferred or protected by the State.
- (4) Existence of deep and pervasive State control may afford an indication that the corporation is a State agency or an instrumentality.
- (5) If the functions of the corporation are of public importance and closely related to government functions, it would be a relevant factor in classifying a corporation as an instrumentality or agency of government.
- (6) If a department of government is transferred to a corporation, it would be a strong factor supporting an inference of the corporation being an instrumentality or agency of government.

Justifiability of Fundamental Rights

Article 13 gives teeth to the fundamental rights. It lays down the rules of interpretation in regard to laws inconsistent with or in derogation of the Fundamental Rights.

Existing Laws : Article 13(1) relates to the laws already existing in force, i.e. laws which were in force before the commencement of the Constitution. A declaration by the Court of their invalidity, however, will be necessary before they can be disregarded and declares that pre-constitution laws are void to the extent to which they are inconsistent with the fundamental rights.

Future Laws : Article 13(2) relates to future laws, i.e., laws made after the commencement of the Constitution. After the Constitution comes into force the State shall not make any law which takes away or abridges the rights conferred by Part III and if such a law is made, it shall be void to the extent to which it curtails any such right.

The word 'law' according to the definition given in Article 13 itself includes—

“... any Ordinance, order, bye-law, rule, regulation, notification, custom or usage having in the territory of India, the force of law.”

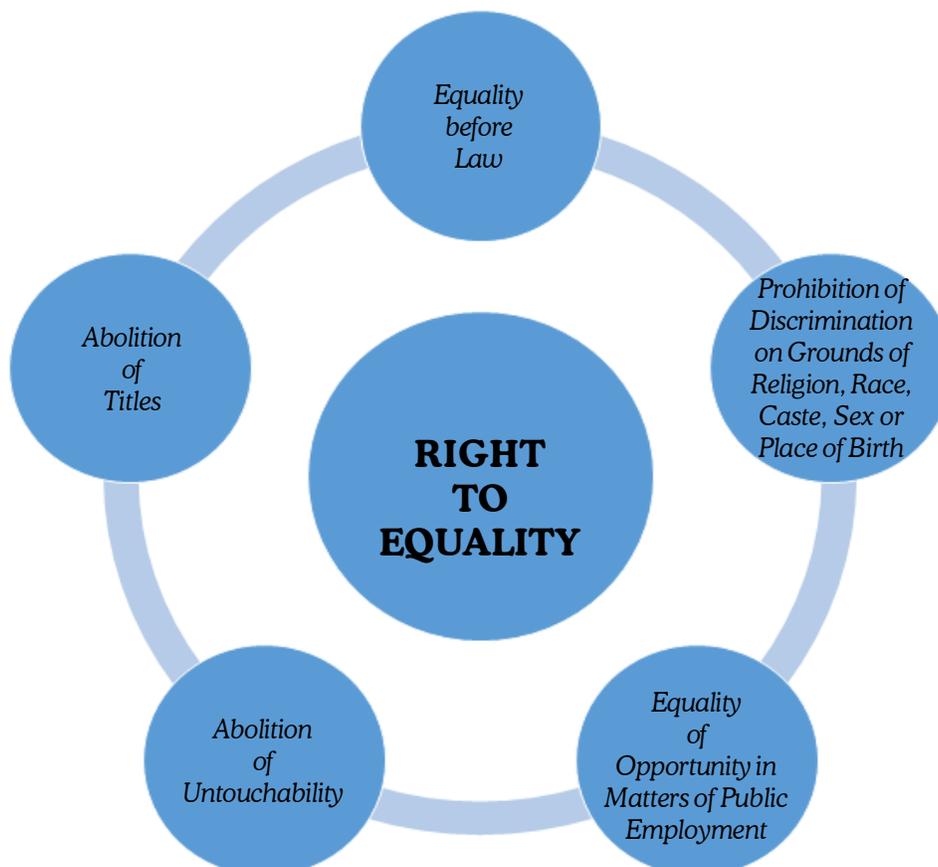
By the Constitution (Twenty-Fourth Amendment) Act, 1971 a new clause has been added to Article 13 which provides that—

“Nothing in this Article shall apply to any amendment of this Constitution made under Article 368”

Article 13 came up for judicial review in a number of cases and the Courts have evolved doctrines like doctrine of eclipse, severability, prospective overruling, acquiescence etc. for interpreting the provisions of Article 13.

Right of equality

Articles 14 to 18 of the Constitution deal with equality and its various facets. The general principle finds expression in Article 14. Particular applications of this right are dealt with in Articles 15 and 16. Still more specialised applications of equality are found in Articles 17 and 18.



Equality before the law and equal protection of the laws

Article 14 of the Constitution says that “the State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India”.

As is evident, Article 14 guarantees to every person the right to equality before the law or the equal protection of the laws. The expression ‘equality before the law’ which is borrowed from English Common Law is a declaration of equality of all persons within the territory of India, implying thereby the absence of any special privilege in favour of any individual. Every person, whatever be his rank or position is subject to the jurisdiction of the ordinary courts.

The second expression “the equal protection of the laws” which is based on the last clause of the first section of the Fourteenth Amendment to the American Constitution directs that equal protection shall be secured to all persons within the territorial jurisdiction of the Union in the enjoyment of their rights and privileges without favouritism or discrimination.

Article 14 applies to all persons and is not limited to citizens. A corporation, which is a juristic person, is also entitled to the benefit of this Article (*Chiranjit Lal Chowdhury v. Union of India*, AIR 1951 SC 41). The right to equality is also recognised as one of the basic features of the Constitution (*Indra Sawhney v. Union of India*, AIR 2000 SC 498).

Prohibition of discrimination on grounds of religion etc.

Article 15(1) prohibits the State from discriminating against any citizen on grounds only of:

- (a) Religion
- (b) Race
- (c) Caste
- (d) Sex
- (e) Place of birth or
- (f) Any of them

Article 15(2) lays down that no citizen shall be subjected to any disability, restriction or condition with regard to—

- (a) Access to shops, public restaurants, hotels and places of public entertainment; or
- (b) The use of wells, tanks, bathing ghats, roads and places of public resort, maintained wholly or partially out of State funds or dedicated to the use of the general public.

Article 15(3) and 15(4) and 15(5) and 15(6) create certain exceptions to the right guaranteed by

Article 15(1) and 15(2). Under Article 15(3) the State can make special provision for women and children. It is under this provision that courts have upheld the validity of legislation or executive orders discriminating in favour of women (*Union of India v. Prabhakaran*, (1997) 2 SCC 633).

Article 15(4) permits the State to make special provision for the advancement of—

- (a) Socially and educationally backward classes of citizens;
- (b) Scheduled castes; and
- (c) Scheduled tribes.

Article 15(5) inserted in the Constitution of India by the Constitution (Ninety-third Amendment) Act, 2005, permits the State to make special provision for the advancement of any socially and educationally backward classes of citizens or for the Scheduled Castes or the Scheduled Tribes in so far as such special provisions relate to their admission to educational institutions including private educational institutions, whether aided or unaided by the State, other than the minority educational institutions referred to in clause (1) of article 30.

Further, Article 15(6) inserted in the Constitution of India by the Constitution (One Hundred and Third Amendment) Act, 2019, provides that nothing in this article or sub-clause (g) of clause (1) of article 19 or clause (2) of article 29 shall prevent the State from making,—

- (a) any special provision for the advancement of any economically weaker sections of citizens other than the classes mentioned in clauses (4) and (5); and
- (b) any special provision for the advancement of any economically weaker sections of citizens other than the classes mentioned in clauses (4) and (5) in so far as such special provisions relate to their admission to educational institutions including private educational institutions, whether aided or unaided by the State, other than the minority educational institutions referred to in clause (1) of article 30, which in the case of reservation would be in addition to the existing reservations and subject to a maximum of ten per cent. of the total seats in each category.

Explanation.—For the purposes of Article 15 and Article 16, "economically weaker sections" shall be such as may be notified by the State from time to time on the basis of family income and other indicators of economic disadvantage.

Equality of opportunity in matters of public employment

Article 16(1) guarantees to all citizens' equality of opportunity in matters relating to employment or appointment of office under the State.

Article 16(2) prohibits discrimination against a citizen on the grounds of religion, race, caste, sex descent, place of birth or residence.

However, there are certain exceptions provided in Article 16(3), 16(4) and 16(5). These are as under:

- (1) Parliament can make a law that in regard to a class or classes of employment or appointment to an office under the Government of a State or a Union Territory, under any local or other authority within the State or Union Territory, residence within that State or Union Territory prior to such employment or appointment shall be an essential qualification. [Article 16(3)]
- (2) A provision can be made for the reservation of appointments or posts in favour of any backward class of citizens which in the opinion of the State is not adequately represented in the services under the State. [Article 16(4)]
- (3) Nothing in this article shall prevent the State from making any provision for reservation in matters of promotion, with consequential seniority, to any class or classes of posts in the services under the State in favour of the Scheduled Castes and the Scheduled Tribes which, in the opinion of the State, are not adequately represented in the services under the State. [Article 16(4A)]
- (4) Nothing in this article shall prevent the State from considering any unfilled vacancies of a year which are reserved for being filled up in that year in accordance with any provision for reservation made under clause (4) or clause (4A) as a separate class of vacancies to be filled up in any succeeding year or years and such class of vacancies shall not be considered together with the vacancies of the year in which they are being filled up for determining the ceiling of fifty per cent. reservation on total number of vacancies of that year. [Article 16(4B)]
- (5) A law shall not be invalid if it provides that the incumbent of an office in connection with the affair of any religious or denominational institution or any member of the governing body thereof shall be a person professing a particular religion or belonging to a particular denomination. [Article 16(5)]
- (6) Nothing in this article shall prevent the State from making any provision for the reservation of appointments or posts in favour of any economically weaker sections of citizens other than the classes mentioned in clause (4), in addition to the existing reservation and subject to a maximum of ten per cent. of the posts in each category. [Article 16(6)]

Abolition of untouchability

Article 17 says that “Untouchability” is abolished and its practice in any form is forbidden. The enforcement of any disability arising out of “Untouchability” shall be an offence punishable in accordance with law.

Untouchability does not include an instigation to social boycott (*Davarajiah v. Padamanna*, AIR 1961 Mad. 35, 39). Punishment for violation of Article 17 is to be provided by Parliament under Article 35(a) (ii).

Abolition of titles

Article 18 is more a prohibition rather than a fundamental right. British Government used to confer

titles upon persons who showed special allegiance to them. Many persons were made Sir, Raj Bahadur, Rai Saheb, Knight, etc. These titles had the effect of creating a class of certain persons which was regarded superior to others and thus had the effect of perpetuating inequality. To do away with that practice, Article 18 provides as under:

- (i) No title, not being a military or academic distinction, shall be conferred by the State.
- (ii) No citizen of India shall accept any title from any foreign State.
- (iii) No person, who is not a citizen of India shall, while he holds any office or trust under the State, accept without the consent of the President, any title from any foreign State.
- (iv) No person, holding any office of profit or trust under State shall without the consent of the

CONSTITUTION GUARANTEES TO THE CITIZENS OF INDIA SIX FREEDOMS

*Freedom
of
speech
and
expression*

*Assemble
peaceably
and
without
arms*

*Form
associations
or
unions*

*Move
freely,
throughout
the
territory
of
India*

*Reside
and
settle in
any part
of the
territory
of
India*

*Practice
any
profession,
or to
carry on
any
occupation,
trade
or
business*

President, accept any present, emolument or office of any kind from or under a foreign State.

Rights Relating to Freedom

Articles 19-22 guarantee certain fundamental freedoms.

The Six Freedoms of Citizens

Article 19(1), of the Constitution, guarantees to the citizens of India six freedoms, namely:

- (a) Freedom of speech and expression;
- (b) Assemble peaceably and without arms;
- (c) Form associations or unions
- (d) Move freely, throughout the territory of India;
- (e) Reside and settle in any part of the territory of India;
- (f) Practice any profession, or to carry on any occupation, trade or business.

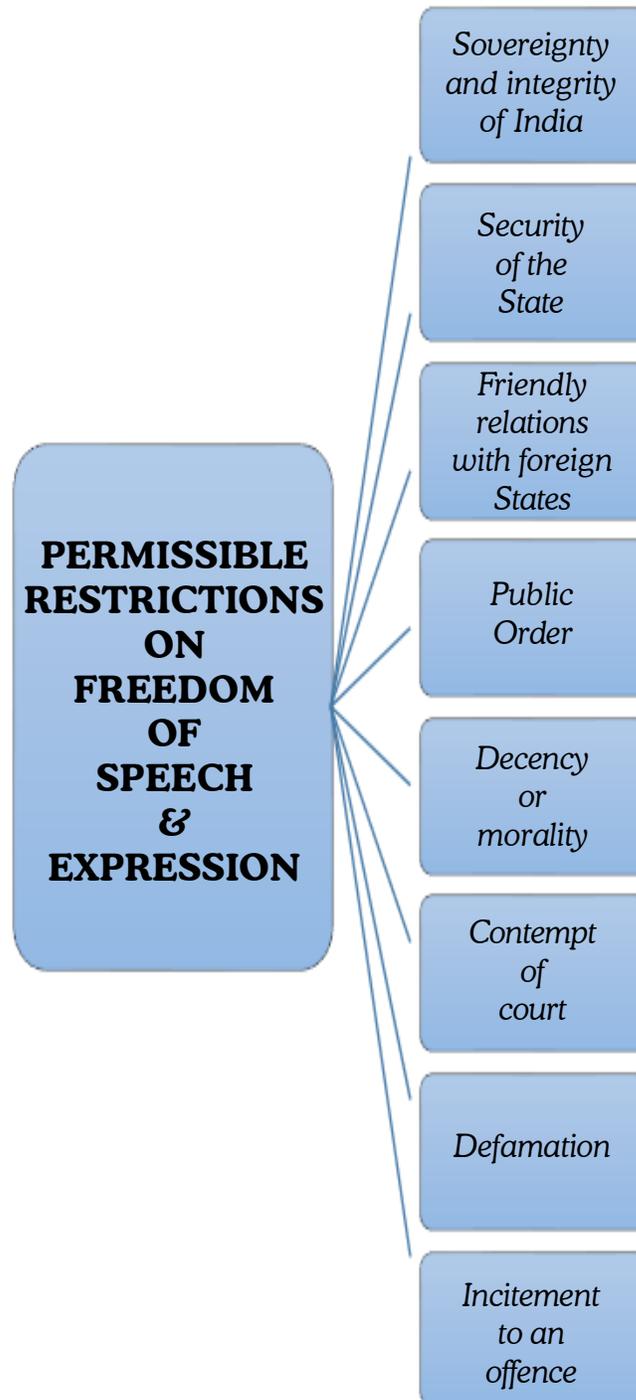
These freedoms are those great and basic rights which are recognized as the natural rights inherent in the status of a citizen. At the same time, none of these freedoms is absolute but subject to reasonable restrictions specified under clauses (2) to (6) of the Article 19. The Constitution under Articles 19(2) to 19(6) permits the imposition of restrictions on these freedoms subject to the following conditions:

- (a) The restriction can be imposed by law and not by a purely executive order issued under a statute;
- (b) The restriction must be reasonable;
- (c) The restriction must be imposed for achieving one or more of the objects specified in the respective clauses of Article 19.

Article 19(2) specifies the limits upto which the freedom of speech and expression may be restricted. It enables the Legislature to impose by law reasonable restrictions on the freedom of speech and expression under the following heads:

Permissible Restrictions

- (1) Sovereignty and integrity of India
- (2) Security of the State
- (3) Friendly relations with foreign States
- (4) Public Order
- (5) Decency or morality
- (6) Contempt of court
- (7) Defamation
- (8) Incitement to an offence



Reasonable restrictions under these heads can be imposed only by a duly enacted law and not by the executive action (*Express News Papers Pvt. Ltd. v. Union of India*, (1986) 1 SCC 133).

Protection of Life and Personal Liberty

Article 21 confers on every person the fundamental right to life and personal liberty. It says that,

“No person shall be deprived of his life or personal liberty except according to procedure established by law.”

The right to life includes those things which make life meaningful. The right to life enshrined in Article 21 guarantees right to live with human dignity. Right to live in freedom from noise pollution is a fundamental right protected by Article 21 and noise pollution beyond permissible limits is an inroad into that right. (*Noise Pollution (v), in re*, (2005) 5 SCC 733).

In *Satwant Singh Sawhney v. A.P.O.*, New Delhi, AIR 1967 S.C. 1836, it was held that right to travel is included within the expression ‘personal liberty’ and, therefore, no person can be deprived of his right to travel, except according to the procedure established by law. Since a passport is essential for the enjoyment of that right, the denial of a passport amounts to deprivation of personal liberty. In the absence of any procedure prescribed by the law of land sustaining the refusal of a passport to a person, its refusal amounts to an unauthorised deprivation of personal liberty guaranteed by Article 21.

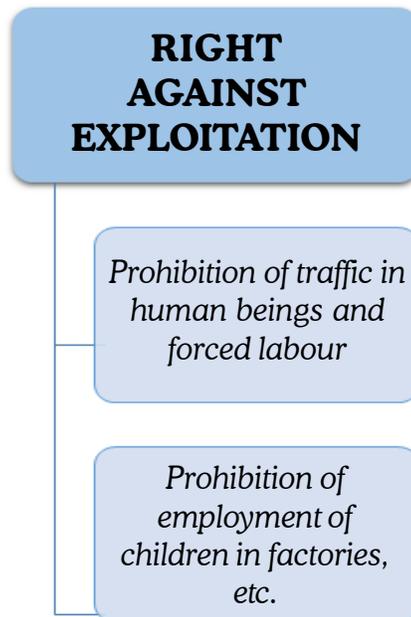
Procedure established by law : The expression ‘procedure established by law’ means procedure laid down by statute or procedure prescribed by the law of the State. Accordingly, first, there must be a law justifying interference with the person’s life or personal liberty, and secondly, the law should be a valid law, and thirdly, the procedure laid down by the law should have been strictly followed. The procedure must be fair, just and reasonable. It must not be arbitrary, fanciful or oppressive.

Right to Education

According to Article 21A of the Constitution of India, the State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine.

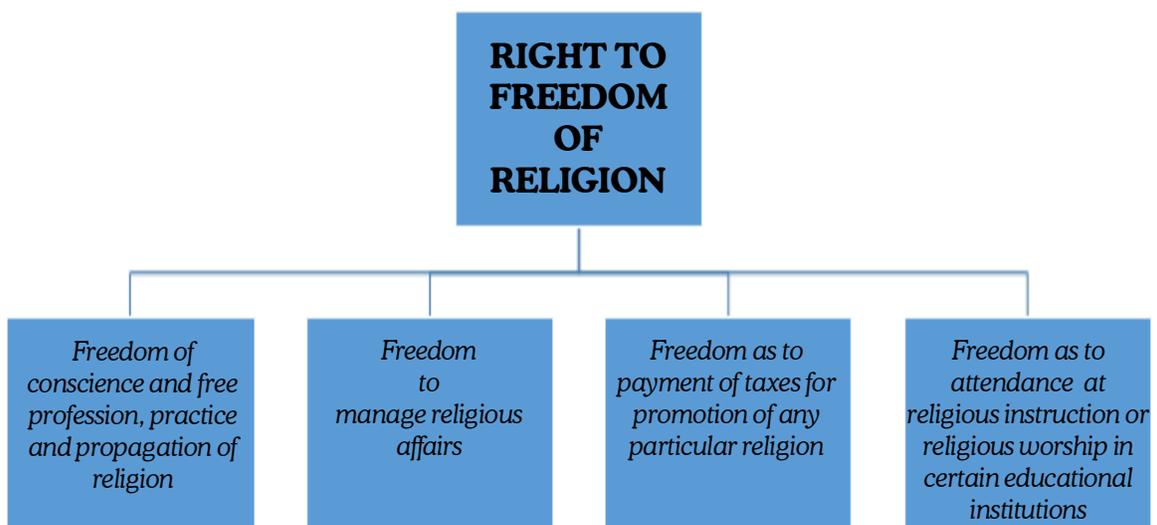
Right against Exploitation

According to, Article 23 of Constitution of India traffic in human beings and begar and other similar forms of forced labour are prohibited and any contravention of Article 23 shall be an offence punishable in accordance with law. Further, as per Article 24 of Constitution of India, no child below the age of fourteen years shall be employed to work in any factory or mine or engaged in any other hazardous employment.



Right to Freedom of Religion

Articles 25, 26, 27 and 28 of Constitution of India deals with right to Freedom of Religion.



Right to Constitutional Remedies

Article 32 guarantees the enforcement of Fundamental Rights. It is remedial and not substantive in nature. The rest of the Articles 33 to 35 relate to supplementary matters and do not create or guarantee any right. Therefore, we shall discuss Article 32 first and then rest of the Articles i.e. 33-35 briefly.

Remedies for Enforcement of Fundamental Rights

It is a cardinal principle of jurisprudence that where there is a right there is a remedy (*ubi jus ibi remedium*) and if rights are given without there being a remedy for their enforcement, they are of no use. While remedies are available in the Constitution and under the ordinary laws, Article 32 makes it a fundamental right that a person whose fundamental right is violated has the right to move the Supreme Court by appropriate proceedings for the enforcement of his fundamental right. It is really a far reaching provision in the sense that a person need not first exhaust the other remedies and then go to the Supreme Court. On the other hand, he can directly raise the matter before highest Court of the land and the Supreme Court is empowered to issue directions or orders or writs in the nature of ***habeas corpus, mandamus, prohibition, quo warranto and certiorari***, whichever may be appropriate for the enforcement of the right, the violation of which has been alleged. This power of the Supreme Court to issue directions, etc., may also be assigned to other Courts by Parliament without affecting the powers of the Supreme Court.

The right to move the Supreme Court is itself a guarantee right and the significance of this has been assessed by Gajendragadkar, J. in the following words:

“The fundamental right to move this Court can therefore be appropriately described as the cornerstone of the democratic edifice raised by the Constitution. That is why it is natural that this Court should, in the words of Patanjali Sastri, J., regard itself ‘as the protector and guarantor of fundamental rights’, and should declare that “it cannot, consistently with the responsibility laid upon it, refuse to entertain applications seeking protection against infringements of such rights. In discharging the duties assigned to it, this Court has to play the role of ‘sentinel on the qui vive’ (*State of Madras v. V.G. Row, AIR 1952 SC 196*) and it must always regard it as its solemn duty to protect the said fundamental rights ‘zealously and vigilantly’ (*Daryao v. State of U.P., AIR 1961 SC 1457*).

DIRECTIVE PRINCIPLES OF STATE POLICY

The Sub-committee on Fundamental Rights constituted by the Constituent Assembly suggested two types of Fundamental Rights — one which can be enforced in the Courts of law and the other which because of their different nature cannot be enforced in the law Courts. Later on however, the former were put under the head ‘Fundamental Rights’ as Part III which we have already discussed and the latter were put separately in Part IV of the Constitution under the heading ‘Directive Principles of State Policy’ which are discussed in the following pages.

The Articles included in Part IV of the Constitution (Articles 36 to 51) contain certain Directives which are the guidelines for the Government to lead the country. Article 37 provides that the ‘provisions contained in this part (i) shall not be enforceable by any Court, but the principles therein laid down

are nevertheless (ii) fundamental in the governance of the country and it shall be the duty of the state to apply these principles in making laws. The Directives, however, differ from the fundamental rights contained in Part-III of the Constitution or the ordinary laws of the land in the following respects:

- (i) The Directives are not enforceable in the courts and do not create any justiciable rights in favour of individuals.
- (ii) The Directives require to be implemented by legislation and so long as there is no law carrying out the policy laid down in a Directive, neither the state nor an individual can violate any existing law.
- (iii) The Directives *per-se* do not confer upon or take away any legislative power from the appropriate legislature.
- (iv) The courts cannot declare any law as void on the ground that it contravenes any of the Directive Principles.
- (v) The courts are not competent to compel the Government to carry out any Directives or to make any law for that purpose.
- (vi) Though it is the duty of the state to implement the Directives, it can do so only subject to the limitations imposed by the different provisions of the Constitution upon the exercise of the legislative and executive power by the state.

Important Directive Principles

To be specific, the important Directive Principles are enumerated below:

- (a) State to secure a social order for the promotion of welfare of the people:
 - (1) The State must strive to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political should inform all the institutions of the national life.
 - (2) The State shall, in particular, strive to minimise the inequalities in income and endeavour to eliminate inequalities in status, facilities, and opportunities, not only amongst individuals but also among groups of people residing in different areas or engaged in different vocations. (Article 38).
- (b) Certain principles of policy to be followed by the State. The State, particularly, must direct its policy towards securing:
 - (i) that the citizens, men and women equally, have the right to an adequate means of livelihood;
 - (ii) that the ownership and control of the material resources of the community are so distributed as best to subserve the common goods;

- (iii) that the operation of the economic systems does not result in the concentration of wealth and means of production to the common detriment;
 - (iv) equal pay for equal work for both men and women;
 - (v) that the health and strength of workers and children is not abused and citizens are not forced by the economic necessity to enter avocation unsuited to their age or strength;
 - (vi) that childhood, and youth are protected against exploitation and against moral and material abandonment (Article 39).
- (bb) The State shall secure that the operation of legal system promotes justice on a basis of equal opportunity, and shall, in particular provide free legal aid, by suitable legislation or schemes or in any other way, to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities (Article 39A).
- (c) The State must take steps to organise the Village Panchayats and enable them to function as units of self-government (Article 40).
- (d) Within the limits of economic capacity and development the State must make effective provision for securing the right to work, to education and to public assistance in case of unemployment, old age, etc. (Article 41).
- (e) Provision must be made for just and humane conditions of work and for maternity relief (Article 42).
- (f) The State must endeavour to secure living wage and good standard of life to all types of workers and must endeavour to promote cottage industries on an individual or co-operative basis in rural areas (Article 43).
- (ff) The State take steps, by suitable legislation or in any other way, to secure the participation of workers in the management of undertakings, establishments or other organisations engaged in any industry (Article 43A).
- (g) The State must endeavour to provide a uniform civil code for all Indian citizens (Article 44).
- (h) Provision for free and compulsory education for all children upto the age of fourteen years (Article 45).
- (i) The State must promote the educational and economic interests of Scheduled Castes, Scheduled Tribes and other weaker sections (Article 46).
- (j) The State must regard it one of its primary duties to raise the level of nutritional and the standard of living and to improve public health and in particular it must endeavour to bring about prohibition of the consumption, except for medicinal purposes, in intoxicating drinks and of drugs which are injurious to health (Article 47).

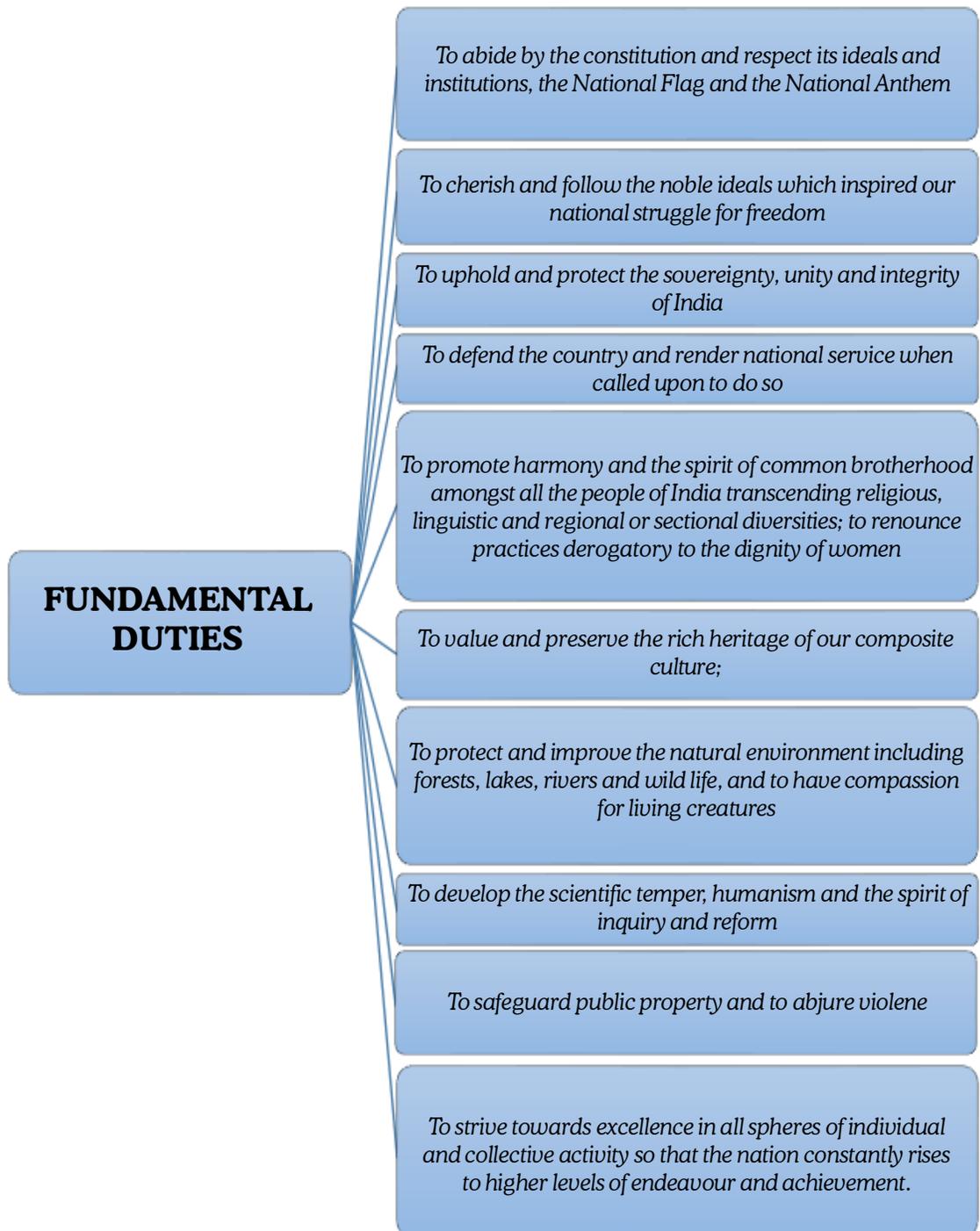
- (k) The State must organise agriculture and animal husbandry on modern and scientific lines and improve the breeds and prohibit the slaughter of cows and calves and other milch and draught cattle (Article 48).
- (kk) The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country (Article 48A).
- (l) Protection of monuments and places and objects of national importance is obligatory upon the State (Article 49).
- (m) The State must separate executive from judiciary in the public services of the State (Article 50).
- (n) In international matters the State must endeavour to promote peace and security, maintain just and honourable relations in respect of international law between nations, treaty obligations and encourage settlement of international disputes by arbitration (Article 51).

FUNDAMENTAL DUTIES

Article 51A imposes the fundamental duties on every citizen of India. These Fundamental Duties are:

- (a) to abide by the constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) To cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

Since the duties are imposed upon the citizens and not upon the States, legislation is necessary for their implementation. Fundamental duties can't be enforced by writs (*Surya Narain v. Union of India*, AIR 1982 Raj 1).



CITIZENSHIP

"The State is a compound made of citizens; and this compels us to consider who should properly be called a citizen and what a citizen really is. The nature of Citizenship like that of the State, is a question which is often disputed; there is no general agreement on a single definition; the man who is a citizen in democracy is often not one in an oligarchy."

Aristotle

National citizenship remains an essential and enduring feature of modern life in terms of politics and elections, welfare state benefits, all round integration etc. Articles 5 to 9 of the Constitution determine who Indian citizens at the commencement of the Constitution are. Article 10 provides for their continuance as such citizens subject to the provisions of any law that may be made by Parliament. Article 11 entrusts the Parliament with powers to regulate the right of citizenship. In other words, the Constitution under Article 11 expressly left acquisition and termination of citizenship and all other matters relating thereto to the Parliament by way of legislation. The legislation related to this matter is the Citizenship Act, 1955.

Article 5: Citizenship at the commencement of the Constitution

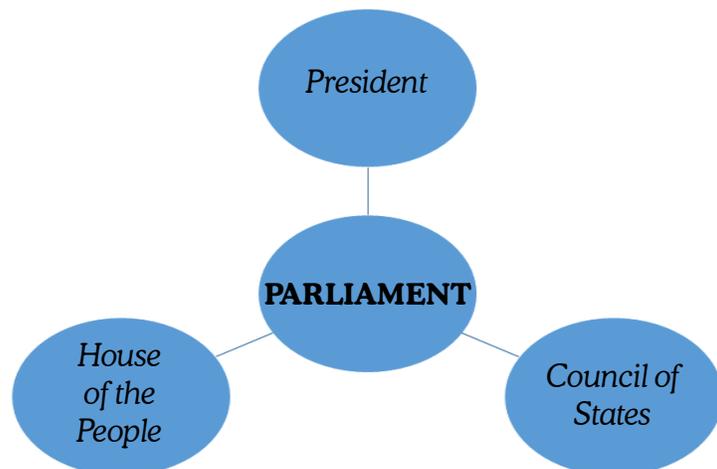
Article 5 provides that at the commencement of the Constitution, every person who has his domicile in the territory of India and—

- (a) Who was born in the territory of India; or
- (b) Either of whose parents was born in the territory of India; or
- (c) Who has been ordinarily resident in the territory of India for not less than five years immediately preceding such commencement, shall be a citizen of India.

PARLIAMENT

There shall be a Parliament for the Union which shall consist of the President and two Houses to be known respectively as the Council of States and the House of the P

eople.



President

The President shall be elected by the members of an electoral college consisting of— (a) the elected members of both Houses of Parliament; and (b) the elected members of the Legislative Assemblies of the States.

Powers of President

In its Article 53 the Constitution lays down that the executive power of the union shall be vested in the President. The President of India shall, thus, be the head of the 'executive power' of the union. The executive power may be defined as the power of "carrying on the business of Government" or "the administration of the affairs of the state" excepting functions which are vested in any other authority by the Constitution. Various powers that are included within the comprehensive expression 'executive power' in a modern state have been classified under following heads :

- (i) Administrative power, i.e., the execution of the laws and the administration of the departments of Government.
- (ii) Military power, i.e., the command of the armed forces and the conduct of war.
- (iii) Legislative power, i.e., the summoning prorogation, etc. of the legislature.
- (iv) Judicial power, i.e., granting of pardons, reprieves etc. to persons convicted of crime.

These powers vest in the President under each of these heads, subject to the limitations made under the Constitution.

Power to Promulgate Ordinance

The most important legislative power conferred on the President is to promulgate Ordinances. Article 123 of the Constitution provides that the President shall have the power to legislate by Ordinances at any time when it is not possible to have a parliamentary enactment on the subject, immediately. This is a special feature of the Constitution of India.

The ambit of this Ordinance-making power of the President is co-extensive with the legislative powers of Parliament, that is to say it may relate to any subject in respect of which Parliament has the right to legislate and is subject to the same constitutional limitations as legislation by Parliament.

Rajya Sabha (Council of States)

The Council of States shall consist of twelve members to be nominated by the President and not more than two hundred and thirty-eight representatives of the States and of the Union territories.

The allocation of seats in the Council of States to be filled by representatives of the States and of the Union territories shall be in accordance with the provisions in that behalf contained in the Fourth

Schedule of the Constitution. The members to be nominated by the President shall consist of persons having special knowledge or practical experience in respect of literature, science, art and social service. The representatives of each State in the Council of States shall be elected by the elected members of the Legislative Assembly of the State in accordance with the system of proportional representation by means of the single transferable vote. The representatives of the Union territories in the Council of States shall be chosen in such manner as Parliament may by law prescribe.

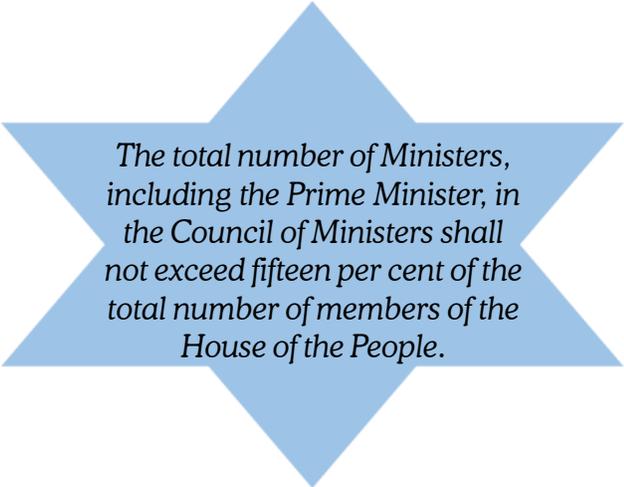
Lok Sabha (House of the People)

Lok Sabha is composed of representatives of the people chosen by direct election on the basis of the adult suffrage. The maximum strength of the House envisaged by the Constitution is 552, which is made up by election of upto 530 members to represent the States, upto 20 members to represent the Union Territories and not more than two members of the Anglo-Indian Community to be nominated by the Hon'ble President, if, in his/her opinion, that community is not adequately represented in the House. The total elective membership is distributed among the States in such a way that the ratio between the number of seats allotted to each State and the population of the State is, so far as practicable, the same for all States.

COUNCIL OF MINISTERS

There shall be a Council of Ministers with the Prime Minister at the head to aid and advise the President who shall, in the exercise of his functions, act in accordance with such advice. The Prime Minister shall be appointed by the President and the other Ministers shall be appointed by the President on the advice of the Prime Minister. The total number of Ministers, including the Prime Minister, in the Council of Ministers shall not exceed fifteen per cent. of the total number of members of the House of the People.

The Ministers shall hold office at the pleasure of the President. The Council of Ministers shall be



The total number of Ministers, including the Prime Minister, in the Council of Ministers shall not exceed fifteen per cent of the total number of members of the House of the People.

collectively responsible to the House of the People. Before a Minister enters upon his office, the President shall administer to him the oaths of office and of secrecy. The salaries and allowances of Ministers shall be such as Parliament may from time to time by law determine and, until Parliament so determines, shall be as specified in the Second Schedule.

CONSTITUTION OF LEGISLATURES IN STATES

For every State there shall be a Legislature which shall consist of the Governor, and

- (i) in the States of Andhra Pradesh, Bihar, Madhya Pradesh, Maharashtra, Karnataka, Tamil Nadu, Telangana and Uttar Pradesh having two Houses
- (ii) in other States, one House.

Where there are two Houses of the Legislature of a State, one shall be known as the Legislative Council and the other as the Legislative Assembly, and where there is only one House, it shall be known as the Legislative Assembly.

The Legislative Assembly of each State shall consist of not more than five hundred, and not less than sixty, members chosen by direct election from territorial constituencies in the State. The total number of members in the Legislative Council of a State having such a Council shall not exceed one third of the total number of members in the Legislative Assembly of that State. The total number of members in the Legislative Council of a State shall in no case be less than forty.

Legislative Assembly of every State, unless sooner dissolved, shall continue for five years from the date appointed for its first meeting and no longer and the expiration of the said period of five years shall operate as a dissolution of the Assembly. The



Legislative Council of a State shall not be subject to dissolution, but as nearly as possible one third of the members thereof shall retire as soon as may be on the expiration of every second year in accordance with the provisions made in that behalf by Parliament by law.

GOVERNOR

The executive power of the State is vested in the Governor and all executive action of the State has to be taken in the name of the Governor. Normally there shall be a Governor for each State but the same person can be appointed as Governor for two or more states. The Governor of a State is not elected but is appointed by the President and holds his office at the pleasure of the President. The head of the executive power to a State is the Governor just as the President for the Union.

The Governor possesses executive, legislation and judicial powers as the Presidents except that he has no diplomate or military powers like the President.

The Governor's power to make Ordinances as given under Article 213 is similar to the Ordinance making power of the President and have the force of an Act of the State Legislature. He can make Ordinance only when the state Legislature or either of the two Houses (where it is bicameral) is not in session. He must be satisfied that circumstances exist which render it necessary to take immediate action. While exercising this power, the Governor must act with the aid and advise of the Council of Ministers. But in following cases, the Governor cannot promulgate any Ordinance without instructions from the President:

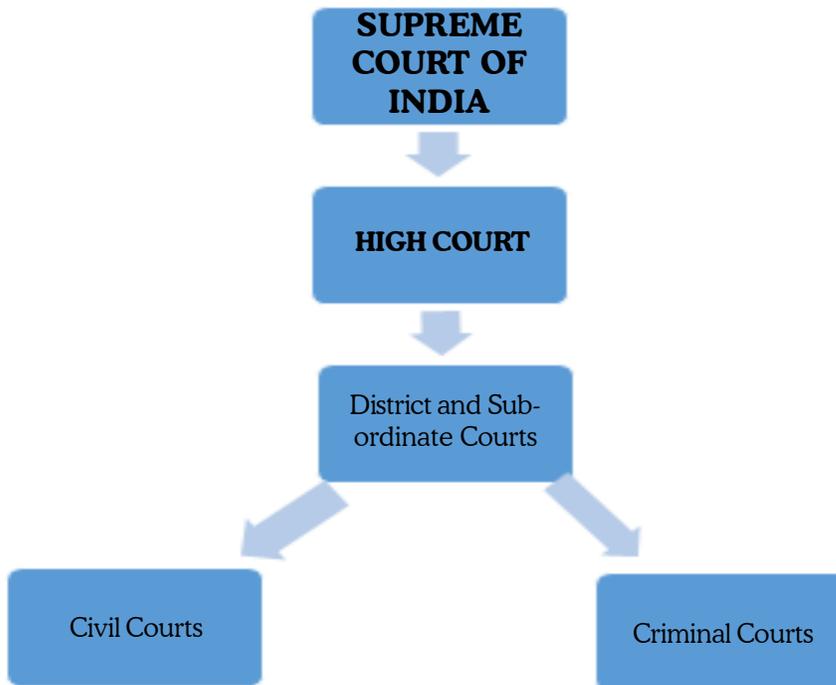
- (a) if a Bill containing the same provisions would under this constitution have required the previous section of the President.
- (b) he would have deemed it necessary to reserve a Bill containing the same provisions for the consideration of the President.
- (c) an Act of the state legislature containing the same provisions would under this constitution have been invalid under having been reserved for the consideration of the President, it had received the assent of the President.

The Ordinance must be laid before the state legislature (when it re-assembles) and shall automatically cease to have effect at the expiration of six weeks from the date of the re-assembly unless disapproved earlier by that legislature.

THE JUDICIARY

The Supreme Court

The Courts in the Indian legal system, broadly speaking, consist of (i) the Supreme Court, (ii) the High Courts, and (iii) the Subordinate Courts. The Supreme Court, which is the highest Court in the country (both for matters of ordinary law and for interpreting the Constitution) is an institution created by the Constitution. Immediately before independence, the Privy Council was the highest appellate authority for British India, for matters arising under ordinary law. But appeals from High Courts in constitutional matters lay to the Federal Court (created under the Government of India



Act, 1935) and thence to the Privy Council. The Supreme Court of India, in this sense, has inherited the jurisdiction of both the Privy Council and the Federal Court. However, the jurisdiction of the Supreme Court under the present Constitution is much more extensive than that of its two predecessors mentioned above.

The Supreme Court, entertains appeals (in civil and criminal and other cases) from High Courts and certain Tribunals. It has also writ jurisdiction for

enforcing Fundamental Rights. It can advise the President on a reference made by the President on questions of fact and law. It has a variety of other special jurisdictions.

High Courts

The High Courts that function under the Constitution were not created for the first time by the Constitution. Some High Courts existed before the Constitution, although some new High Courts have been created after 1950. The High Courts in (British) India were established first under the Indian High Courts Act, 1861 (an Act of the U.K. Parliament). The remaining High Courts were established or continued under the Constitution or under special Acts. High Courts for each State (or Group of States) have appellate, civil and criminal jurisdiction over lower Courts. High Courts have writ jurisdiction to enforce fundamental rights and for certain other purposes.

Some High Courts (notably) Bombay, Calcutta and Delhi, have ordinary original civil jurisdiction (i.e. jurisdiction to try regular civil suits) for their respective cities. High Courts can also hear references made by the Income Tax Appellate Tribunal under the Income Tax Act and other tribunals.

It should be added, that the "writ" jurisdiction vested at present in all High Courts by the Constitution was (before the Constitution came into force) vested only in the High Courts of Bombay, Calcutta and Madras (i.e. the three Presidency towns).

Subordinate Courts

Finally, there are various subordinate civil and criminal courts (original and appellate), functioning under ordinary law. Although their nomenclature and powers have undergone change from time to time, the basic pattern remains the same. These have been created, not under the Constitution, but under laws of the competent legislature. Civil Courts are created mostly under the Civil Courts Act of each State. Criminal courts are created mainly under the Code of Criminal Procedure.

Civil Courts

In each district, there is a District Court presided over by the District Judge, with a number of Additional District Judges attached to the court. Below that Court are Courts of Judges (sometimes called subordinate Judges) and in, some States, Munsiffs. These Courts are created under State Laws.

Criminal Courts

Criminal courts in India primarily consist of the Magistrate and the Courts of Session. Magistrates themselves have been divided by the Code of Criminal Procedure into 'Judicial' and 'Executive' Magistrates.

Executive Magistrate

The Executive Magistrate do not try criminal prosecutions, and their jurisdiction is confined to certain miscellaneous cases, which are of importance for public tranquillity and the like. Their proceedings do not end in conviction or acquittal, but in certain other types of restrictive orders. In some States, by local amendments, Executive Magistrates have been vested with powers to try certain offences.

Judicial Magistrate

Judicial Magistrates, are of two classes: Second Class and First Class. Judicial Magistrates are subject to the control of the Court of Session, which also in itself a Court of original jurisdiction. The powers of Magistrates of the two classes, vary according to their grade. The Court of Session can try all offences, and has power to award any sentence, prescribed by law for the offence, but a sentence of death requires confirmation by the High Court.

In some big cities (including the three Presidency towns and Ahmedabad and Delhi), the Magistrates are called Metropolitan Magistrates. There is no gradation inter se. Further, in some big cities (including the three Presidency towns and Ahmedabad and Hyderabad), the Sessions Court is called the "City Sessions Court", its powers being the same as those of the Courts of Session in the districts.

Special Tribunals

Besides these Courts, which form part of the general judicial set up, there are hosts of specialised Tribunals dealing with Direct Taxes, Labour, Customs, Claims for accidents caused by motor vehicles, Copyright and Environment, Anti- Competitive Agreement etc.

WRIT JURISDICTION OF HIGH COURTS AND SUPREME COURT

Under the Constitution by virtue of Article 226, every High Court has the power to issue directions or orders or writs including writs in the nature of Habeas corpus, Mandamus, Prohibition, Quo warranto and Certiorari or any of them for the enforcement of fundamental rights stipulated in Part III of the Constitution or for any other purpose. This power is exercisable by each High Court throughout the territory in relation to which it exercises jurisdiction.

The Supreme Court could be moved by appropriate proceedings for the issue of directions or orders or writs, as referred to under Article 226 for the enforcement of the rights guaranteed by Part III of the Constitution. Article 32 itself being a fundamental right, the Constitutional remedy of writ is available to anyone whose fundamental rights are infringed by state action.



Types of Writs

A brief description of the various types of writs is given below:

1. Habeas Corpus

The writ of Habeas corpus - an effective bulwark of personal liberty – is a remedy available to a person who is confined without legal justification. The words ‘Habeas Corpus’ literally mean “to have the body”. When a prima facie case for the issue of writ has been made then the Court issues a rule nisi upon the relevant authority to show cause why the writ should not be issued. This is in national order to let the Court know on what grounds he has been confined and to set him free if there is no justification for his detention. This writ has to be obeyed by the detaining authority by producing the person before the Court. Under Articles 32 and 226 any person can move for this writ to the Supreme Court and High Court respectively. The applicant may be the prisoner or any person acting on his behalf to safeguard his liberty for the issuance of the writ of Habeas Corpus as no man can be punished or deprived of his personal liberty except for violation of law and in the ordinary legal manner. An appeal to the Supreme Court of India may lie against an order granting or rejecting the application (Articles

132, 134 or 136). The disobedience to this writ is met with by punishment for contempt of Court under the Contempt of Courts Act.

2. *Mandamus*

The word 'Mandamus' literally means we command. The writ of mandamus is, a command issued to direct any person, corporation, inferior court, or Government requiring him or it do a particular thing specified therein which pertains to his or its office and is further in the nature of a public duty. This writ is used when the inferior tribunal has declined to exercise jurisdiction while resort to certiorari and prohibition arises when the tribunal has wrongly exercised jurisdiction or exceeded its jurisdiction and are available only against judicial and quasi-judicial bodies. Mandamus can be issued against any public authority. It commands activity. The writ is used for securing judicial enforcement of public duties. In a fit case, Court can direct executives to carry out Directive Principles of the Constitution through this writ (State of Maharashtra v. MP Vashi, 1995 (4) SCALE). The applicant must have a legal right to the performance of a legal duty by the person against whom the writ is prayed for. It is not issued if the authority has a discretion.

The Constitution of India by Articles 226 and 32 enables mandamus to be issued by the High Courts and the Supreme Court to all authorities.

3. *Prohibition*

A writ of prohibition is issued to an Inferior Court preventing the latter from usurping jurisdiction which is not legally vested in it. When a tribunal acts without or in excess of jurisdiction, or in violation of rules or law, a writ of prohibition can be asked for. It is generally issued before the trial of the case.

While mandamus commands activity, prohibition commands inactivity, it is available only against judicial or quasi-judicial authorities and is not available against a public officer who is not vested with judicial functions. If abuse of power is apparent this writ may be of right and not a matter of discretion.

4. *Certiorari*

It is available to any person, wherever anybody of persons having legal authority to determine questions affecting the rights of subjects and having the duty to act judicially in excess of their legal authority" (See *The King v. Electricity Commissioners*, (1924) I.K.B. 171, P. 204-5).

The writ removes the proceedings from such body to the High Court, to quash a decision that goes beyond its jurisdiction. Under the Constitution of India, all High Courts can issue the writ of certiorari throughout their territorial jurisdiction when the subordinate judicial authority acts (i) without or in excess of jurisdiction or (ii) in contravention of the rules of natural justice or (iii) commits an error apparent on the face of the record. The jurisdiction of the Supreme Court to issue such writs arises under Article 32. Although the object of both the writs of prohibition and of certiorari is the same, prohibition is available at an earlier stage whereas certiorari is available at a later stage but on similar grounds i.e. Certiorari is issued after authority has exercised its powers.

5. *Quo Warranto*

The writ of quo warranto enables enquiry into the legality of the claim which a person asserts, to an office or franchise and to oust him from such position if he is an usurper. The holder of the office has to show to the court under what authority he holds the office. It is issued when:

- (i) the office is of public and of a substantive nature,
- (ii) created by statute or by the Constitution itself, and
- (iii) the respondent has asserted his claim to the office. It can be issued even though he has not assumed the charge of the office.

The fundamental basis of the proceeding of Quo warranto is that the public has an interest to see that a lawful claimant does not usurp a public office. It is a discretionary remedy which the court may grant or refuse.

MAJOR CONSTITUTIONAL AMENDMENTS 1951 - 2019

The Constitution (First Amendment) Act, 1951

- Added Ninth Schedule to protect the land reform and other laws included in it from the judicial review.
- Added three more grounds of restrictions on freedom of speech and expression, viz., public order, friendly relations with foreign states and incitement to an offence. Also, made the restrictions 'reasonable' and thus, justiciable in nature.
- Empowered the state to make special provisions for the advancement of socially and economically backward classes.

The Constitution (Second Amendment) Act, 1952

The scale of representation in the Lok Sabha by providing that one member could represent even more than 7, 50,000 persons.

Constitution (Forty – Second Amendment) Act, 1976

- It is also known as Mini-Constitution. It was enacted to give effect to the recommendations of Swaran Singh Committee).
- Added three new words (i.e., socialist, secular and integrity) in the Preamble.
- Added Fundamental Duties by the citizens (new Part IV A).
- Made the president bound by the advice of the cabinet.
- Added three new Directive Principles viz., equal justice and free legal aid, participation of workers in the management of industries.

- Shifted five subjects from the state list to the concurrent list, viz, education, forests, protection of wild animals and birds, weights and measures and administration of justice, constitution and organisation of all courts except the Supreme Court and the high courts.
- Empowered the Centre to deploy its armed forces in any state to deal with a grave situation of law and order.

Constitution (Fifty – Second Amendment) Act, 1985

- This amendment popularly known as Anti-Defection Law
- Provided for disqualification of members of Parliament and state legislatures on the ground of defection and added a new Tenth Schedule containing the details in this regard.

Constitution (Sixty – First Amendment) Act, 1989

Reduced the voting age from 21 years to 18 years for the Lok Sabha and state legislative assembly elections.

Constitution (Sixty – Ninth Amendment) Act, 1991

Accorded a special status to the Union Territory of Delhi by designing it as the National Capital Territory of Delhi.

Constitution (Seventieth Amendment) Act, 1989

Provided for the inclusion of the members of the Legislative Assemblies of National Capital Territory of Delhi and the Union Territory of Puducherry in the Electoral College for the election of the president.

Constitution (Eighty-Fourth Amendment) Act, 2001

The number of seats in the Lok Sabha and the assemblies are to remain same till 2026.

Constitution (Eighty-Sixth Amendment) Act, 2002

- Made elementary education a fundamental right. Added Article 21-A which declares that “the State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may determine”.
- Changed the subject matter of Article 45 in Directive Principles. It now reads—“The State shall endeavour to provide early childhood care and education for all children until they complete the age of six years”.
- Added a new fundamental duty under Article 51-A which reads—“It shall be the duty of every citizen of India who is a parent or guardian to provide opportunities for education to his child or ward between the age of six and fourteen years”.

Constitution (Ninety-First Amendment) Act, 2003

- The total number of ministers, including the Prime Minister, in the Central Council of Ministers shall not exceed 15% of the total strength of the Lok Sabha [Article 75(1A)].

- The total number of ministers, including the Chief Minister, in the Council of Ministers in a state shall not exceed 15% of the total strength of the legislative Assembly of that state. But, the number of ministers, including the Chief Minister, in a state shall not be less than 12 [Article 164(1A)].
- The provision of the Tenth Schedule (anti-defection law) pertaining to exemption from disqualification in case of split by one-third members of legislature party has been deleted. It means that the defectors have no more protection on grounds of splits.

Constitution (One Hundred-One Amendment) Act, 2016

- Goods and Services Tax (GST) has commenced with the enactment of the 101st Constitution Amendment Act, 2016.
- Articles 246A, 269A and 279A were added in the constitution. The amendment made changes in the 7th schedule of the constitution.

Constitution (One Hundred-Second Amendment) Act, 2018

- Constitutional status to the National Commission for Backward Classes.
- Inserted a new Article 342-A which empowers President to notify the list of socially and educationally backward classes of that state/union territory.

Constitution (One Hundred-Third Amendment) Act, 2019

It changed two fundamental rights, Article 15 and 16. It provides for the advancement of the economically weaker sections of society. Ten (10%) of all government jobs and college seats will be reserved for people outside the high-income bracket.

Sample Questions

1. Right to Life is a _____
(A) Fundamental Right
(B) Fundamental Duties
(C) Directive principle
(D) Legal Right
2. Total strength of Judges in the Supreme Court of India _____
(A) 25
(B) 30
(C) 31
(D) 34
3. The total number of ministers, including the Prime Minister, in the Central Council of Ministers shall not exceed _____ of the total strength of the Lok Sabha-
(A) 10%
(B) 15%
(C) 20%
(D) 25%
4. Which of the following is not a writ-
(A) Habeas corpus
(B) Mandamus
(C) Quo warranto
(D) Warrant

5. Which of the following State having Legislative Council ?
- (A) Manipur
 - (b) Odisha
 - (C) Telengana**
 - (D) Jharkhand

Lesson 2

**ELEMENTS OF
GENERAL LAWS**

A. INDIAN CONTRACT ACT

INTRODUCTION

A contract is an agreement enforceable at law, made between two or more persons, by which rights are acquired by one or more to acts or forbearances on the part of the other or others. A contract is an agreement creating and defining obligations between the parties.

The Indian Contract Act, 1872 lays down general principles relating to formation and enforceability of contracts; rules governing the provisions of an agreement and offer; the various types of contracts including those of indemnity and guarantee, bailment and pledge and agency. It also contains provisions pertaining to breach of a contract.

The Law of Contract constitutes the most important branch of Mercantile or Commercial Law. It affects everybody, more so, trade, commerce and industry. It may be said that the contract is the foundation of the civilized world.

The Indian Contract Act, 1872 came into force on the first day of September, 1872. The preamble to the Act says that it is an Act "to define and amend certain parts of the law relating to contract". The Act is by no means exhaustive on the law of contract. It does not deal with all the branches of the law of contract. Thus, contracts relating to partnership, sale of goods, negotiable instruments, insurance etc. are dealt with by separate Acts. The Indian Contract Act majorly deals with the general principles and rules governing contracts. The Act is divisible into two parts:

- The first part (Section 1-75) deals with the general principles of the law of contract, and therefore applies to all contracts irrespective of their nature.
- The second part (Sections 124-238) deals with certain special kinds of contracts, namely contracts of Indemnity and Guarantee, Bailment, Pledge, and Agency.

CONTRACT

The Indian Contract Act has defined "Contract" in Section 2(h) as "an agreement enforceable by law". This definition indicate that a contract essentially consists of two distinct parts. First, there must be an agreement. Secondly, such an agreement must be enforceable by law. To be enforceable, an agreement must be coupled with an obligation. A contract therefore, is a combination of the two elements:

- An agreement, and
- An obligation.

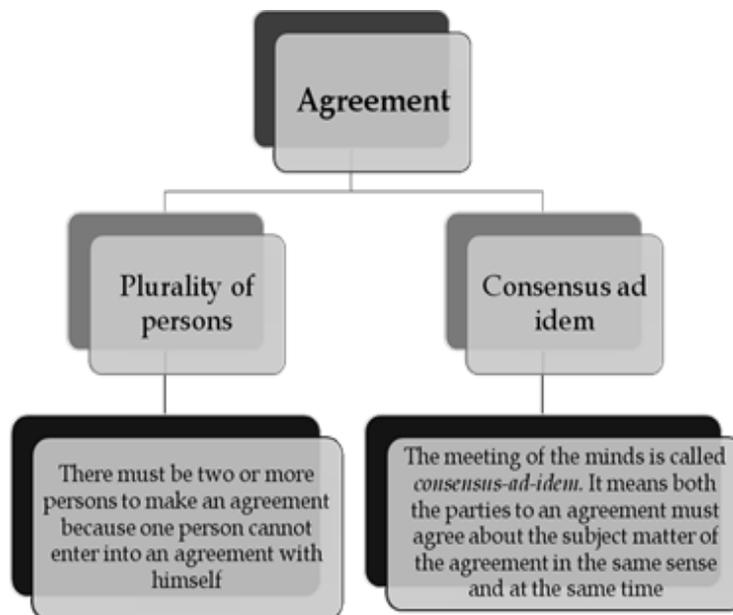
AGREEMENT

An agreement gives birth to a contract. As per Section 2(e) of the Indian Contract Act every promise and every set of promises, forming the consideration for each other, is an agreement.

It is evident from the definition given above that an agreement is based on a promise. What is a

promise? According to Section 2(b) of the Indian Contract Act “*when the person to whom the proposal is made signifies his assent thereto, the proposal is said to be accepted. A proposal, when accepted, becomes a promise. An agreement, therefore, comes into existence when one party makes a proposal or offer to the other party and that other party signifies his assent thereto. In a nutshell, an agreement is the sum total of offer and acceptance.*”

An analysis of the definition given above reveals the following characteristics of an agreement:



OBLIGATION

An obligation is the legal duty to do or abstain from doing what one has promised to do or abstain from doing. A contractual obligation arises from a bargain between the parties to the agreement who are called the promisor and the promisee. Section 2(b) says that when the person to whom the proposal is made signifies his assent thereto, the proposal is said to be accepted; and a proposal when accepted becomes a promise. In broad sense, therefore, a contract is an exchange of promises by two or more persons, resulting in an obligation to do or abstain from doing a particular act, where such obligation is recognised and enforced by law.

Rights and Obligations

Where parties have made a binding contract, they have created rights and obligations between

themselves. The contractual rights and obligations are correlative, e.g., A agrees with B to sell his car for Rs.10, 00,000/- to him. In this example, the following rights and obligations have been created:

- (i) A is under an obligation to deliver the car to B. B has a corresponding right to receive the car.
- (ii) B is under an obligation to pay Rs.10, 00,000/- to A. A has a correlative right to receive Rs.10, 00,000/-.

Agreements which are not Contracts

Agreements in which the idea of bargain is absent and there is no intention to create legal relations are not contracts. These are:

- (a) *Agreements relating to social matters* : An agreement between two persons to go together to the cinema, or for a walk, does not create a legal obligation on their part to abide by it. Similarly, if I promise to take you for dinner and break that promise, I do not expect to be liable to legal penalties. There cannot be any offer and acceptance to hospitality.
- (b) *Domestic arrangements between husband and wife* : In *Balfour v. Balfour* (1919) 2 KB 571, a husband working in Ceylone, had agreed in writing to pay a housekeeping allowance to his wife living in England. On receiving information that she was unfaithful to him, he stopped the allowance. He was held to be entitled to do so. This was a mere domestic arrangement with no intention to create legally binding relations. Therefore, there was no contract.

Three consequences follow from the above discussion

- To constitute a contract, the parties must intend to create legal relationship.
- The law of contract is the law of those agreements which create obligations, and those obligations have their source in agreement.
- Agreement is the genus of which contract is the specie and, therefore, all contracts are agreements but all agreements are not contracts.

Essential Elements of a Valid Contract

Section 10 of the Indian Contract Act, 1872 provides that “all agreements are contracts if they are made by the free consent of parties competent to contract, for a lawful consideration and with a lawful object, and are not hereby expressly declared to be void”.

The essential elements of a valid contract are:

- (i) An offer or proposal by one party and acceptance of that offer by another party resulting in an Agreement — *consensus-ad-idem*.
- (ii) An intention to create legal relations or an intent to have legal consequences.

- (iii) The agreement is supported by a lawful consideration.
- (iv) The parties to the contract are legally capable of contracting.
- (v) Genuine consent between the parties.
- (vi) The object and consideration of the contract is legal and is not opposed to public policy.
- (vii) The terms of the contract are certain.
- (viii) The agreement is capable of being performed i.e., it is not impossible of being performed.

Therefore, to form a valid contract there must be:

- An agreement
- Based on the genuine consent of the parties
- Supported by a lawful consideration
- Made for a lawful object, and
- Between the competent parties.

Offer or Proposal and Acceptance

One of the early steps in the formation of a contract lies in arriving at an agreement between the contracting parties by means of an offer and acceptance. Thus, when one party (the offeror) makes a definite proposal to another party (the offeree) and the offeree accepts it in its entirety and without any qualification, there is a meeting of the minds of the parties and a contract comes into being, assuming that all other elements are also present.

A proposal is also termed as an offer. The word 'proposal' is synonymous with the English word "offer". An offer is a proposal by one person, whereby he expresses his willingness to enter into a contractual obligation in return for a promise, act or forbearance. Section 2(a) of the Indian Contract Act defines proposal or offer as "when one person signifies to another his willingness to do or abstain from doing anything with a view to obtaining the assent of that other to such act or abstinence, he is said to make a proposal". The person making the proposal or offer is called the proposer or offeror and the person to whom the proposal is made is called the offeree.

Rules Governing Offers

A valid offer must comply with the following rules:

- (a) An offer must be clear, definite, complete and final. It must not be vague. For example, a promise to pay an increased price for a horse if it proves lucky to promisor, is too vague and is not binding.

- (b) An offer must be communicated to the offeree. An offer becomes effective only when it has been communicated to the offeree so as to give him an opportunity to accept or reject the same.
- (c) The communication of an offer may be made by express words-oral or written-or it may be implied by conduct.
- (d) The communication of the offer may be general or specific. Where an offer is made to a specific person it is called specific offer and it can be accepted only by that person. But when an offer is addressed to an uncertain body of individuals i.e. the world at large, it is a general offer and can be accepted by any member of the general public by fulfilling the condition laid down in the offer'.

Lapse of Offer

Section 6 deals with various modes of lapse of an offer. It states that an offer lapses if—

- (a) It is not accepted within the specified time (if any) or after a reasonable time, if none is specified.
- (b) It is not accepted in the mode prescribed or if no mode is prescribed in some usual and reasonable manner, e.g., by sending a letter by mail when early reply was requested;
- (c) The offeree rejects it by distinct refusal to accept it;
- (d) Either the offeror or the offeree dies before acceptance;
- (e) The acceptor fails to fulfil a condition precedent to an acceptance.
- (f) The offeree makes a counter offer, it amounts to rejection of the offer and an offer by the offeree may be accepted or rejected by the offeror.

Revocation of Offer by the Offeror

- An offer may be revoked by the offeror at any time before acceptance.
- Revocation must be communicated to the offeree, as it does not take effect until it is actually communicated to the offeree. Before its actual communication, the offeree, may accept the offer and create a binding contract. The revocation must reach the offeree before he sends out the acceptance.
- An offer to keep open for a specified time (option) is not binding unless it is supported by consideration.

Acceptance

A contract emerges from the acceptance of an offer. Acceptance is the act of assenting by the offeree

to an offer. Under Section 2(b) of the Contract Act when a person to whom the proposal is made signifies his assent thereto, the proposal is said to be accepted. A proposal, when accepted becomes a promise.

Rules Governing Acceptance

- (a) Acceptance may be express i.e. by words spoken or written or implied from the conduct of the parties.
- (b) If a particular method of acceptance is prescribed, the offer must be accepted in the prescribed manner.
- (c) Acceptance must be unqualified and absolute and must correspond with all the terms of the offer.
- (d) A counter offer or conditional acceptance operates as a rejection of the offer and causes it to lapse, e.g., where a horse is offered for Rs.1,000 and the offeree counter-offers Rs.990, the offer lapses by rejection.
- (e) Acceptance must be communicated to the offeror, for acceptance is complete the moment it is communicated. Where the offeree merely intended to accept but does not communicate his intention to the offeror, there is no contract. Mere mental acceptance is not enough.
- (f) Mere silence on the part of the offeree does not amount to acceptance.

Ordinarily, the offeror cannot frame his offer in such a way as to make the silence or inaction of the offeree as an acceptance. In other words, the offeror can prescribe the mode of acceptance but not the mode of rejection.

- (g) If the offer is one which is to be accepted by being acted upon, no communication of acceptance to the offeror is necessary, unless communication is stipulated for in the offer itself.

Thus, if a reward is offered for finding a lost dog, the offer is accepted by finding the dog after reading about the offer, and it is unnecessary before beginning to search for the dog to give notice of acceptance to the offeror.

- (h) Acceptance must be given within a reasonable time and before the offer lapses or is revoked. An offer becomes irrevocable by acceptance.

An acceptance never precedes an offer. There can be no acceptance of an offer which is not communicated. Similarly, performance of conditions of an offer without the knowledge of the specific offer, is no acceptance.

Contracts over the Telephone

Contracts over the telephone are regarded the same in principle as those negotiated by the parties in the actual presence of each other. In both cases an oral offer is made and an oral acceptance is

expected. It is important that the acceptance must be audible, heard and understood by the offeror. If during the conversation the telephone lines go “dead” and the offeror does not hear the offeree’s word of acceptance, there is no contract at the moment. If the whole conversation is repeated and the offeror hears and understands the words of acceptance, the contract is complete (Kanhaiyalal v. Dineshwarchandra (1959) AIR, M.P. 234).

Intention to Create Legal Relations

The second essential element of a valid contract is that there must be an intention among the parties that the agreement should be attached by legal consequences and create legal obligations. If there is no such intention on the part of the parties, there is no contract between them. Agreements of a social or domestic nature do not contemplate legal relationship. As such they are not contracts.

A proposal or an offer is made with a view to obtain the assent to the other party and when that other party expresses his willingness to the act or abstinence proposed, he accepts the offer and a contract is made between the two. But both offer and acceptance must be made with the intention of creating legal relations between the parties. The test of intention is objective. The Courts seek to give effect to the presumed intention of the parties. Where necessary, the Court would look into the conduct of the parties, for much can be inferred from the conduct. The Court is not concerned with the mental intention of the parties, rather what a reasonable man would say, was the intention of the parties, having regard to all the circumstances of the case.

For example, if two persons agree to assist each other by rendering advice, in the pursuit of virtue, science or art, it cannot be regarded as a contract. In commercial and business agreements, the presumption is usually that the parties intended to create legal relations. But this presumption is rebuttable which means that it must be shown that the parties did not intend to be legally bound.

Consideration

Consideration is one of the essential elements of a valid contract. The requirement of consideration stems from the policy of extending the arm of the law to the enforcement of mutual promises of parties. A mere promise is not enforceable at law. For example, if A promises to make a gift of Rs. 500 to B, and subsequently changes his mind, B cannot succeed against A for breach of promise, as B has not given anything in return.

It is only when a promise is made for something in return from the promisee, that such promise can be enforced by law against the promisor. This something in return is the consideration for the promise.

Sir Fredrick Pollock has defined consideration “as an act or forbearance of one party, or the promise thereof is the price for which the promise of the other is bought”.

It is “some right, interest, profit, or benefit accruing to one party or some forbearance, detriment, loss or responsibility, given, suffered or undertaken by the other” (*Currie v. Misa* (1875) L.R. 10 Ex. 153).

Section 2(d) of the Indian Contract Act, 1872 defines consideration thus: “when at the desire of the promisor, the promisee or any other person has done or abstained from doing, or does or abstains from

doing, or promises to do or to abstain from doing something, such act or abstinence or promise is called a consideration for the promise”.

The fundamental principle that consideration is essential in every contract, is laid down by both the definitions but there are some important points of difference in respect of the nature and extent of consideration and parties to it under the two systems:

- (a) *Consideration at the desire of the promisor* : Section 2(d) of the Act begins with the statement that consideration must move at the desire or request of the promisor. This means that whatever is done must have been done at the desire of the promisor and not voluntarily or not at the desire of a third party. If A rushes to B's help whose house is on fire, there is no consideration but a voluntary act. But if A goes to B's help at B's request, there is good consideration as B did not wish to do the act gratuitously.
- (b) *Consideration may move from the promisee or any other person* : In English law, consideration must move from the promisee, so that a stranger to the consideration cannot sue on the contract. A person seeking to enforce a simple contract must prove in court that he himself has given the consideration in return for the promise he is seeking to enforce.

In Indian law, however, consideration may move from the promisee or any other person, so that a stranger to the consideration may maintain a suit. In *Chinnaya v. Ramaya*, (1882) 4 Mad. 137, a lady by a deed of gift made over certain property to her daughter directing her to pay an annuity to the donor's brother as had been done by the donor herself before she gifted the property. On the same day, her daughter executed in writing in favour of the donor's brother agreeing to pay the annuity. Afterwards the donee (the daughter) declined to fulfil her promise to pay her uncle saying that no consideration had moved from him. The Court, however, held that the uncle could sue even though no part of the consideration received by his niece moved from him. The consideration from her mother was sufficient consideration.

Privity of Contract

A stranger to a contract cannot sue both under the English and Indian law for want of privity of contract. The following illustration explains this point.

In *Dunlop Pneumatic Tyre Co. v. Selfridge Ltd.* (1915) A.C. 847, D supplied tyres to a wholesaler X, on condition that any retailer to whom X re-supplied the tyres should promise X, not to sell them to the public below D's list price. X supplied tyres to S upon this condition, but nevertheless S sold the tyres below the list price. Held: There was a contract between D and X and a contract between X and S. Therefore, D could not obtain damages from S, as D had not given any consideration for S's promise to X nor was he party to the contract between D and X.

Thus, a person who is not a party to a contract cannot sue upon it even though the contract is for his benefit. A, who is indebted to B, sells his property to C, and C the purchaser of the property, promises to pay off the debt to B. In case C fails to pay B, B has no right to sue C for there is no privity of contract between B and C.

Kinds of Consideration

Consideration may be:

- (a) Executory or future which means that it makes the form of promise to be performed in the future, e.g., an engagement to marry someone; or
- (b) Executed or present in which it is an act or forbearance made or suffered for a promise. In other words, the act constituting consideration is wholly or completely performed, e.g., if A pays today Rs.100 to a shopkeeper for goods which are promised to be supplied the next day, A has executed his consideration but the shopkeeper is giving executory consideration—a promise to be executed the following day. If the price is paid by the buyer and the goods are delivered by the seller at the same time, consideration is executed by both the parties.
- (c) Past which means a past act or forbearance, that is to say, an act constituting consideration which took place and is complete (wholly executed) before the promise is made.

Rules Governing Consideration

- (a) Every simple contract must be supported by valuable consideration otherwise it is formally void subject to some exceptions.
- (b) Consideration may be an act of abstinence or promise.
- (c) There must be mutuality i.e., each party must do or agree to do something. A gratuitous promise as in the case of subscription for charity, is not enforceable.
- (d) Consideration must be real, and not vague, indefinite, or illusory, e.g., a son's promise to "stop being a nuisance" to his father, being vague, is no consideration.
- (e) Although consideration must have some value, it need not be adequate i.e., a full return for the promise. Section 25 (Exp. II) clearly provides that "an agreement to which the consent of the promisor is freely given is not void merely because the consideration is inadequate.
- (f) Consideration must be lawful, e.g., it must not be some illegal act such as paying someone to commit a crime. If the consideration is unlawful, the agreement is void.
- (g) Consideration must be something more than the promisee is already bound to do for the promisor. Thus, an agreement to perform an existing obligation made with the person to whom the obligation is already owed, is not made for consideration

When Consideration not Necessary

The general rule is that an agreement made without consideration is void. But Section 25 of the Indian Contract Act lays down certain exceptions which make a promise without consideration valid and binding. Thus, an agreement without consideration is valid:

If it is expressed in writing and registered and is made out of natural love and affection between parties standing in a near relation to each other; or

If it is made to compensate a person who has already done something voluntarily for the promisor, or done something which the promisor was legally compellable to do; or

If it is a promise in writing and signed by the person to be charged therewith, or by his agent, to pay a debt barred by the law of limitation

Besides, according to Section 185 of the Indian Contract Act, consideration is not required to create an agency

In the case of gift actually made, no consideration is necessary. There need not be nearness of relation and even if it is, there need not be any natural love and affection between them

The requirements in the above exceptions are noteworthy. The first one requires written and registered promise. The second may be oral or in writing and the third must be in writing.

Flaws in Contract

There may be circumstances under which a contract made under these rules may still be bad, because there is a flaw, vice or error somewhere. As a result of such a flaw, the apparent agreement is not a real agreement. Where there is no real agreement, the law has three remedies:

Firstly : The agreement may be treated as of no effect and it will then be known as void agreement.

Secondly : The law may give the party aggrieved the option of getting out of his bargain, and the contract is then known as voidable.

Thirdly : The party at fault may be compelled to pay damages to the other party

Void Agreement

A void agreement is one which is destitute of all legal effects. It cannot be enforced and confers no rights on either party. It is really not a contract at all, it is non-existent. Technically the words 'void contract' are a contradiction in terms. But the expression provides a useful label for describing the situation that arises when a 'contract' is claimed but in fact does not exist. For example, a minor's contract is void.

According to Section 2 (j) of the Indian Contract Act, a contract which ceases to be enforceable by law becomes void when it ceases to be enforceable. Void means a lack of existence or a nullity.

Contract Act, an agreement which is enforceable by law at the option of one or more of the parties thereto, but not at the option of the other or others, is a voidable contract.

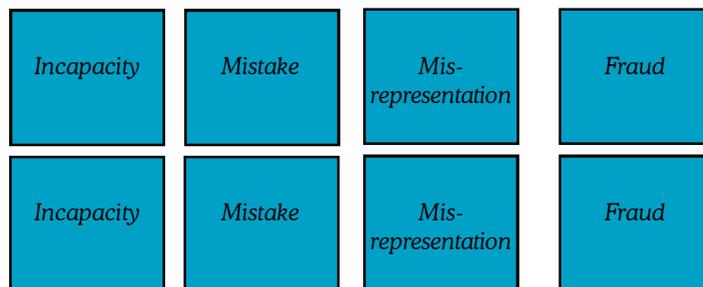
A voidable contract is one which a party can put to an end. He can exercise his option, if his consent was not free. The contract will, however be binding, if he does not exercise his option to avoid it within a reasonable time. The consent of a party is not free and so he is entitled to avoid the contract, if he has given his consent due to misrepresentation, fraud, coercion or undue influence.

Illegal Agreement

An illegal agreement is one which, like the void agreement has no legal effects as between the immediate parties. Further, transactions collateral to it also become tainted with illegality and are, therefore, not enforceable. Parties to an unlawful agreement cannot get any help from a Court of law, for no polluted hands shall touch the pure fountain of justice. On the other hand, a collateral transaction can be supported by a void agreement.

For example, one party may have deceived the other party, or in some other way there may be no genuine consent. The parties may be labouring under a mistake, or one or both the parties may be incapable of making a contract. Again, the agreement may be illegal or physically impossible. All these are called “the FLAWS in contract or the VICES of contract”.

The chief flaws in contract are:



Flaw in Capacity - Capacity and Persons

In law, persons are either natural or artificial. Natural persons are human beings and artificial persons are corporations. Contractual capacity or incapacity is an incident of personality.

The general rule is that all natural persons have full capacity to make binding contracts. But the Indian Contract Act, 1872 admits an exception in the case of:

- (i) minors,
- (ii) lunatics, and
- (iii) persons disqualified from contracting by any law to which they are subject.

These persons are not competent to contract. Section 11 of the Act provides that every “person is competent to contract who is of the age of majority according to the law to which he is subject, and who is of sound mind, and is not disqualified from contracting by any law to which he is subject”. A valid agreement requires that both the parties should understand the legal implications of their conduct. Thus, both must have a mature mind. The legal yardstick to measure maturity according to the law of contract is, that both should be major and of sound mind and if not, the law would presume that the maturity of their mind has not reached to the extent of visualising the pros and cons of their acts, hence, a bar on minors and lunatics competency to contract.

Lunatics Agreement

A person of unsound mind is a lunatic. That is to say for the purposes of making contract, a person is of unsound mind if at the time when he makes the contract, he is incapable of understanding it and of forming rational judgment as to its effect upon his interests.

A person of unsound mind cannot enter into a contract. A lunatic’s agreement is therefore void. But if he makes a contract when he is of sound mind, i.e., during lucid intervals, he will be bound by it.

If a contract entered into by a lunatic or person of unsound mind is for his benefit, it can be enforced (for the benefit) against the other party but not vice-versa [*Jugal Kishore v. Cheddu*, (1903) 1 All. L.J 43]

Flaw in Consent

The basis of a contract is agreement, i.e., mutual consent. In other words, the parties should mean the something in the same sense and agree voluntarily. It is when there is consent, that the parties are said to be consensus ad idem i.e. their minds have met. Not only consent is required but it must be a free consent. Consent is not free when it has been caused by coercion, undue influence, misrepresentation, fraud or mistake. These elements if present, may vitiate the contract.

When this consent is wanting, the contract may turn out to be void or voidable according to the nature of the flaw in consent. Where there is no consent, there can be no contract as in the case of mutual mistake. Where there is consent, but it is not free, a contract is generally voidable at the option of the party whose consent is not free. In the case of misrepresentation, fraud, coercion, undue influence, the consent of one of the parties is induced or caused by the supposed existence of a fact which did not exist.

Wilful Misrepresentation or Fraud

As per Section 7 of the Indian Contract Act, ‘Fraud’ means and includes any of the following acts committed by a party to a contract, or with his connivance, or by his agent, with intent to deceive another party thereto or his agent, or to induce him to enter into the contract:

- The suggestion, as a fact, of that which is not true, by one who does not believe it to be true;
- The active concealment of a fact by one having knowledge or belief of the fact;

- A promise made without any intention of performing it;
- Any other act fitted to deceive;
- Any such act or omission as the law specially declares to be fraudulent.

Fraud is an untrue statement made knowingly or without belief in its truth or recklessly, carelessly, whether it be true or false with the intent to deceive. The chief ingredients of a fraud are:

- (i) a false representation or assertion;
- (ii) of fact (and not a mere opinion),
- (iii) made with the intention that it should be acted upon,
- (iv) the representation must have actually induced the other party to enter into the contract and so deceived him,
- (v) the party deceived must thereby be indemnified, for there is no fraud without damages, and
- (vi) the statement must have been made either with the knowledge that it was false or without belief in its truth or recklessly without caring whether it was true or false.

It is immaterial whether the representation takes effect by false statement or with concealment. The party defrauded can avoid the contract and also claim damages.

Mere silence as to facts likely to affect the willingness of a person to enter into a contract is not fraud, unless silence is in itself equivalent to speech, or where it is the duty of the person keeping silent to speak as in the cases of contracts *uberrimae fidei*- (contracts requiring utmost good faith).

Contracts Uberrimae Fidei

There are contracts in which the law imposes a special duty to act with utmost good faith i.e., to disclose all material information. Failure to disclose such information will render the contract voidable at the option of other party.

Contracts *uberrimae fidei* are:

- (a) *Contract of insurance of all kinds* : The assured must disclose to the insurer all material facts and whatever he states must be correct and truthful.
- (b) *Company prospectus* : When a company invites the public to subscribe for its shares, it is under statutory obligation to disclose truthfully the various matters set out in the Companies Act. Any person responsible for non-disclosure of any of these matters is liable to damages. Also, the contract to buy shares is voidable where there is a material false statement or non-disclosure in the prospectus.

- (c) *Contract for the sale of land* : The vendor is under a duty to the purchaser to show good title to the land he has contracted to sell.
- (d) *Contracts of family arrangements* : When the members of a family make agreements or arrangements for the settlement of family property, each member of the family must make full disclosure of every material fact within his knowledge.

Coercion

Coercion as defined in Section 15 of the Act means “the committing or threatening to commit any act forbidden by the Indian Penal Code, or unlawful detaining or threatening to detain, any property to the prejudice of any person whatever with the intention of causing any person to enter into an agreement”. Simply stated, the doing of any act forbidden by the Indian Penal Code is coercion even though such an act is done in a place where the Indian Penal Code is not in force. If A at the point of a pistol asks B to execute a promissory note in his favour and B to save his life does so he can avoid this agreement as his consent was not free. Even a threat to third-party, e.g., where A compels B to sign a document threatening to harm C, in case B does not sign would also amount to coercion.

It has been held that mere threat by one person to another to prosecute him does not amount to coercion. There must be a contract made under the threat and that contract should be one sought to be avoided because of coercion (*Ramchandra v. Bank of Kohlapur*, 1952 Bom. 715). It may be pointed out that coercion may proceed from any person and may be directed against any person, even a stranger and also against goods, e.g., by unlawful detention of goods.

Undue Influence

Under Section 16 of the Indian Contract Act, 1872, a contract is said to be produced by undue influence “where the relations subsisting between the parties are such that one of the parties is in a position to dominate the will of the other and uses that position to obtain an unfair advantage over the other”.

The elements of undue influence are:

- (i) A dominant position, and
- (ii) The use of it to obtain an unfair advantage.

The words “unfair advantage” do not limit the jurisdiction to cases where the transaction would be obviously unfair as between persons dealing on an equal footing. In the words of Lord Kingston, “the principle applies to every case where influence is acquired and abused where confidence is reposed and betrayed”.

Legality of Object

One of the requisites of a valid contract is that the object should be lawful. Section 10 of the Indian Contract Act, 1872, provides, “All agreements are contracts if they are made by free consent of parties

competent to contract for a lawful consideration and with a lawful object..." Therefore, it follows that where the consideration or object for which an agreement is made is unlawful, it is not a contract.

Section 23 of the Indian Contract Act, 1872 provides that the consideration or object of an agreement is lawful unless it is

- (i) forbidden by law; or
- (ii) it is of such nature that if permitted it would defeat the provisions of law; or
- (iii) is fraudulent; or
- (iv) involves or implies injury to the person or property of another; or
- (v) the Court regards it as immoral or opposed to public policy.

In each of these cases the consideration or object of an agreement is said to be unlawful. Every agreement of which the object or consideration is unlawful is void.

Void and Illegal Contracts

A void contract is one which is destitute of legal effects altogether. An illegal contract too has no legal effect as between the immediate parties to the contract, but has the further effect of tainting the collateral contracts also with illegality. For instance A borrows from B, Rs. 1,000 for lending to C a minor. The contract between A and C is void, but B can nevertheless recover the money from A, On the other hand, if A had borrowed Rs. 1,000 from B to buy a pistol to shoot C, the question whether B can recover the money hinges on whether B was aware of the purpose for which money was borrowed. If B had knowledge of the illegal purpose, he cannot recover. Therefore, it may be said that all illegal agreements are void but all void agreements are not necessarily illegal.

Consequence of Illegal Agreements

- (i) an illegal agreement is entirely void;
- (ii) no action can be brought by a party to an illegal agreement. The maxim is "Ex turpi cause non-oritur action" - from an evil cause, no action arises;
- (iii) money paid or property transferred under an illegal agreement cannot be recovered. The maxim is *in parti delicto potior est conditio defendentis*- In cases of equal guilt, more powerful is the condition of the defendant;
- (iv) where an agreement consist of two parts, one part legal and other illegal, and the legal parts is separable from the illegal one, then the Court will enforce the legal one. If the legal and the illegal parts cannot be separated the whole agreement is illegal; and
- (v) any agreement which is collateral to an illegal agreement is also tainted with illegality and is

treated as being illegal, even though it would have been lawful by itself [*Film Pratapchand v. Firm Kotri* Re. AIR (1975) S.C. 1223].

Agreements Void as being opposed to Public Policy

The head public policy covers a wide range of topics. Agreements may offend public policy by tending to prejudice of the State in times of war, by tending to abuse of justice or by trying to impose unreasonable and inconvenient restrictions on the free choice of individuals in marriage, or their liberty to exercise lawful trade or calling.

The doctrine of public policy is a branch of Common Law and like any other branch of Common Law it is governed by the precedents [*Gherulal Parakh v. MahadeodasMaiya* (1959) 2 S.C.R. (Suppl.) 406; AIR 1959 S.C. 781]. The doctrine of public policy is not to be extended beyond the classes of cases already covered by it and no Court can invent a new head of public policy [*Lord Halsbury, Janson v. Driefontien Consolidated Mines* (1902) A.C. 484, 491]. It has been said by the House of Lords that public policy is always an unsafe and treacherous ground for legal decisions. Even if it is possible for Courts to evolve a new head of public policy, it should be done under extraordinary circumstances giving rise to incontestable harm to the society.

The following agreements are void as being against public policy but they are not illegal:

- (a) *Agreement in restraint of parental rights* : An agreement by which a party deprives himself of the custody of his child is void.
- (b) *Agreement in restraint of marriage* : An agreement not to marry at all or not to marry any particular person or class of persons is void as it is in restraint of marriage.
- (c) *Marriage brokerage or brokerage Agreements* : An agreement to procure marriage for reward is void. Where a purohit (priest) was promised Rs.200 in consideration of procuring a wife for the defendant, the promise was held void as opposed to public policy, and the purohit could not recover the promised sum.
- (d) *Agreements in restraint of personal freedom are void* : Where a man agreed with his money lender not to change his residence, or his employment or to part with any of his property or to incur any obligation on credit without the consent of the money lender, it was held that the agreement was void.
- (e) *Agreement in restraint of trade* : An agreement in restraint of trade is one which seeks to restrict a person from freely exercising his trade or profession.

Wagering Agreements

The literal meaning of the word “wager” is a “bet”. Wagering agreements are nothing but ordinary betting agreements. For example, A and B enter into an agreement that if England’s Cricket Team wins the test match, A will pay B Rs.100 and if it loses B will pay Rs.100 to A. This is a wagering agreement and nothing can be recovered by winning party under the agreement.

The essence of gaming and wagering is that one party is to win and the other to lose upon a future event which at the time of the contract is of an uncertain nature that is to say, if the event turns out one way A will lose; but if it turns out the other way he will win (Thacker v. Hardy, (1878) 4 OBD 685).

Wagering Agreements Void

In India except Mumbai, wagering agreements are void. In Mumbai, wagering agreements have been declared illegal by the Avoiding Wagers (Amendment) Act, 1865. Therefore, in Mumbai a wagering agreement being illegal, is void not only between the immediate parties, but taints and renders void all collateral agreements to it.

Thus, A bets with B and losses, applies to C for a loan, who pays B in settlement of A's losses. C cannot recover from A because this is money paid "under" or "in respect of" a wagering transaction which is illegal in Mumbai. But in respect of India such a transaction (i.e., betting) being only void, C could recover from A. Of course, if A refused to pay B the amount of the bet that he has lost, B could not sue A anywhere. Again, where an agent bets on behalf of his principal and loses and pays over the money to the winner, he cannot recover the money from his principal, if the transactions took place in Mumbai, but elsewhere he could recover. But if the agent wins, he must pay the winnings to the principal, as this money was received on behalf of the principal.

Sometimes, commercial transactions assume the form of wagering contracts. The sample test to find out whether a particular transaction is a wager or a genuine commercial transaction is: "Where delivery of the goods sold is intended to be given and taken, it is valid contract, but where only the differences are intended to be paid, it will be a wagering contract and unenforceable".

In a wagering contract there must be mutuality in the sense that the gain of one party should be loss to the other on the happening of an uncertain event which is the subject matter of the contract.

Void Agreements

The following types of agreements are void under Indian Contract Act:

- (a) Agreement by or with a minor or a person of unsound mind or a person disqualified to enter into a contract - Section 11;
- (b) Agreement made under a mistake of fact, material to the agreement on the part of the both the parties - Section 20.
- (c) An agreement of which the consideration or object is unlawful - Section 23.
- (d) If any part of a single consideration for one or more objects, or any one or any part of any one of several considerations for a single object, is unlawful, the agreement is void - Section 24.
- (e) An agreement made without consideration subject to three exceptions provided to Section 25.
- (f) An agreement in restraint of marriage - Section 26.

- (g) An agreement in restraint of trade - Section 27.
- (h) An agreement in restraint of legal proceedings - Section 28.
- (i) Agreements, the meaning of which is not certain, or capable of being made certain - Section 29.
- (j) Agreement by way of wager- Section 30.
- (k) An agreement to enter into an agreement in the future.
- (l) An agreement to do an act impossible in itself - Section 56(1)

When Contract becomes Void

- An agreement not enforceable by law is void ab initio - Section 2(g).
- A contract which ceases to be enforceable by law becomes void when it ceases to be enforceable - Section 2(j)
- A contract becomes void when, by reason of some event which the promisor could not prevent, the performance of the contract becomes impossible, e.g., by destruction of the subject- matter of the contract after the formation of the contract.
- A contract becomes void by reason of subsequent illegality. A in India agrees to supply goods to B in Pakistan. After the formation of the contract war breaks out between India and Pakistan and the supply of goods to Pakistan is prohibited by legislation. The contract becomes void.
- A contingent contract to do or not do to anything if an uncertain future event happens becomes void if the event becomes impossible.
- Where a contract is voidable at the option of the aggrieved party, the contract becomes void when the option is exercised by him.

Contingent Contract

As per Section 31, a contingent contract is a contract to do or not to do something, if some event collateral to such contract, does or does not happen. For example, A contracts to sell B 10 bales of cotton for Rs. 20,000, if the ship by which they are coming returns safely. This is a contingent contract. Contract of insurance and contracts of indemnity and guarantee are popular instances of contingent contracts.

Quasi-Contracts

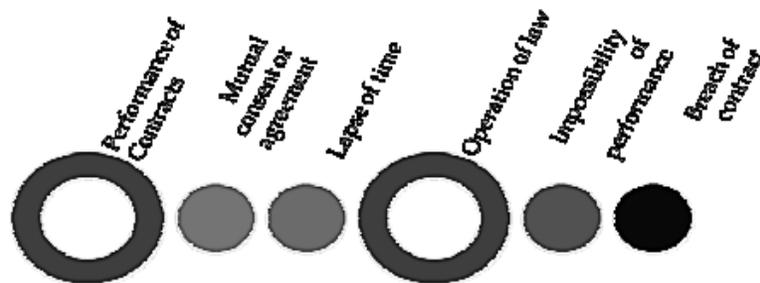
A valid contract must contain certain essential elements, such as offer and acceptance, capacity to contract, consideration and free consent. But sometimes the law implies a promise imposing obligations

on one party and conferring right in favour of the other even when there is no offer, no acceptance, no consensus ad idem, and in fact, there is neither agreement nor promise. Such cases are not contracts in the strict sense, but the Court recognises them as relations resembling those of contracts and enforces them as if they were contracts, hence the term quasi- contracts (i.e., resembling a contract).

A quasi-contract rests on the equitable principle that a person shall not be allowed to enrich himself unjustly at the expense of another. In truth, it is not a contract at all. It is an obligation which the law creates, in the absence of any agreement, when any person is in the possession of other person's money, or its equivalent, under such circumstances that in equity and good conscience he ought not to retain it, and which in justice and fairness belongs to another. It is the duty and not an agreement or intention which defines it. A very simple illustration is money paid under mistake. Equity demands that such money must be paid back.

Discharge or Termination of Contracts

A contract is said to be discharged or terminated when the rights and obligations arising out of a contract are extinguished. Contracts may be discharged or terminated by any of the following modes:



Discharge by Impossibility or Frustration

In India, the doctrine of frustration is primarily looked at as contained in Sections 32 and 56 of the Act. The Court usually gives relief on the ground of subsequent impossibility when it finds that the whole purpose or the basis of the contract was frustrated by the intrusion or occurrence of an event that was not contemplated by the parties. The Court also grants relief where one of the parties was or could have been aware of such a contingency happening and the other party was not. Before invoking the doctrine, it must be shown that the event, which has produced the frustration was one which the parties to the contract did not foresee and could not with reasonable diligence have foreseen.

A contract which is entered into to perform something that is clearly impossible is void. For instance, A agrees with B to discover treasure by magic. The agreement is void by virtue of Section 56 para 1 which lays down the principle that an agreement to do an act impossible in itself is void.

Sometimes subsequent impossibility (i.e. where the impossibility supervenes after the contract has been made) renders the performance of a contract unlawful and stands discharged; as for example, where a singer contracts to sing and becomes too ill to do so, the contract becomes void. In this connection, para 2 of Section 56 provides that a contract to do an act, which after the contract is made, becomes impossible or by reason of some event which the promisor could not prevent, unlawful, becomes void when the act becomes impossible or unlawful.

If the impossibility is not obvious and the promisor alone knows of the impossibility or illegally then existing or the promisor might have known as such after using reasonable diligence, such promisor is bound to compensate the promisee for any loss he may suffer through the non-performance of the promise in spite of the agreement being void ab-initio (Section 56, para 3).

In *Satyabarta Ghose v. Mugnuram A.I.R. 1954 S.C. 44* the Supreme Court interpreted the term 'impossible' appearing in second paragraph of Section 56. The Court observed that the word 'impossible' has not been used here in the sense of physical or literal impossibility. The performance of an act may not be literally impossible but it may be impracticable and useless from the point of view of the object and purpose which the parties had in view; and if an untoward event or change of circumstances totally upsets the very foundation upon which the parties rested their bargain; it can very well be said that the promisor found it impossible to do the act which he promised to do. In this case, A undertook to sell a plot of land to B but before the plot could be developed, war broke out and the land was temporarily requisitioned by the Government. A offered to return earnest money to B in cancellation of contract. B did not accept and sued A for specific performance. A pleaded discharge by frustration. The Court held that Section 56 is not applicable on the ground that the requisition was of temporary nature and there was no time limit within which A was obliged to perform the contract. The impossibility was not of such a nature which would strike at the root of the contract.

Breach of Contract

Where the promisor neither performs his contract nor does he tender performance, or where the performance is defective, there is a breach of contract. The breach of contract may be (i) actual; or (ii) anticipatory. The actual breach may take place either at the time the performance is due, or when actually performing the contract. Anticipatory breach means a breach before the time for the performance has arrived. This may also take place in two ways – by the promisor doing an act which makes the performance of his promise impossible or by the promisor in some other way showing his intention not to perform it.

Breach of contract may occur, before the time for performance is due. This may happen where one of the parties definitely renounces the contract and shows his intention not to perform it or does some act which makes performance impossible. The other party, on such a breach being committed, has a right of action for damages.

He may either sue for breach of contract immediately after repudiation or wait till the actual date when performance is due and then sue for breach. If the promisee adopts the latter course, i.e., waits till the date when performance is due, he keeps the contract alive for the benefit of the promisor as well as for his own. He remains liable under it and enables the promisor not only to complete the

contract in spite of previous repudiation, but also to avail himself of any excuse for non-performance which may have come into existence before the time fixed for performance.

In *Hochester v. De La Tour* (1853) E.R. 922, A hired B in April to act as a courier commencing employment from 1st June, but wrote to B in May repudiating the agreement, B sued A for breach of contract immediately after repudiation. A contended that there could not be breach of contract before June 1. Held, B was immediately entitled to sue and need not wait till 1st June, for his right of action to accrue.

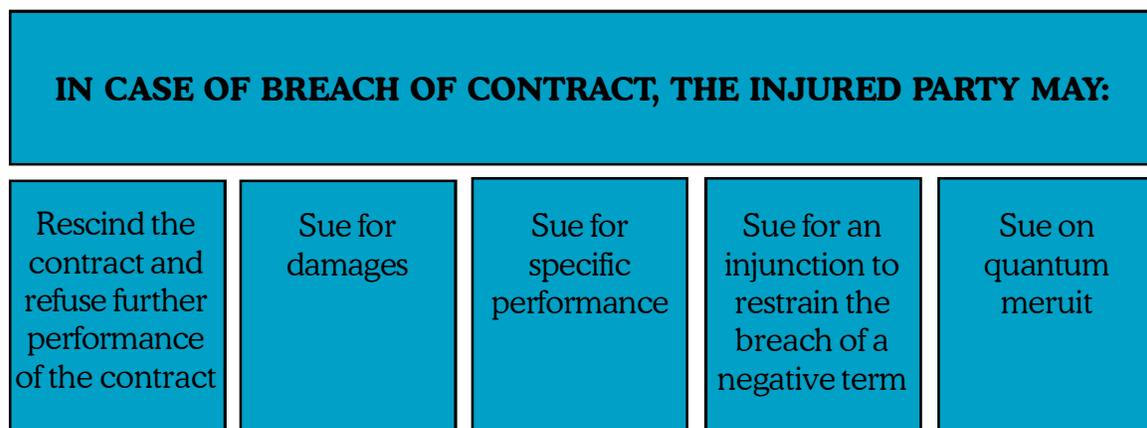
In *Avery v. Bowden* (1856) 116 E.R. 1122, A hired B's ship to carry a cargo from Russia. Later on B repudiated the contract. A delayed taking action hoping B would change his mind before the performance date. War broke out between Russia and Britain before the performance date frustrating the contract. Held, A lost his right to sue B for damages by his delay.

In *Frost v. Knight* (1872) L.R. 7 Ex. 111, the law on the subject of anticipatory breach was summed up as follows:

“The promisee if he pleases may treat the notice of intention as inoperative and await the time when the contract is to be executed and then hold the other party responsible for all the consequences of non-performance: but in that case he keeps the contract alive for the benefit of the other party as well as his own; he remains subject to all his own obligations and liabilities under it, and enables the other party not only to complete the contract, if so advised, notwithstanding his previous repudiation of it, but also to take advantage of any supervening circumstances which would justify him in declining to complete it.”

Remedies for Breach of Contract

Where a contract is broken, the injured party has several courses of action open to him. The appropriate remedy in any case will depend upon the subject-matter of the contract and the nature of the breach.



When a party to a contract has broken the contract, the other party may treat the contract as rescinded and he is absolved from all his obligations under the contract. Under Section 65, when a party treats the contract as rescinded, he makes himself liable to restore any benefits he has received under the contract to the party from whom such benefits were received. Under Section 75 of the Indian Contract Act, if a person rightfully rescinds a contract, he is entitled to a compensation for any damage which he has sustained through the non-fulfilment of the contract by the other party. Section 64 deals with consequences of rescission of voidable contracts, i.e., where there is flaw in the consent of one party to the contract. Under this Section when a person at whose option a contract is voidable rescinds, the other party thereto need not perform any promise therein contained in which he is the promisor. The party rescinding a voidable contract shall, if he has received any benefit thereunder, from another party to such contract, restore such benefit so far as may be, to the person from whom it was received.

Contract of Indemnity and Guarantee

A contract of indemnity is a contract by which one party promises to save the other party from loss caused to him by the conduct of the promisor himself, or by the conduct of any other person (Section 124). For example, A contracts to indemnify B against the consequence of any proceedings which C may take against B in respect of a certain sum of 300 rupees. This is a contract of indemnity. The contract of indemnity may be express or implied. The later may be inferred from the circumstances of a particular case, e.g., an act done by A at the request of B. If A incurs any expenses, he can recover the same from B.

The person who promises to indemnify or make good the loss is called the indemnifier and the person whose loss is made good is called the indemnified or the indemnity holder. A contract of insurance is an example of a contract of indemnity according to English Law. In consideration of premium, the insurer promises to make good the loss suffered by the assured on account of the destruction by fire of his property insured against fire.

Under the Indian Contract Act, the contract of indemnity is restricted to such cases only where the loss promised to be reimbursed, is caused by the conduct of the promisor or of any other person. The loss caused by events or accidents which do not depend on the conduct of any person, it seems, cannot be sought to be reimbursed under a contract of indemnity.

A contract of guarantee is a contract to perform the promise, or discharge the liability of a third person in case of his default. The person who gives the guarantee is called the Surety, the person for whom the guarantee is given is called the Principal Debtor, and the person to whom the guarantee is given is called the Creditor (Section 126). A guarantee may be either oral or written, although in the English law, it must be in writing.

Illustration

A advances a loan of Rs. 5, 000 to B and C promises to A that if B does not repay the loan, C will do so. This is a contract of guarantee. Here B is the principal debtor, A is the creditor and C is the surety or guarantor.

Like a contract of indemnity, a guarantee must also satisfy all the essential elements of a valid contract. There is, however, a special feature with regard to consideration in a contract of guarantee. The consideration received by the principal debtor is sufficient for surety. Section 127 provides that anything done or any promise made for the benefit of the principal debtor may be a sufficient consideration to the surety for giving the guarantee.

Distinction between Contract of Indemnity and Contract of Guarantee

<i>Contract of Indemnity</i>	<i>Contract of Guarantee</i>
In a contract of indemnity there are only two parties: the indemnifier and the indemnified.	In a contract of guarantee, there are three parties; the surety, the principal debtor and the creditor.
In a contract of indemnity, the liability of the indemnifier is primary.	In a contract of guarantee, the liability of the surety is secondary. The surety is liable only if the principal debtor makes a default, the primary liability being that of the principal debtor.
The indemnifier need not necessarily act at the request of the debtor.	The surety gives guarantee only at the request of the principal debtor.
In the case of indemnity, the possibility of any loss happening is the only contingency against which the indemnifier undertakes to indemnify.	In the case of a guarantee, there is an existing debt or duty, the performance of which is guaranteed by the surety,
The indemnifier cannot sue third-parties in his own name, unless there be assignment. He must sue in the name of the indemnified.	The surety, on payment of the debt when the principal debtor has failed to pay is entitled to proceed against the principal debtor in his own right.

Law of Agency

An agent is a person who is employed to bring his principal into contractual relations with third-parties. As the definition indicates, an agent is a mere connecting link between the principal and a third-party. But during the period that an agent is acting for his principal, he is clothed with the capacity of his principal.

A contract of agency may be express or implied, (Section 186) but consideration is not an essential element in this contract (Section 185). Agency may also arise by estoppel, necessity or ratification.

- (a) *Express Agency* : A contract of agency may be made orally or in writing. The usual form of written contract of agency is the Power of Attorney, which gives him the authority to act on behalf of his principal in accordance with the terms and conditions therein. In an agency

created to transfer immovable property, the power of attorney must be registered. A power of attorney may be general, giving several powers to the agent, or special, giving authority to the agent for transacting a single act.

(b) *Implied Agency* : Implied agency may arise by conduct, situation of parties or necessity of the case.

(i) *Agency by Estoppel (Section 237)* : Estoppel arises when you are precluded from denying the truth of anything which you have represented as a fact, although it is not a fact. Thus, where P allows third-parties to believe that A is acting as his authorised agent, he will be estopped from denying the agency if such third-parties relying on it make a contract with A even when A had no authority at all.

(ii) *Wife as agent* : Where a husband and wife are living together, the wife is presumed to have her husband's authority to pledge his credit for the purchase of necessaries of life suitable to their standard of living. But the husband will not be liable if he shows that (i) he had expressly warned the tradesman not to supply goods on credit to his wife; or (ii) he had expressly forbidden the wife to pledge his credit; or (iii) his wife was already sufficiently supplied with the articles in question; or (iv) she was supplied with a sufficient allowance.

Similarly, where any person is held out by another as his agent, the third-party can hold that person liable for the acts of the ostensible agent, or the agent by holding out. Partners are each other's agents for making contracts in the ordinary course of the partnership business.

(iii) *Agency of Necessity (Sections 188 and 189)* : In certain circumstances, a person who has been entrusted with another's property, may have to incur unauthorised expenses to protect or preserve it. Such an agency is called an agency of necessity. For example, A sent a horse by railway and on its arrival at the destination there was no one to receive it. The railway company, being bound to take reasonable steps to keep the horse alive, was an agent of necessity of A.

A wife deserted by her husband and thus forced to live separate from him, can pledge her husband's credit to buy all necessaries of life according to the position of the husband even against his wishes.

(iv) *Agency by ratification (Sections 169-200)*: Where a person having no authority purports to act as agent, or a duly appointed agent exceeds his authority, the principal is not bound by the contract supposedly based on his behalf. But the principal may ratify the agent's transaction and so accept liability. In this way an agency by ratification arises. This is also known as *ex post facto agency*— agency arising after the event. The effect of ratification is to render the contract binding on the principal as if the agent had been authorised beforehand. Also ratification relates back to the original making of the contract so that the agency is taken to have come into existence from the moment the agent first acted,

and not from the date the principal ratified it. Ratification is effective only if the following conditions are satisfied-

- (a) The agent must expressly contract as agent for a principal who is in existence and competent to contract.
- (b) The principal must be competent to contract not only at the time the agent acted, but also when he ratified the agents act.
- (c) The principal at the time of ratification has full knowledge of the material facts, and must ratify the whole contract, within a reasonable time.
- (d) Ratification cannot be made so as to subject a third-party to damages, or terminate any right or interest of a third person.
- (e) Only lawful acts can be ratified.

Classes of Agents

Agents may be special or general or, they may be mercantile agents:

- (a) *Special Agent* : A special agent is one who is appointed to do a specified act, or to perform a specified function. He has no authority outside this special task. The third-party has no right to assume that the agent has unlimited authority. Any act of the agent beyond that authority will not bind the principal.
- (b) *General Agent* : A general agent is appointed to do anything within the authority given to him by the principal in all transactions, or in all transactions relating to a specified trade or matter. The third- party may assume that such an agent has power to do all that is usual for a general agent to do in the business involved. The third party is not affected by any private restrictions on the agent's authority.

Sub-Agent

A person who is appointed by the agent and to whom the principal's work is delegated to known as sub- agent. Section 191 provides that "a sub-agent is a person employed by, and acting under the control of the original agent in the business of the agency." So, the sub-agent is the agent of the original agent.

As between themselves, the relation of sub-agent and original agent is that of agent and the principal. A sub- agent is bound by all the duties of the original agent. The sub-agent is not directly responsible to the principal except for fraud and wilful wrong. The sub-agent is responsible to the original agent. The original agent is responsible to the principal for the acts of the sub-agent. As regards third persons, the principal is represented by sub-agent and he is bound and responsible for all the acts of sub-agent as if he were an agent originally appointed by the principal.

Mercantile Agents

Section 2(9) of the Sale of Goods Act, 1930, defines a mercantile agent as “a mercantile agent having in the customary course of business as such agent authority either to sell goods or consign goods for the purposes of sale, or to buy goods, or to raise money on the security of goods”. This definition covers factors, brokers, auctioneers, commission agents etc.

Factors

A factor is a mercantile agent employed to sell goods which have been placed in his possession or contract to buy goods for his principal. He is the apparent owner of the goods in his custody and can sell them in his own name and receive payment for goods. He has an insurable interest in goods and also a general lien in respect of any claim he may have arising out of the agency.

Brokers

A broker is a mercantile agent whose ordinary course of business is to make contracts with other parties for the sale and purchase of goods and securities of which he is not entrusted with the possession for a commission called brokerage. He acts in the name of principal. He has no lien over the goods as he is not in possession of them.

Del Credere Agent

A del credere agent is a mercantile agent, who is in consideration of an extra remuneration guarantees to his principal that the purchasers who buy on credit will pay for the goods they take. In the event of a third-party failing to pay, the del credere agent is bound to pay his principal the sum owned by third-party.

Auctioneers

An auctioneer is an agent who sells goods by auction, i.e., to the highest bidder in public competition. He has no authority to warrant his principal's title to the goods. He is an agent for the seller but after the goods have been knocked down he is agent for the buyer also for the purpose of evidence that the sale has taken place.

Partners

In a partnership firm, every partner is an agent of the firm and of his co-partners for the purpose of the business of the firm.

Bankers

The relationship between a banker and his customer is primarily that of debtor and creditor. In addition, a banker is an agent of his customer when he buys or sells securities, collects cheques, dividends, bills or promissory notes on behalf of his customer. He has a general lien on all securities and goods in his possession in respect of the general balance due to him by the customer.

Duties of the Agent

An agent's duties towards his principal are as follows (which give corresponding rights to the principal who may sue for damages in the event of a breach of duty by the agent):

- (a) An agent must act within the scope of the authority conferred upon him and carry out strictly the instructions of the principal (Section 211).
- (b) In the absence of express instructions, he must follow the custom prevailing in the same kind of business at the place where the agent conducts the business (Section 211).
- (c) He must do the work with reasonable skill and diligence whereby the nature of his profession, the agent purports to have special skill, he must exercise the skill which is expected from the members of the profession (Section 212).
- (d) He must disclose promptly any material information coming to his knowledge which is likely to influence the principal in the making of the contract.
- (e) He must not disclose confidential information entrusted to him by his principal (Section 213).
- (f) He must not allow his interest to conflict with his duty, e.g., he must not compete with his principal (Section 215).
- (g) The agent must keep true accounts and must be prepared on reasonable notice to render an account.
- (h) He must not make any secret profit; he must disclose any extra profit that he may make.

Where an agent is discovered taking secret bribe, etc., the principal is entitled to (i) dismiss the agent without notice, (ii) recover the amount of secret profit, and (iii) refuse to pay the agent his remuneration.

He may repudiate the contract, if the third-party is involved in secret profit and also recover damages.

- (i) An agent must not delegate his authority to sub-agent. A sub-agent is a person employed by and acting under the control of the original agent in the business of agency (Section 191). This rule is based on the principle: *Delegatus non-potest delegare* — a delegate cannot further delegate (Section 190).

But there are exceptions to this rule and the agent may delegate (i) where delegation is allowed by the principal, (ii) where the trade custom or usage sanctions delegation, (iii) where delegation is essential for proper performance, (iv) where an emergency renders it imperative, (v) where nature of the work is purely ministerial, and (vi) where the principal knows that the agent intends to delegate.

Rights of Agents

Where the services rendered by the agent are not gratuitous or voluntary, the agent is entitled to

receive the agreed remuneration, or if none was agreed, a reasonable remuneration. The agent becomes entitled to receive remuneration as soon as he has done what he had undertaken to do (Section 219).

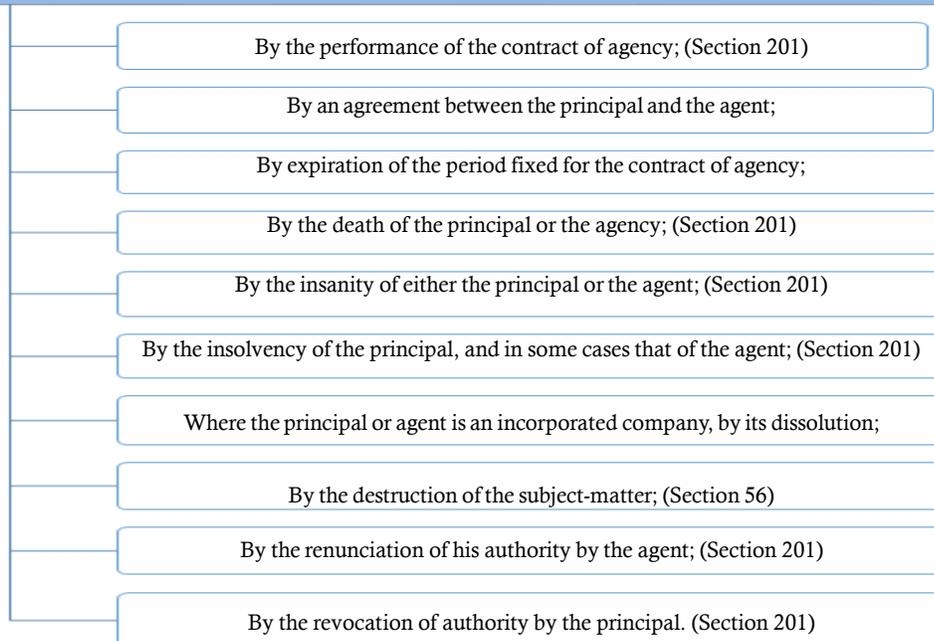
Certain classes of agents, e.g., factors who have goods and property of their principal in their possession, have a lien on the goods or property in respect of their remuneration and expense and liabilities incurred. He has a right to stop the goods in transit where he is an unpaid seller.

As the agent represents the principal, the agent has a right to be indemnified by the principal against all charges, expenses and liabilities properly incurred by him in the course of the agency (Sections 222-223).

The extent of the authority of an agent depends upon the terms expressed in his appointment or it may be implied by the circumstances of the case. The contractual authority is the real authority, but implied authority is to do whatever is incidental to carry out the real authority. This implied authority is also known as apparent or ostensible authority. Thus, an agent having an authority to do an act has authority to do everything lawful which is necessary for the purpose or usually done in the course of conducting business.

An agent has authority to do all such things which may be necessary to protect the principal from loss in an emergency and which he would do to protect his own property under similar circumstances. Where butter was becoming useless owing to delay in transit and was therefore sold by the station master for the best price available as it was not possible to obtain instructions from the principal, the sale was held binding upon the principal.

TERMINATION OF AGENCY



E-Contract

Electronic contracts are not paper based but rather in electronic form are born out of the need for speed, convenience and efficiency. In the electronic age, the whole transaction can be completed in seconds, with both parties simply affixing their digital signatures to an electronic copy of the contract. There was initially an apprehension amongst the legislatures to recognize this modern technology, but now many countries have enacted laws to recognize electronic contracts. The conventional law relating to contracts is not sufficient to address all the issues that arise in electronic contracts. The Information Technology Act, 2000 solves some of the peculiar issues that arise in the formation and authentication of electronic contracts.

NECESSARY INGREDIENTS OF ELECTRONIC CONTRACT



Sample Questions

1. Law of contract is a:
 - (a) Criminal Law
 - (b) Civil Law**
 - (c) International Law
 - (d) Disputed Laws
2. When an offer is accepted by other party, it becomes:
 - (a) Proposal
 - (b) Contract
 - (c) Agreement
 - (d) Promise**
3. Which one among the following is not an essential in the formation of contract?
 - (a) Offer
 - (b) Acceptance
 - (c) Consideration
 - (d) Damages.**
4. A void agreement means:
 - (a) Agreement not enforceable by law**
 - (b) Agreement illegal in nature
 - (c) Agreement not acceptable to Court of law
 - (d) Agreement violating legal procedure.

5. A contract to which a minor is a party, is known as:

(a) Void ab initio

(b) Voidable at the option of minor

(c) Voidable at the option of other party

(d) Valid

B. LAW RELATING TO TORTS

INTRODUCTION

The word 'tort' is a French equivalent of English word 'wrong'. The word tort is derived from Latin word Tortum. Thus, simply stated 'tort' means wrong. But every wrong or wrongful act is not a tort. Tort is really a kind of civil wrong as opposed to criminal wrong. Wrongs, in law, are either public or private.

Broadly speaking, public wrongs are the violations of 'public law and hence amount to be offences against the State, while private wrongs are the breaches of private law, i.e., wrongs against individuals. Public wrongs or crimes are those wrongs which are made punishable under the penal law belonging to the public law group.

"Tort" means a civil wrong which is not exclusively the breach of a contract or the breach of trust. The distinction between civil and criminal wrongs depends on the nature of the appropriate remedy provided by law.

Section 2(m) of the Limitation Act, 1963, states: "Tort means a civil wrong which is not exclusively a breach of contract or breach of trust."

Salmond defines it as "a civil wrong for which the remedy is a common law action for unliquidated damages and which is not exclusively the breach of a contract or the breach of a trust or other merely equitable obligation."

Fraser describes it as "an infringement of a right in rem of a private individual giving a right of compensation at the suit of the injured party."

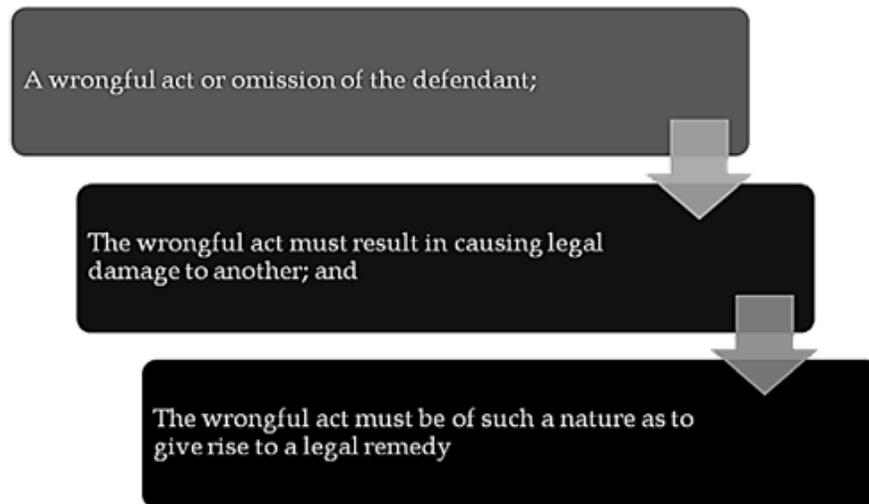
Winfield says: "Tortious liability arises from the breach of duty, primarily fixed by law; this duty is towards persons generally and its breach is redressable by an action for unliquidated damages".

Two important elements can be derived from these definitions, namely: (i) that a tort is a species of civil injury of wrong as opposed to a criminal wrong, and (ii) that every civil wrong is not a tort. Accordingly, it is possible to distinguish tort from a crime and from a contract, a trust and a quasi-contract. The distinction between civil and criminal wrongs depends on the nature of the appropriate remedy provided by law.

General Conditions of Liability for a Tort

As stated earlier, there is no fixed catalogue of circumstances, which along and for all-time mark the limit of what are torts. Certain situations have been held to be torts and will continue to be so in the absence of statutory repeal, and others have been held not to be torts. However, certain general conditions for tortious liability can be laid down.

In general, a tort consists of some act or omission by the defendant (tortfeasor) whereby he has without just cause or excuse caused some harm to plaintiff. To constitute a tort, there must be:



- (i) *Wrongful act* : The act complained of, should under the circumstances, be legally wrongful as regards the party complaining. In other words, it should prejudicially affect any of the above mentioned interests, and protected by law. Thus, every person whose legal rights, e.g., right of reputation, right of bodily safety and freedom, and right to property are violated without legal excuse, has a right of action against the person who violated them, whether loss results from such violation or not.
- (ii) *Legal damages* : It is not every damage that is a damage in the eye of law. It must be a damage which the law recognizes as such. In other words, there should be legal injury or invasion of the legal right. In the absence of an infringement of a legal right, an action does not lie. Also, where there is infringement of a legal right, an action lies even though no damage may have been caused. As was stated in *Ashby v. White*, (1703) 2 Ld. Raym. 938 legal damage is neither identical with actual damage nor is it necessarily pecuniary. Two maxims, namely: (i) *Damnum sine injuria*, and (ii) *injuria sine damnum*, explain this proposition.

Damnum Sine Injuria

Damnum means harm, loss or damage in respect of money, comfort, health, etc. *Injuria* means infringement of a right conferred by law on the plaintiff. The maxim means that in a given case, a man may have suffered damage and yet have no action in tort, because the damage is not to an interest protected by the law of torts. Therefore, causing damage, however substantial to another person is not actionable in law unless there is also a violation of a legal right of the plaintiff. Common examples are, where the damage results from an act done in the exercise of legal rights. Thus, if I own a shop and you open a shop in the neighbourhood, as a result of which I lose some customers and my profits fall off, I cannot sue you for the loss

in profits, because you are exercising your legal right. [*Gloucester Grammer School case*, (1410) Y.B. Hill. 11 Hen, IV to 27, pp. 21, 36]

Injuria Sine Damnum

It means injury without damage, i.e., where there is no damage resulted yet it is an injury or wrong in tort, i.e. where there is infringement of a legal right not resulting in harm but plaintiff can still sue in tort.

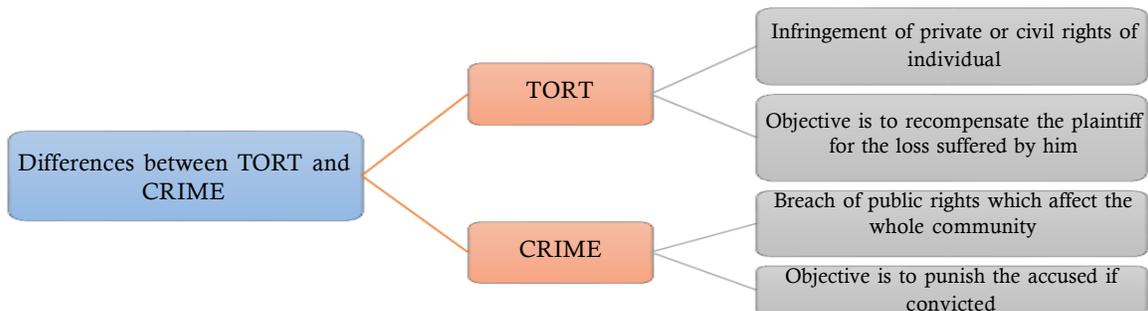
Some rights or interests are so important that their violation is an actionable tort without proof of damage. Thus when there is an invasion of an “absolute” private right of an individual, there is an *injuria* and the plaintiff’s action will succeed even if there is no *Domnum* or damages. An absolute right is one, the violation of which is actionable per se, i.e., without the proof of any damage. *Injuria sine domno* covers such cases and action lies when the right is violated even though no damage has occurred. Thus, the act of trespassing upon another’s land is actionable even though it has not caused the plaintiff even the slightest harm.

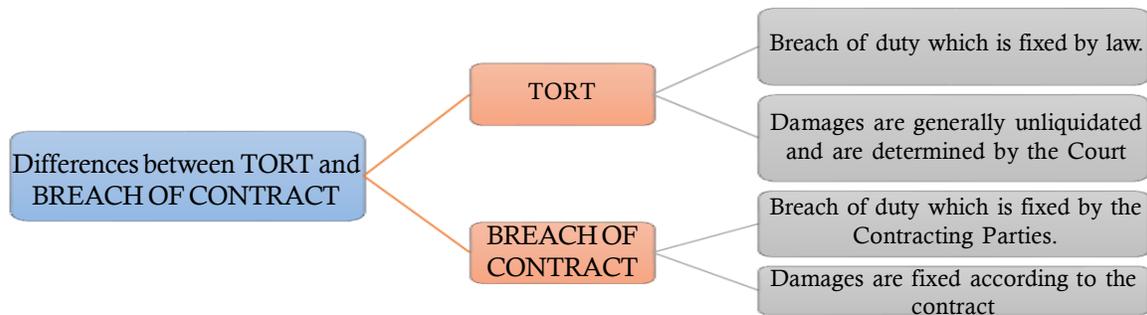
- (iii) *Legal remedy* : The third condition of liability for a tort is legal remedy. This means that to constitute a tort, the wrongful act must come under the law. The main remedy for a tort is an action for unliquidated damages, although some other remedies, e.g., injunction, may be obtained in addition to damages or specific restitution may be claimed in an action for the detention of a chattel. Self-help is a remedy of which the injured party can avail himself without going to a law court. It does not apply to all torts and perhaps the best example of these to which it does apply is trespass to land. For example, if “A” finds a drunken stranger in his room who has no business to be there, and is thus a trespass, he (A) is entitled to get rid of him, if possible without force but if that be not possible with such force as the circumstances of the case may warrant.

Mens Rea

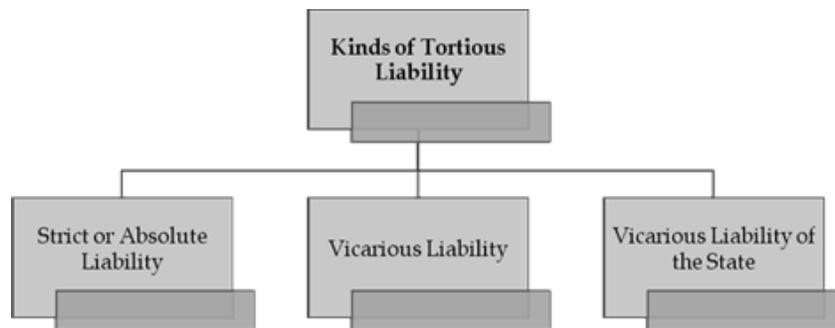
How far a guilty mind of persons is required for liability for tort?

The General principle lies in the maxim “*actus non facit reum nisi mens sit rea*” i.e. the act itself creates no guilt in the absence of a guilty mind. It does not mean that for the law or Torts, the act must be done with an evil motive, but simply means that mind must concur in the Act, the act must be done either with wrongful intention or negligence. However, the cases of absolute or strict liability are exceptions to this principle.





Kinds of Tortious Liability



Strict or Absolute Liability

In some torts, the defendant is liable even though the harm to the plaintiff occurred without intention or negligence on the part of defendant. In other words, the defendant is held liable without fault. These cases fall under the following categories:

- (i) *Liability for Inevitable Accident* – Such liability arises in cases where damage is done by the escape of dangerous substances brought or kept by anyone upon his land. Such cases are where a man is made by law an insurer of other against the result of his activities.
- (ii) *Liability for Inevitable Mistake* – Such cases are where a person interferes with the property or reputation of another.
- (iii) *Vicarious Liability for Wrongs committed by others* – Responsibility in such cases is imputed by law on the grounds of social policy or expediency. These case involve liability of master for the acts of his servant.

The rule in *Rylands v. Flethcer* (1868) L.R. 3 H.L. 330 is that a man acts at his peril and is the insurer of

the safety of his neighbour against accidental harm. Such duty is absolute because it is independent of negligence on the part of the defendant or his servants. It was held in that case that: "If a person brings or accumulates on his land anything which, if it should escape may cause damage to his neighbours, he does so at his own peril. If it does not escape and cause damage he is responsible, however careful he may have been, and whatever precautions he may have taken to prevent damage."

The facts of this case were as follows: B, a mill owner employed independent contractors, who were apparently competent to construct a reservoir on his land to provide water for his mill. There were old disused mining shafts under the site of the reservoir which the contractors failed to observe because they were filled with earth. The contractors therefore, did not block them. When the water was filled in the reservoir, it bursts through the shafts and flooded the plaintiff's coal mines on the adjoining land. It was found as a fact that B did not know of the shafts and had not been negligent, though the independent contractors, had been, B was held liable. Blackburn, J., observed; "We think that the true rule of law is that the person, who for his own purposes brings on his lands and collects and keeps there anything likely to do mischief if it escapes, must keep it at his peril and if, he does not do so is, prima facie answerable for all the damage which is the natural consequence of its escape."

Later in the case of *Read v. Lyons* [(1946) 2 All. E.R. 471 (H.L.)], it has been explained that two conditions are necessary in order to apply the rule in *Ryland v. Fletcher*, these are:

- Escape from a place of which the defendant has occupation or over which he has a control to a place which is outside his occupation or control or something likely to do mischief if it escapes; and
- Non-natural use of Land : The defendant is liable if he makes a non-natural use of land. If either of these conditions is absent, the rule of strict liability will not apply.

Exceptions to the Rule of Strict Liability

The following exceptions to the rule of strict liability have been introduced in course of time, some of them being inherent in the judgment itself in *Ryland v. Fletcher*:

(i) *Damage due to Natural Use of the Land*

In *Ryland v. Fletcher* water collected in the reservoir in such large quantity, was held to be non-natural use of land. Keeping water for ordinary domestic purpose is 'natural use'. Things not essentially dangerous which is not unusual for a person to have on his own land, such as water pipe installations in buildings, the working of mines and minerals on land, the lighting of fire in a fire-place of a house, and necessary wiring for supplying electric light, fall under the category of "natural use" of land.

(ii) *Consent of the plaintiff*

Where the plaintiff has consented to the accumulation of dangerous thing on the defendant's land, the liability under the rule in *Ryland v. Fletcher* does not arise. Such a consent is implied where the source of danger is for the 'common benefit' of both the plaintiff and the defendant.

(iii) *Act of Third Party*

If the harm has been caused due to the act of a stranger, who is neither defendant's servant nor agent nor the defendant has any control over him, the defendant will not be liable. Thus, in *Box v. Jubh* (1879) 4 Ex. D. 76, the overflow from the defendant's reservoir was caused by blocking of a drain by stranger, the defendant was held not liable. But if the act of the stranger, is or can be foreseen by the defendant and the damage can be prevented, the defendant must, by due care prevent the damage. Failure on his part to avoid such damage will make him liable.

(iv) *Statutory Authority*

Sometimes, public bodies storing water, gas, electricity and the like are by statute, exempted from liability so long as they have taken reasonable care.

Thus, in *Green v. Chelzea Water Works Co.* (1894) 70 L.T. 547 the defendant company had a statutory duty to maintain continuous supply of water. A main belonging to the company burst without any fault on its part as a consequence of which plaintiff's premises were flooded with water. It was held that the company was not liable as the company was engaged in performing a statutory duty.

(v) *Act of God*

If an escape is caused, through natural causes and without human intervention circumstances which no human foresight can provide against and of which human prudence is not bound to recognize the possibility, there is then said to exist the defence of Act of God.

(vi) *Escape due to plaintiff's own Default*

Damage by escape due to the plaintiff's own default was considered to be good defence in *Rylands v. Fletcher* itself. Also, if the plaintiff suffers damage by his own intrusion into the defendant's property, he cannot complain for the damage so caused.

Applicability of the Rule in Rylands v. Fletcher in Cases of Enterprises Engaged in a Hazardous or Inherently Dangerous Industry.

The Supreme Court has discussed the applicability of the rule of *Rylands v. Fletcher* in the case of *M.C. Mehta v. Union of India and Others* (1987) 1. Comp. L.J. p. 99 S.C. while determining the principles on which the liability of an enterprise engaged in a hazardous or inherently dangerous industry depended if an accident occurred in such industry.

"We have to evolve new principle and lay down new norms which would adequately deal with the new problems which arise in a highly industrialized economy. We cannot allow our judicial thinking to be constricted by reference to the law as it prevails in England or for the matter of that, in any other foreign country".

On the question of the nature of liability for a hazardous enterprise the court while noting that the above rule as developed in England recognizes certain limitations and responsibilities, recorded its final view as follows:

“We are of the view that an enterprise which is engaged in a hazardous or inherently dangerous industry which poses a potential threat to the health and safety of the persons working in the factory and residing in the surrounding areas, owes an absolute and non-delegable duty to the community to ensure that no harm results to anyone on account of hazardous or inherently dangerous nature of the activity which it has undertaken. The enterprise must be held to be under an obligation to provide that the hazardous or inherently dangerous activity in which it is engaged, must be conducted with the highest standards of safety; and if any harm results on account of such activity, the enterprise must be absolutely liable to compensate for such harm; and it should be no answer to the enterprise to say that it had taken all reasonable care and that the harm occurred without negligence on its part.”

Thus, while imposing absolute liability for manufacture of hazardous substances, the Supreme Court intended that the requirement of non-natural use or the aspect of escape of a dangerous substance, commonly regarded as essential for liability under *Rylands v. Fletcher*, need not be proved in India.

Vicarious Liability



Normally, the tortfeasor is liable for his tort. But in some cases a person may be held liable for the tort committed by another. A master is vicariously liable for the tort of his servant, principal for the tort of his agent and partners for the tort of a partner. This is known as vicarious liability in tort. The common examples of such a liability are:

(a) *Principal and Agent [Specific authority]*

Qui facit per alium facit per se – he who acts through another is acting himself, so that the act of the agent is the act of the principal. When an agent commits a tort in the ordinary course of his duties as an agent, the principal is liable for the same. In *Lloyd v. Grace, Smith & Co.* (1912) A.C. 716, the managing clerk of a firm of solicitors, while acting in the ordinary course of business committed fraud, against a lady client by fraudulently inducing her to sign documents transferring her property to him. He had done so without the knowledge of his principal who was liable because the fraud was committed in the course of employment.

Partners

For the tort committed by a partner in the ordinary course of the business of firm, all the other partners are liable to the same extent as the guilty partner. The liability of the partners is joint and several. In *Hamlyn v. Houston & Co.* (1903) 1 K.B. 81, one of the two partners bribed the plaintiff's clerk and induced him to divulge secrets relating to his employer's business. It was held that both the partners were liable for the tort committed by only one of them.

(b) Master and Servant [Authority by relation]

A master is liable for the tort committed by his servant while acting in the course of his employment. The servant, of course, is also liable; their liability is joint and several.

In such cases (i) liability of a person is independent of his own wrongful intention or negligence (ii) liability is joint as well several (iii) In case of vicarious liability the liability arises because of the relationship between the principal and the wrongdoer but in case of absolute or strict liability the liability arises out of the wrong itself.

A master is liable not only for the acts which have been committed by the servant, but also for acts done by him which are not specifically authorized, in the course of his employment. The basis of the rule has been variously stated: on the maxim *Respondeat Superior* (Let the principal be liable) or on the maxim *Qui facit per alium facit per se* (he who does an act through another is deemed to do it himself).

The master is liable even though the servant acted against the express instructions, for the benefit of his master, so long as the servant acted in the course of employment.

(c) Employer and Independent Contractor

It is to be remembered that an employer is vicariously liable for the torts of his servants committed in the course of their employment, but he is not liable for the torts of those who are his independent contractors.

A servant is a person who is employed by another (the employer) to perform services in connection with the affairs of the employer, and over whom the employer has control in the performance of these services. An independent contractor is one who works for another but who is not controlled by that other in his conduct in the performance of that work. These definitions show that a person is a servant where the employer "retains the control of the actual performance" of the work.

(d) Where Employer is Liable for the acts of Independent Contractor

The employer is not liable merely because an independent contractor commits a tort in the course of his employment; the employer is liable only if he himself is deemed to have committed a tort. This may happen in one of the following three ways:

- (i) When employer authorizes him to commit a tort.

- (ii) In torts of strict liability.
- (iii) Negligence of independent contractor.

(e) Where Employer is not Liable for the acts of an Independent Contractor

An employer is not liable for the tort of an independent contractor if he has taken care in the appointment of the contractor. In *Philips v. Britania Hygienic Laundry Co.* (1923), the owner of lorry was held not liable when a third-party's vehicle was damaged, in consequence of the negligent repair of his lorry by a garage proprietor. Employers of independent contractors are liable for the "collateral negligence" of their contractors in the course of his employment. Where A employed B to fit casement windows into certain premises. B's servant negligently put a tool on the sill of the window on which he was working at the time. The wind blew the casement open and the tool was knocked off the sill on to a passer-by. The employer was held to be liable, because the harm was caused by the work on a highway and duty lies upon the employer to avoid harm.

(f) Liability for the acts of Servants

An employer is liable whenever his servant commits a tort in the course of his employment. An act is deemed to be done in the course of employment if it is either:

- (i) a wrongful act authorized by the employer, or
- (ii) a wrongful and unauthorized mode of doing some act authorized by the employer.

So far as the first alternative is concerned there is no difficulty in holding the master liable for the tort of his servant. A few examples, however, are necessary to explain the working of the rule in the second. These are as follows:

In *Century Insurance Co. Ltd. v. Northern Ireland Road Transport Board* (1942) A.C. 509, the director of a petrol lorry, while transferring petrol from the lorry to an underground tank at a garage, struck a match in order to light a cigarette and then threw it, still alight on the floor. An explosion and a fire ensued. The House of Lords held his employers liable for the damage caused, for he did the act in the course of carrying out his task of delivering petrol; it was an unauthorized way of doing what he was employed to do.

Similarly, in *Bayley v. Manchester, Sheffield and Lincolnshire Rly. Co.* (1873) L.R. 7 C.P. 415, erroneously thinking that the plaintiff was in the wrong train, a porter of the defendants forcibly removed him. The defendants were held liable.

Vicarious Liability of the State

(a) The Position in England

At Common Law the Crown could not be sued in tort, either for wrongs actually authorized

by it or committed by its servants, in the course of their employment. With the passing of the Crown Proceeding Act, 1947, the Crown is liable for the torts committed by its servants just like a private individual. Thus, in England, the Crown is now vicariously liable for the torts of its servants.

(b) *The Position in India*

Unlike the Crown Proceeding Act, 1947 of England, we have no statutory provision with respect to the liability of the State in India.

When a case of Government liability in tort comes before the courts, the question is whether the particular Government activity, which gave rise to the tort, was the sovereign function or non-sovereign function. If it is a sovereign function it could claim immunity from the tortious liability, otherwise not. Generally, the activities of commercial nature or those which can be carried out by the private individual are termed as non-sovereign functions.

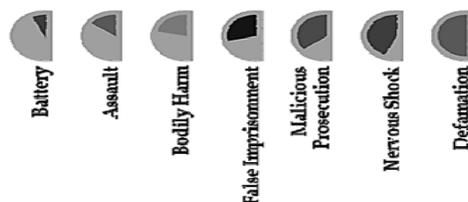
The whole idea of Vicariously Liability of the State for the torts committed by its servants is based on three principles:

- Respondeat superior (let the principal be liable).
- Quifacit per alium facit per se (he who acts through another does it himself).
- Socialisation of Compensation.

The position of State liability as stated in Article 300 of the Constitution is as under: Clause (1) of Article 300 of the Constitution provides first, that the Government of India may sue or be sued by the name of the Union of India and the Government of a State may sue or be sued by the name of the State; secondly, that the Government of India or the Government of a State may sue or be sued in relation to their respective affairs in the like cases as the Dominion of India and the corresponding Provinces or the corresponding Indian States might have sued or be sued, "if this Constitution had not been enacted", and thirdly, that the second mentioned rule shall be subject to any provisions which may be made by an Act of Parliament or of the Legislature of such State, enacted by virtue of powers conferred by the Constitution.

Torts or Wrongs to Personal Safety and Freedom

An action for damages lies in the following kinds of wrongs which are styled as injuries to the person of an individual:



(a) *Battery*

Any direct application of force to the person of another individual without his consent or lawful justification is a wrong of battery. To constitute a tort of battery, therefore, two things are necessary: (i) use of force, however, trivial it may be without the plaintiff's consent, and (ii) without any lawful justification.

Even though the force used is very trivial and does not cause any harm, the wrong is committed. Thus, even to touch a person in anger or without any lawful justification is battery.

(b) *Assault*

Assault is any act of the defendant which directly causes the plaintiff immediately to apprehend a contact with his person. Thus, when the defendant by his act creates an apprehension in the mind of the plaintiff that he is going to commit battery against him, the tort of assault is committed. The law of assault is substantially the same as that of battery except that apprehension of contact, not the contact itself has to be established. Usually when there is a battery, there will also be assault, but not for instance, when a person is hit from behind. To point a loaded gun at the plaintiff, or to shake fist under his nose, or to curse him in a threatening manner, or to aim a blow at him which is intercepted, or to surround him with a display of force is to assault him clearly if the defendant by his act intends to commit a battery and the plaintiff apprehends it, is an assault.

(c) *Bodily Harm*

A wilful act (or statement) of defendant, calculated to cause physical harm to the plaintiff and in fact causing physical harm to him, is a tort.

(d) *False Imprisonment*

False imprisonment consists in the imposition of a total restraint for some period, however short, upon the liberty of another, without sufficient lawful justification. It means unauthorized restraint on a person's body. What happens in false imprisonment is that a person is confined within certain limits so that he cannot move about and so his personal liberty is infringed. It is a serious violation of a person's right and liberty whether being confined within the four walls or by being prevented from leaving place where he is. If a man is restrained, by a threat of force from leaving his own house or an open field there is false imprisonment.

(e) *Malicious Prosecution*

Malicious prosecution consists in instigating judicial proceedings (usually criminal) against another, maliciously and without reasonable and probable cause, which terminate in favour of that other and which results in damage to his reputation, personal freedom or property.

The following are the essential elements of this tort:

- (i) There must have been a prosecution of the plaintiff by the defendant.
- (ii) There must have been want of reasonable and probable cause for that prosecution.
- (iii) The defendant must have acted maliciously (i.e. with an improper motive and not to further the end of justice).
- (iv) The plaintiff must have suffered damages as a result of the prosecution.
- (v) The prosecution must have terminated in favour of the plaintiff.

To be actionable, the proceedings must have been instigated actually by the defendant. If he merely states the fact as he believes them to a policeman or a magistrate he is not responsible for any proceedings which might ensue as a result of action by such policeman or magistrate on his own initiative.

(f) *Nervous Shock*

This branch of law is comparatively of recent origin. It provides relief when a person may get physical injury not by an impact, e.g., by stick, bullet or sword but merely by the nervous shock through what he has seen or heard. Causing of nervous shock itself is not enough to make it an actionable tort, some injury or illness must take place as a result of the emotional disturbance, fear or sorrow.

(g) *Defamation*

Defamation is an attack on the reputation of a person. It means that something is said or done by a person which affects the reputation of another. It is defined as follows:

“Defamation is the publication of a statement which tends to lower a person in the estimation of right thinking members of society generally; or which tends to make them shun or avoid that person.”

Defamation may be classified into two heads: Libel and Slander. Libel is a representation made in some permanent form, e.g. written words, pictures, caricatures, cinema films, effigy, statue and recorded words. In a cinema films both the photographic part of it and the speech which is synchronized with it amount to tort.

Slander is the publication of a defamatory statement in a transient form; statement of temporary nature such as spoken words, or gestures.

Generally, the punishment for libel is more severe than for slander. Defamation is tort as well as a crime in India.

In India both libel and slander are treated as a crime. Section 499 of the Indian Penal Code

recognizes both libel and slander as an offence. However, torts in criminal law are stricter than in law of tort.

Remedies in Torts

Judicial Remedies

Three types of judicial remedies are available to the plaintiff in an action for tort namely: (i) Damages, (ii) Injunction, and (iii) Specific Restitution of Property.

Extra Judicial Remedies

In certain cases it is lawful to redress one's injuries by means of self-help without recourse to the court. These remedies are:

(a) *Self Defence*

It is lawful for any person to use reasonable forces to protect himself, or any other person against any unlawful use of force.

(b) *Prevention of Trespass*

An occupier of land or any person with his authority may use reasonable force to prevent trespassers entering or to eject them but the force should be reasonable for the purpose.

(c) *Re-entry on Land*

A person wrongfully disposed of land may retake possession of land if he can do so in a peaceful and reasonable manner.

(d) *Re-capture of Goods*

It is neither a crime nor a tort for a person entitled to possession of a chattel to take it either peacefully or by the use of a reasonable force from one who has wrongly taken it or wrongfully detained it.

(e) *Abatement of Nuisance*

The occupier of land may lawfully abate (i.e. terminate by his own act), any nuisance injuriously affecting it. Thus, he may cut overhanging branches as spreading roots from his neighbour's trees, but (i) upon giving notice; (ii) by choosing the least mischievous method; (iii) avoiding unnecessary damage.

(f) *Distress Damage Feasant*

An occupier may lawfully seize any cattle or any chattel which are unlawfully on his land doing damage there and detain them until compensation is paid for the damage. The right is known as that of distress damage feasant-to distrain things which are doing damage.

Sample Questions

1. Tort is a species of:
 - (a) Criminal wrong
 - (b) Breach of contract
 - (c) Civil wrong**
 - (d) Moral wrong.
2. The Law of Torts has largely developed through:
 - (a) Judicial decisions**
 - (b) Customs
 - (c) Legislations
 - (d) None of the above
3. The law of torts deals with:
 - (a) Defamation
 - (b) Trespass
 - (c) Negligence
 - (d) All of the above.**
4. In tort, the remedy is:
 - (a) Liquidated damages
 - (b) Unliquidated damages**
 - (c) Punishment
 - (d) Judicial review.

5. When master is held liable for the wrongful acts of his servant, the liability is called:

(a) Vicarious liability

(b) Strict liability

(c) Tortuous liability

(d) Absolute liability

Lesson 3

**ELEMENTS
OF COMPANY
SECRETARIES
LEGISLATION**

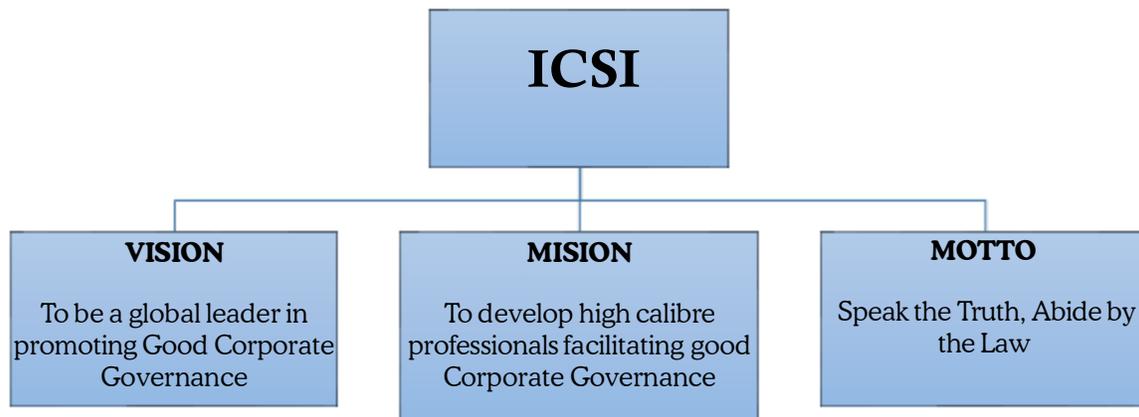
THE INSTITUTE OF COMPANY SECRETARIES OF INDIA

The Institute of Company Secretaries of India (ICSI) is the only recognized professional body in India to develop and regulate the profession of Company Secretaries in India. It is a premier national professional body set up under an act of Parliament, the Company Secretaries Act, 1980. ICSI functions under the jurisdiction of the Ministry of Corporate Affairs, Government of India. The Institute provides top-quality education to the students of Company Secretaries (CS) Course and best quality set standards to CS Members. At present, there are more than 50,000 members and about 4, 00,000 students on the roll of ICSI.

ICSI has its headquarters at New Delhi, four Regional Offices at New Delhi, Chennai, Kolkata, Mumbai and over 70 Chapters across India.

ICSI has been contributing to the initiatives of Government of India that have potential to excel the social-economic growth of India.

THE VISION, MOTTO, MISSION AND CORE VALUE OF THE INSTITUTE



VISION

To be a global leader in promoting Good Corporate Governance

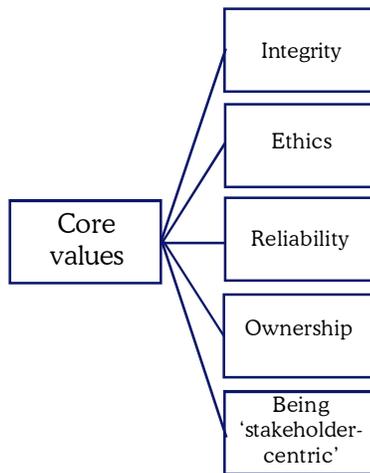
MISSION

To develop high calibre professionals facilitating good Corporate Governance

MOTTO

Speak the Truth, Abide by the Law

CORE VALUES



Core values are the expression of beliefs, followed by an individual, group or community in their personal or professional behavior, individually or collectively. The ICSI identifies for itself and its members the following core values:

- Integrity
- Ethics
- Reliability
- Ownership
- Being 'stakeholder-centric'

Integrity

The ICSI's vision to be a global leader in promoting Good Corporate Governance is a promise to the nation. It casts upon the ICSI and the profession of Company Secretaries a huge responsibility to deliver upon this promise, with objectivity and integrity as core values. There is no middle path to integrity.

Etymologically, the word 'integrity' derives from the Latin word 'integer' which means whole or complete. In this context, integrity may comprise the personal inner sense of wholeness deriving from character, courage and consistency. As integrity conveys a sense of wholeness and strength, members shall be guided by a set of core principles that will empower them to remain consistent with high standards, viz compassion, dependability, generosity, honesty, openness, transparency, loyalty, maturity, objectivity, trust, and wisdom.

Ethics

The term 'ethics' has its origin from a Greek word "ethos", which means character or custom – the distinguishing character, moral nature or guiding beliefs of a person, institution or a group.

'Ethics' in its simplest form means possessing a sense of right and wrong. Whatever is conscientiously right is ethical; whatever is not, is unethical. In other words, ethics is the sense of right and wrong, coupled with a desire to do good in some measure for someone.

The ICSI has been built on the principle of ethics and its members continuously strive to promote ethical practices, and hold the profession in high esteem, which is integral to maintaining quality and reputation of both, the ICSI and its members.

Being 'stakeholder-centric'

The ICSI, its members and the Team ICSI pledge to uphold the established principles of professional ethics, values and standards and will always promote honesty and transparency in their behaviour, practices and processes.

Reliability

Reliability is an assurance of quality of service and commitment. At the ICSI, reliability is a core value reinforced by stringent processes specially focusing on quality of service, predictability and reliability. The values are an intrinsic component of work culture and sustainable growth. Quality and predictability through commitment and value-added services is what would be the strongest USP of the ICSI and its members. We shall continuously build on reliability as our core value for it is the sum total of quality service to our stakeholders.

Ownership

Ownership is synonymous with responsibility, accountability and empowerment. The idea of ownership is much more than simply a willingness to accept own criticism, deficiency or oversight. It is more about setting one's priorities, placing rightful obligations on others as high as obligations to self. To be responsible is to always do the right things in the eyes of valued stakeholders and the public at large. It is to value the trust and confidence stakeholders put in them. It is about commitment to keep a promise or make right some unintentional wrong, even when it is inconvenient to do so. "Ownership being one of our core values, we believe that it will reduce risk, increase efficiency and contribute to goodwill, reputation and brand image of the Institute and the profession. We shall uphold this at all times."

Being Stakeholder-Centric

Stakeholder is our most valued constituency when it comes to being able to achieve our goals. We believe in constant stakeholder consultation and in translating their aspirations into achievable goals. We take pride in having a transparent and stakeholder focused approach in having a trustworthy and collaborative relationship with them.

It will be our endeavor to constantly activate new channels and pathways to not only meet but beat the expectations of our stakeholders. This window into the future will help us to achieve sustained performance and growth.

COMPANY SECRETARY

According to Section 2(1)(c) of the Company Secretaries Act, 1980 “Company Secretary” means a person who is a member of the Institute of Company Secretaries of India. The role of the Company secretary is defined in various other legal enactments.

Under the Companies Act, 2013 Company Secretary has been defined under section 2(24) as: ‘Company Secretary’ or ‘Secretary’ means a Company Secretary as defined in Section 2(1)(c) of the Company Secretaries Act, 1980 who is appointed by a company to perform the functions of the Company Secretary under the Companies Act, 2013.

Company Secretary is recognized as one of the **Key Managerial Personnel (KMP)** of a company under the Companies Act, 2013. Section 203 of Companies Act, 2013 read with Rule 8 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 provides that every listed company and every other public company having a paid-up share capital of ten crore rupees or more shall have the following whole-time key managerial personnel:

- (i) Managing Director, or Chief Executive Officer or Manager and in their absence, a Whole-Time Director;
- (ii) Company Secretary; and
- (iii) Chief Financial Officer:

According to Rule 8A of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014. Every Private company which has a paid up share capital of 10 crore rupees or more shall have a whole-time company secretary.

Functions of a Company Secretary

The functions of the company secretary shall include,—

- (a) to report to the Board about compliance with the provisions of this Act, the rules made thereunder and other laws applicable to the company;
- (b) to ensure that the company complies with the applicable secretarial standards;
- (c) to discharge such other prescribed duties .

Duties of Company Secretary

The duties of Company Secretary shall also discharge, the following duties, namely:-

- (1) to provide to the directors of the company, collectively and individually, such guidance as they may require, with regard to their duties, responsibilities and powers;

- (2) to facilitate the convening of meetings and attend Board, committee and general meetings and maintain the minutes of these meetings;
- (3) to obtain approvals from the Board, general meeting, the government and such other authorities as required under the provisions of the Act;
- (4) to represent before various regulators, and other authorities under the Act in connection with discharge of various duties under the Act;
- (5) to assist the Board in the conduct of the affairs of the company;
- (6) to assist and advise the Board in ensuring good corporate governance and in complying with the corporate governance requirements and best practices; and
- (7) to discharge such other duties as have been specified under the Act or rules; and
- (8) such other duties as may be assigned by the Board from time to time.

Company Secretary in Practice

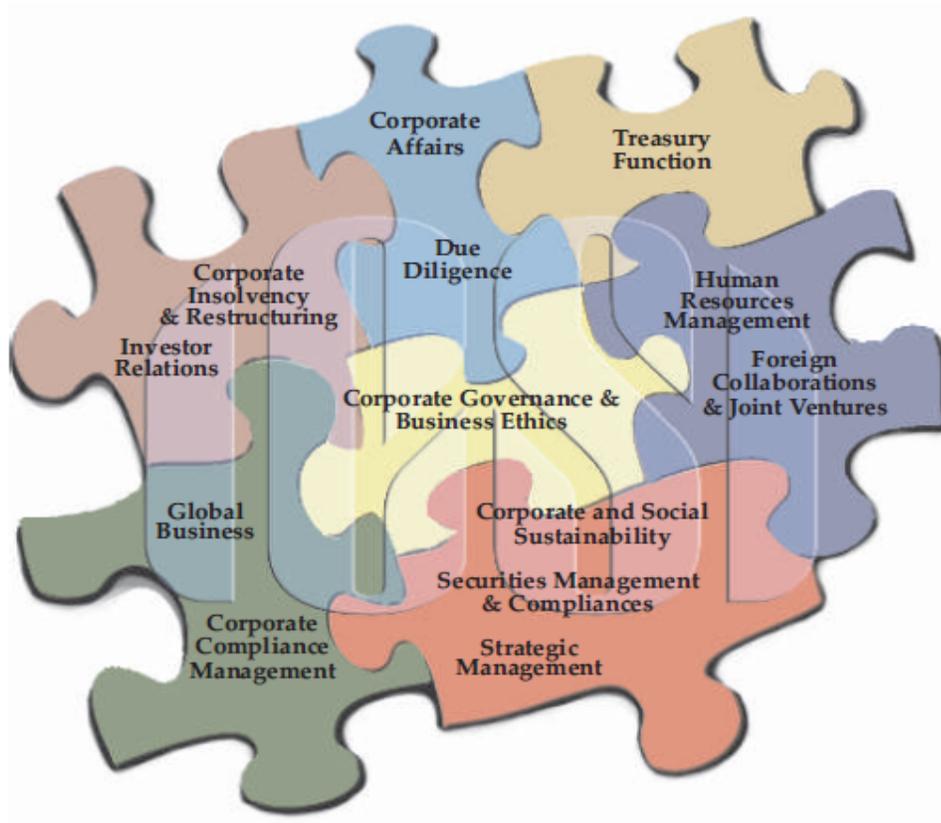
As per Section (25) the Companies Act, 2013 "Company Secretary in Practice" means a company secretary who is deemed to be in practice under section 2(2) of the Company Secretaries Act, 1980.

A member of the Institute shall be deemed "to be in practice" when, individually or in partnership with one or more members of the Institute in practice or in partnership with members of such other recognised professions as may be prescribed, he, in consideration of remuneration received or to be received,—

- (a) Engages himself in the practice of the profession of Company Secretaries to, or in relation to, any company; or
- (b) offers to perform or performs services in relation to the promotion, forming, incorporation, amalgamation, reconstruction, reorganisation or winding up of companies; or
- (c) offers to perform or performs such services as may be performed by—
 - (i) an authorised representative of a company with respect to filing, registering, presenting, attesting or verifying any documents (including forms, applications and returns) by or on behalf of the company
 - (ii) a share transfer agent,
 - (iii) an issue house,
 - (iv) a share and stock broker,
 - (v) a secretarial auditor or consultant,

- (vi) an adviser to a company on management, including any legal or procedural matters
- (vii) issuing certificates on behalf of, or for the purposes of, a company; or
- (d) holds himself out to the public as a Company Secretary in practice; or
- (e) renders professional services or assistance with respect to matters of principle or detail relating to the practice of the profession of Company Secretaries; or
- (f) renders such other services as, in the opinion of the Council, are or may be rendered by a Company

Company Secretary in Practice have been authorised by Government as well as Regulatory Bodies including Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), NCLT & NCLAT, Insurance Regulatory Authority of India (IRDA), Competition Commission of India (CCI), Real Estate Regulatory Authority of India (RERA) and Stock Exchanges (SE) to act as authorised representative and issue various certifications and undertake Secretarial Audit of Bigger Companies.



A Company Secretary being multidisciplinary professional renders services in following areas:

CORPORATE GOVERNANCE AND SECRETARIAL SERVICES

Corporate Governance Services

Advising on good governance practices and compliance of Corporate Governance norms as prescribed under various Corporate, Securities and Other Business Laws and regulations and guidelines made thereunder.

Corporate Secretarial Services

1. Promotion, formation and incorporation of companies and matters related therewith
2. Filing, registering any document including forms, returns and applications by and on behalf of the company as an authorized representative
3. Maintenance of secretarial records, statutory books and registers
4. Arranging board/general meetings and preparing minutes thereof
5. All work relating to shares and their transfer and transmission

SECRETARIAL AUDIT

According to Section 204 of the Companies Act, 2013 every listed company and every public company having a paid-up share capital of fifty crore rupees or more or every public company having a turnover of two hundred fifty crore rupees or more or every company having outstanding loans or borrowings from banks or public financial institutions of one hundred crore rupees or more shall annex with its Board's report made in terms of section 134(3), a secretarial audit report, given by a company secretary in practice, in prescribed form .

It shall be the duty of the company to give all assistance and facilities to the company secretary in practice, for auditing the secretarial and related records of the company.

The Board of Directors, in their report made in terms of section 134(3), shall explain in full any qualification or observation or other remarks made by the company secretary in practice in his report.

If a company or any officer of the company or the company secretary in practice, contravenes the provisions of this section, the company, every officer of the company or the company secretary in practice, who is in default, shall be punishable with fine which shall not be less than one lakh rupees but which may extend to five lakh rupees

CORPORATE LAWS ADVISORY AND REPRESENTATION

Advising companies on Compliance of legal and procedural aspects, particularly under

1. SEBI Act, SCRA and Rules and Regulations made thereunder

2. Insolvency and Bankruptcy Code
3. Foreign Exchange Management Act
4. Consumer Protection Act
5. Depositories Act
6. Environment and Pollution Control Laws
7. Labour and Industrial Laws
8. Co-operative Societies Act
9. Mergers and Amalgamations and Strategic Alliances
10. Foreign Collaborations and Joint Ventures
11. Setting up subsidiaries abroad
12. Competition Laws
13. IPR Protection, Management, Valuation and Audit
14. Real Estate(Regulation and Development) Act
15. Arbitration and Conciliation Act
16. Drafting of Legal documents.

Representing on behalf of a company and other persons before-

1. Registrar of Companies(RoC)/Regional Director(RD)
2. National Company Law Tribunal
3. Competition Commission of India
4. Securities Appellate Tribunal
5. National Company Law Appellate Tribunal
6. Consumer Forums
7. Telecom Disputes Settlement and Appellate Tribunal
8. Trade Marks Authority
9. Special Economic Zones Authorities
10. Tax Authorities
11. Other quasi-judicial bodies and Tribunals

Arbitration and Conciliation Services

Acting as Arbitrator/Conciliator in domestic and international commercial disputes. Advising on arbitration, negotiation and conciliation in commercial disputes between the parties and Drafting Arbitration/Conciliation Agreement/Clause.

FINANCIAL MARKETS SERVICES**Public Issue, Listing and Securities Management**

1. Advisor/consultant in issue of shares and other securities
2. Preparation of Projects Reports and Feasibility Studies
3. Syndication of Loans from banks & financial institutions
4. Drafting of prospectus/offer for sale/letter of offer/other documents related to issue of securities and obtaining various approvals in association with lead managers
5. Loan Documentation, registration of charges, status and search reports
6. Listing of securities/delisting of securities with recognized stock exchange
7. Private placement of shares and other securities
8. Buy-back of shares and other securities
9. Raising of funds from international markets ADR/GDR/ECB

Takeover Code and Insider Trading

1. Ensuring compliance of the Takeover Regulations and any other laws or rules as may be applicable in this regard.
2. Acting as Compliance Officer and ensuring compliance with SEBI (Prohibition of insider Trading) Regulations including maintenance of various documents.

Securities Compliance and Certification Services

Compliance with rules and regulations in the securities market particularly:

1. Internal Audit of Depository Participants
2. Certification under SEBI LODR/ICDR Regulations.
3. Audit in relation to Reconciliation of shares
4. Certificate in respect of compliance of Private Limited and Unlisted Public Company (Buy Back Securities) Rules

FINANCE AND ACCOUNTING SERVICES

1. Internal Audit

2. Secretary to Audit Committee
3. Working capital and liquidity management
4. Determination of an appropriate capital structure
5. Analysis of capital investment proposals
6. Business valuations prior to mergers and/or acquisitions
7. Loan syndication
8. Budgetary controls
9. Accounting and compilation of financial statements

TAXATION SERVICES

1. Advisory services to companies on tax management and tax planning under Income Tax, GST and Customs Laws
2. Preparing/reviewing various returns and reports required for compliance with the tax laws and regulations
3. Representing companies and other persons before the tax authorities and tribunals

INTERNATIONAL TRADE AND WTO SERVICES

1. Advising on all matters related to IPRs and TRIPs Agreement of WTO
2. Advising on matters relating to antidumping, subsidies and countervailing duties
3. International Commercial Arbitration
4. Advising on and issuing certificates on Foreign Trade Policy and Procedures
5. Advising on Intellectual Property licensing and drafting of Agreement
6. Acting as registered Trade Mark Agent

MANAGEMENT SERVICES

General/Strategic Management

1. Advising on Legal Structure of the organization
2. Business policy strategy and planning
3. Formulation of the organizational structure
4. Acting as management representative to obtain ISO Certification

Corporate Communications and Public Relations

1. Communication with shareholders, stakeholders, Government and Regulators, Authorities, etc.

2. Advisory services for Brand equity and image building

Human Resources Management

1. Manpower planning and development
2. Audit of the HR function
3. Performance appraisal
4. Motivation and remuneration strategies
5. Industrial relations
6. Office management, work studies and performance standards
7. Advising on industrial and labour laws

Information Technology

1. Compliance with cyber laws
2. Conducting Board Meetings through video-conferencing and teleconferencing
3. Advising on software copyright and licensing
4. Development of management reports and controls
5. Maintenance of statutory records in electronic form
6. Sending notices to shareholders by electronic mode
7. Filing of forms/documents in electronic form with Registrar of Companies and other statutory authorities

Sample Questions

1. The 'Vision' of the Institute of Company Secretaries of India is
 - (a) to promote good Corporate Governance
 - (b) to be a global leader in promoting Good Corporate Governance**
 - (c) to develop high calibre professionals facilitating good Corporate Governance
 - (d) to be a global leader in Governance
2. Which of the following is/are "Mission" of ICSI?
 - (a) Creating Brand ICSI
 - (b) to develop high calibre professionals facilitating good Corporate Governance**
 - (c) to develop globalisation of professions of Company Secretaries
 - (d) All of the above
3. The Institute of Company Secretaries of India was constituted as a statutory body in the year _____.
 - (a) 1975
 - (b) 1979
 - (c) 1980**
 - (d) 1982
4. Which of the following are the functions of the Institute of Company Secretaries of India?
 - (a) Examination of the of the Student
 - (b) Regulation of Training of the Students
 - (c) Conduct of elections to the Council of the Institute
 - (d) All of the above**

5. A Company Secretary in Practice can appear as 'Authorised Representative' before-
- (a) Real Estate Regulatory Authority (RERA)
 - (b) Competition Commission of India (CCI)
 - (c) National Company Law Tribunal (NCLT)
 - (d) All of the above.**

Lesson 4

**ELEMENTS
OF
COMPANY LAW**

MEANING OF COMPANY

The word 'company' is derived from the Latin word (Com=with or together; panis =bread), and it originally referred to an association of persons who took their meals together. In the leisurely past, merchants took advantage of festive gatherings, to discuss business matters. Now a days, the business matters have become more complicated and cannot be discussed at length at festive gatherings. Therefore, the word company has assumed greater importance. It denotes a joint stock enterprise in which the capital is contributed by a large number of people. Thus, in popular parlance, a company denotes an association of like-minded persons formed for the purpose of carrying on some business or undertaking. A company is a corporate body and a legal person having status and personality distinct and separate from that of the members constituting it.

It is called a body corporate because the persons composing it are made into one body by incorporating it according to the law and clothing it with legal personality. The word 'corporation' is derived from the Latin term 'corpus' which means 'body'. Accordingly, 'corporation' is a legal person created by the process other than natural birth. It is, for this reason, sometimes called artificial legal person. As a legal person, a corporate is capable of enjoying many of the rights and incurring many of the liabilities of a natural person.

In the legal sense, a company is an association of both natural and artificial persons incorporated under the existing law of a country. In terms of the Section 2(20) of the Companies Act, 2013, Company means a company incorporated under this Act or under any previous company law. In common law, a company is a "legal person" or "legal entity" separate from, and capable of surviving beyond the lives of its members. However, an association formed not for profit acquires a corporate life and falls within the meaning of a company by reason of a licence under Section 8 of the Act.

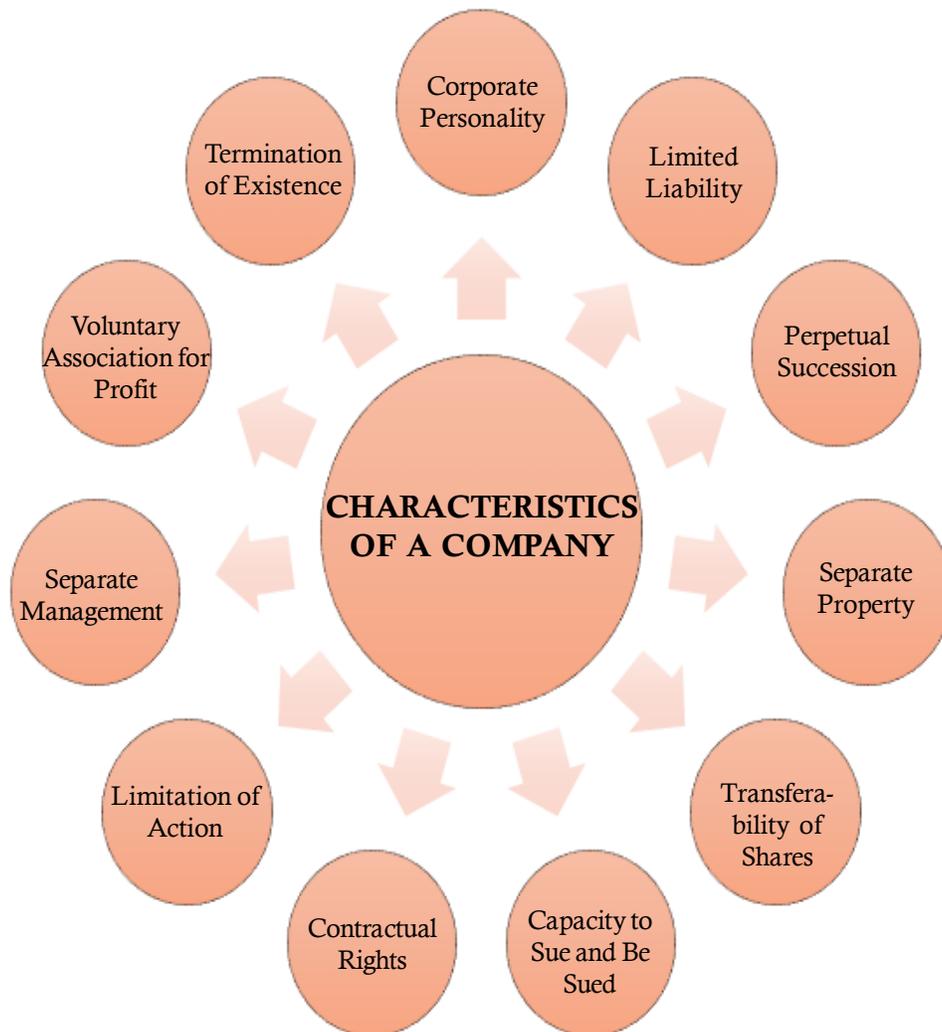
But a company is not merely a legal institution. It is rather a legal device for the attainment of any social or economic end. It is, therefore, a combined political, social, economic and legal institution. Thus, the term company has been described in many ways. "It is a means of cooperation and organisation in the conduct of an enterprise". It is "an intricate, centralised, economic and administrative structure run by professional managers who hire capital from the investor(s)". Lord Justice James has defined a company as "an association of many persons who contribute money or money's worth to a common stock and employ it in some trade or business and who share the profit and loss arising therefrom. The common stock so contributed is denoted in money and is the capital of the company. The persons who form it, or to whom it belongs, are members. The proportion of capital to which each member is entitled is his "share".

From the foregoing discussion it is clear that a company has its own corporate and legal personality distinct and separate from that of its members. A brief description of the various attributes is given here to explain the nature and characteristics of the company as a corporate body.

NATURE & CHARACTERISTICS OF A COMPANY

Since a corporate body (i.e. a company) is the creation of law, it is not a human being, it is an artificial person (i.e. created by law); it is clothed with many rights, obligations, powers and duties prescribed

by law; it is called a 'person'. Being the creation of law, it possesses only the properties conferred upon it by its Memorandum of Association. Within the limits of powers conferred by the charter, it can do all acts as a natural person may do.



The most striking characteristics of a company are:

(i) Corporate Personality

By incorporation under the Act, the company is vested with a corporate personality quite distinct from individuals who are its members. Being a separate legal entity it bears its own name and acts under a corporate name. It has a seal of its own. Its assets are separate and distinct from those of its members. It is also a different 'person' from the members who compose it. As such it is capable of owning property, incurring debts, borrowing money, having a bank account, employing people, entering into contracts and suing or being sued in the same manner as an individual. Its members are its owners but they can be its creditors simultaneously as it has a separate legal entity. A shareholder cannot be held liable for the acts of the company even if he holds virtually the entire share capital. The shareholders are not the agents of the company and so they cannot bind it by their acts. The company does not hold its property as an agent or trustee for its members and they cannot sue to enforce its rights, nor can they be sued in respect of its liabilities. Thus, 'incorporation' is the act of forming a legal corporation as a juristic person. A juristic person is in law also conferred with rights and obligations and is dealt with in accordance with law. In other words, the entity acts like a natural person but only through a designated person, whose acts are processed within the ambit of law [*Shiromani Gurdwara Prabandhak Committee v. Shri Sam Nath Dass* AIR 2000 SCW 139].

The case of *Salomon v. Salomon and Co. Ltd.*, (1897) A.C. 22 has clearly established the principle that once a company has been validly constituted under Companies Act, it becomes a legal person distinct from its members and for this purpose it is immaterial whether any member has a large or small proportion of the shares, and whether he holds those shares beneficially or as a mere trustee.

In the case, Salomon had, for some years, carried on a prosperous business as a leather merchant and boot manufacturer. He formed a limited company consisting of himself, his wife, his daughter and his four sons as the shareholders, all of whom subscribed for 1 share each so that the actual cash paid as capital was £ 7. Salomon sold his business (which was perfectly solvent at that time), to the Company for the sum of £ 38,782. The company's nominal capital was £ 40,000 in £ 1 shares. In part payment of the purchase money for the business sold to the company, debentures of the amount of £10,000 secured by a floating charge on the company's assets were issued to Salomon, who also applied for and received an allotment of 20,000 £ 1 fully paid shares. The remaining amount of £8,782 was paid to Salomon in cash. Salomon was the managing director and two of his sons were other directors.

The company soon ran into difficulties and the debenture holders appointed a receiver and the company went into liquidation. The total assets of the company amounted to £6050, its liabilities were £10,000 secured by debentures, £8,000 owing to unsecured trade creditors, who claimed the whole of the company's assets, viz., £6,050, on the ground that, as the company was a mere 'alias' or agent for Salomon, they were entitled to payment of their debts in priority to debentures. They further pleaded that Salomon, as principal beneficiary, was ultimately responsible for the debts incurred by his agent or trustee on his behalf.

Their Lordships of the House of Lords observed:

“When the memorandum is duly signed and registered, though there be only seven shares taken, the subscribers are a body corporate capable forthwith of exercising all the functions of an incorporated company. It is difficult to understand how a body corporate thus created by statute can lose its individuality by issuing the bulk of its capital to one person. The company is at law a different person altogether from the subscribers of the memorandum; and though it may be that after incorporation the business is precisely the same as before, the same persons are managers, and the same hands receive the profits, the company is not in law their agent or trustee. The statute enacts nothing as to the extent or degree of interest which may be held by each of the seven or as to the proportion of interest, or influence possessed by one or majority of the shareholders over others. There is nothing in the Act requiring that the subscribers to the memorandum should be independent or unconnected, or that they or any of them should take a substantial interest in the undertakings, or that they should have a mind or will of their own, or that there should be anything like a balance of power in the constitution of company.”

The case of *Lee v. Lee's Air Farming Ltd.* (1961) A.C. 12 (P.C.) illustrates the application of the principles established in Salomon's case (supra). In this case, a company was formed for the purpose of aerial top-dressing. Lee, a qualified pilot, held all but one of the shares in the company. He voted himself the managing director and got himself appointed by the articles as chief pilot at a salary. He was killed in an air crash while working for the company. His widow claimed compensation for the death of her husband in the course of his employment. The company opposed the claim on the ground that Lee was not a worker as the same person could not be the employer and the employee. The Privy Council held that Lee and his company were distinct legal persons which had entered into contractual relationships under which he became, the chief pilot, a servant of the company. In his capacity of managing director he could, on behalf of the company, give himself orders in his other capacity of pilot, and the relationship between himself, as pilot and the company, was that of servant and master. Lee was a separate person from the company he formed and his widow was held entitled to get the compensation. In effect the magic of corporate personality enabled him (Lee) to be the master and servant at the same time and enjoy the advantages of both.

The decision of the Calcutta High Court in *Re. Kondoli Tea Co. Ltd.*, (1886) ILR 13 Cal. 43, recognised the principle of separate legal entity even much earlier than the decision in *Salomon v. Salomon & Co. Ltd.* case. Certain persons transferred a Tea Estate to a company and claimed exemptions from ad valorem duty on the ground that since they themselves were also the shareholders in the company and, therefore, it was nothing but a transfer from them in one name to themselves under another name. While rejecting this Calcutta High Court observed: “The company was a separate person, a separate body altogether from the shareholders and the transfer was as much a conveyance, a transfer of the property, as if the shareholders had been totally different persons.

(ii) Limited Liability

“The privilege of limited liability for business debts is one of the principal advantages of doing business under the corporate form of organisation.” The company, being a separate person,

is the owner of its assets and bound by its liabilities. The liability of a member as shareholder, extends to contribution to the assets of the company up to the nominal value of the shares held and not paid by him. Members, even as a whole, are neither the owners of the company's undertakings, nor liable for its debts. In other words, a shareholder is liable to pay the balance, if any, due on the shares held by him, when called upon to pay and nothing more, even if the liabilities of the company far exceed its assets. This means that the liability of a member is limited. For example, if A holds shares of the total nominal value of Rs. 1,000 and has already paid Rs. 500/- (or 50% of the value) as part payment at the time of allotment, he cannot be called upon to pay more than Rs. 500/-, the amount remaining unpaid on his shares. If he holds fully-paid shares, he has no further liability to pay even if the company is declared insolvent. In the case of a company limited by guarantee, the liability of members is limited to a specified amount mentioned in the memorandum.

Buckley, J. in Re. London and Globe Finance Corporation, (1903) 1 Ch.D. 728 at 731, has observed: "The statutes relating to limited liability have probably done more than any legislation of the last fifty years to further the commercial prosperity of the country. They have, to the advantage of the investor as well as of the public, allowed and encouraged aggregation of small sums into large capitals which have been employed in undertakings of "great public utility largely increasing the wealth of the country".

There are, however, some statutory exceptions to the principle of limited liability. As the Companies Act, 2013 the members become personally liable if the membership falls below prescribed minimum and the business is carried on for more than six months thereafter.

(iii) Perpetual Succession

An incorporated company never dies except when it is wound up as per law. A company, being a separate legal person is unaffected by death or departure of any member and remains the same entity, despite total change in the membership. A company's life is determined by the terms of its Memorandum of Association. It may be perpetual or it may continue for a specified time to carry on a task or object as laid down in the Memorandum of Association. Perpetual succession, therefore, means that the membership of a company may keep changing from time to time, but that does not affect its continuity.

The membership of an incorporated company may change either because one shareholder has transferred his shares to another or his shares devolve on his legal representatives on his death or he ceases to be a member under some other provisions of the Companies Act. Thus, perpetual succession denotes the ability of a company to maintain its existence by the constant succession of new individuals who step into the shoes of those who cease to be members of the company. Professor L.C.B. Gower rightly mentions, "Members may come and go, but the company can go on for ever. During the war all the members of one private company, while in general meeting, were killed by a bomb, but the company survived — not even a hydrogen bomb could have destroyed it".

(iv) Separate Property

A company being a legal person and entirely distinct from its members, is capable of owning,

enjoying and disposing of property in its own name. The company is the real person in which all its property is vested, and by which it is controlled, managed and disposed off. Their Lordships of the Madras High Court in *R.F. Perumal v. H. John Deavin*, A.I.R. 1960 Mad. 43 held that “no member can claim himself to be the owner of the company’s property during its existence or in its winding-up”. A member does not even have an insurable interest in the property of the company.

(v) Transferability of Shares

The capital of a company is divided into parts, called shares. The shares are said to be movable property and, subject to certain conditions, freely transferable, so that no shareholder is permanently or necessarily wedded to a company. When the joint stock companies were established, the object was that their shares should be capable of being easily transferred, [In *Re. Balia and San Francisco Rly.*, (1968) L.R. 3 Q.B. 588]. Companies Act, 2013 enunciates the principle by providing that the shares held by the members are movable property and can be transferred from one person to another in the manner provided by the articles.

A member may sell his shares in the open market and realise the money invested by him. This provides liquidity to a member (as he can freely sell his shares) and ensures stability to the company (as the member is not withdrawing his money from the company). The Stock Exchanges provide adequate facilities for the sale and purchase of shares.

Further, as of now, in most of the listed companies, the shares are also transferable through Electronic mode i.e. through Depository Participants instead of physical transfers.

(vi) Capacity to Sue and Be Sued

A company being a body corporate, can sue and be sued in its own name. To sue, means to institute legal proceedings against (a person) or to bring a suit in a court of law. All legal proceedings against the company are to be instituted in its own name. Similarly, the company may bring an action against anyone in its own name. A company’s right to sue arises when some loss is caused to the company, i.e. to the property of the personality of the company. Hence, the company is entitled to sue for damages in libel or slander as the case may be [*Floating Services Ltd. v. MV San Fransceco Dipaloo* (2004) 52 SCL 762 (Guj)]. A company, as a person separate from its members, may even sue one of its own members for libel.

A company has a right to seek damages where a defamatory material published about it, affects its business. Where video cassettes were prepared by the workmen of a company showing, their struggle against the company’s management, it was held to be not actionable unless shown that the cassette would be defamatory. The court did not restrain the exhibition of the cassette. [*TVS Employees Federation v. TVS and Sons Ltd.*, (1996) 87 Com Cases 37]. The company is not held liable for contempt committed by its officer. [*Lalit Surajmal Kanodia v. Office Tiger Database Systems India (P) Ltd.*, (2006) 129 Comp Cas 192 Mad].

(vii) Contractual Rights

A company, being a separate legal entity different from its members, can enter into contracts for the conduct of the business in its own name. A shareholder cannot enforce a contract

made by his company; he is neither a party to the contract nor entitled to the benefit of it, as a company is not a trustee for its shareholders. Likewise, a shareholder cannot be sued on contracts made by his company. The distinction between a company and its members is not confined to the rules of privity, however, it permeates the whole law of contract. Thus, if a director fails to disclose a breach of his duties to his company, and in consequence a shareholder is induced to enter into a contract with the director which he would not have entered into had there been disclosure, the shareholder cannot rescind the contract.

Similarly, a member of a company cannot sue in respect of torts committed against the company, nor can he be sued for torts committed by the company. [*British Thomson-Houston Company v. Sterling Accessories Ltd.*, (1924) 2 Ch. 33]. Therefore, the company as a legal person can take action to enforce its legal rights or be sued for breach of its legal duties. Its rights and duties are distinct from those of its constituent members.

(viii) Limitation of Action

A company cannot go beyond the power stated in the Memorandum of Association. The Memorandum of Association of the company regulates the powers and fixes the objects of the company and provides the edifice upon which the entire structure of the company rests. The actions and objects of the company are limited within the scope of its Memorandum of Association. In order to enable it to carry out its actions without such restrictions and limitations in most cases, sufficient powers are granted in the Memorandum of Association. But once the powers have been laid down, it cannot go beyond these powers unless the Memorandum of Association is itself altered prior to doing so.

(ix) Separate Management

As already noted, the members may derive profits without being burdened with the management of the company. They do not have effective and intimate control over its working and elect their representatives to conduct corporate functioning. In other words, the company is administered and managed by its managerial personnel.

(x) Voluntary Association for Profit

A company is a voluntary association for profit. It is formed for the accomplishment of some public goals and whatsoever profit is gained is divided among its shareholders or restored for the future expansion of the company. Only a Section 8 company can be formed with no profit motive.

(xi) Termination of Existence

A company, being an abstract and artificial person, does not die a natural death. It is created by law, carries on its affairs according to law throughout its life and ultimately is effaced by law. Generally, the existence of a company is terminated by means of winding up. However, to avoid winding up sometimes companies change their form by means of reorganisation, reconstruction and amalgamation.

To sum up, “a company is a voluntary association for profit with capital divisible into transferable

shares with limited liability, having corporate entity and a common seal with perpetual succession”.

NATIONALITY & RESIDENCE OF A COMPANY

Though it is established through judicial decisions that a company cannot be a citizen, yet it has nationality, domicile and residence. In *Gasque v. Inland Revenue Commissioners*, (1940) 2 K.B. 88, Macnaghten. J. held that a limited company is capable of having a domicile and its domicile is the place of its registration and that domicile clings to it throughout its existence. He observed in this case:

“It was suggested that a body corporate has no domicile. It is quite true that a body corporate cannot have a domicile in the same sense as an individual. But by analogy with a natural person the attributes of residence, domicile and nationality can be given to a body corporate.”

In *Tulika v. Parry and Co.*, (1903) I.L.R. 27 Mad. 315, Kelly C.B. observed:

“A joint stock company resides where its place of incorporation is, where the meetings of the whole company or those who represent it are held and where its governing body meets in bodily presence for the purposes of the company and exercises the powers conferred upon it by statute and by the Articles of Association.”

The company, though a legal person, is not a citizen under the Citizenship Act, 1955 or the Constitution of India. In *State Trading Corporation of India Ltd. v. C.T.O.*, A.I.R. 1963 S.C. 1811, the Supreme Court held that the State Trading Corporation though a legal person, was not a citizen and can act only through natural persons. Nevertheless, it is to be noted that certain fundamental rights enshrined in the Constitution for protection of “person”, e.g., right to equality (Article 14) etc. are available to company.

CONCEPT OF CORPORATE PERSONALITY

By the provision of law, a corporation is clothed with a distinct personality, yet in reality it is an association of persons who are in fact, in a way, the beneficial owners of the property of the body corporate. A company, being an artificial person, cannot act on its own, it can only act through natural persons.

Lifting of or piercing through the corporate veil

It means the company has a separate legal entity from the persons constituting its members. Indeed, the theory of corporate entity is still the basic principle on which the whole law of corporations is based. But as the separate personality of the company is a statutory privilege, it must be used for legitimate business purposes only. Where a fraudulent and dishonest use is made of the legal entity, the individuals concerned will not be allowed to take shelter behind the corporate personality. The Court will break through the corporate shell and apply the principle of what is known as “lifting of or piercing through the corporate veil”. The Court will look behind the corporate entity and take action

as though no entity separate from the members existed and make the members or the controlling persons liable for debts and obligations of the company

The corporate veil is lifted when in defence proceedings, such as for the evasion of tax, an entity relies on its corporate personality as a shield to cover its wrong doings. [*BSN (UK) Ltd. v. Janardan Mohandas Rajan Pillai* [1996] 86 Comp. Cas. 371 (Bom).].

However, the shareholders cannot ask for lifting veil for their purposes. This was upheld in *Premlata Bhatia v. Union of India* (2004) 58 CL 217 (Delhi) wherein the premises of a shop were allotted on a licence to the individual licencee. She set up a wholly owned private company and transferred the premises to that company with the Government consent. She could not remove the illegality by saying that she and her company were virtually the same person.

Ever since the decision in the *Salomon v. Salomon & Co. Ltd.*, (1897) A.C. 22 normally Courts are reluctant or at least very cautious to lift the veil of corporate personality to see the real persons behind it. Nevertheless, Courts have found it necessary to disregard the separate personality of a company in the following situations:

- (a) Where the corporate veil has been used for commission of fraud or improper conduct. In such a situation, Courts have lifted the veil and looked at the realities of the situation.
- (b) Where a corporate facade is really only an agency instrumentality.
- (c) Where the doctrine conflicts with public policy, courts lifted the corporate veil for protecting the public policy.
- (d) Further, In *Daimler Co. Ltd. v. Continental Tyre & Rubber Co.*, (1916) 2 A.C. 307, it was held that a company will be regarded as having enemy character, if the persons having de facto control of its affairs are resident in an enemy country or , wherever they may be, are acting under instructions from or on behalf of the enemy.
- (e) Where it was found that the sole purpose for which the company was formed was to evade taxes the Court will ignore the concept of separate entity, and make the individuals liable to pay the taxes which they would have paid but for the formation of the company.
- (f) Avoidance of welfare legislation is as common as avoidance of taxation and the approach in considering problems arising out of such avoidance has necessarily to be the same and, therefore, where it was found that the sole purpose for the formation of the new company was to use it as a device to reduce the amount to be paid by way of bonus to workmen, the Supreme Court upheld the piercing of the veil to look at the real transaction.
- (g) Where it is found that a company has abused its corporate personality for an unjust and inequitable purpose, the court would not hesitate to lift the corporate veil. Further, the corporate veil could be lifted when acts of a corporation are allegedly opposed to justice, convenience and interests of revenue or workman or are against public interest.

Thus, in appropriate cases, the Courts disregard the separate corporate personality and look behind the legal person or lift the corporate veil.

COMPANY AS DISTINGUISHED FROM OTHER BUSINESS ENTERPRISES

Though there are a number of similarities between a limited company and other forms of associations, there are a great number of dissimilarities as well. In both the cases individuals are the subjects, and trading is generally the object. In the following paragraphs, a limited company is distinguished from a partnership firm, a Hindu Joint family business and a registered society.

Distinction between Company and Partnership

The principal points of distinction between a company and a partnership firm, are as follows:

- (1) A company is a distinct legal person. A partnership firm is not distinct from the several persons who compose it.
- (2) In a partnership, the property of the firm is the property of the individuals comprising it. In a company, it belongs to the company and not to the individuals comprising it.
- (3) Creditors of a partnership firm are creditors of individual partners and a decree against the firm can be executed against the partners jointly and severally. The creditors of a company can proceed only against the company and not against its members.
- (4) Partners are the agents of the firm, but members of a company are not its agents. A partner can dispose of the property and incur liabilities as long as he acts in the course of the firm's business. A member of a company has no such power.
- (5) A partner cannot contract with his firm, whereas a member of a company can.
- (6) A partner cannot transfer his share and make the transferee a member of the firm without the consent of the other partners, whereas a company's share can ordinarily be transferred.
- (7) Restrictions on a partner's authority contained in the partnership contract do not bind outsiders; whereas such restrictions incorporated in the Articles are effective, because the public are bound to acquaint themselves with them.
- (8) A partner's liability is always unlimited whereas that of shareholder may be limited either by shares or a guarantee.
- (9) A company has perpetual succession, i.e. the death or insolvency of a shareholder or all of them does not affect the life of the company, whereas the death or insolvency of a partner dissolves the firm, unless otherwise provided.
- (10) A company is legally required to have its accounts audited annually by a chartered accountant, whereas the accounts of a firm are audited at the discretion of the partners.

- (11) A company, being a creation of law, can only be dissolved as laid down by law. A partnership firm, on the other hand, is the result of an agreement and can be dissolved at any time by agreement.

Distinction between Company and Hindu Joint Family Business

1. A company consists of heterogeneous (varied or diverse) members, whereas a Hindu Undivided Family Business consists of homogenous (unvarying) members since it consists of members of the joint family itself.
2. In a Hindu Joint Family business the Karta (manager) has the sole authority to contract debts for the purpose of the business, other coparceners cannot do so. There is no such system in a company.
3. A person becomes a member of Joint Hindu Family business by virtue of birth. There is no provision to that effect in the company.
4. No registration is compulsory for carrying on business for gain by a Hindu Joint Family even if the number of members exceeds twenty [Shyam Lal Roy v. Madhusudan Roy, AIR 1959 Cal. 380 (385)]. Registration of a company is compulsory.

Distinction between company and Limited Liability Partnership (LLP)

LLP is an alternative corporate business form that gives the benefits of limited liability of a company and the flexibility of a partnership. LLP can continue its existence irrespective of changes in partners. It is capable of entering into contracts and holding property in its own name. LLP is a separate legal entity, is liable to the full extent of its assets but liability of the partners is limited to their agreed contribution in the LLP.

Further, no partner is liable on account of the independent or un-authorized actions of other partners, thus individual partners are shielded from joint liability created by another partner's wrongful business decisions or misconduct.

Mutual rights and duties of the partners within a LLP are governed by an agreement between the partners or between the partners and the LLP as the case may be. The LLP, however, is not relieved of the liability for its other obligations as a separate entity.

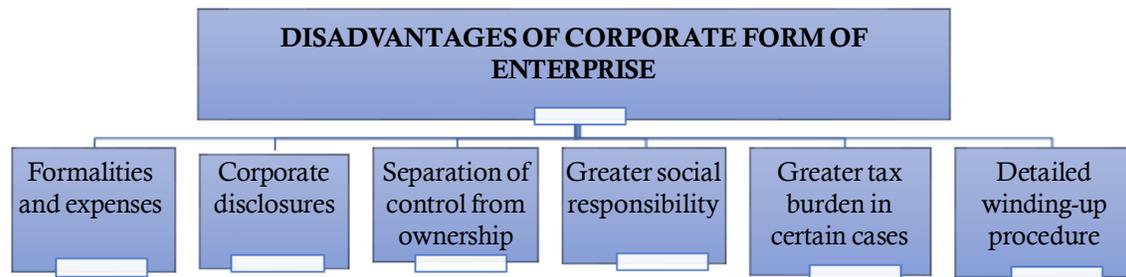
Since LLP contains elements of both 'a corporate structure' as well as 'a partnership firm structure' LLP is called a hybrid between a company and a partnership.

LLP is a body corporate and a legal entity separate from its partners, having perpetual succession. LLP form is a form of business model which : (i) is organized and operates on the basis of an agreement. (ii) provides flexibility without imposing detailed legal and procedural requirements (iii) enables professional/technical expertise and initiative to combine with financial risk taking capacity in an innovative and efficient manner

A basic difference between an LLP and a company lies in that the internal governance structure of a company is regulated by statute (i.e. Companies Act) whereas for an LLP it would be by a contractual agreement between partners.

The management-ownership divide inherent in a company is not there in a limited liability partnership. LLP have more flexibility as compared to a company. LLP have lesser compliance requirements as compared to a company.

DISADVANTAGES OF CORPORATE FORM OF ENTERPRISE



There are, however, certain disadvantages and inconveniences in Incorporation. Some of these disadvantages are:

1. *Expenses of Incorporation and Floation* : Incorporation of a company is coupled with complex, cumbersome and detailed legal formalities and procedures, involving considerable amount of time and money. Even after the company is incorporated, its affairs and working must be conducted strictly in accordance with legal provisions. Thus various returns and documents are required to be filed with the Registrar of Companies, some periodically and some on the happening of an event. Certain books and registers are compulsorily required to be maintained by a company. Approval and sanction of the Company Law Board, the Government, the Court, the Registrar of Companies or other appropriate authority, as the case may be, is necessarily required to be obtained for certain corporate activities.
2. *Corporate disclosures* : Notwithstanding the elaborate legal framework designed to ensure maximum disclosure of corporate information, the members of a company comparatively have restricted accessibility to its internal management and day-to-day administration of corporate working.
3. *Separation of control from ownership* : Members of a company do not have an effective and intimate control over its working as one can have in other forms of business organisation, say, a partnership firm. This is particularly so in big companies in which the number of members is too large to exercise any effective control over its day-to-day affairs.
4. *Greater social responsibility* : Having regard to the enormous powers wielded by the companies

- and the impact they have on the society, the companies are called upon to show greater social responsibility in their working and, for that purpose, are subject to greater control and regulation than that by which other forms of business organisation are governed and regulated.
5. *Greater tax burden in certain cases* : In certain circumstances, the tax burden on a company is more than that on other forms of business organization including partnership firms.
 6. *Detailed winding-up procedure* : The Act provides elaborate and detailed procedure for winding-up of companies which is more expensive and time consuming than that which is applicable to other forms of business organisation.

JOURNEY OF INDIAN COMPANY LAW

Company Law in India, as indicated earlier, is the cherished child of the English parents. Our various Companies Acts have been modelled on the English Acts. Following the enactment of the Joint Stock Companies Act, 1844 in England, the first Companies Act was passed in India in 1850. It provided for the registration of the companies and transferability of shares. The Amending Act of 1857 conferred the right of registration with or without limited liability. Subsequently this right was granted to banking and insurance companies by an Act of 1860 following the similar principle in Britain. The Companies Act of 1856 repealed all the previous Acts. That Act provided inter alia for incorporation, regulation and winding up of companies and other associations. This Act was recast in 1882, embodying the amendments which were made in the Company Law in England upto that time. In 1913 a consolidating Act was passed, and major amendments were made to the consolidated Act in 1936. In the meantime England passed a comprehensive Companies Act in 1948. In 1951, the Indian Government promulgated the Indian Companies (Amendment) Ordinance under which the Central Government and the Court assumed extensive powers to intervene directly in the affairs of the company and to take necessary action in the interest of the company. The ordinance was replaced by an Amending Act of 1951.

The Companies Act, 1956 was enacted with a view to consolidate and amend the earlier laws relating to companies and certain other associations. The Act came into force on 1st April, 1956. The present Companies Act is based largely on the recommendations of the Company Law Committee (Bhabha Committee) which submitted its report in March, 1952. This Act is the longest piece of legislation ever passed by our Parliament. Amendments have been made in this Act periodically. The Companies Act consists of 658 Sections and 15 Schedules.

Full and fair disclosure of various matters in prospectus; detailed information of the financial affairs of company to be disclosed in its account; provision for intervention and investigation by the Government into the affairs of a company; restrictions on the powers of managerial personnel; enforcement of proper performance of their duties by company management; and protection of minority shareholders were some of the main features of the Companies Act, 1956.

The Companies Act, 1956 has undergone changes by amendments in 1960, 1962, 1963, 1964, 1965, 1966, 1967, 1969, 1971, 1977, 1985, 1988, 1996, 1999, 2000, 2002 (Amendment), 2002 (Second Amendment), and 2006.

CONCEPT PAPER ON COMPANY LAW, 2004 & J.J. IRANI REPORT

To frame a law that enables companies to achieve global competitiveness in a fast changing economy, the Government had taken up a fresh exercise for a comprehensive revision of the Companies Act, 1956, albeit through a consultative process. As the first step in this direction, a Concept Paper on Company Law drawn up in the legislative format was exposed for public viewing on the electronic media so that all interested parties may not only express their opinions on the concepts involved but may also suggest formulations on various aspects of Company Law.

The response to the concept paper on Company Law was tremendous. The Government, therefore, felt it appropriate that the proposals contained in the Concept Paper and suggestions received thereon be put to merited evaluation by an independent Expert Committee. A Committee was constituted on 2nd December, 2004 under the Chairmanship of Dr. J J Irani, the then Director, Tata Sons, with the task of advising the Government on the proposed revisions to the Companies Act, 1956 with the objective to have a simplified compact law that will be able to address the changes taking place in the national and international scenario, enable the adoption of internationally accepted best practices as well as provide adequate flexibility for timely evolution of new arrangements in response to the requirements of ever-changing business models. The Committee submitted its report to the Government on 31st May 2005.

Dr. J J Irani Expert Committee on Company Law had submitted its report charting out the road map for a flexible, dynamic and user-friendly new company law. The Committee had taken a pragmatic approach keeping in view the ground realities, and had sought to address the concerns of all the stakeholders to enable adoption of internationally accepted best practices. As one wades through the report, one finds an arduous zeal to ensure that flexibility is coupled with accountability and transparency. Be it the role of directors in the management of the company or the role of promoters at the time of incorporation or the responsibility of professionals in ensuring better governance, the report had made very dynamic and balanced recommendations. The Report of the Committee had also sought to bring in multifarious progressive and visionary concepts and endeavored to recommend a significant shift from the "Government Approval Regime" to a "Shareholder Approval and Disclosure Regime".

The Expert Committee had recommended that private and small companies need to be given flexibilities and freedom of operations and compliance at a low cost. Companies with higher public interest should be subject to a stricter regime of Corporate Governance. Further, Government companies and public financial institutions should be subject to similar parameters with respect to disclosures and Corporate Governance as other companies are subjected to.

To attune the Indian Company Law with the global reforms taking place in the arena, the Report of the Committee had sought to bring in multifarious visionary concepts, which if accepted and acted upon would really simplify the voluminous and cumbersome Companies Act in the country.

Companies Bill, 2012

The Government considered the recommendations of Irani Committee and also had detailed

discussions and deliberations with various stakeholders viz Industry Chambers, Professional Institutes, Government Departments, Legal Experts and Professionals etc. Thereafter, the Companies Bill, 2009 was introduced in the Lok Sabha on 3rd August, 2009, The Bill laid greater emphasis on self-regulation and minimization of regulatory approvals in managing the affairs of the company. The Bill promised greater shareholder democracy, vesting the shareholders with greater powers, containing stricter corporate governance norms and requiring greater disclosures. The Companies Bill, 2009 after introduction in Parliament was referred to the Parliamentary Standing Committee on Finance for examination which submitted its report to Parliament on 31st August, 2010. Certain amendments were introduced in the Bill in the light of the report of the Committee and a revised Companies Bill, 2011 was introduced. This version was also referred to the Hon'ble Committee, which suggested certain further amendments. The amended Bill was passed by the Lok Sabha on 18th December, 2012 and by the Rajya Sabha on 8th August, 2013. The Bill was retitled as Companies Bill, 2012.

COMPANIES ACT, 2013

The Companies Bill, 2012 finally became the Companies Act, 2013. It received the assent of the President on August 29, 2013 and was notified in the Gazette of India on 30.08.2013. Companies Act, 2013 has undergone amendments four times so far. Companies (Amendment) Act, 2015 and Companies (Amendment) Act, 2017 aimed at enhancing efficiency and promoting ease of doing business. The Act was also amended by The Insolvency and Bankruptcy Code, 2016 and Finance Act, 2017. The Insolvency and Bankruptcy Code, 2016 led to omission of various sections i.e. section 253 to section 269, section 289, section 304 to section 323 and section 325. The Finance Act, 2017 amended section 182 with regard to prohibitions and restrictions regarding political contributions. So far Ministry has come out with several circulars, notifications, Orders and various amendment rules to facilitate better and smooth implementation of the Act.

The Companies Act 2013 introduced new concepts supporting enhanced disclosure, accountability, better board governance, and better facilitation of business and so on. It includes associate company, one Person Company, small company, dormant company, independent director, women director, resident director, special court, secretarial standards, secretarial audit, class action, registered valuers, rotation of auditors, vigil mechanism, corporate social responsibility, E-voting etc.

Applicability of Companies Act, 2013

According to section 1 of the Companies Act, 2013, the Act extends to whole of India and the provisions of the Act shall apply to the following:-

- (a) Companies incorporated under this Act or under any previous company law;
- (b) Insurance companies, except in so far as the said provisions are inconsistent with the provisions of the Insurance Act, 1938 (4 of 1938) or the Insurance Regulatory and Development Authority Act, 1999;
- (c) Banking companies, except in so far as the said provisions are inconsistent with the provisions of the Banking Regulation Act, 1949;

- (d) companies engaged in the generation or supply of electricity, except in so far as the said provisions are inconsistent with the provisions of the Electricity Act, 2003;
- (e) any other company governed by any special Act for the time being in force, except in so far as the said provisions are inconsistent with the provisions of such special Act; and
- (f) such body corporate, incorporated by any Act for the time being in force, as the Central Government may, by notification, specify in this behalf, subject to such exceptions, modifications or adaptation, as may be specified in the notification.

Companies Act, 2013 is not applicable to unincorporated companies. An unincorporated company, association or partnership consisting of large number of persons has been declared illegal.

By virtue of section 464 of the Companies Act, 2013, no association or partnership consisting of more than such number of persons as may be prescribed shall be formed for the purpose of carrying on any business that has for its object the acquisition of gain by the association or partnership or by the individual members thereof, unless it is registered as a company under this Act or is formed under any other law for the time being in force. Rule 10 of Companies (Miscellaneous) Rules, 2014 prescribes 50 persons in this regard. The maximum number of persons which may be prescribed under this section shall not exceed 100.

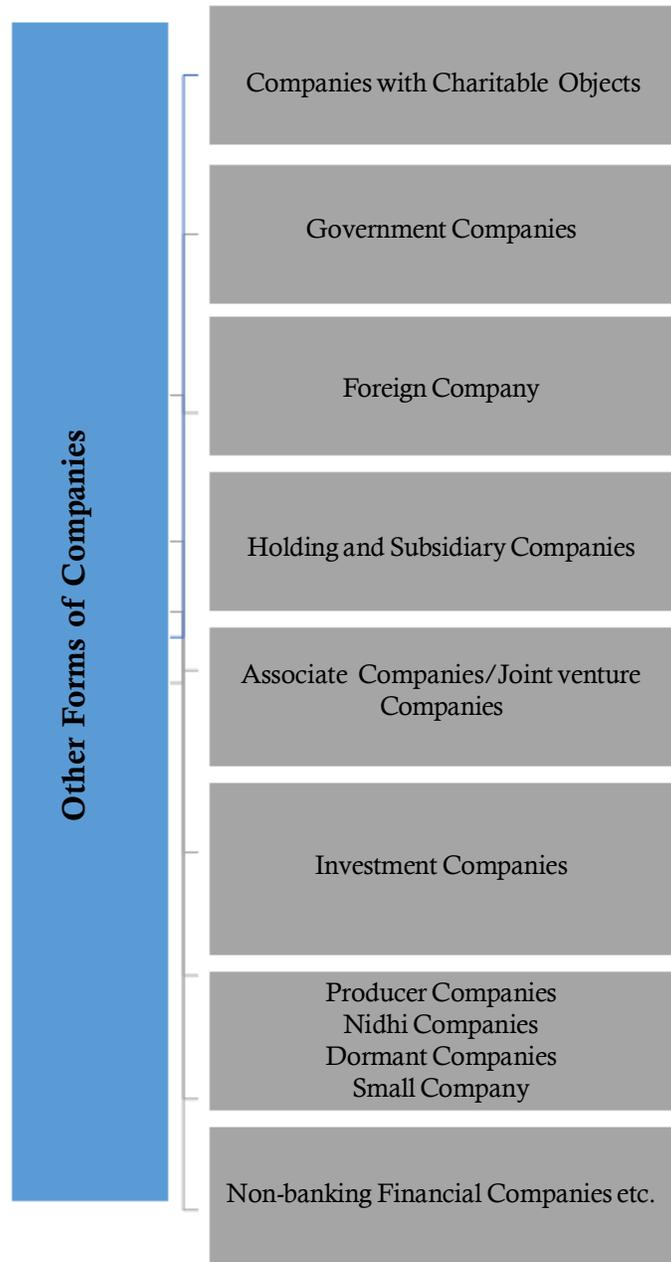
Section 464 of the Act does not apply to the case of a Hindu undivided family carrying on any business whatever may be the number of its members. However, this section is also not applicable to an association or partnership, if it is formed by professionals who are governed by special Acts.

TYPES OF COMPANIES

Companies may be classified on the basis of their incorporation, number of members, size, basis of control and motive. On the basis of incorporation of the companies, it may be classified into Charter Companies, Statutory Companies and Registered Companies. On the basis of liability, it may be Companies limited by shares/guarantee and unlimited liability companies. Further, on the basis of number of members, they may be classified into One Person Company, private company and public company. On the basis of size, they may be divided into small companies and other companies. On the basis of control, they may be classified into holding company, subsidiary company and associate company. Besides, companies may be nonprofit companies licensed under Section 8, Government companies, foreign companies, holding/subsidiary companies, investment companies, producer companies etc.

The Companies Act, 2013 provides for the kinds of companies that can be promoted and registered under the Act. The three basic types of companies which may be registered under the Act are:

- Private Companies;
- Public Companies;
- One Person Company



Private Company

Private company means a company having a minimum paid-up share capital as may be prescribed, and which by its articles,—

- (i) restricts the right to transfer its shares;
- (ii) except in case of One Person Company, limits the number of its members to two hundred:

Provided that where two or more persons hold one or more shares in a company jointly, they shall, for the purposes of this clause, be treated as a single member:

Provided further that—

- (A) persons who are in the employment of the company; and
 - (B) persons who, having been formerly in the employment of the company, were members of the company while in that employment and have continued to be members after the employment ceased, shall not be included in the number of members; and
- (iii) prohibits any invitation to the public to subscribe for any securities of the company.

Public Company

Public company means a company which—

- (a) is not a private company and;
- (b) has a minimum paid-up share capital as may be prescribed:

Provided that a company which is a subsidiary of a company, not being a private company, shall be deemed to be public company for the purposes of this Act even where such subsidiary company continues to be a private company in its articles.

One Person Company

One Person Company means a company which has only one person as a member (to be formed as Private Limited Company).

Companies with Charitable Objects

A person or an association of persons registered and licensed under Section 8 of the Companies Act, 2013 as a limited company—

- (a) has in its objects the promotion of commerce, art, science, sports, education, research, social welfare, religion, charity, protection of environment or any such other object;

- (b) intends to apply its profits, if any, or other income in promoting its objects; and
- (c) intends to prohibit the payment of any dividend to its members.

Government Company

Government company means any company in which not less than fifty-one per cent of the paid-up share capital is held by the Central Government, or by any State Government or Governments, or partly by the Central Government and partly by one or more State Governments, and includes a company which is a subsidiary company of such a Government company.

Foreign Company

Foreign company means any company or body corporate incorporated outside India which,—

- (a) Has a place of business in India whether by itself or through an agent, physically or through electronic mode; and
- (b) Conducts any business activity in India in any other manner.

Associate Company

Associate Company in relation to another company, means a company in which that other company has a significant influence, but which is not a subsidiary company of the company having such influence and includes a joint venture company.

Explanation:

- (a) the expression "significant influence" means control of at least twenty per cent. of total voting power, or control of or participation in business decisions under an agreement;
- (b) the expression "joint venture" means a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Holding Company

Holding company in relation to one or more other companies, means a company of which such companies are subsidiary companies. It may be noted that here "company" includes anybody corporate.

Subsidiary Company or Subsidiary

Subsidiary company or "subsidiary, in relation to any other company (that is to say the holding company), means a company in which the holding company—

- (i) Controls the composition of the Board of Directors; or
- (ii) Exercises or controls more than one-half of the total voting power either at its own or together with one or more of its subsidiary companies:

Provided that such class or classes of holding companies as may be prescribed shall not have layers of subsidiaries beyond such numbers as may be prescribed.

Explanation.—For the purposes of this clause,—

- (a) a company shall be deemed to be a subsidiary company of the holding company even if the control referred to in sub-clause (i) or sub-clause (ii) is of another subsidiary company of the holding company;
- (b) the composition of a company's Board of Directors shall be deemed to be controlled by another company if that other company by exercise of some power exercisable by it at its discretion can appoint or remove all or a majority of the directors;
- (c) the expression "company" includes anybody corporate
- (d) "Layer" in relation to a holding company means its subsidiary or subsidiaries;

Small Company

Small company means a company, other than a public company,—

- (i) paid-up share capital of which does not exceed fifty lakh rupees or such higher amount as may be prescribed which shall not be more than ten crore rupees; and
- (ii) turnover of which as per profit and loss account for the immediately preceding financial year does not exceed two crore rupees or such higher amount as may be prescribed which shall not be more than one hundred crore rupees:

Provided that nothing in this clause shall apply to—

- (A) a holding company or a subsidiary company;
- (B) a company registered under section 8; or
- (C) a company or body corporate governed by any special Act;

Dormant Company

- Where a company is formed and registered for a future project or to hold an asset or intellectual property and has no significant accounting transaction, such a company or an inactive company may make an application to the Registrar for obtaining the status of a dormant company.
- "inactive company" means a company which has not been carrying on any business or operation, or has not made any significant accounting transaction during the last two financial years, or has not filed financial statements and annual returns during the last two financial years;

- In case of a company which has not filed financial statements or annual returns for two financial years consecutively, the Registrar shall issue a notice to that company and enter the name of such company in the register maintained for dormant companies.
- A dormant company shall have a minimum number of three directors in case of a public company, two directors in case of a private company and one director in case of a One Person Company.
- Provisions of the Act in relation to the rotation of auditors shall not apply on dormant companies.
- The Registrar shall strike off the name of a dormant company from the register of dormant companies, which has failed to comply with the requirements.

Nidhi Company

Nidhi means a company which has been incorporated as a Nidhi with the object of cultivating the habit of thrift and savings amongst its members, receiving deposits from, and lending to, its members only, for their mutual benefit, and which complies with such rules as are prescribed by the Central Government for regulation of such class of companies.

Producer Companies

According to the Section 581A(l) of the Companies Act, 1956, a producer company is a body corporate having objects or activities specified in Section 581B and which is registered as such under the provisions of the Act. The membership of producer companies is open to such people who themselves are the primary producers, which is an activity by which some agricultural produce is produced by such primary producers.

In terms of Section 581B (1) of the Companies Act, 1956, the objects of a producer company registered under this Act may be all or any of the following matters:

- (a) production, harvesting, procurement, grading, pooling, handling, marketing, selling, export of primary produce of the members or import of goods or services for their benefit.
- (b) processing including preserving, drying, distilling, brewing, vinting, canning and packaging of the produce of its members.
- (c) manufacturing, sale or supply of machinery, equipment or consumables mainly to its members.
- (d) providing education on the mutual assistance principles to its members and others.
- (e) rendering technical services, consultancy services, training, research and development and all other activities for the promotion of the interests of its members.
- (f) generation, transmission and distribution of power, revitalisation of land and water resources, their use, conservation and communications relatable to primary produce.

- (g) insurance of producers or their primary produce.
- (h) promoting techniques of mutuality and mutual assistance.
- (i) welfare measures or facilities for the benefit of the members as may be decided by the Board.
- (j) any other activity, ancillary or incidental to any of the activities referred to in clauses (a) to (i) above or other activities which may promote the principles of mutuality and mutual assistance amongst the members in any other manner.
- (k) financing of procurement, processing, marketing or other activities specified in clauses (a) to (j) above, which include extending of credit facilities or any other financial services to its members.

Non-Banking Financial Company (NBFC)

A Non-Banking Financial Company (NBFC) is a company registered under the Companies Act, engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority or other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business but does not include any institution whose principal business is that of agriculture activity, industrial activity, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property. A non-banking institution which is a company and has principal business of receiving deposits under any scheme or arrangement in one lump sum or in installments by way of contributions or in any other manner, is also a non-banking financial company (Residuary non-banking company).

FORMATION OF COMPANY

According to Companies Act 2013, a company may be formed for any lawful purpose by—

- (a) Seven or more persons, where the company to be formed is a public company;
- (b) Two or more persons, where the company to be formed is a private company; or
- (c) one person, where the company to be formed is a One Person Company that is to say, a private company.

A company formed above may be either—

- (a) a company limited by shares; or
- (b) a company limited by guarantee; or
- (c) an unlimited company.

Company Limited by Shares means a company having the liability of its members limited by the memorandum to the amount, if any, unpaid on the shares respectively held by them;

Company Limited by Guarantee means a company having the liability of its members limited by the memorandum to such amount as the members may respectively undertake to contribute to the assets of the company in the event of its being wound up;

Unlimited Company means a company not having any limit on the liability of its members.

INCORPORATION OF COMPANY

1. An application for registration of a company shall be filed, with the Registrar within whose jurisdiction the registered office of the company is proposed to be situated, in Form No. INC-32 (SPICe) along with the fee as provided under the Companies (Registration offices and fees) Rules, 2014 and the following documents and information required to be attached with the application namely:
 - The memorandum and articles of the company duly signed by all the subscribers to the memorandum in;
 - Declaration in the prescribed form by an advocate, a chartered accountant, cost accountant or company secretary in practice, who is engaged in the formation of the company, and by a person named in the articles as a director, manager or secretary of the company, that all the requirements of the Act and the rules made thereunder in respect of registration and matters precedent or incidental thereto have been complied with;
 - Directors, if any, in the articles that he is not convicted of any offence in connection with the promotion, formation or management of any company, or that he has not been found guilty of any fraud or misfeasance or of any breach of duty to any company under this Act or any previous company law during the preceding five years and that all the documents filed with the Registrar for registration of the company contain information that is correct and complete and true to the best of his knowledge and belief;
 - Address for correspondence till its registered office is established;
 - Particulars of name, including surname or family name, residential address, nationality and such other particulars of every subscriber to the memorandum along with proof of identity;
 - Particulars of the persons mentioned in the articles as the first directors of the company, their names, including surnames or family names, the Director Identification Number, residential address, nationality and such other particulars including proof of identity; and
 - Particulars of the interests of the persons mentioned in the articles as the first directors of the company in other firms or bodies corporate along with their consent to act as directors of the company in such form and manner.

- (2) The Registrar on the basis of documents and information filed above shall register all the documents and information referred to in that sub-section in the register and issue a certificate of incorporation in to the effect that the proposed company is incorporated under the Act.
- (3) On and from the date mentioned in the certificate of incorporation issued, the Registrar shall allot to the company a corporate identity number, which shall be a distinct identity for the company and which shall also be included in the certificate.
- (4) The company shall maintain and preserve at its registered office copies of all documents and information as originally filed in point no. (1) above till its dissolution under the Act.
- (5) If any person furnishes any false or incorrect particulars of any information or suppresses any material information, of which he is aware in any of the documents filed with the Registrar in relation to the registration of a company, he shall be liable for action Punishment for Fraud under section 447.

SHARE CAPITAL

The term 'Capital' has a variety of meanings. It may mean one thing to an economist, another to an accountant, while another to a businessman or a lawyer. A layman views capital as the money, which a company has raised by issue of its shares. It uses this money to meet its requirements by way of acquiring business premises and stock-in-trade, which are called the fixed capital and the circulating capital respectively.

Share is a share in the share capital of the company, and includes stock except where a distinction between stock and shares is expressed or implied. Share capital refers to the funds that a company raises in exchange for issuing an ownership interest in the company in the form of shares. Share capital may also describe the number and types of shares that compose a company's share structure.

In Company Law, Capital is the share capital of a company, which is classified as:

Nominal, Authorized or Registered Capital : Such capital as is authorised by the memorandum of a company to be the maximum amount of share capital of the company.

Issued Capital : Such capital as the company issues from time to time for subscription. It is that part of the authorised or nominal capital which the company issues for the time being for public subscription and allotment. This is computed at the face or nominal value.

Subscribed Capital : Such part of the capital which is for the time being subscribed by the members of a company. It is that portion of the issued capital at face value which has been subscribed for or taken up by the subscribers of shares in the company. It is clear that the entire issued capital may or may not be subscribed.

Called-up Capital : Such part of the capital, which has been called for payment. It is that portion of the subscribed capital which has been called up or demanded on the shares by the company.

Paid-up Share Capital : Such aggregate amount of money credited as paid-up as is equivalent to the amount received as paid-up in respect of shares issued and also includes any amount credited as paid-up in respect of shares of the company, but does not include any other amount received in respect of such shares, by whatever name called.

Equity Share Capital : equity share capital with reference to any company limited by shares, means all share capital which is not preference share capital.

Preference Share Capital : preference share capital with reference to any company limited by shares, means that part of the issued share capital of the company which carries or would carry a preferential right with respect to—

- (a) payment of dividend, either as a fixed amount or an amount calculated at a fixed rate, which may either be free of or subject to income-tax; and
- (b) repayment, in the case of a winding up or repayment of capital, of the amount of the share capital paid-up or deemed to have been paid-up, whether or not, there is a preferential right to the payment of any fixed premium or premium on any fixed scale, specified in the memorandum or articles of the company

BOARD OF DIRECTORS

The company is an artificial person and is managed by the human beings. The people who run it are known as Board of Directors. Directors acting collectively are known as Board. The directors play a very important role in the day to day functioning of the company. It is the board, who is responsible for the company's overall performance.

Section 2(10) of the Companies Act, 2013 defines that "Board of Directors" or "Board", in relation to a company, means the collective body of the directors of the company. The term 'Board of Directors' means a body duly constituted to direct, control and supervise the affairs of a company.

As per Section 149 of the Companies Act, 2013, the Board of Directors of every company shall consist of individual only. Thus, no body corporate, association or firm shall be appointed as director.

Section 149(1) of the Companies Act, 2013 requires that every company shall have a minimum number of 3 directors in the case of a public company, two directors in the case of a private company, and one director in the case of a One Person Company. A company can appoint maximum 15 fifteen directors by passing a special resolution. A company may appoint more than fifteen directors after passing a special resolution in general meeting. The restriction of maximum number of directors shall not apply to section 8 companies.

Section 149(3) provides that every company shall have at least one director who has stayed in India for a total period of not less than one hundred and eighty-two days in the previous calendar year.

Appointment of Directors

Section 152 of the Act provides that where there is no provision made in Articles of Association of the

company for appointment of first directors then the subscribers to the memorandum who are individuals shall be deemed to be the first directors of the company until the directors are duly appointed by the member. Every director shall be appointed by the company in general meeting.

A person shall not be appointed as a director of a company unless he has been allotted the Director Identification Number or any other number. Every person proposed to be appointed as a director by the company in general meeting or otherwise, shall furnish his Director Identification Number or such other number as may be prescribed and a declaration that he is not disqualified to become a director under the Act.

A person appointed as a director shall not act as a director unless he gives his consent to hold the office as director and such consent has been filed with the Registrar within thirty days of his appointment.

- (a) Unless the articles provide for the retirement of all directors at every annual general meeting, not less than two-thirds of the total number of directors of a public company shall—
 - (i) be persons whose period of office is liable to determination by retirement of directors by rotation; and
 - (ii) save as otherwise expressly provided in the Act, be appointed by the company in general meeting.
- (b) The remaining directors in the case of any such company shall, in default of, and subject to any regulations in the articles of the company, also be appointed by the company in general meeting.
- (c) At the first annual general meeting of a public company held next after the date of the general meeting at which the first directors are appointed in accordance with clauses (a) and (b) and at every subsequent annual general meeting, one-third of such of the directors for the time being as are liable to retire by rotation, or if their number is neither three nor a multiple of three, then, the number nearest to one-third, shall retire from office.
- (d) The directors to retire by rotation at every annual general meeting shall be those who have been longest in office since their last appointment, but as between persons who became directors on the same day, those who are to retire shall, in default of and subject to any agreement among themselves, be determined by lot.
- (e) At the annual general meeting at which a director retires as aforesaid, the company may fill up the vacancy by appointing the retiring director or some other person thereto.

The articles of a company may confer on its Board of Directors the power to appoint any person, other than a person who fails to get appointed as a director in a general meeting, as an additional director at any time who shall hold office up to the date of the next annual general meeting or the last date on which the annual general meeting should have been held, whichever is earlier.

Companies Act empowers the Board, if so authorized by its articles or by a resolution passed by the company in general meeting, to appoint a director (termed as 'alternate director') to act in the absence of a original director during his absence for a period of not less than three months from India.

Removal of Directors

A company may, by ordinary resolution, remove a director, not being a director appointed by the National Company Law Tribunal, before the expiry of the period of his office after giving him a reasonable opportunity of being heard.

An independent director re-appointed for second term shall be removed by the company only by passing a special resolution and after giving him a reasonable opportunity of being heard.

A special notice shall be required of any resolution, to remove a director under this section, or to appoint somebody in place of a director so removed, at the meeting at which he is removed.

A vacancy created by the removal of a director may, if he had been appointed by the company in general meeting or by the Board, be filled by the appointment of another director in his place at the meeting at which he is removed.

A director so appointed shall hold office till the date up to which his predecessor would have held office if he had not been removed.

MEETINGS OF THE BOARD

Meetings of the Board are significant in the light of running of the company more efficiently and effectively. Companies Act, 2013, mandates a company to hold minimal number of meetings of the Board for its proper functioning. Board meetings are crucial for a company's development as the because of the reason that in these formal meetings are held to devise policies, drive the management, strategize and evaluate the expectations of the stakeholders.

Companies Act provides that the first Board meeting should be held within thirty days of the date of incorporation. Thereafter there shall be minimum of four Board meetings every year and not more one hundred and twenty days shall intervene between two consecutive Board meetings.

In case of One Person Company (OPC), small company, dormant company at least one Board meeting should be conducted in each half of the calendar year and the gap between two meetings should not be less than Ninety days. However, this provision would not apply to a one person company in which there is only one director on its Board. Board of Directors of Section 8 Company shall hold at least one meeting within every six calendar months.

Directors may participate in the meeting either in person or through video conferencing or other audio visual means. One third of total strength or two directors, whichever is higher, shall be the quorum for a meeting.

SHAREHOLDERS MEETINGS

A meeting may be generally defined as a gathering or assembly or getting together of a number of persons for transacting any lawful business. There must be at least two persons to constitute a meeting. Therefore, one shareholder usually cannot constitute a company meeting even if he holds proxies for other shareholders. However, in certain exceptional circumstances, even one person may constitute a meeting.

It is to be noted that every gathering or assembly does not constitute a meeting. Company meetings must be convened and held in perfect compliance with the various provisions of the Companies Act, 2013 and the rules framed thereunder. A general meeting is a meeting of the members of the company. The decision making powers of a company are vested in the members and the directors. They exercise their respective powers through Resolutions passed by them. General meetings of the members provide a platform to express their will in regard to the management of the affairs of the company.

Annual general meeting (AGM) is an important annual event where members get an opportunity to discuss the activities of the company. Convening of one such meeting every year is compulsory. Annual general meeting should be held once in each calendar year. Subsequent annual general meeting of the company should be held within 6 months from the date of closing of the relevant financial year. The gap between two annual general meetings shall not exceed 15 months.

An annual general meeting can be called during business hours, that is, between 9 a.m. and 6 p.m. on any day that is not a National Holiday. It should be held either at the registered office of the company or at some other place within the city, town or village in which the registered office of the company is situated. The Central Government is empowered to exempt any company from these provisions, subject to such conditions as it may impose.

According to Section 102(2)(a) in the case of an annual general meeting, all business to be transacted thereat shall be deemed special, other than—

- (i) The consideration of financial statements and the reports of the Board of Directors and auditors;
- (ii) The declaration of any dividend;
- (iii) The appointment of directors in place of those retiring;
- (iv) The appointment of, and the fixing of the remuneration of, the auditors; and

Further, Section 102(2) (b) provides that in the case of any other meeting, all business shall be deemed to be special.

Section 99 of the Companies Act provides that if any default is made in complying or holding a meeting of the company, the company and every officer of the company who is in default shall be punishable with fine which may extend to one lakh rupees and in case of continuing default, with a further fine which may extend to five thousand rupees for each day during which such default continues.

CORPORATE SOCIAL RESPONSIBILITY

- Every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during the immediately preceding financial year shall constitute a Corporate Social Responsibility Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director.
- The Board's report shall disclose the composition of the Corporate Social Responsibility Committee.
- The Corporate Social Responsibility Committee shall (a) formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the company in areas or subject, specified in Schedule VII; (b) recommend the amount of expenditure to be incurred on the activities; and (c) monitor the Corporate Social Responsibility Policy of the company from time to time.
- The Board of every company shall ensure that the company spends, in every financial year, at least two per cent. of the average net profits of the company made during the three immediately preceding financial years or where the company has not completed the period of three financial years since its incorporation, during such immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy.
- In case the unspent amount does not relate to any ongoing project, unspent amounts to be transferred to a Fund specified under Schedule VII within a period of six months of the expiry of the financial year.
- In case the unspent amount relates to any ongoing project subject to fulfilling of prescribed conditions, unspent amounts to be transferred by the company within a period of thirty days from the end of the financial year to a special account to be opened by the company in that behalf for that financial year in any scheduled bank to be called the Unspent Corporate Social Responsibility Account.
- Such amount shall be spent by the company in pursuance of its obligation towards the Corporate Social Responsibility Policy within a period of three financial years from the date of such transfer, failing which, the company shall transfer the same to a Fund specified in Schedule VII, within a period of thirty days from the date of completion of the third financial year.
- Penal provisions under:
 - The company - punishable with fine which shall not be less than Rs. 50,000 but which may extend to Rs. 25 lakh
 - Every officer of such company who is in default - shall be punishable with imprisonment for a term which may extend to 3 years or with fine which shall not be less than Rs. 50,000 but which may extend to Rs. 5 lakh, or with both.

Activities which may be included by companies in their Corporate Social Responsibility Policies Activities relating to:—

- (i) Eradicating hunger, poverty and malnutrition, 2["promoting health care including preventive health care and sanitation including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water.
- (ii) promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.
- (iii) promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups.
- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga.
- (v) protection of national heritage, art and culture including restoration of buildings and sites of historical importance and works of art; setting up public libraries; promotion and development of traditional art and handicrafts;
- (vi) measures for the benefit of armed forces veterans, war widows and their dependents;
- (vii) training to promote rural sports, nationally recognised sports, paralympic sports and olympic sports
- (viii) contribution to the prime minister's national relief fund or any other fund set up by the central govt. for socio economic development and relief and welfare of the schedule caste, tribes, other backward classes, minorities and women;
- (ix) contribution to incubators funded by Central Government or State Government or any agency or Public Sector Undertaking of Central Government or State Government, and contributions to public funded Universities, Indian Institute of Technology (IITs), National Laboratories and Autonomous Bodies (established under the auspices of Indian Council of Agricultural Research (ICAR), Indian Council of Medical Research (ICMR), Council of Scientific and Industrial Research (CSIR), Department of Atomic Energy (DAE), Defence Research and Development Organisation (DRDO), Department of Science and Technology (DST), Ministry of Electronics and Information Technology) engaged in conducting research in science, technology, engineering and medicine aimed at promoting Sustainable Development Goals (SDGs);

- (x) rural development projects;
- (xi) slum area development;
- (xii) disaster management, including relief, rehabilitation and reconstruction activities.

BUSINESS ETHICS

Business ethics is nothing but the application of ethics in business. Business ethics is the application of general ethical ideas to business behaviour. Ethical business behaviour facilitates and promotes good to society, improves profitability, fosters business relations and employee productivity. The concept of business ethics has come to mean various things to various people, but generally it's coming to know what is right or wrong in the workplace and doing what's right - this is in regard to effects of products/services and in relationships with stakeholders. Business ethics is concerned with the behaviour of a businessman in doing a business. Unethical practices are creating problems to businessman and business units. The life and growth of a business unit depends upon the ethics practiced by a businessman. Business ethics are developed over the passage of time and custom. A custom differs from one business to another. If a custom is adopted and accepted by businessman and public, that custom will become an ethic. Business ethics is applicable to every type of business. The social responsibility of a business requires the observing of business ethics. A business man should not ignore the business ethics while assuming social responsibility. Business ethics means the behaviour of a businessman while conducting a business, by observing morality in his business activities. According to Wheeler, Business Ethics is an art and science for maintaining harmonious relationship with society, its various groups and institutions as well as reorganizing the moral responsibility for the rightness and wrongness of business conduct. According to Rogene. A. Buchholz, Business ethics refers to right or wrong behaviour in business decisions.

Business Ethics or Ethical standards are the principles, practices and philosophies that guide the business people in the day to day business decisions. It relates to the behaviour of a businessman in a business situation. They are concerned primarily with the impacts of decisions on the society within and outside the business organizations or other groups who keep interest in the business activities. Business ethics can be said to begin where the law ends. Business ethics is primarily concerned with those issues not covered by the law, or where there is no definite consensus on whether something is right or wrong. - School of Distance Education.

The Principles of business ethics developed by well-known authorities like Cantt, J. S.Mill, Herbert Spencer, Plato, Thomas Garret, Woodrad, Wilson etc are as follows:

1. *Sacredness of means and ends* : The first and most important principle of business ethics emphasizes that the means and techniques adopted to serve the business ends must be sacred and pure. It means that a good end cannot be attained with wrong means, even if it is beneficial to the society.
2. *Not to do any evil* : It is unethical to do a major evil to another or to oneself, whether this evil is a means or an end.

3. *Principle of proportionality* : This principle suggests that one should make proper judgment before doing anything so that there is a fair view taken & others do not suffer from any loss or risk of evils by the conduct of business.
4. *Non-co-operation in evils* : It clearly pints out that a business should not co-operate with any one for doing any evil acts.
5. *Co-operation with others* : This principles state that business should help others only in that condition when others deserve help.
6. *Publicity* : According to W. Wilson, anything that is being done or to be done, should be brought to the knowledge of everyone. If everyone knows, none gets opportunity to do an unethical act.
7. *Equivalent price* : According to W. Wilson, the people are entitled to get goods equivalent to the value of money that they will pay.
8. *Universal value* : According to this principle the conduct of business should be done on the basis of universal values.
9. *Human dignity* : As per this principle, man should not be treated as a factor of production and human dignity should be maintained.
10. *Non-violence* : If businessman hurts the interests and rights of the society and exploits the consumer by overlooking their interests this is equivalent to violence and unethical act.

ETHICAL DILEMMA

Dilemma is a situation that requires a choice between options that are or seem equally unfavorable or mutually exclusive. By definition, an ethical dilemma involves the need to choose from among two or more morally acceptable courses of action, when one choice prevents selecting the other; or, the need to choose between equally unacceptable alternatives (Hamric, Spross, and Hanson, 2000).

A dilemma could be a *right vs. wrong situation* in which the right would be more difficult to pursue and wrong would be more convenient. A right versus wrong dilemma is not so easy to resolve. It often involves an apparent conflict between moral imperatives, in which to obey one would result in transgressing the other. This is also called an ethical paradox.

An ethical dilemma involves a situation that makes a person question what is the 'right' or 'wrong' thing to do. They make individuals think about their obligations, duties or responsibilities. These dilemmas can be highly complex and difficult to resolve. Easier dilemmas involve a 'right' versus 'wrong' answer; whereas, complex ethical dilemmas involve a decision between a right and another right choice. However, any dilemma needs to be resolved.

Addressing Ethical Dilemmas

The ethical dilemma consideration takes us into the grey zone of business and professional life, where things are no longer black or white and where ethics has its vital role today. A dilemma is a situation

that requires a choice between equally balanced arguments or a predicament that seemingly defies a satisfactory solution. An ethical dilemma is a moral situation in which a choice has to be made between two equally undesirable alternatives. Dilemmas may arise out of various sources of behaviour or attitude, as for instance, it may arise out of failure of personal character, conflict of personal values and organizational goals, organizational goals versus social values, etc.

A business dilemma exists when an organizational decision maker faces a choice between two or more options that will have various impacts on:

- (i) The organization's profitability and competitiveness; and
- (ii) Its stakeholders.

In situations of this kind, one must act out of prudence to take a better decision.

Sample Questions

1. First Clause in Memorandum of Association of company is:
 - (i) Situation Clause
 - (ii) Name Clause**
 - (iii) Liability Clause
 - (iv) Capital Clause
2. Which of the following contains the regulations for management of the company?
 - (i) Memorandum of Association
 - (ii) Certificate of commencement of business
 - (iii) Articles of Association**
 - (iv) Incorporation Certificate
3. The supreme executive authority controlling the management and affairs of a company vests in
 - (i) Managing Director
 - (ii) Whole-time Director
 - (iii) Board of Directors**
 - (iv) Independent Director
4. Which of the following is/are the characteristic(s) of a company?
 - (i) Perpetual Succession
 - (ii) Corporate Personality
 - (iii) Separate Property
 - (iv) All of the above**

5. Maximum number of members in a private company is:
- (i) 50
 - (ii) 100
 - (iii) 150
 - (iv) 200**

Lesson 5

**LEGAL
REASONING**

LEGAL TERMINOLOGY AND MAXIMS

A priori : From the antecedent to the consequent.

Ab initio : From the beginning.

Absolute sententia expositore non-indigent : Plain words require no explanation.

Actio mixta : Mixed action.

Actio personalis moritur cum persona : A personal right of action dies with the person.

Actionable per se : The very act is punishable and no proof of damage is required.

Actus Curiae Neminem Gravabit : Act of the Court shall prejudice no one.

Actus non facit reum nisi mens sit rea : An act does not make a man guilty unless there be guilty intention.

Actus reus : Wrongful act.

Ad hoc : For the particular end or case at hand.

Ad idem : At the same point.

Ad valorem : According to value.

Aliunde : From another source.

Amicus Curiae : A friend of court member of the bar who is appointed to assist the Court.

Animus possidendi : Intention to possess

Audi alteram partem : Hear the other side.

Benami : Nameless.

Bona fide : Good faith; genuine.

Caveat : A caution registered with the public court to indicate to the officials that they are not to act in the matter mentioned in the caveat without first giving notice to the caveator.

Caveat emptor : Let the buyer beware.

Caveat actor : Let the doer beware.

Caveat venditor : Let the seller beware.

Certiorari : A writ by which records of proceeding are removed from inferior courts to High Court and to quash decision that goes beyond its jurisdiction.

Cestui que trust : The person who has the equitable right to property in India he is known as beneficiaries.

Consensus ad idem : Common consent necessary for a binding contract.

Contemporanea expositio est optima et fortissima lege : A contemporaneous exposition or language is the best and strongest in Law.

Corpus delicti : Body/gist of the offence.

Cy pres : As nearly as may be practicable.

Damnum sine injuria : Damage without injury.

De facto : In fact.

De jure : By right (opposed to de facto) in Law

Dehors : Outside; foreign to (French term).

De novo : To make something new; To alter.

Dies non : Day on which work is not performed.

Deceit : Anything intended to mislead another.

Del credere agent : is a mercantile agent who in consideration of extra remuneration called a del credere commission undertakes to indemnify his employer against loss arising from the failure of persons with whom he contracts to carry out their contracts.

Delegate potestas non-potest delegari : A delegated power cannot be delegated further.

Delegatus non potest delegare : A delegate cannot delegate.

Dictum : Statement of law made by judge in the course of the decision but not necessary to the decision itself.

Dispono : Convey legally.

Ejusdem generis : Where there are general words following particular and specific words, the general words must be confined to things of the same kind as those specified.

Estoppel : Stopped from denying.

Ex parte : Proceedings in the absence of the other party.

Expressio unius est exclusio alterius : Express mention of one thing implies the exclusion of another or which is shortly put.

Ex turpi causa non oritur actio : No action arises from an illegal or immoral cause.

Fatum : Beyond human foresight.

Fait accompli : Things done and no longer worth arguing against; an accomplished act.

Factum probandum : Fact in issue which is to be proved.

Factum probans : Relevant fact.

Ferae naturae : Dangerous by nature.

Force majeure : Circumstance beyond one's control, irresistible force or compulsion

Generalia specialibus non derogant : General things do not derogate from special.

Habeas corpus : A writ to have the body to be brought up before the judge.

Ignorantia legis neminem excusat : Ignorance of law excuses no one.

Injuria sine damno : Injury without damage.

Interest reipublicae ut sit finis litium : State or public interest requires that there should be a limit to litigation.

Ispo facto : By the very nature of the case.

In promptu : In readiness.

In posse : In a state of possibility.

In limine : Initial stage; at the outset.

In lieu of : Instead of.

Inter alia : Among other things.

Inter se : Among themselves.

In specie : In kind.

Inter vivos : Between living persons.

Intra vires : Within the powers.

In personam : A proceeding in which relief is sought against a specific person.

Indicia : A symbol; token; mark.

Innuendo : Allusive remark.

Jus in personam : Right against a person.

Jus in rem : Right against the world at large.

Jus non scriptum: Unwritten law; Customary Law.

Jus scriptum : Written Law.

Lex Mercatoria : The law merchant, is a body of legal principles founded on the customs of merchants in their dealings with each other, and though at first distinct from the common law, afterwards became incorporated into it.

Lex fori : The law of the forum of court.

Lis : A suit cause of action.

Lis pendens : A pending suit.

Locus standi : Right of a party to an action to appear and be heard on the question before any tribunal.

Mala fide : In bad faith.

Mandamus : A writ of command issued by a Higher Court to a Lower Court/Government/Public Authority.

Mens rea : Guilty mind.

Manesuetae natureae : Harmless by nature.

Mesne profits : The rents and profits which a trespasser has received/made during his occupation of premises.

Misnomer : A wrong name.

Mutatis-mutandis : With necessary changes in points of detail.

Noscitur a sociis : A word is known by its associated, one is known by his companions.

Obiter dictum : An incidental opinion by a judge which is not binding.

Onus Probandi : Burden of proof.

Pari passu : On equal footing or proportionately.

Per se : By itself taken alone.

Persona non-grata : Person not wanted.

Per incuriam : Through want of care; through inadvertance.

Prima facie: At first sight; on the face of it.

Profit a prendre : A right for a man in respect of his tenement.

Pro bono publico : For the public good.

Pro forma : As a matter of form.

Pro rata : In proportion.

Posteriori : From the consequences to the antecedent.

Puisne mortgage : Second mortgage.

Pari causa : Similar circumstances, with equal right.

Pari materia : Relating to same person or thing.

Qui facit per alium facit per se : He who acts through another is acting by himself.

Quo warranto : A writ calling upon one to show under what authority he holds or claims an office.

Quia timet : Protective justice for fear. It is an action brought to prevent a wrong that is apprehended.

Quid pro quo : Something for something.

Ratio decidendi : Principle or reason underlying a decision.

Res judicata : A decision once rendered by a competent court on a matter in issue between the parties after a full enquiry should not be permitted to be agitated again.

Res ipsa loquitur : The things speak for itself.

Respondent superior : Let the principal be liable.

Res sub judice : Matter under consideration.

Res gestae : Facts relevant to a case and admissible in evidence.

Rule nisi : A rule which will become imperative and final unless cause to be shown against it.

Scire facias : Your cause to know.

Status quo : The existing state of things at any given date.

Scientiet volenti non-fit injuria : Injury is not done to one who knows and wills it.

Spes successionis : Chance of a person to succeed as heir on the death of another.

Supra : Above; this word occurring by itself in a book refers the reader to a previous part of the book.

Suppressio veri : Suppression of previous knowledge.

Sui juris : Of his own right.

Simpliciter : Simply; without any addition.

Scienter : Being aware of circumstances, the knowledge of which is necessary to make one liable, as applied to the keeper of a vicious dog, means no more than reasonable cause to apprehend that he might commit the injury complained of.

Sine qua non : An indispensable condition.

Situs : Position; situation; location.

Suo motu : On its own motion.

Stare decisis : Precedent. Literally let the decision stand

Sine die : Without a day being appointed.

Travaux preparatoires : Preparatory records.

Tortum : Civil wrong actionable without contract.

Uberrimae fide : Of utmost good faith.

Ubi jus ibi remedium : Where there is a right there is remedy.

Ultra vires : Beyond the scope, power or authority.

Ut lite pendente nihil innovetur : Nothing new to be introduced during litigation.

Usufructuary : One who has the use and reaps the profits of property, but not ownership.

Ut res magis valeat quam pereat : The words of a statute must be construed so as to give a sensible or reasonable meaning to them.

Vis major : Act of God.

Vigilantibuset, non dormientibus, jura subveniunt : The laws help those who are vigilant and not those who are slumber or lazy.

Vice versa : The order being reversed; other way round.

Volenti non-fit injuria : Damage suffered by consent gives no cause of action.

LEGAL REASONING

Legal reasoning is the method that a person use to apply laws to facts in order to answer legal questions. Good legal reasoning requires logical argument. In legal reasoning, legal principles have to be applied to the given factual situations to arrive at the most reasonable conclusion. The meaning of a legal rule and how it should be applied are often subject to multiple interpretations. When the meaning of a legal rule is ambiguous, a person use legal reasoning to argue for the interpretation that they find most convincing or that is most favorable to him. Derive a conclusion from given statements provided in question, and no deviation from it is allowed.

Questions in the Legal Reasoning may be asked mainly from the following areas:—

- (A) Indian Constitution
- (B) Indian Contract Act
- (C) Law of Torts
- (D) Element of Company Law

1. Legal Principle : All citizens shall have the right to freedom of speech and expression under Article 19 of the Constitution of India and it is a Fundamental Right.

Factual Situation : Mr. Sinha a famous english writer and orator criticized another novelist, Mr. Rahul stating that: "The novel of Mr. Rahul is irrational and indecent, his mind is impure, he is a loose character, he should write decent and good novel."

Decide

Can Mr. Rahul be sued for defamation?

- (a) He is not liable because he has just expressed his personal views
- (b) He is liable to be sued for defamation if his statement, was not true or said in mala fide intention
- (c) He cannot be liable because he has fundamental right to freedom of speech and expression

(d) He cannot be sued, because both are writer and novelists and both can criticize each other.

- 2. Legal Principle :** Every citizen of India has a fundamental right to carry on any trade or business or profession of his choice subject to the imposition of reasonable restrictions by the State.

Factual Situation : In pursuance of an order passed by the Institute of Company Secretary of India (ICSI), prohibit a person from Practice the profession of Company Secretary unless such person passed the Company Secretaryship Course and hold a certificate of practice from the ICSI. Mr. Manoj, a Executive Programme passed student of Company Secretaryship Course challenges the ban as it violates his right to carry his profession.

Decide

- (a) Institute of Company Secretary of India (ICSI) has a superior right to ban.
- (b) The ban is justified, as the right of Mr. Manoj to carry his profession is not absolute
- (c) The ban is not justified, as the Institute of Company Secretary of India (ICSI) cannot deprive any person of his right to carry on his profession
- (d) None of the above.
- 3. Legal Principle :** A contract is an agreement which the law will enforce. all agreements are contracts if they are made with free consent by parties competent to contract for a lawful consideration and with a lawful object.

Factual Situation : Mr. Raja offered to buy Mr. Ram's Car for Rs. 5 lakhs but Mr. Ram refused. Subsequently, Mr. Raja threatened to kill Mr. Ram and Mr. Ram agreed to the sale. Mr. Ram subsequently rescinded from the contract.

Mr. Raja suit to enforce the contract—

Decide

- (a) Will succeed because Mr. Raja was offering lawful consideration for the car
- (b) Will succeed because buying and selling of car is lawful
- (c) Will succeed because both parties have capacity to contract
- (d) Will fail because Mr. Ram was forced to agree to the contract.
- 4. Legal Principle :** A contract is an agreement which the law will enforce. All agreements are contracts if they are made with free consent by parties competent to contract for a lawful consideration and with a lawful object.

Factual Situation : Mr. Joy a young boy of 27 years without any consideration agrees to give Ms. Jooly Rs. 10, 000/-. Mr. Joy fails to fulfil his promise. Ms. Jooly sues Mr. Joy for the amount.

Decide

- (a) Ms. Jooly will succeed as Mr. Joy made the promise of his own free will
- (b) Ms. Jooly will fail as the agreement is without consideration
- (c) Ms. Jooly will succeed as Mr. Joy has the capacity to make the contract
- (d) Ms. Jooly will succeed as the money is not being paid for any illegal object.

- 5. Legal Principle** : Constitution of India empowers the President of India to appoint the Judge of the High Courts and Supreme Court.

Factual Situation : There is a deadlock between the Council of Minister including Prime Minister of India and the President of India. President of India appointed Mr. Adarsh as the Justice of Supreme Court of India and Mr. Garg appointed as Judge of Delhi High Court by the Prime Minister of India.

Decide

- (a) Appointment of Mr. Garg is valid in the eyes of law
- (b) Appointment of Mr. Adarsh is valid as per the Constitution of India
- (c) Appointment of Mr. Adarsh and Mr. Garg void abinitio
- (d) None of the above.

- 6. Legal Principle** : A violation of a legal Right, with or without damage, gives rise to a tort.

Factual Situation : Mr. Ketan establishes a coaching class for Company Secretary Students of Executive Programme and charges Rs.10, 000/- per year as tuition fees. Mr. Ketan's neighbor Mr. Kalia establishes another coaching class for Company Secretary Students of Executive Programme thereby creating a competition between them. This forces Mr. Ketan to reduce his tuition fees to Rs. 7000/- per year.

Decide

Can Mr. Ketan claim damages from Mr. Kalia for the loss caused to him?

- (a) Yes, he can as Mr. Kalia has violated his Legal Right
- (b) No, Mr. Ketan has reduced the fees on his own

- (c) No, because though, there was damage there was no legal injury
- (d) None of the above.

7. Legal Principle : Company means a company incorporated under the Companies Act, 2013, or under any previous company law.

Factual Situation : (i) ABC Limited is incorporated under the Companies Act, 1956; (ii) ABC LLP incorporated under Limited Liability Partnership Act, 2008; (iii) ABC & Co registered under Partnership Act, 1832 and (iv) ABC Charitable Trust established under Trust Act, 1882.

Decide

Which of the above entity as mentioned in factual situation is a company?

- (a) ABC Limited
- (b) ABC LLP
- (c) ABC & Co
- (d) ABC Charitable Trust

8. Legal Principle : A master shall be responsible for the wrongful acts of his servants in the course of his employment.

Factual Situation : ABC Limited is a Non-Banking Financial Company (NBFC) is registered with Reserve Bank of India to accept deposit from public. Mr. Shyam appointed as authorised agent by ABC Limited to collect deposit money from several people on daily basis. Mr. Shyam, collecting deposits from people on daily basis. One day he disappeared. One Ms. Shyamlee, who had been handing over her deposit money to Mr. Shyam found that nearly for a month before his disappearance, he was not depositing her money at all. Ms. Shyamlee when approached the ABC Limited, the NBFC took the stand that Mr. Shyam was not its employee, he is his agent and therefore, ABC Limited is not responsible for his misconduct. Ms. Shyamlee files a suit against the ABC Limited.

Decide

Who is liable?

- (a) ABC Limited
- (b) Mr. Shyam
- (c) Ms. Shyamlee
- (d) None of the above.

- 9. Legal Principle :** The members of both Lok Sabha and Rajya Sabha are eligible to be Ministers of the Union Government.

Factual Situation : Mr. Ram Sing is sitting member of Upper House of Parliament and as Recommendations of Prime Minister of India, President of India appointed Mr. Ram Singh as Minister for the Ministry of Education.

Decide

Appointment of Mr. Ram Singh as Minister for the Ministry of Education is valid?

- (a) Yes
 - (b) No
 - (c) President of India cannot be appointed
 - (d) Prime Minister of India cannot be recommended
- 10. Legal Principle :** Tort is a civil wrong for which the remedy is a common law action for unliquidated damages and which is not exclusively the breach of a contract or the breach of a trust or other merely equitable obligation.

Factual Situation : Mr. Sunil has six pet dogs which are very ferocious and bark a lot. Mr. Surendra is his next door neighbor and feels that he is not able to enjoy his property due to the presence of a large number of dogs in the adjacent house. He is contemplating initiating a legal action against Mr. Sunil. Mr. Surendra can:

Decide

- (a) Initiate action for breach of contract against Mr. Sunil as there is an implied contract between the neighbours.
 - (b) Initiate action for unliquidated damages under torts because there is no contract between the neighbours.
 - (c) Initiate criminal action against Mr. Sunil because having a large number of ferocious dogs is a criminal act.
 - (d) Not be successful as Mr. Sunil has an unrestricted right to enjoy his personal property and has no duty towards Mr. Surendra.
- 11. Legal Principle :** Causing damage, however substantial to another person is not actionable in law unless there is also a violation of a legal right of the plaintiff.

Factual Situation : Mr. Nandan opened a petrol pump next to earlier existing petrol pump of Mr. Chandan as a result of which Mr. Chandan suffered huge losses.

Mr. Chandan wants to initiate action against Mr. Nandan for the losses suffered. He will

Decide

- (a) Succeed because he has suffered losses because of Mr. Nandan.
- (b) Fail because no legal right of Mr. Chandan was infringed.
- (c) Succeed because Mr. Nandan was wrong in opening a petrol pump next to already existing one.
- (d) Succeed because Mr. Chandan is entitled to earn reasonable profit on his investments.

- 12. Legal Principle :** Even where there is infringement of a legal right which does not result in harm, plaintiff can still sue in tort.

Factual Situation : Cattle owned by Mr. Vinay entered the fields of Mr. Vipin and roamed about freely for considerable time without causing any kind of loss to Mr. Vinay. Mr. Vinay did not like Mr. Vipin and thought of initiating legal action against him using this opportunity. Mr. Vinay will:

Decide

- (a) Fail because he did not suffer any monetary loss.
- (b) Fail because he did not suffer any infringement of his legal right.
- (c) Succeed because his legal right was infringed.
- (d) Fail because he initiated the legal action because of his dislike for the defendant.

- 13. Legal Principle :** Normally, the tort-feasor is liable for his tort but in some cases a person may be held liable for the tort committed by another.

Factual situation : Mr. Rahul's car was being driven by his driver when it hit a pedestrian as a result of which the pedestrian suffered heavy injuries. He brought a legal action against Mr. Rahul because the car belonged to him and the driver was employed by him. The legal action of the pedestrian against Mr. Rahul will:

Decide

- (a) Fail because Mr. Rahul had nothing to do with the accident.
- (b) Succeed because responsibility in such cases is imputed by law on grounds of social policy or expediency.
- (c) Succeed because a master is always liable for the acts of his or her servant.
- (d) Fail because it was the duty of the driver to be careful while driving.

14. Legal Principle : The defendant is liable if he makes a non-natural use of land.

Factual Situation : Mr. Kundan had stored chemicals on his land which escaped and caused damaged to the adjacent properties one of which belonged to Mr. Ankit. Mr. Ankit is

Decide

- (a) Fail because Mr. Kundan had stored chemicals on his own property.
- (b) Succeed because storing chemicals is a non-natural use of land.
- (c) Fail because storing chemicals is a natural use of land.
- (d) Fail because Mr. Ankit should have taken adequate precautions against the chemicals.

15. Legal Principle : Absolute or strict liability are exceptions to the requirement of mens rea.

Factual Situation : B, a mill owner employed independent contractors, who were apparently competent to construct a reservoir on his land to provide water for his mill. There were old disused mining shafts under the site of the reservoir which the contractors failed to observe because they were filled with earth. The contractors therefore, did not block them. When the water was filled in the reservoir, it bursts through the shafts and flooded the plaintiff's coal mines on the adjoining land. It was found as a fact that B did not know of the shafts and had not been negligent.

Decide

- (a) Even though the independent contractors had been negligible, B will be held liable for the losses suffered by the plaintiff.
- (b) B will be held liable for the losses suffered by the plaintiff only if B was negligent and not otherwise.
- (c) Independent contractors would be liable to the plaintiff as there is privity of contract between them.
- (d) Neither B nor the independent contractors would be held liable as there was no guilty mind at work.

16. Legal Principle : Consent of the Plaintiff is an exception to the rule of Strict liability.

Factual Situation : Mr. Jagdish was subjected to a risk owing to a defect in the machinery at the factory at which he was employed. He complained of this to the person who had the general management of the business, but was told nevertheless to go on with his work. He did so and sustained the injury for which he brought his action against the factory.

Decide

- (a) The suit will fail because it must be assumed Mr. Jagdish had assented to take upon himself the risk.
- (b) The suit will succeed because Mr. Jagdish had highlighted the risk to the Factory management and his refusal to work might have led to his termination.
- (c) The suit will fail because Mr. Jagdish should have stopped working at the factory if the management had refused to address his concerns regarding safety.
- (d) The suit will succeed because in a suit between an employer and an employee, the employee is favoured because he/ she is generally poor.

- 17. Legal Principle :** For the tort committed by a partner in the ordinary course of the business of the firm, all the other partners are liable to the same extent as the guilty partner.

Factual Situation : A, B and C ran a Chartered Accountancy firm in partnership. In order to solicit work from a big bank, A, one of the three partners bribed the Bank's senior manager and induced him to hand over the audit work to their firm.

Decide

- (a) All the partners are liable for the tort committed by only one of them.
- (b) Only the partner who paid the bribe is liable.
- (c) Whether or not all partners are liable would depend on the fact whether B and C had knowledge of bribe or not.
- (d) The liability of B and C would be established only if they had given their written consent to A to bribe the bank official.

- 18. Legal Principle :** The State can claim immunity from the tortious liability only in the cases of sovereign function, otherwise not.

Factual Position : Chandra and his father Gopal were lodged in a jail, wherein one day bombs were hurled at them by their rivals, causing the death of Gopal and injuries Chandra. The victims were having previous knowledge of the impending attack, which they conveyed to the authorities, but no additional security was provided to them. On the contrary, there was gross negligence since there was a great relaxation in the number of police men who were to guard the jail on that fateful day. Thus, on the grounds of negligence a suit was filed Chandra against the Government. The suit will

Decide

- (a) Succeed because there was gross negligence on part of the State.
- (b) Fail because maintain jail facilities is part of the sovereign function of the State.

- (c) Succeed because securing law and order is not a sovereign function of the State.
- (d) Fail because the State cannot be held responsible in any way if people lose life because of their personal rivalries even in facilities maintained and operated by the State.

19. Legal Principle : Under Article 12, unless the context otherwise requires, “the State” includes—

- (a) the Government and Parliament of India;
- (b) the Government and Legislature of each of the States; and
- (c) all local or other authorities: (i) within the territory of India; or (ii) under the control of the Government of India.

Factual Situation : Mr. Arvind is employed with Oil and Natural Gas Corporation (ONGC). He faces discrimination at work at the hands of the Management and thinks that his right to equality is violated. He contemplates moving a writ petition against ONGC but his colleague suggests that Mr. Arvind will not succeed because ONGC is not ‘State’.

Decide

- (a) ONGC is ‘State’ as per Article 12 of the Constitution.
- (b) ONGC is not ‘State’ as per Article 12 of the Constitution.
- (c) Mr. Arvind will not succeed because a writ cannot be brought against a Company.
- (d) ONGC is not ‘State’ because its shares are listed in the stock market.

20. Legal Principle : No person shall be convicted of any offence except for violation of a law in force at the time of the commission of the act charged as an offence.

Factual Situation : Ms. Chandni had an altercation with her classmate in her college and in the heat of the moment she hurled a racist abuse at her classmate and her classmate was deeply offended by it. Ms. Chandni had later apologized for it. In the next few months, a law was passed which made racist abuse punishable. Aware of the fact that the law of limitation does not apply to criminal acts, she moved an application to the court to initiate criminal action against Ms. Chandni for the racist abuse. The classmate’s application will:

Decide

- (a) Fail because racist abuse was not punishable when it was hurled.
- (b) Succeed because the law made racist abuse punishable with imprisonment and it is undeniable that Ms. Chandni has hurled that abuse.

- (c) Succeed because law of limitation does not apply to criminal acts.
- (d) Fail because it was not a serious offence and Ms. Chandni had already apologized for it.

21. Legal Principle : No person shall be subjected to a penalty greater than that which might have been inflicted under the law in force at the time of the commission of the offence.

Factual Situation : A person was accused of cheating and before he was arrested and committed to trial for it, the law relating to cheating was changed and the punishment for it was increased to life imprisonment. The person was found guilty and sentenced to life imprisonment. He decides to challenge his sentence of life imprisonment. He will

Decide

- (a) Fail because the punishment for cheating was increased to life imprisonment before his trial began.
- (b) Succeed because the punishment for cheating was not life imprisonment when he committed it.
- (c) Fail because the law does not provide for such leniency to guilty persons.
- (d) Succeed only if he is able to prove his innocence.

22. Legal Principle : Parliament can amend any part of the Constitution including the Fundamental Rights but the Parliament cannot alter the basic structure or framework of the Constitution.

Factual Situation : The Government of India passed a Constitutional amendment Act which has the effect of curbing the independence of the judiciary. The Act has been challenged in the Supreme Court of India by a group of NGOs and public spirited individuals as being violative of the Constitution. The challenge will:

Decide

- (a) Succeed because any amendment that compromises the independence of the judiciary is unconstitutional.
- (b) Fail because the Parliament has unlimited power to amend the Constitution as per the Kesavananda Bharati judgment.
- (c) Succeed because the amendment was not brought to the Parliament with the consent of the Supreme Court of India.
- (d) Fail because the Supreme Court cannot sit in judgment over a matter that affects its own independence.

- 23. Legal Principle :** Directive Principles of State Policy (DPSP) are non-justiciable in nature.

Factual Situation : Mr. Sumit works for the protection of cows. He has come to know that in some states slaughtering of cows is permissible under law. He also knows that one of the Directive Principles of State Policy calls upon the State to prohibit cow slaughter. Based on this, Mr. Sumit approaches the Supreme Court of India for getting direction to the states to enact anti-cow slaughtering law. His petition will:

Decide

- (a) Succeed because DPSP clearly says that states should take steps to prevent cow slaughter.
 - (b) Fail because DPSP cannot be enforced by the Courts.
 - (c) Succeed because laws in contravention of DPSP are unconstitutional.
 - (d) Fail because only a section of Indian population holds cow as sacred and its views cannot be forced on others.
- 24. Legal Principle :** The right of all citizens to practise any profession or to carry on any occupation, trade or business is a Fundamental Right.

Factual Situation : Due to a law passed by the Government, even a person with good knowledge of law cannot appear in the Court as lawyer unless he has a law degree from a recognized university and fulfils other mandatory conditions. Due to this Mr. Dinesh is not able to appear in courts and believes that government is denying him of his Fundamental Right to practice any profession or to carry on any occupation, trade or business. He decides to challenge this as a violation of his Fundamental Right. He will

Decide

- (a) Succeed because the requirements to be eligible to appear before the Court deny him the opportunity to earn his livelihood.
 - (b) Succeed because government cannot abridge Fundamental Rights in any manner under any condition.
 - (c) Fail because the Government is well within its rights to prescribe eligibility and other conditions for profession, trade or business.
 - (d) Fail because Government has the power to abrogate the Fundamental Rights.
- 25. Legal Principle :** Article 14 of the Constitution says that “the State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India”.

Factual Situation : Due to the growing menace of terrorism in the country, the Government of India decided to have a new substantive criminal laws for terrorists from other countries. A foreign terrorist captured by the police and subjected to the new law claimed that his rights under Article 14 of the Indian constitution were violated. His claim will:

Decide

- (a) Fail because the rights under Article 14 are available only to the citizens of India.
- (b) Fail because the rights under the Article cannot be made available to people who engage in terrorist activities in India.
- (c) Succeed because he is entitled to be subjected to the same laws as any other person charged with the same offence.
- (d) Succeed because once he is captured by the Indian authorities, he acquired all the Fundamental Rights that are enjoyed by the citizens of India.

- 26. Legal Principle** : The ambit of this Ordinance-making power of the President is co-extensive with the legislative powers of Parliament.

Factual Situation : During a time when the Lok Sabha was not in session the President of India promulgated an ordinance on a matter which was not very urgent. A non-governmental organization decided to challenge the ordinance as ultra vires the Constitution. His challenge will:

Decide

- (a) Succeed because the ordinance is to be promulgated only in urgent matters.
- (b) Fail because the use of the power to promulgate ordinance is left to the discretion of the President.
- (c) Fail because the use of the power to promulgate ordinance is left to the discretion of the Government.
- (d) Succeed because an ordinance can be issued only when both the houses of the Parliament are not in session.

- 27. Legal Principle** : The State shall not make any law which takes away or abridges the rights conferred by Part III and if such a law is made, it shall be void to the extent to which it curtails any such right.

Factual Situation : Right to Property was a Fundamental Right but was abolished as such by a Constitutional amendment. Mr. Gautam decides to challenge the constitutional validity of the amendment. He will

Decide

- (a) Succeed because the State cannot make any law which takes away or abridges the rights conferred by Part III.
- (b) Fail because 'law' referred to in the above statement does not apply to Constitutional amendment Acts.
- (c) Succeed because even constitutional amendments cannot take away Part III rights.
- (d) Fail because Right to Property was not conferred by Part III.

- 28. Legal Principle :** There shall be a Council of Ministers with the Prime Minister at the head to aid and advise the President who shall, in the exercise of his functions, act in accordance with such advice.

Factual Situation : The Lok Sabha general elections in 1996 did not give any party a clear majority and various political parties in their individual capacity and in association with other parties staked claim with the President to form government. The President had to invite one such party or a group to form the government. He was:

Decide

- (a) Bound to follow the advice of the outgoing Prime Minister on who should be first called to form the government.
- (b) Free to exercise his discretion in such a situation.
- (c) Bound to consult the Chief Justice of India in a situation of no clear majority in favour of a party or an alliance.
- (d) Bound to invite the single largest party to form the government.

- 29. Legal Principle :** An agreement enforceable by law is a contract.

Factual Situation : Mr. A and Mr. B, father of a minor boy P and minor girl Q respectively enter into an agreement that they would marry their children P and Q to each other. Mr. B, later refused to honour this agreement. Aggrieved by this, Mr. A decided to sue Mr. B and Ms. Q for breach. Mr. A will:

Decide:

- (a) Succeed because Mr. B has refused to fulfil his obligation under the agreement.
- (b) Fail because the agreement between them is not a contract.
- (c) Succeed because the agreement between them is a contract.

(d) Fail because Mr. A should have sued Mr. B and Ms. Q together with Mr. P and not alone as Mr. P has also suffered because of the breach.

- 30. Legal Principle :** All agreements are contracts if they are made by the free consent of parties competent to contract, for a lawful consideration and with a lawful object.

Factual Situation : A was planning to sell his property to B but B was not aware of it. Since B was interested in the property, he threatened to harm the only child of A if A did not enter into an agreement to sell the property to B. The price at which the agreement to sell was agreed upon was much more than the expectation of A or the prevailing market price of the property. Once the agreement was signed, B got to know that A was anyway interested in selling the property to B and at a lower price. A later refused to execute the sale deed and claimed that the contract between the parties was not valid. A will:

Decide:

- (a) Fail because there was a valid contract between him and B.
- (b) Succeed because the consent of A for the agreement to sell was not a free consent.
- (c) Fail because in the given facts and circumstances even with the free consent the same transaction would have taken place. A is even better placed because he is receiving a higher price.
- (d) Succeed because there is no lawful object in the contract.

- 32. Legal Principle :** A person who is usually of unsound mind, but occasionally of sound mind, may make a contract when he is of sound mind.

Factual Situation : Mr. Jamal is a patient in a lunatic asylum who experiences intervals of sound mind. Jamal entered into a contract during such interval of sound mind. On having suffered losses, he challenged the validity of the contract on the ground that he not only was mentally unsound but also lived in lunatic asylum.

Decide

- (a) The contract is valid.
- (b) The contract is invalid.
- (c) The contract is voidable at the option of Mr. Jamal.
- (d) The contract is voidable at the option of the opposite party.

- 33. Legal Principle :** A person who is usually of sound mind, but occasionally of unsound mind, may not make a contract when he is of unsound mind.

Factual Situation : One of the purposes of the business party was to strike business deals and Mr. Animesh was well aware of it. Still, Mr. Animesh drank so much at the party that he could not understand the terms of a contract, or form a rational judgment as to its effect on his interests. He still went ahead and entered into a few contracts at the party. One of such agreements had very oppressive terms and conditions for Mr. Animesh and therefore he challenges the validity of the contract. He will:

Decide

- (a) Fail because he knew the purpose of the business party and should have behaved more responsibly.
 - (b) Succeed because he was temporarily of unsound mind because of his drunk state.
 - (c) Fail because being drunk even to the extent of not being able to understand the terms of the contract cannot be considered as 'unsound mind'
 - (d) Succeed because oppressive terms and conditions in the contract show that it could have been agreed to only by a person of unsound mind.
- 34. Legal Principle :** A contract is said to be induced by "undue influence" where the relations subsisting between the parties are such that one of the parties is in a position to dominate the will of the other and uses that position to obtain an unfair advantage over the other.

Factual Situation : Mr. Ashwini having advanced money to his son, Bhuvan, during his minority, upon Bhuvan's coming of age obtains, by misuse of parental influence, a bond from Bhuvan for a greater amount than the sum due in respect of the advance.

Decide

- (a) Ashwini employed undue influence.
 - (b) Ashwini did not employ undue influence.
 - (c) Father and son cannot ever enter into a valid contract.
 - (d) Ashwini employed coercion.
- 35. Legal Principle :** When consent to an agreement is caused by coercion, fraud or misrepresentation, the agreement is a contract voidable at the option of the party whose consent was so caused.

Factual Situation : Mr. Arun, intending to deceive Mr. Prakash, falsely represented that five hundred tonnes of fertilizer are made annually at his factory, and thereby induced Mr. Prakash to buy the factory.

Decide:

- (a) The contract is voidable at the option of Mr. Prakash.
- (b) The contract is voidable at the option of Mr. Arun.
- (c) The contract is void.
- (d) The contract is valid.

- 36. Legal Principle :** Where both the parties to an agreement are under a mistake as to a matter of fact essential to the agreement, the agreement is void.

Factual Situation : Mr. Rupesh agrees to buy from Mr. Jalaj a certain car. It turns out that the car was scrapped at the time of bargain, though neither party was aware of the fact.

Decide

- (a) The agreement is valid.
- (b) The agreement is void.
- (c) The agreement is voidable at the instance of either parties.
- (d) The agreement is void because Mr. Jalaj played a fraud upon Mr. Rupesh.

- 37. Legal Principle :** Every agreement of which the object or consideration is unlawful is void.

Factual Situation : Mr. Thomas promises Mr. Jhonson to drop a prosecution which he has instituted against Mr. Jhonson for robbery, and Mr. Jhonson promises to restore the value of the things taken.

Decide:

- (a) The agreement is void, as its object is unlawful.
- (b) The agreement is valid.
- (c) The agreement is voidable at the instance of Mr. Thomas.
- (d) The agreement is voidable at the instance of Mr. Jhonson.

- 38. Legal Principle :** A stranger to a contract cannot sue for want of privity of contract.

Factual situation : A, who is indebted to B, sells his property to C, and C the purchaser of the property, promises to pay off the debt to B. C fails to pay B.

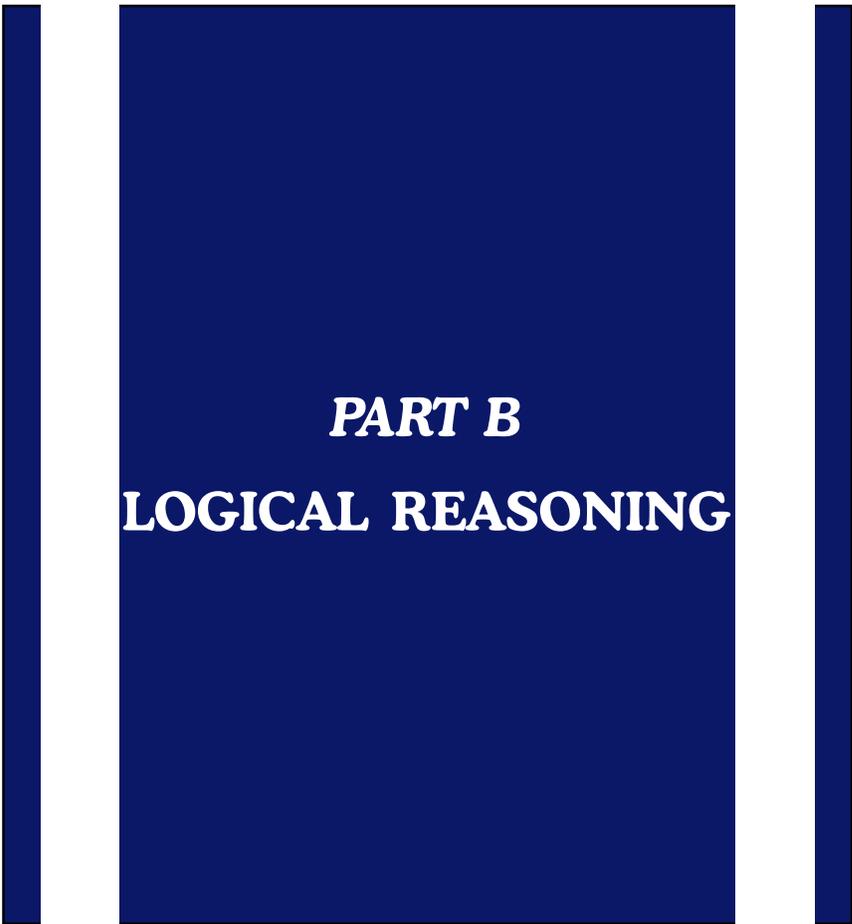
Decide

- (a) B has no right to sue C for there is no privity of contract between B and C.
 - (b) B has the right to sue C as there is privity of contract between B and C.
 - (c) C has no legal obligation to A to pay B off.
 - (d) Once the property is sold to C, B can only sue C and not A.
- 39. Legal Principle :** All illegal agreements are void but all void agreements are not necessarily illegal.

Factual Situation : A had borrowed Rs. 1,000 from B to buy a pistol to shoot C which he did. He, however, failed to repay B and B decides to recover this money from A by filing a suit.

Decide

- (a) The contract between A and B is illegal.
- (b) The contract between A and B will be illegal only if it is established that B was aware of the purpose at the time of the borrowing.
- (c) The contract between A and B is void but not illegal.
- (d) The contract between A and B is valid even if B was aware of the purpose at the time of borrowing.



PART B
LOGICAL REASONING

Lesson 6

**LOGICAL
REASONING**

“Logic takes care of itself; all we have to do is to look and see how it does it.” - Ludwig Wittgenstein

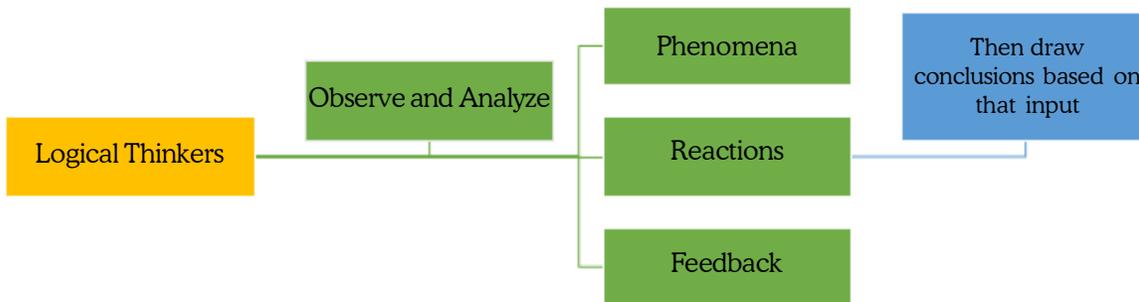
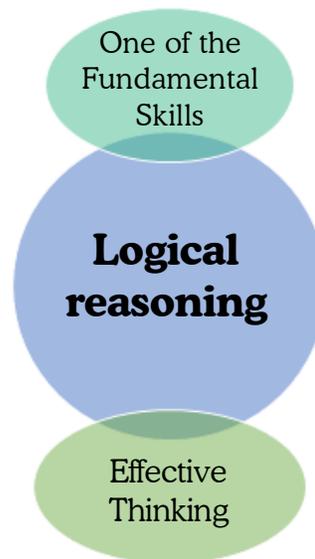
Introduction

Logical reasoning (or just “logic” for short) is one of the fundamental skills of effective thinking.

It works by raising questions like:

- If this is true, what else must be true?
- If this is true, what else is probably true?
- If this isn’t true, what else can’t be true?

In the contemporary perspective, Doyle Alison (2019), in his article ‘The Importance of Logical Thinking in the Workplace’¹ stated that Logical thinkers observe and analyze phenomena, reactions, and feedback and then draw conclusions based on that input. They can justify their strategies, actions, and decisions based on the facts they gather.



These are all inferences: they’re connections between a given sentence (the “premise”) and some other sentence (the “conclusion”). Inferences are the basic building blocks of logical reasoning, and there are strict rules governing what counts as a valid inference and what doesn’t — it’s a lot like math, but applied to sentences rather than numbers.²

Example - 1:

If there is someone at the door, the dog will bark.

Assuming this sentence holds true, there are some other sentences that must also be true.

- If the dog didn’t bark, there is no one at the door.

- Just because the dog barked doesn't mean there's someone at the door.

There are also a few sentences that are probably true, such as:

- The dog can sense (hear or smell) when someone is at the door.
- The dog belongs to the people who live in the house where the door is located.

Example - 2

A sales representative modifies a presentation about a product to highlight its user-friendly qualities after receiving feedback from customers indicating that ease of use was the primary reason that they had purchased the product.

Logical Reasoning: History and Significance

The word 'Logical Reasoning' is made up of two words – Logical and Reasoning. So let us understand, analyse and brief out the history of Logical Reasoning with the help of these two words separately as well as in conjunction.

Logic: Milieu

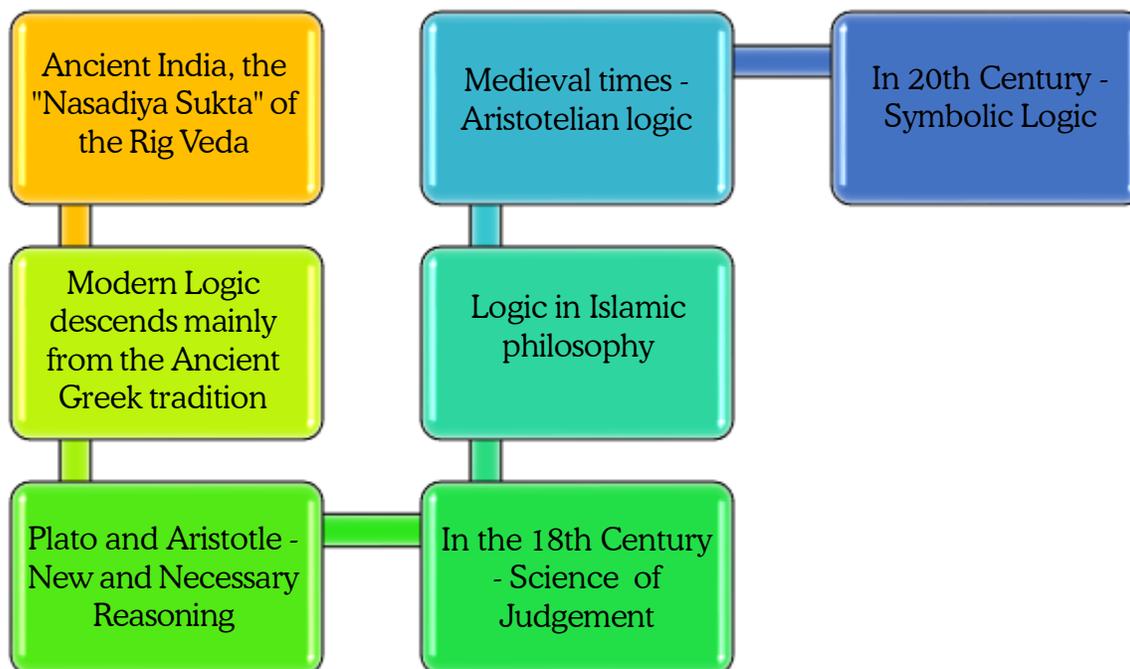
Logic is a universal part of the human experience. Even agriculture would be impossible without inductive reasoning about weather and sunlight, and construction would be impossible without mathematics and deductive reasoning about what makes a structure sturdy.

Logic (from the Greek "logos", which has a variety of meanings including word, thought, idea, argument, account, reason or principle) is the study of reasoning, or the study of the principles and criteria of valid inference and demonstration. It attempts to distinguish good reasoning from bad reasoning.

Formalized logic has appeared in several places with more or less similar results. The Greek philosopher Aristotle is credited with being the first to develop a formal system of logical reasoning, but there were already people in India and China working on formal logic long before Aristotle was born.³

History of Logic: A Snapshot from Vedas to Contemporary Era⁴

In *Ancient India*, the "Nasadiya Sukta" of the *Rig Veda* contains various logical divisions that were later recast formally as the four circles of *catuskoti*: "A", "not A", "A and not A" and "not A and not not A". The *Nyaya* school of Indian philosophical speculation is based on texts known as the "Nyaya Sutras" of *Aksapada Gautama* from around the 2nd Century B.C., and its methodology of inference is based on a system of logic (involving a combination of induction and deduction by moving from particular to particular via generality) that subsequently has been adopted by the majority of the other Indian schools.



But **modern logic** descends mainly from the Ancient Greek tradition. Both Plato and Aristotle conceived of logic as the study of argument and from a concern with the correctness of argumentation. Aristotle produced six works on logic, known collectively as the "Organon", the first of these, the "Prior Analytics", being the first explicit work in formal logic.

Aristotle espoused two principles of great importance in logic, the Law of Excluded Middle (that every statement is either true or false) and the Law of Non-Contradiction (confusingly, also known as the Law of Contradiction, that no statement is both true and false).

He is perhaps most famous for introducing the syllogism (or term logic) (see the section on Deductive Logic below). His followers, known as the Peripatetics, further refined his work on logic.

In medieval times, Aristotelian logic (or dialectics) was studied, along with grammar and rhetoric, as one of the three main strands of the trivium, the foundation of a medieval liberal arts education.

Logic in Islamic philosophy also contributed to the development of modern logic, especially the development of Avicennian logic (which was responsible for the introduction of the hypothetical syllogism, temporal logic, modal logic and inductive logic) as an alternative to Aristotelian logic.

In the 18th Century, Immanuel Kant argued that logic should be conceived as the science of judgment, so that the valid inferences of logic follow from the structural features of judgments, although

he still maintained that Aristotle had essentially said everything there was to say about logic as a discipline.

In the 20th Century, however, the work of Gottlob Frege, Alfred North Whitehead and Bertrand Russell on Symbolic Logic, turned Kant's assertion on its head. This new logic, expounded in their joint work "Principia Mathematica", is much broader in scope than Aristotelian logic, and even contains classical logic within it, albeit as a minor part. It resembles a mathematical calculus and deals with the relations of symbols to each other.

Aristotle defined logic as "new and necessary reasoning", "new" because it allows us to learn what we do not know, and "necessary" because its conclusions are inescapable. It asks questions like "What is correct reasoning?", "What distinguishes a good argument from a bad one?", "How can we detect a fallacy in reasoning?"

The Indian, Chinese, and Greek systems were all remarkably similar in their rules, which suggests that there may have been some mutual influence despite the distance. Traders and travelling scholars may have brought ideas about logical reasoning with them all over the world, allowing for rapid development of new ideas.

Logic may seem like a stuffy, abstract discipline used only by philosophers and lawyers, but it has had a profound influence on the history of science and technology as well. Alan Turing, the inventor of the modern computer, was a logician rather than a thinker or engineer, and his famous "Turing Machine" was a product of his rigorous training in formal logical reasoning.

Need and Significance of Logic

Logic investigates and classifies the structure of statements and arguments, both through the study of formal systems of inference and through the study of arguments in natural language. It deals only with propositions (declarative sentences, used to make an assertion, as opposed to questions, commands or sentences expressing wishes) that are capable of being true and false. It is not concerned with the psychological processes connected with thought, or with emotions, images and the like. It covers core topics such as the study of fallacies and paradoxes, as well as specialized analysis of reasoning using probability and arguments involving causality and argumentation theory.

Reasoning: Milieu

As per Merriam Webster Dictionary, Reasoning means the use of reason especially, the drawing of inferences or conclusions through the use of reason.

Reshma S in her writings on 'Reasoning: Meaning, Definition and Types', stated that reasoning is one of the best forms of controlled thinking consciously towards the solution of a problem. It is realistic in the sense that the solution is sought always in reference to the reality of the situation. We can solve many problems in our day-dreams, dreams and imaginations but they are unrealistic solutions.

Sherman defined, "reasoning is a process of thinking during which the individual is aware of a problem identifies, evaluates, and decides upon a solution".

Reasoning is used not only when we want to solve an immediate problem but also when we anticipate future problems.

Reasoning plays a significant role in one's adjustment to the environment. It not only determines one's cognitive activities but also influences the behavior and personality.

Other Definitions of Reasoning:

1. "Reasoning is a stepwise thinking with a purpose or goal in mind" — Garrett.
2. "Reasoning is the term applied to highly purposeful, controlled and selective thinking" — Gates.
3. "Reasoning is the word used to describe the mental recognition of cause and effect relationships, it may be the prediction of an event from an observed cause or the inference of a cause from an observed event" — Skinner.

Thus reasoning is a highly specialized thinking which helps an individual to explore mentally the cause and effect relationship of an event or solution of a problem by adopting some well-organized systematic steps based on previous experience combined with present observation.

Content of Logic/Logic Systems/Logical Reasoning

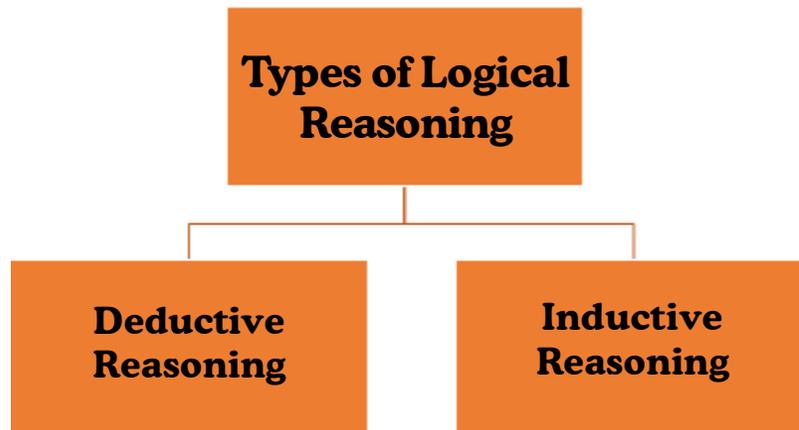
Logical systems should have three things: consistency (which means that none of the theorems of the system contradict one another); soundness (which means that the system's rules of proof will never allow a false inference from a true premise); and completeness (which means that there are no true sentences in the system that cannot, at least in principle, be proved in the system).

Popular Use or Culture of Logical Reasoning: An Example

On Sherlock, the great detective Sherlock Holmes has a website called "The Art of Deduction," in which he explains his methods for solving crimes. However, the website has the wrong name — nearly all of Sherlock's inferences are inductive rather than deductive. That is, they bring together bits and pieces of evidence to develop a theory about what probably happened in a particular crime. They're not based on the kind of logical certainty that we saw in section 1, but rather on reasoning about likelihoods and probabilities. It's always logically possible that Sherlock could have it wrong, even though that rarely seems to happen.

Types of Logical Reasoning

There are two basic types of logic, each defined by its own type of inference. They correspond to the two categories in the example from section 1.



1. **Deductive Reasoning** : It is the ability to draw some logical conclusions from known statements (premises) or evidences. Here one starts with already known or established generalized statement or principle and applies it to specific cases.

For example, all human beings are mortal you are a human being, therefore, you are mortal.

Deductive Reasoning is based on Deduction or Deductive Logic. Deduction is when the conclusion, based on the premises, must be true.

- For example, if it's true that the dog always barks when someone is at the door and it's true that there's someone at the door, then it must be true that the dog will bark. Of course, the real world is messy and doesn't always conform to the strictures of deductive reasoning (there are probably no actual dogs who always bark when someone's at the door), but deductive reasoning is still important in fields like law, engineering, and science, where strict truths still hold. All math is deductive.
- Another example of Deduction states that - An organization may work with a core belief that employees are more productive if they have control over the ways they carry out their responsibilities. A manager could demonstrate logical thinking using deductive reasoning by meeting with subordinates, communicating department goals, and structuring a brainstorming session for staff to decide methods for reaching those objectives.

2. **Inductive Reasoning** : It is a specialized thinking aimed at the discovery or construction of a generalized principle by making use of particular cases, special examples and identifying of elements or relations.

- For example, Mohan is mortal, Radha is mortal, Karim is mortal; therefore, all human beings are mortal.

Inductive Reasoning is based on Inductive logic. Inductive logic is when the conclusion, based on the premises, is probably the answers are less definitive than they are in deductive

reasoning, but they are often more useful. Induction is our only way of predicting what will happen in the future: we look at the way things are, and the way they have been in the past, and we make an educated guess about what will probably happen. But all predictions are based on probability, not certainty: for example, it's extremely probable that the sun will rise tomorrow morning. But it's not certain, since there are all sorts of catastrophes that could happen in between now and then.

Logical Reasoning vs. Critical Thinking

Logic is one of the main pillars of critical thinking. And there's no question that critical thinking would be impossible without some understanding of logical reasoning. However, there are many other skills involved in critical thinking, such as:

- *Empathy*, or the ability to imagine what someone else is feeling or experiencing. This is a crucial skill for critical thinking, since it allows you to broaden your perspective and reflect on your actions and beliefs. Empathy also makes you a better student of philosophy because it enables you to put yourself in the author's shoes and understand the argument from within.
- *Analogy*, or noticing similarities and thinking them through. Analogies allow us to draw conclusions about, for example, the similarity between our own time and some moment in history, and thus try to make better decisions in the future. This skill is closely related to inductive logic.
- *Creativity*. Critical thinking is all about innovative problem-solving and coming up with new ideas, so it's heavily dependent on creativity. Just like a creative art, critical thinking depends on assembling old parts in new ways, working inventively within constraints, and matching moments of inspiration with hours of rigorous craft.

Logic assists in establishing correlation between two variables, i.e., independent and dependent variables pertaining to corporate activities.

For instance, through Karl Pearson's Correlation Coefficient and Co-efficient of determination the correlation between two variables, i.e. CSR Expenditure and Goodwill may be observed

Significance of Logical Reasoning for Company Secretaries : Key Points

- From the perspective of Logic leads to conclusion by correlating different facts and statements.
- This correlation is done through the arguments.
- As a Company Secretaries, one has to resolve various issues in the day to day affair and also ensure compliances and governance in true letter and spirit. This requires the professionals to argue or to support in favour of some conclusion with the help of certain facts and some assumptions.
- A Company Secretary does all these things throughout his life in imparting his professional excellence.
- Therefore, Logical Reasoning is becoming more important day by day in the entrance test of professional as well as academic bodies.

Logical Reasoning: A Summarized Guidance to CSSET Candidates

- Logic only ensures a valid conclusion.
- This conclusion may or may not be consistent with our usual experience. But the questions based on logic are to be solved only as per information provided, without using one's own conscience.
- Therefore, conclusion should follow directly from the statements provided in question, and no deviation from it is allowed.
- Questions on Logical Reasoning are of different types. You may be asked to derive an inference or a conclusion from given statements. Sometimes, you have to consider a statement and decide from among given assumptions, which one is more implicit in the statement and which is not.
- You may have to weigh pros and cons of some arguments given for a statement.
- You will have to decide whether the argument is a strong argument or a weak argument.

The key to have a command over this Chapter is to practise as many questions as you can.

Contents

Considering the vision and mission of the Institute along with aims and objectives of CSSET under the perspectives of global requirement, the contents of Logical Reasoning are divided under three heads, which includes:

1. Logical Reasoning
2. Verbal Reasoning, and
3. Non- Verbal Reasoning.

These heads are well facilitated with various topics and subtopics under them. The detailed contents covered under this Part of the study are described as below:

- | | |
|--------------------------|---|
| Logical Reasoning | <ul style="list-style-type: none">• Calendars• Cause and Effect Reasoning• Clocks• Coding and Decoding• Deriving Conclusion from Passages• Drawing Inference• Number Test |
|--------------------------|---|

Verbal Reasoning

- Sequence and Series
- Statement and Assumptions
- Alphabet Test
- Alpha Numeric Sequence Puzzle
- Analogy
- Assertion and Reason
- Blood Relations
- Decision Making
- Inserting Missing Characters
- Logical Sequence Test
- Logical Venn Diagram
- Number, Ranking and Time Sequence Test
- Syllogism
- Truth Tellers and Liars

Non-Verbal Reasoning

- Analytical Reasoning
- Classification
- Completion of Incomplete Pattern
- Figure Matrix
- Grouping of Identical Figures
- Mirror Image
- Rule Detection
- Numeric and Alphabet Series

To have a clear understanding of all the topics and sub-topics of this part, let us analyse them one by one.

Topic – 1 and 3: Clocks and Calendars (Under Logical Reasoning)

Clocks and Calendars : Concepts

Clock Concepts

- The dial of the clock is circular in shape and was divided into 60 equal minute spaces
- 60 minute spaces traces an angle of 360°. Therefore, 1 minute space traverses an angle of 6°
- In 1 hour, Minute hand traverses 60 minute space or 360°, Hour hand traverses 5 minute space or 30°
- The hands of the clock are perpendicular in 15 minute spaces apart
- The hands of the clock are in straight line and opposite to each other in 30 minute spaces apart.
- The hands of the clock are in straight line when they coincide or opposite to each other.
- The hands of the clock are perpendicular to each other for 22 times in 12 hours and for 44 times in a day.
- The hands of the clock are opposite to each other for 11 times in 12 hours and 22 times in a day.
- The hands of the clock coincide with each other for 11 times in 12 hours and 22 times per day
- The hands of the clock are 44 times in a straight line per day
- The minute hand gain 55 minutes over hour hand per hour.
- Hence x minute space to be gained by minute hand over hour hand can be calculated as $x \cdot (60/55)$ or $x \cdot (12/11)$

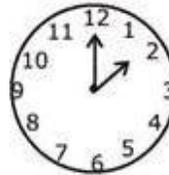
For Example

At what time between 2'O clock and 3'O clock the hands of the clock are opposite to each other.

1. $34(6/11)$ past 2'Oclock
2. $43(7/11)$ past 2'Oclock
3. $56(8/11)$ past 2'Oclock
4. $64(9/11)$ past 2'Oclock

Solution

At 2'O clock the minute hand will be at 12 as shown:



- The minutes hand to coincide with the hour hand it should trace at first 10 minute spaces;
- And then the hands of the clocks to be opposite to each other minute hand should trace 30 minute spaces i.e. totally it should gain $10+30=40$ minute spaces to be opposite to that of hour hand

We know that,

- Minute hand gains 55 minute spaces over hour hand in 1 hour

Therefore, Minute hand gain 40 minute spaces over hour hand in $40 \times (60/55) = 43(7/11)$

Hence the hand of the clock will minutes be opposite to each at $43(7/11)$ past 2'Oclock

Therefore, correct option is 2'

When clock is too fast, too slow

- If a clock or watch indicates 6 hr 10 min when the correct time is 6, it is said that the clock is 10 min too fast
- If it indicates 6. 40 when the correct time is 7, it is said to be 20 min too slow.

Now let us have an example based on this concept.

For Example

My watch, which gains uniformly, is 2 minutes. I have to attend a show at noon on Sunday, and is 4 min 48 seconds fast at 2 PM on the following Sunday. Find out when was it correct ?

Solution

From Sunday noon to the following Sunday at 2 PM, there are 7 days 2 hours or 170 hours.

The watch gains $2+4\frac{4}{5}$ min in 170 hrs.

Therefore, the watch gains 2 min in 2 (divided by) $6\frac{4}{5}$ (multiply by) 170 hrs i.e., 50 hours.

Now 50 hours = 2 Days 2 Hrs.

Therefore, 2 days 2 hours from Sunday noon = 2 PM on Tuesday.

Calendar Concept

- The time in which the earth travels round the sun is a solar year and is equal to 365 days 5 hrs. 48 minutes and $47\frac{1}{2}$ seconds
- Year is 365.2422 days approximately.
- The common year consists of 365 days.

- The difference between a common year and a solar year is therefore 0.2422 of a day and we consider it by adding a whole day to every fourth year.
- Consequently in every 4th year there are 366 days.
- The years which have the extra day are called leap years. The day is inserted at the end of February, The difference between 4 common years and 4 solar years is 0.969 of a day.
- If therefore, we add a whole day to every 4th year, we add too much by 0.0312 of a day. To take account of this, we omit the extra day three times every 400 years,
- The thing is to ensure that each season may fall at the same time of the year in all years.
- In course of time, without these corrections, we should have winter in July and summer in January also.

With the very small variation, the present divisions of the year are those given in B.C 46 by Julius Caesar. The omission of the extra day three times in 400 years is called the Gregorian Correction. This correction was adopted at once in 1582 in Roman Catholic Countries. But not in England until, 1752.

The Gregorian mode* of reckoning is called the New Style, the former, the Old Style.

The New Style has not yet been adopted in Russia, so that they are now 13 days behind us. For example – ‘What we call October 26th, they call that 13th October. They have Christmas day on 7th of January and we have on 25th December every year.

- In an ordinary year there are 365 days i.e., 52 weeks + 1 day
- Therefore an ordinary year contains 1 odd day.

A leap year contains 2 odd days.

100 year = 76 ordinary years + 24 leap years.

= 76 odd days + 48 odd days

= 124 odd days = 17 weeks + 5 days. (in the consideration of weeks)

Therefore, 100 years contain 5 odd days.

200 years contains 3 odd days.

300 years contain 1 odd days

- Since there are 5 odd days in 100 years, there will be 20 days in 400 years. But every 4th century is a leap year.

* We have 1 possible answer for the clue as per the Mode of Reckoning dates according to Gregorian Calendar which appears 1 time in our database.

- Therefore, 400 years contain 21 days. Here 400 years contain no odd days.
- As First January 1 AD was Monday. One must count days from Sunday i.e. Sunday for 0 odd days, Monday for 1 odd day, and Tuesday for 2 odd days and so on.
- Last day of a century cannot be either Tuesday, Thursday or Saturday.
- The first day of a century must either be Monday, Tuesday, Thursday or Saturday.

Calendar: Examples

We can clarify the concept of Calendars with following Examples

Example -1

How many times does the 29th days of the month occur in 400 consecutive years

- (1) 97 Times
- (2) 4400 times
- (3) 4497 times
- (4) None

Solution:

In 400 consecutive years there are 97 leap years. Hence in 400 consecutive years, February has the 29th Days - 97 times, and the remaining 11 months have the 29th Day 400×11 or 4400 times.

Therefore, 29th Day of the month occurs $(4400 + 97)$ or 4497 times.

Example - 2

Given that on 10th November 1981 is Tuesday, what was the day on 10th November 1581

- (1) Monday
- (2) Thursday
- (3) Sunday
- (4) Tuesday

Solution

After every 400 years, the same day comes.

Thus if 10th November, 1981 was Tuesday, before 400 years i.e. on 10th November 1581, it has to be Tuesday.

Important Formula and Equations

Some important formulas and equations may help the candidates to solve the questions related to Clocks and Calendars are listed as below

- 1. Minute Spaces** : The face or dial of watch is a circle whose circumference is divided into 60 equal parts, called minute spaces.
- 2. Hour Hand and Minute Hand** : A clock has two hands, the smaller one is called the hour hand or short hand while the larger one is called minute hand or long hand.

In 60 minutes, the minute hand gains 55 minutes on the hour on the hour hand.

In every hour, both the hands coincide once.

The hands are in the same straight line when they are coincident or opposite to each other.

When the two hands are at right angles, they are 15 minute spaces apart.

When the hands are in opposite directions, they are 30 minute spaces apart.

Angle traced by hour hand in 12 hrs = 360°

Angle traced by minute hand in 60 min. = 360° .

If a watch or a clock indicates 8.15, when the correct time is 8, it is said to be 15 minutes too fast.

On the other hand, if it indicates 7.45, when the correct time is 8, it is said to be 15 minutes too slow.

- 3. Odd Days** : We are supposed to find the day of the week on a given date. For this, we use the concept of 'odd days'. In a given period, the number of days more than the complete weeks are called odd days.
- 4. Leap Year**: (i) Every year divisible by 4 is a leap year, if it is not a century. (ii) Every 4th century is a leap year and no other century is a leap year.
- 5. Ordinary Year** : The year which is not a leap year is called an ordinary years. An ordinary year has 365 days.
- 6. Counting of Odd Days** : 1 ordinary year = 365 days = (52 weeks + 1 day). 1 ordinary year has 1 odd day.

1 leap year = 366 days = (52 weeks + 2 days) 1 leap year has 2 odd days.

100 years = 76 ordinary years + 24 leap years

= (76 x 1 + 24 x 2) odd days = 124 odd days.

= (17 weeks) = 5 odd days.

Important Facts/Points to Remember:

Number of odd days in 100 years = 5

Number of odd days in 200 years = $(5 \times 2) = 3$ odd days.

Number of odd days in 300 years = $(5 \times 3) = 1$ odd day.

Number of odd days in 400 years = $(5 \times 4 + 1) = 0$ odd day.

Similarly, each one of 800 years, 1200 years, 1600 years, 2000 years etc. has 0 odd days.

Day of the Week Related to Odd Days (Assuming that 1AD January 1st is a Sunday):

No. of days:	0	1	2	3	4	5	6
Day:	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.

Sample Questions

1. What is the angle between the two hands of a clock when the time shown by the clock is 6.30 PM?
- (a) 00
 (b) 50
 (c) 30
(d) 150

Explanation : $q = 11/2 m - 30h$
 $= 11/2 * 30 - 30 * 6$
 $= /165 - 180/ = 150$

2. At what time between 3 and 4 o'clock will the minute hand and the hour hand are on the same straight line but facing opposite directions.
- (a) 3:49
 (b) 3:15
 (c) 3:39 1/11
(d) 3:49 1/11

Explanation : On straight line means 180 degree angle.

$$180 = 11/2m - 30h$$

$$180 = 11/2 m - 30 * 3$$

$$180 = 11/2m - 90$$

$$(180 + 90)2 = 11m$$

$$m = 540/11 = 49 \frac{1}{11}$$

3. By how many degrees does the minute hand move in the same time, in which the hour hand move by 280?
- (a) 168
(b) 336

(c) 196

(d) 376

Explanation : $28 * 2 * 6 = 3360$

4. At what time, between 3 o'clock and 4 o'clock, both the hour hand and minute hand coincide each other?

(a) 3:30

(b) 3:16 4/11

(c) 3:16 11/4

(d) 3:16 7/11

Explanation : Coincide means 0° angle.

$$0 = 11/2m - 30 * 3$$

$$11m = 90 * 2 = 180$$

$$m = 180/11 = 16 \frac{4}{11}$$

$$\text{So time} = 3 : 16 \frac{4}{11}$$

5. How many degrees will the minute hand move, in the same time in which the second hand move 4800°?

(a) 60

(b) 90

(c) 40

(d) 80

Explanation : Minute hand covers $4800/60 = 80$

6. How many years have 29 days in February from 2001 to 2100?

(a) 26

(b) 25

(c) 23

(d) 24

Explanation : 100th year is not a leap year. So 24 February's has 29 days

7. 2012 January 1st is Sunday, then which day is the Indian Independence Day of the same year.

(a) Saturday

(b) Wednesday

(c) Thursday

(d) Friday

Explanation : $30 + 29 + 31 + 30 + 31 + 30 + 31 + 15 = 227/7 = \text{remainder} = 3$

So Independence Day is Wednesday

8. Which year has the same calendar as 1700?

(a) 1705

(b) 1706

(c) 1707

(d) 1708

Explanation

Year :	1700	1701	1702	1703	1704	1705
Odd Days :	1	1	1	1	2	1

9. If Arun's birthday is on May 25 which is Monday and his sister's birthday is on July 13. Which day of the week is his sister's birthday?

(a) Monday

(b) Wednesday

(c) Thursday

(d) Friday

Explanation : Reference Day: May 25th is Monday

Days from May 25 to July 13 = $6 + 30 + 13 = 49$

No of Odd Days: $49/7 = 0$

10. March 1 is Wednesday. Which month of the same year starts with the same day?

(a) October

(b) November

(c) December

(d) None of these

Explanation

Month :	Mar	April	May	June	July	August	September	October
Odd Days :	3	2	3	2	3	3	2	3

Total 21 odd days. $21/7 = 0$. So November has start with the same day.

Topic – 2**Cause and Effect Reasoning****Introduction**

In this type of reasoning, each question contains two statements and the students have to find out relationship between the two statements. Here the students have to test whether the statements are related to each other or not. Read them and choose the best option that describes the relationship between them. These types of problems judge the reasoning and analytical power of the students. Therefore, Candidates are advised to read the statements very well to arrive at a particular conclusion.

Example

Statement

- I. Everybody should work hard.
 - II. The only way to achieve success is to work hard.
- A - Statement I is the reason and statement II is the response.
B - Statement II is the reason and statement I is the response.
C - Both the statements I and II are the not depended reasons.
D - Both the statements I and II are the response of not depended reasons.
E - Both the statements I and II are the response of some common reasons.

Herein the Answer is Option A

Explanation -

In the statement I, it told about a generic statement. Working hard can be taken as a reason but to describe it as a reason there should be some response. The response is shown in statement II that tells that through hard work one can achieve success. Hence it shows that, statement I is the reason and statement II is the response.

Types of Statement**Type - I**

These kinds of Statements are about those cases where there will be a direct reason and response type of statement will be present in the question. The last example that we have discussed goes under this category. Now let's discuss another problem of the same kind.

Statement

- I. Apple has vitamin D that helps in boosting immunity.

- II. Doctors advice to eat an apple every day.
- A - Statement I is the reason and statement II is the response.
- B - Statement II is the reason and statement I is the response.
- C - Both the statements I and II are the not depended reasons.
- D - Both the statements I and II are the response of not depended reasons.
- E - Both the statements I and II are the response of some common reasons.

Answer - Option B

Explanation - Here we can clearly see the reason is statement II. This is a reason to describe its response, which is statement I that tells the necessity of consuming an apple every day.

Type - II

Here we will discuss about those cases in which both the statements will be the response of some common reason. Let's analyze it with an example.

Statement

- I. There has been a curfew in the city.
- II. 24 hours police patrolling is going on in the city.
- A - Statement I is the reason and statement II is the response.
- B - Statement II is the reason and statement I is the response.
- C - Both the statements I and II are the not depended reasons.
- D - Both the statements I and II are the response of not depended reasons.
- E - Both the statements I and II are the response of some common reasons.

Answer - Option E

Explanation

Clearly both the statements are directing towards a common reason. To simply our thought process we can assume that for some common reason like Hindu –Muslim riot must have been reason this type of situation.

Types - III

Sometimes the two statements are the response of some not depended reasons. Let's try to analyze this with an example.

Statement

- I. There has been a curfew in the city.

- II. Doctors advice to eat an apple every day.
- A - Statement I is the reason and statement II is the response.
- B - Statement II is the reason and statement I is the response.
- C - Both the statements I and II are the not depended reasons.
- D - Both the statements I and II are the response of not depended reasons.
- E - Both the statements I and II are the response of some common reasons.

Answer - Option D

Explanation

We can clearly analyze one thing that, eating apple and curfew are nowhere related to each other. Hence, they must be the response of not depended reasons.

Types of Causes

There can be different causes in following categories:

1. **Immediate Cause** : This is the cause that has occurred most recently. Consider the example of snowfall. Water is heated by the sun and it evaporates into the atmosphere. Once in the atmosphere, it cools down to a very low temperature and precipitates as snow. There are a few causes that have led to snowfall. The most immediate being the fact that the raindrops freeze in the low temperatures of the atmosphere.
2. **Principal Cause** : This is the main cause responsible for an event. The immediate cause may or may not be the Principal cause.
3. **Independent Cause** : This is the cause that is independent of the events. In other words, the effect and the cause may not have a direct relationship or any relationship at all.

Cause and Effect Reasoning: Possibilities

The question on cause and effect reasoning are mainly designed to decide on a candidate's ability to analyze a pair of given statements and to correlate them in terms of cause and effect. Five possibilities may arise:

1. The fact in the first statement is the effect of that mentioned in the second statement i.e. the second statement expresses the cause that leads to the condition mentioned in the first;
2. The contents of the first statement form the direct cause of the result discussed in the second statement;
3. Both the statements express generalized results that may not be backed by any specific cause but may influence certain other factors;
4. Both the statements are independent and may be explained as effects of different independent causes;

5. The effects in both the given statements may be caused or triggered by a third unmentioned event which may thus be called the common cause of the given events.

Directions or Tips

In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer accordingly.

Give answer (a) if statement I is the cause and statement II is its effect

Give answer (b) if statement II is the cause and statement I is its effect

Give answer (c) if both the statements I and II are independent causes

Give answer (d) if both the statements I and II are effects of independent causes

Give answer (e) if both the statements I and II are effects of some common cause.

Example - I

- I. The local traders' association urged all its members to close down their shops for a day to protest against the government's new tax policy.
- II. Many shopkeepers decided to close down their shops for the day and gave a day off to their employees.

Solution

Clearly, the association's decision to go for a 'bandh' on a massive scale to protest against the government's new policy would have instigated the shopkeepers to keep their shops closed. Thus, I mentions the direct cause of the effect in II. Hence the answer is (a).

Sample Questions

Directions : In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer accordingly.

Give answer (a) if statement I is the cause and statement II is its effect;

Give answer (b) if statement II is the cause and statement I is its effect;

Give answer (c) if both the statements I and II are independent causes;

Give answer (d) if both the statements I and II are effects of independent causes;

Give answer (e) if both the statements I and II are effects of some common cause.

Q.1.

- I. The prices of vegetables have been increased considerably during this summer.
- II. There is tremendous increase in the temperature during this summer thereby damaging crops greatly.

Answer B

Solution

Clearly, damage to crops due to high temperature may have resulted in a short supply of vegetables and hence an increase in their prices

Q.2

- I. Police resorted to lathi to disperse the unlawful gathering of large number of people.
- II. The citizens' forum called a general strike in protest against the police atrocities.

Answer A

Solution

Clearly, the people's mass protest against the police might have instigated the latter to indulge in lathi-charge to disperse the mob.

Q.3

- I. It is the aim of the city's civic authority to get air pollution reduced by 20% in the next two months.
- II. The number of asthma cases in the city is constantly increasing.

Answer B

Solution

The increase in number of asthma cases must have alerted the authorities to take action to control air pollution that triggers the disease.

Q.4

- I. The police authority has recently caught a group of house breakers.
- II. The citizens group in the locality have started night vigil in the area.

Answer E

Solution

Both the statements are clearly backed by a common cause, which is clearly and increase in the number of thefts in the locality.

Q.5

- I. The university authority has instructed all the colleges under its jurisdiction to ban use of all phones inside the college premises.
- II. Majority of the teachers of the colleges signed a joint petition to the university complaining the disturbances caused by cell phone ring-tones inside the classroom.

Answer B

Solution

Clearly, the university's decision came as a sequel to the complaint received by it from the college teachers against use of mobile phones in the college premises.

Q.6

- I. The government has recently fixed the fees for professional courses offered by the unaided institutions which are much lower than the fees charged last year.
- II. The parents of the aspiring students launched a severe agitation last year protesting against the high fees charged by the unaided institutions.

Answer B

Solution

The parents' protest against high fees being charged by the institutional led the government to interfere and fix the fees at a more affordable level.

Q.7.

- I. Large number of people living in the low-lying areas have been evacuated during the last few days to safer places.
- II. The Government has rushed in relief supplies to the people living in the areas.

Answer E

Solution

Evacuating low-lying areas and rushing in relief to the affected areas clearly that floods have occurred in the area.

Q.8.

- I. The performance of most of the students in final exam of class X in the by the Government was excellent.
- II. Many teachers of the Government schools left the school and joined private school.

Answer D

Solution

The students of government schools performing well in the examinations and the teacher of government schools leaving their jobs to join private school are two separate situations that must have been triggered by independent causes.

Q.9.

- I. Majority of the citizens in the locality belong to higher income group.
- II. The sales in the local supermarket are comparatively much higher than in other localities.

Answer B

Solution

The comparatively higher sales in a particular locality are indicative of the high paying capacity of the residents of that locality.

Q.10.

- I. There is considerable reduction in the number of people affected by water-borne disease in City A during this rainy season.
- II. The government has opened four new civil hospitals in City A in the beginning of the year.

Answer C

Solution

The given statements are self-sufficient and depict independent events.

Topic 4

Coding and Decoding

Coding is a system of signals. This is a method of transmitting information in the form of codes or signals without it being known by a third person.

The person who transmits the code or signal, is called the sender and the person who receives it, is called the receiver. Transmitted codes or signals are decoded on the other side by the receiver—this is known as decoding.

In questions on coding-decoding, a word (basic word) is coded in a particular way and the candidates are asked to code other word in the same way. The coding and decoding tests are set up to judge the candidate's ability to decipher the rule that has been followed to code a particular word/message and break the code to decipher the message.

Order of the English Alphabet

Forward order position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Backward order position	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

Approach

- (1) Observe alphabets or numbers given in the code keenly.
- (2) Find the sequence it follows whether it is ascending or descending.
- (3) Detect the rule in which the alphabets/numbers/words follow.
- (4) Fill the appropriate letter/number/word in the blank given.

Letter coding : Alphabets in a word are replaced by other alphabets according to a specific rule to know its code. So the common rule should be detected first. Some examples are given below:

- (1) 'ZYXW' as coded as 'ABCD' then 'STUV' is coded as.....

Answer : Z – A, Y – B, X – C, W – D

V – E, U – F, T – G, S – H

STUV = HGFE

Answer = HGFE

Rule = front alphabet = back alphabet.

- (2) 'bcd' is coded as 'def' then 'True' is coded as.....

Answer : b - d (+2)

c - e (+2)

d - f (+2)

+2 letters are considered in this code.

True - Vtwg

Answer = Vtwg.

- (3) 'Hyderabad' is coded as 'Ixedszcze' then 'Chennai' is coded as.....

Answer : H - I (+1)

Y - X (1-)

D - E (1+)

E - D (1-)

R - S (1+)

A - Z (1-)

B - C (1+)

A - Z (1-)

D - E (1+)

Here if we observe alternatively the letter increasing and one letter decreasing.

Chennai = dgfmzj

Answer = dgfmzj

Number coding : In this each alphabets or words are assigned to the numeric values we should observe the given letters and the assigned values and use the same rule to find the value to of given code. Some examples are given below:

- (1) Apple is coded as 25563, Rung is coded as 7148. Then purple is coded as

Answer

PURPLE - 517563

Answer = 517563.

- (2) In a language A is coded as 1, B is coded as 2, then FACE is coded as

Answer

Then FACE = 6135

Answer = 6135.

- (3) PUSH is coded as 1234, ROUGH is coded as 65274. Then SOUP is coded as

Answer

SOUP = 3521

Answer = 3521.

Substitution : In this section an object names are substituted with different object names. We should carefully trace the substitution and answer given question. Some examples are given below:

- (1) 'book' is coded as 'pencil', 'pencil' is coded as 'mirror', 'mirror' is coded as 'book'. Then what is useful to write on a paper?

Answer : Pencil is coded as mirror

Answer = mirror.

- (2) 'man' is coded as 'woman', 'woman' is coded as 'girl', 'girl' is coded as 'boy', 'boy' is coded as 'worker' then 6 years female is known as?

Answer : 6 years female = girl, but 'girl' is coded as 'boy'.

Answer = boy.

- (3) 'Reds' are 'blues', 'blues' are 'whites', 'whites' are 'yellows', 'yellows' are 'oranges', 'oranges' are 'pinks', then what is the colour of the sky?

Answer : Sky is blue, but blues are whites

Answer = white.

Sample Questions

1. In a certain code, COMPUTER is written as RFUVQNPC. How is MEDICINE written in the same code?
 - (a) MFEDJJOE
 - (b) EOJDEJFM
 - (c) MFEJDJOE
 - (d) EOJDJEFM

Answer : Option D

The letters of the word are written in reverse order and except the first and the last letter all other letters are move one step forward

2. In a code language, A is written as B, B is written as C, C is written as D and so on, then how will SMART be written in that code language ?
 - (a) TLBSU
 - (b) SHBSU
 - (c) TNBSU
 - (d) SNBRU

Answer : Option C

The letters are coded by moving them 1 step forward.

3. In a certain code, RIPPLE is written as 613382 and LIFE is written as 8192. How is PILLER written in that code?
 - (a) 318826
 - (b) 776655
 - (c) 786543
 - (d) 156724

Answer : Option A

Word : RIPPLELIFEPILLER

Code : 6 1 3 3 8 2 8 1 9 2 3 1 8 8 2 6

4. In a certain code FLOWER is coded as 36 and SUNFLOWER is coded as 81, then how to code FOLLOWS?
- (a) 42
 - (b) 49
 - (c) 63
 - (d) 36

Answer : Option B

The word FLOWER has 6 letters. 6² is 36

The word SUNFLOWER has 9 letters. 9² is 81

Like FOLLOWS has 7 letters. So 7² is 49

5. In a certain code, 'il be pee' means 'roses are blue', 'sik hee' means 'red flowers' and 'pee mit hee' means 'flowers are vegetables', How is 'red' written in that code?
- (a) hee
 - (b) sik
 - (c) be
 - (d) cannot be determined
 - (e) none

Answer : Option B

Code Sentence

Il be pee roses are blue

Sik hee red flowers

Pee mit hee flowers are vegetables

In II and III code 'hee' stands for 'flowers'. So 'sik' stands for 'red'

6. In a certain code language : 'dugo hui mul zo' stands for 'work is very hard' 'hui dugo ba ki' for 'Bingo is very smart'; 'nano mul dugo' for 'cake is hard'; and 'mul ki gu' for 'smart and hard' Which of the following word stand for Bingo ?
- (a) Jalu
 - (b) Dugo
 - (c) Ki
 - (d) Ba

Answer : Option D

Code Sentence

1. dugo hui mul zo work is very hard
2. hui dugo ba ki bingo is very smart
3. nano mul dugo cake is hard
4. mul ki gu smart and hard

From second code and its sentence neither 'ba' is repeated nor is 'Bingo'.

7. If rain is called water, water is called air, air is called cloud, cloud is called sky, sky is called sea, sea is called road, where do the aeroplanes fly?
- (a) Water
 - (b) Road
 - (c) Sea
 - (d) Cloud

Answer : Option C

Aeroplanes fly in sky and as per given codes sky is sea

8. If Orange is called Lemon, Lemon is called Flower, Flower is called Fish, Fish is called Tail and Tail is called Pen, what is Rose?
- (a) Pen
 - (b) Lemon
 - (c) Flower
 - (d) Fish

Answer : Option D

Rose is a flower and as per given codes flower is fish.

9. In a certain code language \$#* means 'Shirt is clean', @ D# means 'Clean and neat' and @ ? means 'neat boy', then what is the code for 'and' in that language
- (a) #
 - (b) D
 - (c) @
 - (d) Data inadequate

Answer : Option B

Code sentence

\$#* 'Shirt is clean',

@ D# 'Clean and neat'

@ ? 'neat boy'

Here # stands for clean and @ stands for neat. D stands for 'and'

10. If A stands for +, B stands for -, C stands for x, what is the value of $(10C4)(A) (4C4)B6$?
- (a) 60
 - (b) 50
 - (c) 56
 - (d) 46

Answer : Option B

$$(10C4)(A) (4C4) B6 = (10 * 4) + (4*4) - 6 = 50$$

Topic 5**Deriving Conclusion from Passages**

In this section of logical deduction, the question consists of a brief passage (usually a report containing certain data regarding some social or economic problem), Followed by certain inferences based on it. The candidate is required to analyse the content (or data) of the passage and grasp the desirable facts from it.

Then, he has to consider each of the given inferences in the context of the given passage, decide upon its degree of truth or falsity and then choose the best alternative provided accordingly.

Directions : Read the following passage and examine each inference given below it in the context of this passage.

Mark your answer as:

- (a) if the inference is 'definitely true'
- (b) if the inference is 'probably true';
- (c) if the 'data provided is inadequate';
- (d) if the inference is 'probably false'; and
- (e) if the inference is 'definitely false'.

Example 1. The World Health Organization has called for improved surveillance to combat dengue and says the outbreak can be controlled in two weeks if all necessary steps are taken to stop the mosquitoes from breeding and break the transmission cycle.

Dengue is already the most widespread mosquito-borne disease among humans. In the past 15 years, outbreaks in South and South-East Asia have been rapidly rising mostly due to falling environmental and public health standards during urbanization. WHO, reports that severe forms of the disease such as hemorrhagic fever (DHF) and shock syndrome (DSS) are putting more 2.5 million people at risk worldwide each year. Importantly, 95 % of the DHF cases are among children less than 15 years. Therefore, the disease has major impacts on public health and future generations.

1. If rate of urbanization in South Asia is controlled, outbreaks of all disease are reduced.
2. World Health Organization has not collected data of outbreak of dengue in the past.
3. There was no outbreak of dengue in the European countries in the recent past.
4. Over the last decade, South Asian countries have not successfully stepped up mechanism to combat dengue.
5. DSS type dengue seems mostly to be affecting the adults.

Solution

1. It is mentioned in the passage that 'outbreaks in South and South East Asia have been rapidly rising mostly due to falling environmental and public health standards during urbanization'. Thus, the fact in the question is quite probable. So, the conclusion is probably true.
2. The passage talks of outbreak of dengue during the past 15 years. This contradicts give European countries. Hence, the data are inadequate
3. The passage mentions the outbreak of dengue during in Asian countries only and not the European countries. Hence the data are inadequate
4. It is mentioned in the passage that cases of outbreak of dengue are rapidly rising in South Asian countries since the last 15 years. This means that adequate steps to combat dengue have not been taken. Hence, the conclusion is definitely true.
5. Nothing about the effect of DSS type dengue is mentioned in the passage. Hence the data are inadequate.

Sample Questions

Directions : Read the following passage and examine each inference given below it in the context of this passage.

Mark your answer as:

- (a) if the inference is 'definitely true'
- (b) if the inference is 'probably true';
- (c) if the 'data provided is inadequate';
- (d) if the inference is 'probably false'; and
- (e) if the inference is 'definitely false'.

Procurement of wheat is in full swing in the north-western states of India. By June end, public agencies are likely to end up with food grain stocks of about 40 to 42 million tonnes, the highest ever witnessed in the history of this country. This stock should be more than sufficient to ensure that the country's "food security" is not endangered even if India faces two consecutive droughts.

But strangely enough, while the granaries overflow, there is still widespread hunger in the country even without a drought. The estimates of poverty are being debated, but broadly one-third of India seems to remain underfed. And this coexistent of grain surpluses with large scale hunger should make any serious policy-maker think and examine the existing policy mix with a view to ensure faster economic growth and reduction in poverty.

Q.1 The policy-makers in India are unaware of prevalent hunger.

Answer B

Explanation

The statement '..... while the granaries overflow, there is still widespread hunger in the country' in the passage, indicates a lackening on the part of the policy-makers. Hence, it is quite probable that they are unaware of the prevalent hunger. Thus, the given inference is probably true.

Q.2 India always maintains foodgrain stocks to withstand two consecutive droughts.

Answer D

Explanation

It is mentioned in the passage that the current foodgrain stock is the highest e witnessed in the history of this country'. Thus, it is quite probable that such stocks are not always maintained. Hence, the given inference is probably false.

- Q.3 The distribution of foodgrains to the masses has remained a problem area for India.

Answer A*Explanation*

The phrase 'coexistence of grain surpluses with large scale hunger' in the passage clearly implies the given fact. Hence, the inference is definitely true.

- Q.4 India's foodgrains stock has been satisfactory over the past few years.

Answer C*Explanation*

Nothing about the previous years' foodgrain stock of the country has been mentioned in the passage. Only the current situation has been discussed. Hence, the data are inadequate.

- Q.5 More than 30 percent of the population in India do not even get two times meals per day.

Answer A*Explanation*

The given fact is clear from the sentence, "... but broadly one-third of India seems to remain underfed". Hence, the inference is definitely true.

- Q.6 The policy of India needs to be revamped to reduce the extent of poverty in the country.

Answer A*Explanation*

The last sentence of the passage clearly implies the given fact. Hence, the given inference is definitely true.

- Q.7 India, at present, is one of the countries in the world to have sufficient food for its people.

Answer A*Explanation*

The statement "This stock should be more than sufficient to ensure that country's food security is not endangered" clearly supports the given inference. Hence, the given inference is definitely true.

Direction for [Question No: 8 To 10]: Economic liberalization and globalization have put

pressures on Indian industry, particularly on the service sector, to offer quality products and services at low costs and with high speed. Organizations have to compete with unequal partners from abroad. It is well recognized that developing countries like India are already behind other countries technologically, in many areas, although some of them, particularly India, boast of huge scientific and technical manpower. In addition to this, if an entrepreneur or industrialist has to spend a lot of his time, money and energy in dealing with unpredictable services and in negotiating with the local bureaucracy, it can have a significant dampening effect on business.

- Q.8 Official formalities are less cumbersome in almost all the countries except India.
- A. If you think the inference is 'definitely true'.
 - B. If you think the inference is 'probably true' though not definitely true in the light of the facts given.
 - C. If the data given is inadequate i.e., from the fact given you cannot say whether the inference is likely to be true or false.
 - D. If you think the inference is probably false though not definitely false in the light of the facts given.

Answer C

Explanation

The last sentence of the passage hints at cumbersome official formalities in India, but nothing can be deduced about its comparison to other countries.

- Q.9 India at present is to some extent at par with the developed countries in terms of technological development.
- A. If you think the inference is 'definitely true'.
 - B. If you think the inference is 'probably true' though not definitely true in the light of the facts given.
 - C. If the data given is inadequate i.e., from the fact given you cannot say whether the inference is likely to be true or false.
 - D. If you think the inference is probably false though not definitely false in the light of the facts given.

Answer D

Explanation

It is mentioned in the passage that though India boasts of huge technical manpower, yet it lags behind other countries in technology. Thus, it is quite probable that India is in no way at par with the developed countries in terms of technological development.

- Q.10 Foreign companies are more equipped than domestic companies to provide quality service in good time.
- A. If you think the inference is 'definitely true'.
 - B. If you think the inference is 'probably true' though not definitely true in the light of the facts given.
 - C. If the data given is inadequate i.e., from the fact given you cannot say whether the inference is likely to be true or false.
 - D. If you think the inference is probably false though not definitely false in the light of the facts given.

Answer A

Explanation

The fact clearly follows from the first two sentences of the passage.

Topic 6

Drawing Inference

An inference...is a statement about the unknown made on the basis of the known.

S. I. Hayakawa, Language in Thought and Action (2nd ed.) p. 41

Inferences are evidence-based guesses. They are the conclusions a reader draws about the unsaid based on what is actually said. Inferences drawn while reading are much like inferences drawn in everyday life. If your best friend comes in from a blind date and looks utterly miserable, you would probably infer the date was not a success. Drawing inferences while you read requires exactly the same willingness to look at the evidence and come to a conclusion that has not been expressed in words. Only in reading, the evidence for your inference consists solely of words rather than actual events, expressions, or gestures.

To pull meaning from the page, readers need to draw all kinds of inferences. They need to infer main ideas; figure out how sentences and paragraphs relate; connect supporting details to main ideas; match pronouns to antecedents (the words to which pronouns refer); understand the function of allusions (references to people and events that are used to make a point); and determine how visual aids contribute to the author's message (This is just a partial list). While it's commonly assumed that writers supply every word readers need to construct meaning, nothing could be further from the truth. Readers almost always help create the texts they read. Those readers who don't draw inferences to fill in gaps in the text are likely to miss or misunderstand the meaning intended by the author.

For an illustration of how important inferences are to communication between reader and writer, read the following sentence: "After reading that Paris Hilton told an interviewer how the beauty of her hit song 'Stars Are Blind' made her want to cry, I couldn't help thinking of a quotation from Mark Twain: 'Man is the only animal that blushes—or needs to.' " To understand that sentence, readers need to draw at least three essential inferences:

- a. The author thinks the song is just awful.
- b. Mark Twain thought that only humans blushed because they were the only ones who did things they needed to be ashamed of.
- c. The author makes a connection between Hilton and Twain because she thinks Paris Hilton is one of those humans who should blush from shame.

Note as well how the author expects readers to infer that the antecedent for the pronoun "her" is Paris Hilton. Linking pronouns to antecedents is one of the most common kinds of inferences readers are expected to draw on a consistent basis.

What You Need to Know About Inferences

1. There are logical and illogical inferences, inferences that "fit" the rest of the text and inferences that don't. Make sure your inference has the right fit by relying on the author's words more

than on your own feelings and opinions. To give you an obvious example: If the writer uses glowing language to describe the presidency of Bill Clinton but never states an opinion of the Clinton years in office, you probably shouldn't infer that the writer is a Clinton critic just because you yourself thought Bill Clinton was a terrible president.

2. Think of inferring implied main ideas as a two-step process, moving from part to whole. Your first step is to understand what each sentence contributes to your knowledge of the topic. Next ask yourself what the sentences combine as group to suggest. The answer to that question is the implied main idea of the paragraph.
3. If you draw an inference about the main idea, check to see if your inference is contradicted by any statements in the paragraph. If it is, you have probably drawn an illogical inference, one that does not follow from the information given. With particularly difficult readings, see if you can actually identify the language or statements that led you to the main idea you inferred. This kind of close reading is a great inference check. It also gives you practice doing the kind of thoughtful reading that guarantees remembering.
4. Transitions such as "consequently," "next," and "in summary" definitely help readers make connections between sentences and paragraphs. Transitions are the considerate author's way of saying, "This is the connection you need to make between what you just read and what's coming up." However, transitions are not as commonly used as readers might like. It's often the reader's job to supply sentence and paragraph connections. In other words, it's the reader's job to draw the right inference. If a sentence doesn't open with a transition—and a good many won't—make sure you know how the sentence you are reading connects to the ideas that came before.
5. Pay especially close attention to sentence openers. That's where you will often get the clues you need to infer relationships between sentences and paragraphs.
6. Be on the look-out for key allusions or idioms (expressions that might seem completely out of place to those just learning the language, but which make sense to those who grew up hearing or reading these expressions), e.g., she loved her job; the money was "icing on the cake"). Allusions and idioms often suggest meanings that are central to the author's message. For instance, if the writer says that "the shotgun marriage between the unions and management dissolved once the war was over" you can infer that the unions and management were working together because they were forced to by necessity. However, the writer doesn't say anything about either side being forced by necessity. Instead, she uses an idiom and expects reader to draw the correct inference.
7. If the text includes visual aids, but neither the title nor caption tells you exactly how they relate to the author's meaning, take the time to figure out the relationship between text and graphic. Inferring relationships between the author's words and the visual aids will deepen your overall understanding of the point or points being made. You will also have two ways, one verbal, one visual, to anchor information in long-term memory.
8. To get you started thinking about inferences, here are a few warm-up exercises. If you sail through these, you can find more at [Online Practice for Reading for Results](#).

Exercise 1

Directions : Each item in this exercise describes a famous person. It's your job to infer the name of the person described.

1. A small-town lawyer from Illinois, tall and lanky with an Adam's apple that could have gone down in the Guinness Book of Records had it existed in the nineteenth century. Nevertheless, he changed the face of American history, steering it through a civil war that left both sides bloody. Who knows what more he could have done had an assassin's bullet not cut him down.

The person described is _____

In drawing the correct inference, which piece of information is more useful:

- a. He had a big Adam's apple.
- b. He steered the nation through a civil war.

Answer and Explanation:

1. Abraham Lincoln

Clue : He steered the country through civil war.

Explanation : Lots of people have big Adam's apples, but America has had only one civil war.

2. Glittering and shaking to the strains of "Proud Mary," this lady ruled the stage in the sixties, but Ike ruled the roost until she walked out the door. It took her almost a decade to get back on top but she still remains one of pop's great divas. Closing in on sixty, she can still belt out rock and roll with singers half her age, and "Simply the Best" just may qualify as her own personal theme song.

The person described is _____

In drawing the appropriate inference, which piece of information is more useful.

- a. She ruled the stage but Ike ruled the roost.
- b. She was a popular singer in the sixties.

Answer and Explanation

Tina Turner

Clue : She ruled the stage but Ike ruled the roost.

Explanation : There were many popular women singers in the sixties but only one was linked to a domineering husband named Ike.

Exercise 2

Directions : For each situation, draw what you think is an appropriate inference.

1. You have just gotten a pit bull puppy from an animal shelter. He's lovable but nervous. If you raise your voice for any reason, he cowers and trembles. If you scold him, he hides. When you got him from the shelter, he had a slight limp and a deep scratch across his nose.

Inference :

2. You are a high school student sitting in class when a substitute teacher walks in and announces that your regular teacher is ill. Everyone in the class including you erupts in applause. The substitute raps his knuckles on the desk for order, but the students ignore him and talk louder.

Inference : Answers may vary.

1. Inference: The puppy may well have been abused by its former owners.
2. Inference: The students are going to take advantage of the substitute teacher.

Exercise 3

Directions : Each item in this exercise introduces a topic. Six specific statements about the topic follow. Read them carefully. Then choose the more appropriate inference.

1. Topic: Shakespeare in nineteenth-century America

Specific Statements :

- a. In the early nineteenth century, Shakespeare was the most widely performed playwright in both the North and Southeast.
- b. In the first half of the nineteenth century, English and American actors could always earn money by performing Shakespeare in towns both big and small.
- c. American audiences were famous for their participation in performances of Shakespeare's plays: They hurled eggs and tomatoes at the villains and cheered and whistled for the heroes.
- d. By the end of the nineteenth century, theater owners claimed that most ordinary people couldn't understand Shakespeare, and they were refusing to stage his plays.
- e. In the early 1800s, theater goers in big cities could often choose between three different productions of Macbeth or Romeo and Juliet; by the end of the nineteenth century, it was hard to find one production of a Shakespeare play, let alone several.

Answer B

Inference

- a. Early American audiences embraced Shakespeare's plays enthusiastically because they wanted to prove that they were as clever and sophisticated as their former British rulers.

- b. The role of Shakespeare in America changed dramatically as the nineteenth century drew to a close.

2. Topic : The medics in World War II

Specific Statements

- a. During training for combat, the medics were often despised because most of them had refused to take up arms.
- b. The medics had their own barracks and were separated from combat soldiers, who referred to them as "pill pushers" and laughed at their medical drills.
- c. In actual combat, it was often the medics who meant the difference between life and death for soldiers wounded in battle; they were the ones who braved gunfire to carry wounded soldiers to the hospital.
- d. In many divisions, soldiers who had lived through combat took up collections in order to provide bonuses for the medics.
- e. Interviewing veterans of World War II, author Stephen Ambrose consistently heard from men who believed they owed their lives to some member of the medical core.

Inference

- a. The combat experience profoundly changed the way soldiers felt about the medical core.
- b. Despite their bravery in the battles of World War II, medics never really received the respect that was due them.

Answer A

Exercise 4

Directions : Read each paragraph. Then choose the inference that could effectively sum up the main idea.

- 1. When World War II broke out in Europe in 1939, the United States was the only major power without a propaganda agency. More important, despite prodding from England and France, the U.S. had no plans to create one. During World War I, a government-based group known as the Committee for Public Information had successfully stirred up public feeling against German-Americans because America was at war with Germany. As a result, many innocent German-American citizens had been insulted, beaten, even lynched. In addition, a good portion of the American public still believed that the United States had been tricked into entering World War I because of British propaganda. Distrustful of propaganda in general, there was little widespread support for a government agency dispensing it when the Second World War broke out.

Inference

- a. Because of what had happened during World War I, the American public was suspicious of propaganda and not inclined to support its use when World War II first erupted.

- b. Aware of how the German government was using propaganda to spread hate and violence, the American public was reluctant to make use of it at the beginning of World War II.

Answer A

2. At his death in 1971, trumpeter Louis Armstrong was much loved as a celebrity. Yet as a musician, he no longer commanded wide respect among the general public. To most people, he was the man with the toothy smile who made occasional appearances in television and movies usually singing what had become his signature songs "Hello, Dolly" and "It's a Wonderful World." Jazz enthusiasts, however, had another take on the passing of Louis Armstrong. To them he was the New Orleans-born musician who had, along with Bix Beiderbecke, introduced the solo to jazz. With records like "Struttin' with Some Barbecue," "I'm not Rough," and "Potato Head Blues," Louis became the first great jazz influence. As music critic Terry Teachout has written, Louis Armstrong was "the player other players copied." Still, at his death, few really knew what Louis had accomplished. In his honor, radio and television broadcasts played "Hello Dolly," not "West-End Blues," his 1928 recording that starts off with what may be the most famous horn solo in jazz.

Inference

- a. A hero to much of the jazz community, Louis Armstrong was forgotten by the general public at the time he died.
- b. At his death, Louis Armstrong was a beloved celebrity whose spectacular achievements had been forgotten by all but devoted jazz fans.

Answer B*Exercise 5*

Directions : Read each paragraph. Then draw an inference that sums up the main idea.

1. In the movies, England's King Richard the First—he of the lion heart and Robin Hood fame—is a hero of spotless reputation. In Hollywood's many versions of the Robin Hood story, for example, Robin worships good King Richard and would willingly die for him. History, however, offers a different slant on Richard's supposed goodness. In 1189, the Pope called for yet another crusade to take back the holy land of Jerusalem from Moslem rule. Intent on following the Pope's order, Richard combined forces with King Philip the II of France. Together, they managed to take the town of Acre, a port on what is now Israel's Northwestern coast. Attempting to blackmail the Moslem ruler Saladin into giving up sacred lands, Richard took 2,500 civilians hostage, many of them women and children. When Saladin refused, Richard promptly slaughtered every last one of his hostages.

Inference :

2. When Bonnie Parker met Clyde Barrow, she was twenty years old. Although she had been a rebellious child and teenager, she had never broken a law in her life. The worst thing she had done in her mother's opinion was run off and get married to a shiftless womanizer who

humiliated and neglected her. When Clyde came along, Bonnie was ripe for the attentions of a man who seemed to think she was both important and attractive. As long as he didn't desert her, Bonnie didn't much care about Clyde's two-year jail sentence. In jail at least, she knew where he was, and she could write him daily letters about how much she loved him. Bonnie, however, got nervous when she heard that Clyde was planning a jailbreak. To bind him more tightly to her, she smuggled him a gun and helped him escape. After he got caught and sent back to prison, Bonnie was even more determined to wait for the man she called her "one true love." Upon his release from jail, Bonnie took Clyde home to meet her folks and announced she was going to Houston, Texas to get a new job. The next time her mother heard from her, Bonnie Parker was sitting in jail and had formally started her career as one half of the most famous bandit duo in history.

Answers will vary.

1. Richard the Lionhearted was not as pure of heart as some movies suggest.
2. Her romantic attachment to Clyde Barrow led Bonnie Parker into a life of crime.

Topic 7
Number Test

Self – Exercise Questions*Directions to Solve*

In each series, look for the degree and direction of change between the numbers. In other words, do the numbers increase or decrease, and by how much

1. Look at this series: 2, 1, (1/2), (1/4) ... What number should come next?
 - A. (1/3)
 - B. (1/8)
 - C. (2/8)
 - D. (1/16)

Answer : Option B*Explanation*

This is a simple division series; each number is one-half of the previous number.

In other terms to say, the number is divided by 2 successively to get the next result.

$$4/2 = 2$$

$$2/2 = 1$$

$$1/2 = 1/2$$

$$(1/2)/2 = 1/4$$

$$(1/4)/2 = 1/8 \text{ and so on.}$$

2. Look at this series: 7, 10, 8, 11, 9, 12,... What number should come next?
 - A. 7
 - B. 10
 - C. 12
 - D. 13

Answer : Option B*Explanation*

This is a simple alternating addition and subtraction series. In the first pattern, 3 is added; in the second, 2 is subtracted.

3. Look at this series: 36, 34, 30, 28, 24, ... What number should come next?
- A. 20
 - B. 22
 - C. 23
 - D. 26

Answer: Option B

Explanation:

This is an alternating number subtraction series. First, 2 is subtracted, then 4, then 2, and so on.

4. Look at this series: 22, 21, 23, 22, 24, 23, ... What number should come next?
- A. 22
 - B. 24
 - C. 25
 - D. 26

Answer: Option C

Explanation:

In this simple alternating subtraction and addition series; 1 is subtracted, then 2 is added, and so on.

5. Look at this series: 53, 53, 40, 40, 27, 27, ... What number should come next?
- A. 12
 - B. 14
 - C. 27
 - D. 53

Answer: Option B

Explanation:

In this series, each number is repeated, then 13 is subtracted to arrive at the next number.

6. Look at this series: 21, 9, 21, 11, 21, 13, 21, ... What number should come next?
- A. 14
 - B. 15

C. 21

D. 23

Answer: Option B

7. Look at this series: 58, 52, 46, 40, 34, ... What number should come next?

A. 26

B. 28

C. 30

D. 32

Answer: Option B

8. Look at this series: 3, 4, 7, 8, 11, 12, ... What number should come next?

A. 7

B. 10

C. 14

D. 15

Answer: Option D

9. Look at this series: 8, 22, 8, 28, 8, ... What number should come next?

A. 9

B. 29

C. 32

D. 34

Answer: Option D

10. Look at this series: 31, 29, 24, 22, 17, ... What number should come next?

A. 15

B. 14

C. 13

D. 12

Answer: Option A

Topic 8

Sequence and Series

Number series is important for various competitive examinations. In this category of questions, a series of various numbers is given with a blank. We are supposed to find out a pattern between every number and its predecessor and find out the answer using the same logic.

For the purpose of better understanding of the concept, we classify them into the following categories:

- Series with a constant difference
- Series with an increasing difference
- Series with a decreasing difference
- Squares/ Cubes series
- Combination of different operations
- Miscellaneous

The Best Approach

The best way of approaching number series questions is to observe the difference between various terms. If we see a constant difference, then it's a constant difference series. If the difference is decreasing or increasing by a constant number, then it is a series of type 2 or type 3. But if there is no such increase or decrease in the difference, then try dividing the 2nd term with the first, third with the second and so on. If you obtain the same number each time, then it is a product series.

Also, if none of these seem to work, then you can try writing each term as a product of two factors and try to see if there is any pattern. If you still observe no pattern and the difference is increasing or decreasing rapidly, then try to look for square/ cube series.

If the difference is increasing and decreasing in some fixed manner, then it is a type of combination series.

Let us look at each type of series in greater depth:

1. Series with a constant difference

In this kind of series, any 2 consecutive numbers have the same difference between them.

For example : 1, 5, 9, 13, ?

We can observe that we are adding 4 to the previous number to obtain the next number. So, answer here will be $13 + 4 = 17$.

2. Series with an increasing difference

In this type of series, the difference between two consecutive terms keep on increasing as we move forward in a series. Let us try to use this theory in a question.

1, 2, 4, 7, 11, 16, ?

We can clearly observe that the series is increasing with the difference: +1, +2, +3, +4, +5. So, we will obtain our number by adding 6 to 16 which gives us 22.

3. Series with a decreasing difference

In this type of series, the difference between two consecutive terms keep on decreasing as we move forward in a series. Let us try to use this with some modification in the previous question that we did.

16, 11, 7, 4, 2, ?

We can clearly observe that the series is decreasing with the difference: -5, -4, -3, -2.

So, we will obtain our number by subtracting 1 from 2 which gives us 1.

4. Squares/ Cubes series

We can have series where the terms are related to the squares/ cubes of numbers. We can have a lot of variations here. Let us look at some of the possibilities.

1, 9, 25, 49, ?

We can observe that the above series is square of odd numbers starting from one. So our answer will be $9^2 = 81$.

Let us look at another example:

1, 1, 2, 4, 3, 9, 4, ?

We observe here that the series is formed by writing numbers starting from 1 along with its square as the next number i.e. (1, 1x1), (2, 2x2) and so on. So we obtain our answer as 16 which is 4^2 .

Consider the following question:

9, 28, ?, 126.

The answer for above question will be 65, let us discuss how.

9, 28, ?, 126.

(2^3+1) (3^3+1) (5^3+1)

The blank should have 4^3+1 . **Hence, the answer is 65.**

5. Combination of different operations

This kind of series has more than 1 type of arithmetic operations which have been performed or it can also have 2 different series which have been combined to form a single series. This kind of series is the most asked and the most important among all the types of series that we have discussed so far.

Consider the series:

1, 3, 6, 2, 6, 9, 3, 9, ?

The first term 1 is multiplied by 3 to give the second term, 3 has been added to the second term to get the third term. The next term is 2 which is 1 more than the 1st term. It is multiplied with 3 to give next term and the process is continued. With this process, we obtain our answer as 12.

Consider the series:

6, 10, 7, 11, 8, 12, ?

We can see that the above series is a combination of 2 simple series:

1st, 3rd, 5th terms make an increasing series of 6, 7, 8,.... . The 2nd, 4th and 7th term make a series of 10, 11, 12,.... So, our answer will be 9 which is the 7th term of the original series.

6. Miscellaneous series

Some series do not come under any of the above mentioned categories but are very important and also asked in many examinations.

The series of prime numbers or any other related operation done on it comes under this category.

Consider the example:

9, 25, 49, 121, ?

The above series is the squares of prime numbers. So next term will be square of 13 which is 169.

Topic 9

Statement and Assumptions

Logical Reasoning (LR) is an integral part of Competitive Exams. It is designed to measure a person's ability to draw logical conclusions based on statements or arguments, and to identify the strengths and weaknesses of those arguments. It is important to keep in mind that the statements and assumptions in logical reasoning might defy your expectations rooted in the real world,

For instance, eating a lot makes you lose weight.

Rahul has lost weight.

Rahul eats a lot.

This goes against the knowledge that eating a lot leads to obesity, but within the limits of logical reasoning, this is a valid argument.

Statements, Premises, Assumptions, Conclusion are some of the terms associated with logical reasoning and you will be tested on these in IIFT, CAT, XAT, NMAT and MAT Exams.

1. Statement

In logic, a statement is either a meaningful declarative sentence that is either true or false, or that which a true or false declarative sentence asserts. For instance,

'Socrates is a mortal', 'Delhi is the capital of India.'

A statement is different from a sentence. A sentence is one form of a statement, whereas there may be several ways of formulating the same statement. For instance,

'All men are mortal'

'Every man is mortal',

are two different sentences that form the same statement.

2. Assumption

An assumption is an unstated premise that supports the conclusion. Both premise and assumption are unquestionable facts but the assumption, unlike the premise, is not explicitly stated and needs to be deciphered. Assumption is something that is taken for granted in the context of a statement. For instance, 'All kids are happy when they get new gadgets. Vicky will be thrilled when he gets the new mobile phone.' In this, the assumption is that Vicky is a kid. Without this assumption, the argument will make no sense.

3. Statement- Assumption

Questions with statements and assumptions are common in the logical reasoning section of

entrance examinations such as, CAT, IIFT, XAT, MAT and NMAT. Most questions on Statement and Assumptions include a statement followed by further statements, which have to be tested for whether they are implied in the given statement or not. For instance:

Statement- A big retail store was attacked by vegetable vendors in Amritsar.

- Assumptions -
- i. The store has affected the livelihood of local vegetable vendors.
 - ii. The store is built in thickly populated areas.

Consider the statement and decide which of the given assumption is implicit.

The answer to this will be the first assumption, because the store is affecting the vendors, which causes the attack. Assumption ii is irrelevant because nothing is mentioned regarding the location of the store.

- b. Statement - "Please switch off the mobile phones while you are in the theatre", a notice outside a theatre.

- Assumption -
- i. Every viewer who enters the theatre keeps mobile phones.
 - ii. Switched on mobile phones might distract the performers.

In this, assumption ii is implied by the given statement.

Statement and assumptions are crucial concepts to understand thoroughly, for doing well in the logical reasoning section.



Rules

- Assumption is always Indefinite & Positive
- Some, to large extent, many, much , exist in the assumption
- Some words like only, each, any, every, all, question indicating word (why, these, what), Answer indicating words (therefore), Definitely, But, Certainly exist in the assumption that assumption will always be explicit (False).

- Some words like some, to large extent, many, much, exist in the assumption that assumption will always be implicit (True).
- Any assumption that is conveying the message of advertisement, notice, appeal that assumption will always be implicit (True).
- Any assumption that is talking about the social welfare (positive), govt. policies that assumption will always be implicit (True).
- If any assumption is talking about past & future that assumption will always be explicit (False).
- If any assumption showing the word like suggestion, order, request that will always be implicit (True). Restatement is never implicit.
- Comparison always wrong.

Example:

#1 Statement:

Everybody loves reading adventure stories

Assumption:

Adventures stories are the only reading material.

Nobody loves Reading any other material.

#2

Statement: "If you want to study account join institute Y", A advice to B.

Assumption:

Institute Y provides good account education.

B listen to A advice.

#3

Statement: The college administration has instructed all the students to stop using cell phone within the college premises.

Assumption:

The student may stop using cell phone in the college premises

The student may continue to use cell phone in the college premises.

#4

Statement: Read the Notice before entering the club

Assumption:

People are literate.

Club is not for blind person.

#5

Statement: ABC is the only magazine that provides good notes on Reasoning & Mathematics.

Assumption:

It will have some effect on those who read.

People always wait for latest Notes on reasoning & Mathematics.

#6

Statement: If you are a classical singer we have challenging job for you.

Assumption:

We need a classical singer

You are a classical singer.

#7

Statement: Like a mad man I decided to follow him.

Assumption:

I am a mad man.

I am not a mad man.

#8

Statement: All the workers are here by instructed to reach the factory by 8:30 am.

Assumption:

Some of the worker will not arrived at the factory in time.

Worker will follow the strict warning in the notice.

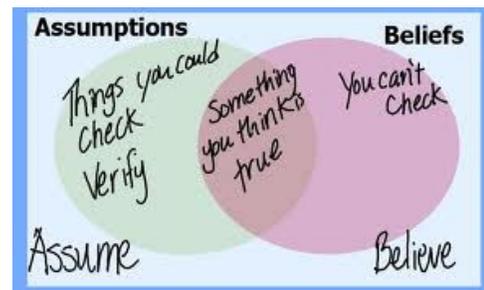
#9

Statement: You can't solve syllogism question without constructing a diagram (Venn). Difficult question of syllogism need Venn diagram solving, A teacher tells his students.

Assumption:

The students are not intelligent.

Problem cannot be solved.



Sample Questions

Directions to Solve

In each question below is given a statement followed by two assumptions numbered I and II. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give answer

- (A) If only assumption I is implicit
- (B) If only assumption II is implicit
- (C) If either I or II is implicit
- (D) If neither I nor II is implicit
- (E) If both I and II are implicit.

1. *Statement* : "You are hereby appointed as a programmer with a probation period of one year and your performance will be reviewed at the end of the period for confirmation." - A line in an appointment letter.

Assumptions

The performance of an individual generally is not known at the time of appointment offer.

Generally an individual tries to prove his worth in the probation period.

- A. Only assumption I is implicit
- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer : Option E

Explanation

The performance of the individual has to be tested over a span of time as the statement mentions. So, I is implicit. The statement mentions that the individual's worth shall be reviewed (during probation period) before confirmation. So, II is also implicit.

2. *Statement*

It is desirable to put the child in school at the age of 5 or so.

Assumptions

At that age the child reaches appropriate level of development and is ready to learn.

The schools do not admit children after six years of age.

- A. Only assumption I is implicit
- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer: Option A

Explanation

Since the statement talks of putting the child in school at the age of 5, it means that the child is mentally prepared for the same at this age. So, I is implicit. But nothing about admission after 6 years of age is mentioned in the statement. So, II is not implicit.

3. *Statement* : "In order to bring punctuality in our office, we must provide conveyance allowance to our employees." - In charge of a company tells Personnel Manager.

Assumptions

Conveyance allowance will not help in bringing punctuality.

Discipline and reward should always go hand in hand.

- A. Only assumption I is implicit
- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer: Option B

Explanation

Assumption I goes against the statement. So, it is not implicit. The allowance will serve as a reward to the employees and shall provoke them to come on time. So, II is implicit.

4. *Statement* : Unemployment allowance should be given to all unemployed Indian youth above 18 years of age.

Assumptions

There are unemployed youth in India who needs monetary support.

The government has sufficient funds to provide allowance to all unemployed youth.

- A. Only assumption I is implicit
- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer : Option A

Explanation

I directly follow from the statement, so is implicit. Also, the statement is a suggestion and does not tell about a government policy or its position of funds. So, II is not implicit.

5. *Statement* : "If you trouble me, I will slap you." - A mother warns her child.

Assumptions

With the warning, the child may stop troubling her.

All children are basically naughty.

- A. Only assumption I is implicit
- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer : Option A

Explanation :

The mother warns her child with the expectation that he would stop troubling her. So, I is implicit. The general nature of children cannot be derived from the statement. So, II is not implicit.

6. *Statement* : The State government has decided to appoint four thousand primary school teachers during the next financial year.

Assumptions

There are enough schools in the state to accommodate four thousand additional primary school teachers.

The eligible candidates may not be interested to apply as the government may not finally appoint such a large number of primary school teachers.

- A. Only assumption I is implicit
- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer : Option A

Explanation

Such decisions as given in the statement are taken only after taking the existing vacancies into consideration. So, I implicit while II isn't.

7. *Statement* : A warning in a train compartment - "To stop train, pull chain. Penalty for improper use Rs. 500."

Assumptions

Some people misuse the alarm chain.

On certain occasions, people may want to stop a running train.

- A. Only assumption I is implicit
- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer : Option E

Explanation

Clearly, the penalty is imposed to prevent people from misusing the alarm chain. This means that some people misuse it. So, I is implicit. The alarm chain is provided to stop the running train in times of urgency. So, II is also implicit.

8. *Statement* : If it is easy to become an engineer, I don't want to be an engineer.

Assumptions

An individual aspires to be professional.

One desires to achieve a thing which is hard earned.

- A. Only assumption I is implicit

- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer : Option B

Explanation

Clearly, nothing is mentioned about the professional nature of the job. So, I is not implicit. The statement hints that one rejects a thing that is easy to achieve. So, II is implicit.

9. *Statement* : The concession in rail fares for the journey to hill stations has been cancelled because it is not needed for people who can spend their holidays there.

Assumptions

Railways should give concession only to needy persons.

Railways should not encourage people to spend their holidays at hill stations.

- A. Only assumption I is implicit
- B. Only assumption II is implicit
- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer : Option A

Explanation

The statement mentions that concessions should not be given to people who can afford to spend holidays in hill stations. This means they should be given only to needy persons. So, I is implicit. But, II does not follow from the statement and is not implicit.

10. *Statement* : "The bridge was built at the cost of Rs. 128 crore and even civil bus service is not utilizing it, what a pity to see it grossly underutilized." - A citizen's view on a new flyover linking east and west sides of a suburb.

Assumptions

The building of such bridges does not serve any public objective.

There has to be some accountability and utility of money spent on public projects.

- A. Only assumption I is implicit
- B. Only assumption II is implicit

- C. Either I or II is implicit
- D. Neither I nor II is implicit
- E. Both I and II are implicit

Answer : Option B

Explanation

Clearly, the statement expresses grave concern over a newly-built flyover not being utilized by public. This implies that such projects need to be taken up only after working out their utility and that the huge expenditure incurred on building such structures is worthwhile only if they prove useful for the public. Thus, only II is implicit.

Foot Notes

1. Doyle Alison (2019), 'The Importance of Logical Thinking in the Workplace', The Balance Career. available at: <https://www.thebalancecareers.com/logical-thinking-definition-with-examples-2059690>
2. See, <https://philosophyterms.com/logical-reasoning/>
3. Source: https://www.philosophybasics.com/branch_logic.html
4. Source: https://www.philosophybasics.com/branch_logic.html

Lesson 7

**VERBAL
REASONING**

Introduction

Reasoning means the action of thinking about something in a logical and sensible way. In our day to day work, we apply the reasoning and try to work with logical sense. The general mental ability of a person can be well tested with the approach of Verbal and Non-verbal reasoning developed in the mind. In short the mental ability is depicted through this technique.

We begin with the word "Analogy". As per New Concise Oxford Dictionary, "Analogy" means agreement, or similarity. Analogue is the process of reasoning from parallel cases. In simple way, we can say that, analogy means correspondence or relationships.

Following are to be noticed:

1. Measurements and Instruments :

When we say Temperature, we immediately think of Thermometer. When it comes to Blood Pressure, we think of BP measuring machine.

2. Quantity and unit:

If mass is to be measured, we say Kilograms.

However, if time is to be measured, we say minutes or seconds or hours etc. depends on the nature of counting the time.

3. Selection of Groups for individuals:

When we say "Man" it gets associated with "Crowd"

When we say "Singer" it can get associated with "Chorus"

4. Male and Female:

We can have a logical flow as Gentleman-Lady or Son-Daughter etc.

5. Worker and working place:

For example we may say Doctor-Hospital or Clinic, and Manager-Bank, Teacher-School or college etc.

6. Product and Raw material:

For example, the Book-Paper, Jewelry-Gold, Shoes-Leather are some of the examples of the link of product and Raw Materials.

Illustrative Examples:

Q1. Mumbai: Maharashtra:: Ahmedabad:

- a. Maharashtra b. Gujrat c. Uttar Pradesh d. Canada

Here the correct answer is 'b' Gujrat as Ahmedabad is capital city of Gujrat.

Q2. Doctor: Nurse::Follower:

- a. Worker b. Employer c. Leader d. Union.

Here, the correct answer is 'c' Leader as the nurse follows the instructions of the doctor, then, the follower also follows the instructions of the leader.

Questions based on Directions

In the following types of questions, there are certain directions which one can understand; it is expected to choose the correct alternatives:

Q3. Moon: Satellite: : Earth: ?

- a. Solar system b. Sun c. Planet d. Asteroid

The correct answer should be c. Planet in the above case.

Q4. Clock: Time : Thermometer: ?

- a. Temperature b. Energy c. Heat d. radiation.

The correct answer should be 'a' temperature as the Thermometer gives the direction of temperature.

Questions Based on Relationship

Each of the following questions consists of two words that have a certain relationships to each other, followed by four letter head pairs of words. Select that letterhead pair that has same relationship as the original letterhead pair.

Q5. Sound: Muffled::

- a. Moisture: Humid b. Colour: faded c. Despair : Anger d. Odour: Pungent

The correct answer is 'b' because the second is the process of the gradual disappearance of the first.

Q6. Knowledge: Ignorance: :

- a. Cure: Health b. Conceal : Hide c. Breath : Suffocation d. Construction : war

The correct answer is 'c' as the words in each pair are antonyms of each other.

Logical order:

Sometimes there can be logical order of the words or the given things. We understand more from the following questions:

Q7. Arrange the following words in the logical order: 1.Elbow 2.Wrist 3.Shoulder 4. Palm 5. Finger

- a. 2,4,5,3,1, b. 5,4,2,1,3, c. 3,4,5,2,1, d. 3,1,4,2,5

The correct answer is 'b' as the logic of the arrangement matches in that order.

- Q8. The mobile manufacturing companies have increased the the prices of smartphones. The government has recently increased the duty on the smartphones.
- The statement II is the cause and statement I is the effect.
 - Statement I is cause and statement II is the effect.
 - Both statement I and II are independent causes
 - Both statement I and II are effects of independent causes.

The correct answer is 'a' as the statement II is cause and statement I is an effect.

- Q9. Choose the some relationship of the given words: Bald Eagle: America:: Wolf : ?
- Australia
 - Spain
 - Italy
 - France

Answer is 'c' Italy as the Bald Eagle is national bird of America and Wolf is national animal of Italy.

- Q10. Appointment: Abiligy
- Transfer : Punishment
 - Business : Money
 - Promotion : Merit
 - Examination: Success

The correct answer is 'c' as the first is the result of the second thing.

- Q11. Pulp: Paper
- Rope : Hamp
 - Rayon : Cellulose
 - Thread : needle
 - Yarn : fabric

Here the correct answer is 'd' as the first is used to make the second.

- Q12. Liquor : Drink
- Bread: Butter
 - Tea : Bevarage
 - Snuff: Inhale
 - Water : Sip

The correct answer is 'b' as the second denotes the class to which the first belongs.

Series Completion:

In this types of questions, the series of numbers are given and we have to choose that which is most logically fitting to the same.

- Q13. Completing the given series: Which number would replace the question mark in the series 7,12,19,?, 39
- 29
 - 28
 - 26
 - 24

One can easily understand that $7+5=12$ and $12+7=19$ so, the numbers are added by 5,7 and so on. Therefore, $19+9=28$. Hence the answer is 28. So the answer is 'b'

The Alphabet series: In this type of questions, we have to have logical flow of understanding the alphabets to get to the answer.

Q14. What will be the next term in BDF, CFI, DHL,?

- a. CJM b. EIM c. EJO d. EMI

Clearly, the first, the second and the third letters of each term are respectively moved one, two and three steps forward to obtain the corresponding letters of the next term. So the missing term is EJO and hence the correct answer is 'c'.

The Letter Series

This type of questions consists of the series of small letters which follow a certain pattern. However, some letters are missing from the series. These missing letters are given a proper sequence as one of the alternatives. The candidate should choose proper alternative answer.

For example : aab__aaa__bba__?

- a. baa b. abb c. bab d. aab

Answer: We proceed step by step as below:

1. The first blank space should be filled by 'b' so that we have two 'a' s followed by two 'b' s
2. The second blank space should be filled in either by 'a' so that we have four 'a' s followed by two 'b' s or by 'b' s or by 'b' so that we have three 'a' s followed by three 'b' s
3. The last space must be filled in by 'a'
4. Thus we have two possible answers 'baa' and 'bba' but only 'baa' appears in the alternatives. So the correct answer is 'a' above.

Number coding

In these type of questions, either the numerical codes are assigned to the word or alphabetical codes are assigned to the numbers. The candidate should analyses the code with direction:

For example : If in a certain language, A is coded as 1, B is coded as 2, and so on, how is BIDDIC coded in that code?

- a. 294493 b. 284563 c. 375582 d. 394492

As the given letters are coded as A B C D E F G H I

1 2 3 4 5 6 7 8 9

So, in BIDDIC, code B is coded as 2, I as 9, D as 4 and C as 3. Thus BIDDIC is coded as 294493 hence the correct answer is 'a'.

Relations Puzzles

In this type, the mutual blood relations or other informations of more than two persons are mentioned and information about two is mentioned.

Example : A and B are brothers. C and D are sisters. A's son is D's brother. How is B related to C?

- a. Father b. brother c. Grandfather d. Uncle e. none of these.

In this example, clearly B is brother of A; A's son is D's brother. This means D is the daughter of A. Since C and D are sisters, C is also a daughter of A. So, B is the uncle of C. Hence the correct answer is 'd'.

Alphabet Test

This is also called Alphabetical Order. Generally, there is not tough to understand and solve these types of questions. With enough practice, everyone can ace these questions. Like there may be questions to find the English letters between two English alphabets given in the question. You will also be asked to find out the place of English letter to the right or to the left of the one given in the question.

Questions may vary on the arrangement of alphabets. Like in some questions it may be backward, second half backward or multiple letter segments which are in changed order, etc. In some questions, one may be asked to find the letters that do not change with the change in their alphabetic arrangement and in some questions you will be asked to find the middle letter of the two given English letters in the question.

It is important to note that while solving the questions of alphabetical order you need to keep in mind the forward and backward position of all the alphabets along with its number.

Questions Asked in Alphabetical Order

There is not one single type of question of alphabetical order that is asked in exams. But rather there are many types of these questions which can be asked in the competitive exams. They are

1. Series of alphabets
2. Problems related to letter gap
3. Problems related to word formation
4. Words in the alphabetical order

For better understanding, we will provide you with the solved example of each and every type of question that can come under the Alphabetical Order section of Reasoning Ability.

Series of alphabets

This type of questions does not follow any rule and thus we would advise you to get enough practice. So that you can quickly solve these type of questions.

- Q. Which of the following options is fifth to the left of the 11th letter from the left in a forward series of the alphabet?

1. H 2. G 3. I 4. E

In this type of question first we need to find the eleventh letter from the left in the forward series which is as follows:

A B C D E F G H I J K. Here K is the eleventh letter in the series, now from the eleventh letter

we need to go five letters to the left again which will be: K J I H G. Hence G is the correct answer which is number 2 in the option.

Problems related to the Letter Gap

This question is purely based on your logic and how quickly you remember the alphabets.

Q. In the word 'CHAIRS', how many pairs of the letters have the same number of letters between them in the word as in alphabet?

1. 1 2. 3 3. 4 4. 2

Here in between C and A, there is one letter H and in general alphabets also there is one letter between them which is B. While in R and S there are no letters in between which is the same as in the alphabets. So the correct answer to this question is option - 4.

Problems related to word formation

These questions require more practice than any other type of questions. It is also important to have a good set of vocabulary.

Q. If the name of a game is formed by rearranging the letters of the word MODBANTIN, than what will be the first and the last letter of the name?

1. A,T 2. N,D 3. B,N 4. B,T

Here the name of the game that will be formed is Badminton. And its first and last letters are B and N. Thus option (3) is the correct answer.

Words in the alphabetical order

In these types of questions, you need to find which word will come first based on their alphabetical order

Q. Arrange the question based on the initial letter of the word given in the alphabetical order.

1. Fame 2. Shame 3. Name 4. Came

'Came' comes first in the alphabetical order. 'Fame' comes second in the alphabetical order. 'Name' comes third in the alphabetical order. 'Shame' comes forth in the alphabetical order.

Practice Questions

1. How many meaning words can be formed using the first, fourth, seventh, and eighth letter of the word 'SUPERFLUOUS'?

- A. 1 B. 2 C. 3 D. 4

Answer : Option A

2. How many letters are there in between the 7th letter from the left and 8th from right in the English Alphabets?

- A. 8 B. 9 C. 10 D. 11

Answer : Option D

3. Which is the 11th letter to the left of the 4th letter from the right when you write the English alphabets in backward order?
- A. P B. Q C. O D. N

Answer : Option C

Alpha Numeric Sequence Puzzle

In Alpha numeric sequence puzzle, a mix up sentence consisting of some letters, numbers and symbols are given followed by some certain questions based on it.

Based on following types, questions are categorized:

- Satisfying certain conditions in the given sequence, it is required to find elements (letters, numbers or symbols).
- At a certain given relative position in the sequence, it is need to determine the element.
- By converting the hidden part in relation to the position of the elements in the sequence, it is required to complete a series consisting of terms formed by a combination of the elements of the sequence.
- By finding the common property which other combinations share as per their positions in the given sequence, It is required to find the odd combination from among a given set of combinations of elements.
- To determine the analogical relationship between a given pair of combination of elements, later find a combination which carry same relationship with another given combination.

Alphanumeric sequence is a sequence which consists of both alphabets and numbers. In this sequence, we can also add some symbols along with alphabets and numbers.

For example we can make an alphanumeric sequence as follows -

A \$ E R 9 * T 5 F 6 @ D 8

In the above sequence, we can see that there are numbers, alphabets, and symbols. These types of sequences are called Alphanumeric Sequence. We can make many sequences like this and can deduce questions based on the sequences.

Important Points to Remember

Let's have an alphanumeric sequence -

A \$ E R 9 * T 5 F 6 @ D 8

Questions regarding this chapter can come in this way -

- a. Which element is nth from the left of the sequence?
- b. Which element is nth from the right of the sequence?

- c. Which element is m th to the right of n th from the left of the sequence?
- d. Which element is m th to the left of n th from the left of the sequence?
- e. Which element is m th to the right of n th from the right of the sequence?
- f. Which element is m th to the left of n th from the right of the sequence?
- g. A precedes B
- h. B is preceded by A
- i. B follows A
- j. A is followed by B

To solve questions like this, we have to watch the sequence thoroughly and answer accordingly.

- a. Which element is n th from the left of the sequence?

To get the answer of the above question, we have to look at the sequence from the left side and have to count the exact number that is asked in the question.

- b. Which element is n th from the right of the sequence?

To get the answer of the above question, we have to look at the sequence from the right side and have to count the exact number that is asked in the question.

- c. Which element is m th to the right of n th from the left of the sequence?

To get the answer for such type of questions, we have to find out the n th element from the left side of the sequence and then find out the m th element to the right of that particular element.

- d. Which element is m th to the left of n th from the left of the sequence?

To get the answer for such type of questions, we have to find out the n th element from the left side of the sequence and then find out the m th element to the left of that particular element.

- e. Which element is m th to the right of n th from the right of the sequence?

To get the answer for such type of questions, we have to find out the n th element from the right side of the sequence and then find out the m th element to the right of that particular element.

- f. Which element is m th to the left of n th from the right of the sequence?

To get the answer for such type of questions, we have to find out the n th element from the right side of the sequence and then find out the m th element to the left of that particular element.

- g. If it is written that A precedes B then it means A is placed before B.
- h. Similarly if it is written that B is preceded by A then it means A is placed before B.
- i. If it is written that B follows A then it means B is placed after A.
- j. If it is written that A is followed by B then B is placed after A.

These ten type of questions are normally asked in this chapter. Whether it is of a type or b type or c type or j type we have to read the question carefully and see the sequence and finally we can get the answer according to the question.

Sample Questions

Study the following arrangement carefully and answer the question given below -

6 R O T 4 A 8 % B F 1 E # W @ 9 H I \$ M N * 3 2 V \$ 5 G P 7 Q

1. How many such consonants are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a number?
 - A None
 - B One
 - C Two
 - D Three

Answer - C

Explanation

According to question –

Consonant – Consonant - Number

B-F-1

G-P-7

2. How many such vowels are there in the above arrangement, each of which is immediately preceded by a letter but immediately not followed by a symbol?
 - A None
 - B One
 - C Two
 - D Three

Answer - B

Explanation

According to question

Letter-Vowels-Letter/Number

R - O - T

3. Which of the following is the fourth to left of the twelfth from the left end?
 - A 8
 - B B
 - C 2
 - D %

Answer - D

Explanation

According to question.

L - L = L

12 - 4 = 8TH

So the required element is %.

4. Three of the following four are alike in a certain way based on their position in the above arrangement and so form a group. Which is the one that does not belong to that group?

A 406 B F%A C @#1 D \$H9

Answer - D

Explanation

According to question.

-2	-2
4	6
O	
-2	-2
F	A
%	
-2	-2
@	1
#	
-2	-1
\$	9
H	

5. If all the symbols are eliminated from the above arrangement, then which of the following will be the 5th to the right of 10th element from the right end?

A 4 B 5 C V D A

Answer - B

Explanation

According to question.

R - R = R

10 - 5 = 5th from right end after deleting all the symbols is 5.

This question is based on the following letter /symbol/number sequence. Study it carefully and answer the question.

M 3 R # A P 4 9 @ K D 1 U H 5 \$ 2 N \$ W E Q 6 T V 7 * 8 B X

6. Which of the following elements is the fourth to the right of 12th from right end?
A 9 B 6 C 5 D \$

Answer - B

Explanation

Remember, $R_{12} - R_4 = R = 6$

7. How many such numbers are there in the above arrangement which are immediately preceded by a symbol?
A 2 B 1 C None D 3

Answer - A

Explanation

The numbers which are preceded by a symbol are \$2, *8.

8. If started from M, M is interchanged with 3 and R is interchanged with # and so on than which element will be twelfth from left?
A 1 B \$ C N D D

Answer - D

Explanation

As, M 3 R # A P 4 9 @ K D 1

So it will be D

9. What will come next in the following sequence - MRP,9KU,52W?
A QT7 B 6V8 C QT* D QV7

Answer - C

Explanation

As, M_R__P_9_K__U,

_5_2__W,_Q_T__*.

10. Three of the following four are alike in a certain way based on their position in the above arrangement. Which of the following does not belong to the group?
A M3X B R#8 C P4V D KDE

Answer - D

Explanation

M 3 R # A P 4 9 @ K D I U H 5 \$ 2 N \$ W E Q 6 T V 7 * 8 B X

It should be Q in place of E.

Analogy

Analogy means similarity. In this type of questions, two objects related in some way are given and third object is also given with four or five alternatives. You have to find out which one of the alternatives bears the same relation with the third objects as first and second objects are related.

Example 1:

Curd : Milk :: Shoe : ?

(A) Leather (B) Cloth (C) Jute (D) Silver

Answer : Option A

As curd is made from milk similarly shoe is made from leather.

Example 2:

Calf : Piglet :: Shed : ?

(A) Prison (B) Nest (C) Pigsty (D) Den

Answer : Option C

Calf is young one of the cow and piglet is the young of Pig. Shed is the dwelling place of cow. Similarly Pigsty is the dwelling place of pig.

Example 3:

Malaria : Mosquito :: ? : ?

(A) Poison : Death (B) Cholera : Water (C) Rat : Plague (D) Medicine : Disease

Answer : Option B

As malaria is caused due to mosquito similarly cholera is cause due to water.

Example 4:

ABC : ZYX :: CBA : ?

(A) XYZ (B) BCA (C) YZX (D) ZXY

Answer : Option A

CBA is the reverse of ABC similarly XYZ is the reverse of ZYX.

Example 5:

4 : 18 :: 6 : ?

(A) 32 (B) 38 (C) 11 (D) 37

Answer : Option B

As, $(4)^2 + 2 = 18$

Similarly, $(6)^2 + 2 = 38$.

Assertion and Reason

This type of reasoning questions consists of two statements; an assertion (statement of fact) and a reason (explanation for the assertion). You have to determine whether each statement is correct. If both the statements are correct, you have to determine whether the reason supports the assertion. There will be four answer choices for the possible outcomes and you have to select the correct one.

(1) *Assertion (A)* : James Watt invented the steam engine.

Reason (R) : It was invented to pump out the water from the flooded mines.

- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. A is false, but R is true.
- E. Both A and R are false.

Answer : A

Explanation

The need of self-working engine to pump out the water from the flooded mines led James Watt to invent the steam engine.

(2) *Assertion (A)* : Increased levels of carbon dioxide in the atmosphere would melt the polar ice.

Reason (R) : Increased levels of carbon dioxide would increase the temperature.

- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. A is false, but R is true.
- E. Both A and R are false.

Answer : A

Explanation

The carbon dioxide traps the heat in the atmosphere. If its level rises, more heat will be trapped. It would increase the temperature and eventually the polar ice would melt.

(3) *Assertion (A)* : Uranium can undergo a nuclear fusion reaction.

Reason (R) : Uranium has a big unstable nucleus.

- A. Both A and R are true and R is the correct explanation of A.

- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. A is false, but R is true.
- E. Both A and R are false.

Answer : D

Explanation

Uranium does not undergo a fusion reaction. It undergoes fission reaction due to the presence of a heavy unstable nucleus.

- (4) *Assertion (A)* : Baking soda helps reduce stomach acidity.

Reason (R) : It is a powerful natural cleaner.

- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. A is false, but R is true.
- E. Both A and R are false.
- F. Hide Answer Workspace

Answer : B

Explanation

Baking soda is alkaline in nature, so it helps reduce stomach acidity. It is also used as a cleaning agent.

- (5) *Assertion (A)* : Plants have green leaves.

Reason (R) : Plants contain phycoerythrin, the green pigment.

- A. Both A and R are true and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true, but R is false.
- D. A is false, but R is true.
- E. Both A and R are false.

Answer: C

Explanation

Plants have green leaves due to the presence of a green pigment called chlorophyll. Phycoerythrin is a red pigment.

Blood Relations

The questions which are asked in this section depend upon Relation. You should have a sound knowledge of the blood relation in order to solve the questions.

To remember easily the relations may be divided into two sides as given below:

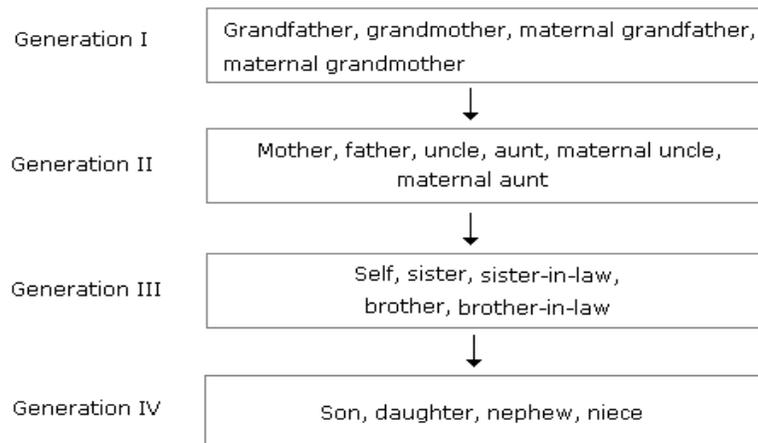
1. *Relations of Paternal side:*

1. Father's father ? Grandfather
2. Father's mother ? Grandmother
3. Father's brother ? Uncle
4. Father's sister ? Aunt
5. Children of uncle ? Cousin
6. Wife of uncle ? Aunt
7. Children of aunt ? Cousin
8. Husband of aunt ? Uncle

2. *Relations of Maternal side:*

1. Mother's father ? Maternal grandfather
2. Mother's mother ? Maternal grandmother
3. Mother's brother Maternal uncle
4. Mother's sister ? Aunt
5. Children of maternal uncle ? Cousin
6. Wife of maternal uncle ? Maternal aunt

Relations from one generation to next



Sample Questions

1. A man pointing to a photograph says, "The lady in the photograph is my nephew's maternal grandmother." How is the lady in the photograph related to the man's sister who has no other sister?
- A. Mother B. Cousin C. Mother-in-law D. Sister-in-law

Answer : A

Explanation

Clearly, the lady is the grandmother of man's sister's son.

i.e. the mother of the mother of man's sister's son.

i.e. the mother of man's sister.

So, the lady is man's mother.

2. A woman introduces a man as the son of the brother of her mother. How is the man related to the woman?
- A. Son B. Nephew C. Grandson D. Uncle

Answer : D

Explanation

Brother of mother – Uncle;

Uncle's son – Cousin.

3. Prasanna said, "This girl is the wife of the grandson of my mother." Who is Prasanna to the girl?
- A. Husband B. Father C. Father-in-law D. Grandfather

Answer : C

Explanation

Mother's grandson – Son;

Son's wife – Daughter-in-law.

4. If Arun says, "Vimal's mother is the only daughter of my mother", how is Arun related to Ravi?
- A. Father B. Brother C. Grandfather D. None of these

Answer : D.

Explanation

Only daughter of Arun's mother – Arun's sister.

So, Vimal's mother is Arun's sister (or)

Arun is the brother of Vimal's mother i.e. Vimal's maternal uncle.

5. Pointing to a man in a photograph. Asha said. "His mother's only daughter is my mother". How is Asha related to that man?
- A. Wife B. Sister C. Niece D. Nephew

Answer : C

Explanation

Asha's mother's mother is man's mother i.e.,

Asha's mother is man's sister (or)

Asha is man's niece.

6. A woman going with a boy is asked by another woman about the relationship between them. The women replied, "My maternal uncle and the uncle of his maternal uncle is the same." How is the lady related with that boy?
- A. Mother and Son B. Aunt and Nephew C. Grandmother and Grandson
D. None of these

Answer : B

Explanation

Clearly, the brother of woman's mother is the same as the brother of the father of boy's maternal uncle.

So, the woman and boy's mother are cousins.

Thus, the woman is boy's aunt.

7. A man said to a lady, "Your mother's husband's sister is my aunt." How is the lady related to the man?
- A. Grand daughter B. Mother C. Daughter D. Sister

Answer : D

Explanation

Lady's mother husband – Lady's father;

Lady's father's sister – Lady's aunt.

So, lady's aunt is man's aunt and therefore lady is man's sister.

8. If X is the brother of the son of Y's son, how is X related to Y?
- A. Son B. Cousin C. Grandson D. Brother

Answer : C

Explanation

Son of Y's son – Grandson;

Brother of Y's grandson – Y's grandson.

So X is Y's grandson.

Decision Making

Decision Making is the process in which an outcome is derived by evaluating and analyzing the given information. The objective of Decision making is to reach a specific conclusion from the given data or a given set of conditions.

Sample Questions

DIRECTIONS for questions 1 to 4 : Krishnapuram's town council has exactly three members: Arjun, Karn, and Bhim. During one week, the council members vote on exactly three bills: a recreation bill, a school bill, and a tax bill. Each council member votes either for or against each bill. The following is known:

- Each member of the council votes for at least one of the bills and against at least one of the bills.
 - Exactly two members of the council vote for the recreation bill.
 - Exactly one member of the council votes for the school bill.
 - Exactly one member of the council votes for the tax bill.
 - Arjun votes for the recreation bill and against the school bill.
 - Karn votes against the recreation bill.
 - Bhim votes against the tax bill.
1. If the set of members of the council who vote against the school bill are the only ones who also vote against the tax bill, then which one of the following statements must be true?
- A. Arjun votes for the tax bill.
 - B. Karn votes for the recreation bill.
 - C. Karn votes against the school bill.
 - D. Bhim votes against the recreation bill.
 - E. Bhim votes against the school bill.

Answer : E

2. If Karn votes for the tax bill, then which one of the following statements could be true?:
- A. Arjun and Karn each vote for exactly one bill.**
 - B. Karn and Bhim each vote for exactly one bill.

- C. Arjun votes for exactly two bills.
- D. Karn votes for the recreation bill.
- E. Bhim votes against the recreation bill.

Answer : A

3. Karn votes for exactly two of the three bills, which one of the following statements must be true?
- A. Arjun votes for the tax bill.
 - B. Karn votes for the recreation bill.
 - C. Karn votes for the school bill.**
 - D. Karn votes against the tax bill.
 - E. Bhim votes for the school bill.

Answer : C

4. If one of the members of the council votes against exactly the same bills as does another member of the council, then which one of the following statements must be true?
- A. Arjun votes for the tax bill
 - B. Kam votes for the recreation bill.
 - C. Kam votes against the school bill.
 - D. Kam votes for exactly one bill.
 - E. Bhim votes for exactly one bill.**

Answer : E

DIRECTIONS for the question 5 : The year 2004 was a great year for Top-Cloth cotton mill. Manufacturing towels for the export market employing more than 2000 workers, the company had an impressive growth in sales and profits. The Chairman felt that employees were entitled to a share in the profits and it was proposed that the employee mess be air-conditioned. The proposal was discussed in a meeting that was attended by, among other senior officials, the marketing director, the personnel director and the finance director. The proposal was based on the fact that the shop floor of the mill often had temperatures in excess of 40°C with a relative humidity of 99%. The air-conditioned mess would represent management's appreciation of the employee's hard work.

At the end of 2005, management reviewed the mill's performance. Profits were higher, and employee attrition was negligible. Chairman decided that employees deserved additional recognition for their fine work. Since the mess had already been air-conditioned, the chairman wanted to know if the employees appreciated this sort of action. In the course of discussion, the chairman asked the personnel director to send a questionnaire to a sample of fifty employees and obtain their reaction to the air-

conditioned mess. The management agreed to decide only after obtaining the feedback from the employees.

The personnel director mailed a simple form to fifty employees asked them for the following information: "Please state your reaction to the air-conditioned mess."

Of the fifty forms mailed, forty-six were returned. The answers received were as follows:

Reaction	Frequency
"I did not know it was air-conditioned."	16
"I never eat there"	8
"If management can spend money like that, they should pay us more"	6
"I wish the entire mill was air-conditioned."	8
"The mess is for management employees."	4
"It is OK."	2
Miscellaneous comments	2

5. This decision-making situation best highlights

A. Managerial short-sightedness in decision making

B. Managerial benevolence in sharing profits among the workers

C. Managerial incompetence in handling a negative feedback in employee survey

D. Inefficient infrastructure management

E. None of the above

Answer : A

DIRECTIONS for questions 6 to 7 : For each question, an answer (A) and a reason (R) has been given. Base your analysis on the information presented in the passage. Mark

The Society for Education in India (in short SEI) had been engaged in running primary schools in different parts of the country since 1950s. While attending a conference on employee selection, Mr. J Mehta, a senior member of the society learned that a leading school had recently employed a

psychologist to perform employment functions, i.e. recruitment and selection of teachers. Within two months of his return, Mr. J Mehta contacted a reputed university and employed a graduating psychologist, Mr. Bibek Gupta. Mr. Bibek Gupta was employed by SEI with the single directive that he was to contribute to the selection of teachers. This task had previously been the prerogative of principals of each school. Mr. Gupta immediately notified each principal that in the future he was to be notified of the personnel needs and in return he would recruit, screen and select the teachers.

At the end of his first year with SEI, Mr. Gupta realized that his efforts had resulted in failure. During his first few months he encountered much opposition from several principals who had been managing schools for ten or more years. They did not believe in newer psychological techniques and preferred selecting people based on their own assessment. Other principals frequently refused to accept the teachers selected by Mr. Gupta. Finally, Mr. Gupta began to notice fewer and fewer principals notifying him of vacancies in their schools. Realizing that he was not making any effective contribution, Mr. Gupta submitted the suggestion to the society members that support and co-operation of the school principals should be a matter of executive order, or else his resignation should be considered.

6. What was the flaw in the decision of selecting a psychologist for selecting teachers that led to the final situation?
- A: Mr. Mehta's decision was predominantly driven by the information about another school that had enlisted the services of a psychologist for recruitment and selection.
- R: Both the administration of the school and managing teachers have been primary responsibilities of the principal of the school.
- A. If both A and R are based on information given in the passage and R is the correct explanation of A.
- B. If both A and R are based on information given in the passage but R is not the correct explanation of A.**
- C. If A is based on information given in the passage but R is not based on the facts given.
- D. If A is not based on information given in the passage but R is based on the information given in the passage.
- E. If both A and R are not based on information given in the passage.

Answer : B

7. What responsibilities were shouldered by Mr. Bibek in his first year of employment?
- A: Mr. Bibek had the responsibility of contributing his expertise to recruitment and selection of teachers.
- R: The board members wanted to systematize the recruitment and selection of the entire organization.
- A. if both A and R are based on information given in the passage and R is the correct explanation of A.

- B. if both A and R are based on information given in the passage but R is not the correct explanation of A.
- C. if A is based on information given in the passage but R is not based on the facts given.**
- D. if A is not based on information given in the passage but R is based on the information given in the passage.
- E. if both A and R are not based on information given in the passage.

Answer : C

DIRECTIONS for questions 8 to 11: A famous retail electronics showroom chain has six new mobile phone models - T, V, W, X, Y, and Z – each equipped with at least one of the following three options: digital camera, music player, and office document viewer. No mobile has any other option. The following conditions apply:

- A. V features both a digital camera and an office document viewer.
 - B. W has digital camera and music player
 - C. W and Y have no options in common.
 - D. X has more options as compared to W
 - E. V and Z have exactly one option in common
 - F. T has fewer options as compared to Z.
8. For exactly how many of the six mobile phones is it possible to determine exactly which option each one has?
- A. Two B. Three **C. Four** D. Five E. Six

Answer : C

9. Which one of the following must be false?
- A. Exactly five mobile phones feature a music player.**
 - B. Exactly five mobile phones feature a document viewer.
 - C. Exactly four mobile phones feature a music player.
 - D. Exactly four mobile phones feature a digital camera.
 - E. Exactly four mobile phones feature a document viewer.

Answer : A

10. If Z has no option in common with T but has at least one option in common with every other mobile phone, then which one of the following must be false?
- A. T has digital camera
 - B. Z has document viewer

- C. Exactly four of the six mobile phones have digital camera.
- D. Exactly four of the six mobile phones have document viewer.
- E. Exactly four of the six mobile phones have music player.**

Answer : E

11. Suppose no two mobile phone models have exactly the same options as one another. In that case each of the following could be true EXCEPT:
- A. Exactly three of the six mobile phones have digital camera.
 - B. Exactly four of the six mobile phones have digital camera.
 - C. Exactly three of the six mobile phones have document viewer.**
 - D. Exactly four of the six mobile phones have document viewer.
 - E. Exactly four of the six mobile phones have music player.

Answer : C

Answers & Explanation of Questions related to Decision Making

Decision Making 1-4

Bill	For	Against
Recreation Bill	Arjun, Bhim	Karn
School Bill	Karn/ Bhim	Arjun and Either Karn or Bhim
Tax Bill	Karn/ Arjun	Bhim and Either Karn or Arjun

1. We can modify the above table based on the additional information given in the question. Accordingly, Arjun and Bhim are the members who voted against the School Bill and Tax bill.

Bill	For	Against
Recreation Bill	Arjun, Bhim	Karn
School Bill	Karn	Arjun, Bhim
Tax Bill	Karn	Bhim, Arjun

By visual observation, it can be checked that Bhim votes against the school bill, thus option E is correct.

2. We can modify the above table based on the additional information given in the question as follows:

Bill	For	Against
Recreation Bill	Arjun, Bhim	Karn
School Bill	Bhim	Arjun, Karn
Tax Bill	Karn	Bhim, Arjun

Thus, it can be verified that Arjun and Karn each vote for exactly one bill. The other answer choices do not follow from the above table. Hence, option A is correct.

3. We can modify the above table based on the additional information given in the question as follows:

Bill	For	Against
Recreation Bill	Arjun, Bhim	Karn
School Bill	Karn	Arjun, Bhim
Tax Bill	Karn	Bhim, Arjun

Thus, it can be observed that Karn votes for the school bill.

4. We can modify the above table based on the additional information given in the question as follows:

Bill	For	Against
Recreation Bill	Arjun, Bhim	Karn
School Bill	Karn	Arjun, Bhim
Tax Bill	Karn	Arjun, Bhim

Thus, Bhim votes for exactly one bill and hence option E is correct.

5. The situation highlights the management's short-sightedness.
 6. Both A and R are mentioned in the passage, but R is not the correct reason for A.
 7. A is mentioned in the passage while R is not.

- 8-11. Mobile Phone Digital Camera Music Player Office Document Viewer

T			
V	✓	X	✓
W	✓	✓	
X	✓	✓	✓
Y	X	X	✓
Z		✓	

T may have any of three options.

Z may have Music Player and either Digital Camera or Office Document Viewer.

8. It is clear from the table that it is possible to determine the option(s) of phones V, W, X and Y.
 9. Three or four mobile phones feature a music player.
 10. Z must have the music player and the office document viewer while T must have the digital camera. So only 3 models have the music player and option 5 is false.
 11. After assigning different features to the mobiles, it is seen that exactly four of the six mobiles have a document viewer. The best answer is option 3.

Inserting Missing Characters

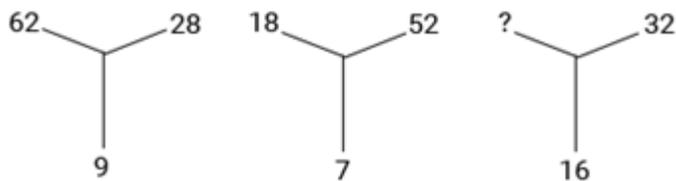
In such type of questions, a figure, a set of figures, an arrangement or a matrix is given.

Each figure contain certain characters, numbers, letters or a group/combination of letters/numbers, following a certain pattern.

The candidate is required to convert this pattern and accordingly find the missing character in the figure. Need to develop the ability to identify the missing character with the help of figures provided.

Sample Questions

Insert the missing number in each of the following

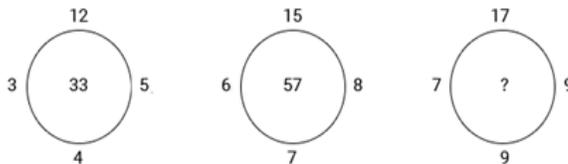


1. 105 2. 142 3. 128 4. 118

Answer : 3

Explanation : The pattern is: $62 + 28 / 10 = 9$; $18 + 52 / 10 = 7$.

So, missing number = $x + 32 / 10 = 16$, $x = 128$

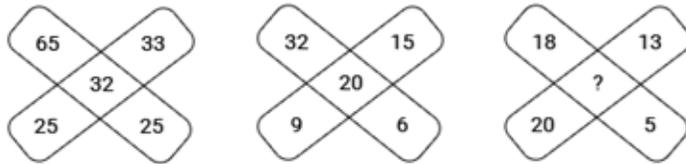


1. 80 2. 90 3. 72 4. 64

Answer : 2

Explanation : The pattern is: $(12 \times 4) - (5 \times 3) = 33$, $(15 \times 7) - (8 \times 6) = 57$.

So, Missing number = $(17 \times 9) - (9 \times 7) = 90$.

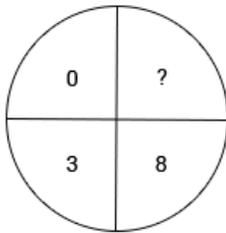


1. 18 2. 20 3. 23 4. 25

Answer : 2

Explanation : The pattern is: $(65+25) - (33+25) = 32$, $(32+9)-(15+6)=20$.

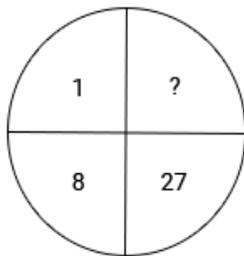
So, missing number = $(18+20)-(13+5)=20$. So answer is option 2



1. 27 2. 15 3. 30 4. 63

Answer : 4

Explanation : Going anticlockwise starting from 0, the terms are: $12 - 1$, $22 - 1$, $32 - 1$. So, missing number = $42 - 1 = 15$. So answer is option 2



1. 64 2. 18 3. 24 4. 27

Answer : 1

Explanation : Going anticlockwise starting from 1, numbers are $1^3, 2^3, 3^3, 4^3$. So missing number is 64. So answer is option 1

17	16	15
52	39	26
29	44	59
37	?	45

1. 41 2. 43 3. 31 4. 40

Answer : 1

Explanation : In the each row middle term is average of extreme terms $17+15/2 = 16$, $52+26/2 = 39$. So, missing number $=37+45/2 = 41$. Hence, the answer is option 1

P	J	O
A	D	I
O	F	?

1. F 2. G 3. H 4. K

Answer : 1

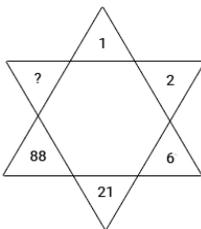
Explanation : Positions of alphabets (A to Z) is (1-26) we have:

In the first column, $P-A=16-1=15=O$.

In the second column, $J-D=10-4=6=F$.

So, in the third column, missing letter $=O-I=15-9=6=F$

So the answer is option 1



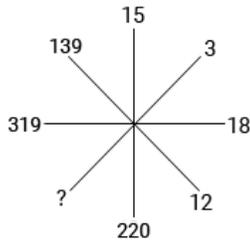
Find the missing term in each of the following

1. 445 2. 446 3. 472 4. 435

Answer : 1

Explanation : We have : $1 \times 1 + 1 = 2$, $2 \times 2 + 2 = 6$, $6 \times 3 + 3 = 21$, $21 \times 4 + 4 = 88$.

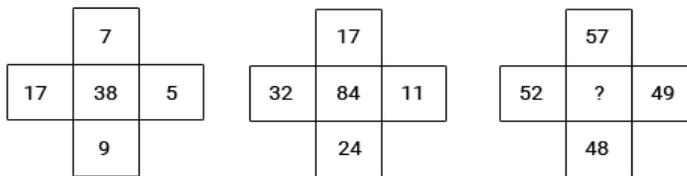
So, missing number $= 88 \times 5 + 5 = 445$ so answer is option 1



1. 8 2. 9 3. 4 4. 25

Answer : 3

Explanation : The two ends of each line contain a number and its square - 5. e.g. $15^2 - 5 = 220$, $18^2 - 5 = 319$ So, missing number = $3^2 - 5 = 4$. So answer is option 3



1. 70 2. 206 3. 106 4. 100

Answer : 2

Explanation : The pattern is middle number is sum of extreme terms. So, missing number = $52 + 48 + 49 + 57 = 206$ So the answer is option 2

Logical Sequence Test

In this type of question, some words are given. You have to arrange these words in a meaningful order. The order may be according to age, size and need etc.

Example 1:

Arrange the following words in a meaningful order.

1. Death 2. Marriage 3. Education 4. Birth 5. Funeral
 A. 5, 1, 2, 3, 4 B. 4, 2, 3, 1, 5 C. 4, 3, 2, 5, 1 D. 4, 3, 2, 1, 5

Answer is Option D

Explanation : First of all a man is born then he takes education; after this he is married. Then after sometimes he dies. After death the order is of Funeral. So the correct order is 4, 3, 2, 1 and 5.

Example 2:

Arrange the following words in a logical sequence.

1. Grass 2. Curd 3. Milk 4. Cow 5. Butter

- A. 1, 2, 3, 4, 5
 B. 2, 3, 4, 5, 1
 C. 4, 1, 3, 2, 5
 D. 5, 4, 3, 2, 1

Answer is Option C

Explanation : We know that cow eats grass and then gives milk. With the milk, curd is made and then from curd, butter is made. Hence logical sequence is Cow, Grass, Milk, Curd, Butter.

Sample Questions

1. Arrange the words given below in a meaningful sequence.

1. Key 2. Door 3. Lock 4. Room 5. Switch on

- A. 5, 1, 2, 4, 3 B. 4, 2, 1, 5, 3 C. 1, 3, 2, 4, 5 D. 1, 2, 3, 5, 4

Answer : Option C

Explanation : The correct order is : Key Lock Door Room Switch on

2. Arrange the words given below in a meaningful sequence.

1. Word 2. Paragraph 3. Sentence 4. Letters 5. Phrase

- A. 4, 1, 5, 2, 3 B. 4, 1, 3, 5, 2 C. 4, 2, 5, 1, 3 D. 4, 1, 5, 3, 2

Answer : Option D

Explanation : The correct order is : Letters Word Phrase Sentence Paragraph

3. Arrange the words given below in a meaningful sequence.

1. Police 2. Punishment 3. Crime 4. Judge 5. Judgement

- A. 3, 1, 2, 4, 5 B. 1, 2, 4, 3, 5 C. 5, 4, 3, 2, 1 D. 3, 1, 4, 5, 2

Answer : Option D

Explanation : The correct order is : Crime Police Judge Judgement Punishment

4. Arrange the words given below in a meaningful sequence.
 1. Family 2. Community 3. Member 4. Locality 5. Country
 A. 3, 1, 2, 4, 5 B. 3, 1, 2, 5, 4 C. 3, 1, 4, 2, 5 D. 3, 1, 4, 5, 2

Answer : Option A

Explanation : The correct order is : Member Family Community Locality Country

5. Arrange the words given below in a meaningful sequence.
 1. Poverty 2. Population 3. Death 4. Unemployment 5. Disease
 A. 2, 3, 4, 5, 1 B. 3, 4, 2, 5, 1 C. 2, 4, 1, 5, 3 D. 1, 2, 3, 4, 5

Answer : Option C

Explanation : The correct order is : Population Unemployment Poverty Disease Death

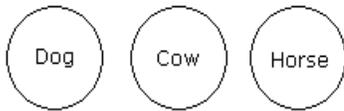
Logical Venn Diagram

The main aim of this section is to test your ability about the relation between some items of a group by diagrams. In these questions some figures of circles and some words are given. You have to choose a figure which represents the given words.

Some critical examples are given below:

Example 1

If all the words are of different groups, then they will be shown by the diagram as given below.
 Dog, Cow, Horse

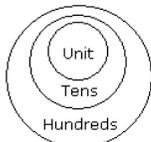


All these three are animals but of different groups, there is no relation between them. Hence they will be represented by three different circles.

Example 2

If the first word is related to second word and second word is related to third word. Then they will be shown by diagram as given below.

Unit, Tens, Hundreds

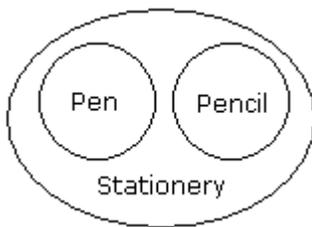


Ten units together make one Tens or in one tens, whole unit is available and ten tens together make one hundreds.

Example 3

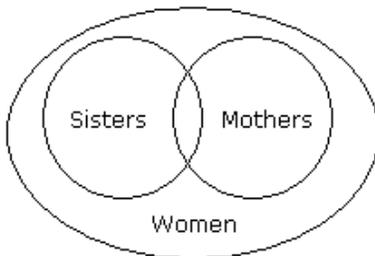
If two different items are completely related to third item, they will be shown as below.

Pen, Pencil, Stationery

*Example 4*

If there is some relation between two items and these two items are completely related to a third item they will be shown as given below.

Women, Sisters, Mothers



Some sisters may be mothers and vice-versa. Similarly some mothers may not be sisters and vice-versa. But all the sisters and all the mothers belong to women group.

Example 5

Two items are related to a third item to some extent but not completely and first two items totally different.

Students, Boys, Girls

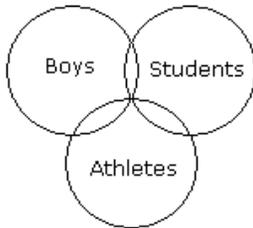


The boys and girls are different items while some boys may be students. Similarly among girls some may be students.

Example 6

All the three items are related to one another but to some extent not completely.

Boys, Students, Athletes

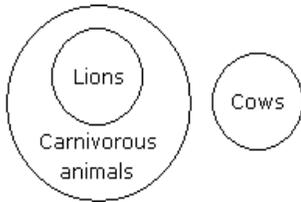


Some boys may be students and vice-versa. Similarly some boys may be athletes and vice-versa. Some students may be athletes and vice-versa.

Example 7

Two items are related to each other completely and third item is entirely different from first two.

Lions, Carnivorous, Cows

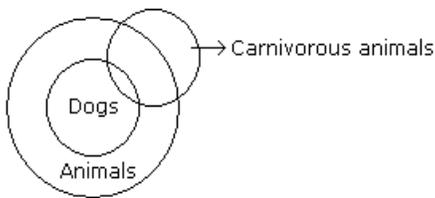


All the lions are carnivorous but no cow is lion or carnivorous.

Example 8

First item is completely related to second and third item is partially related to first and second item.

Dogs, Animals, Flesh-eaters

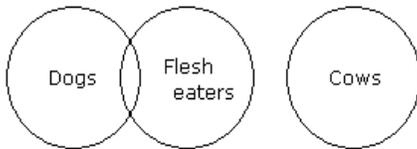


All the dogs are belonging to animals but some dogs are flesh eater but not all.

Example 9

First item is partially related to second but third is entirely different from the first two.

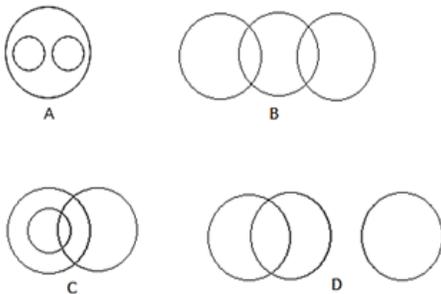
Dogs, Flesh-eaters, Cows



Some dogs are flesh-eaters but not all while any dog or any flesh-eater cannot be cow.

Sample Questions

1. Which of the following diagrams correctly represents lions, elephants, and animals?



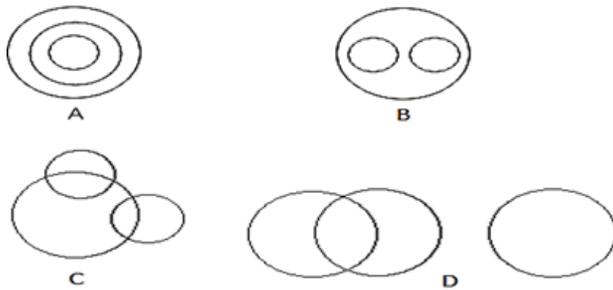
Answer: A

Explanation:



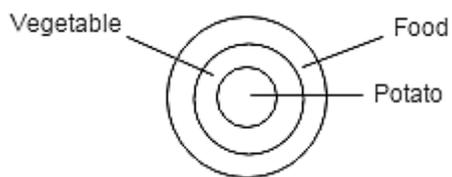
Lions and elephants have no relationship to each other, but both are animals.

2. Which of the following diagrams correctly shows the relationship between potato, food, and vegetables?



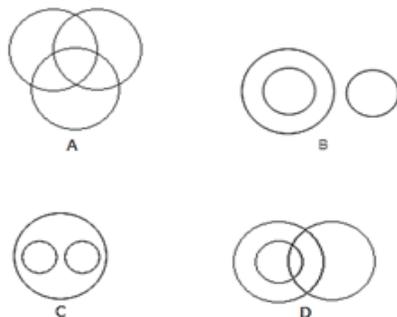
Answer : A

Explanation



Potato is a vegetable, and all vegetables are food.

3. Which of the following diagrams correctly shows the relationship between tea, coffee, and beverages?

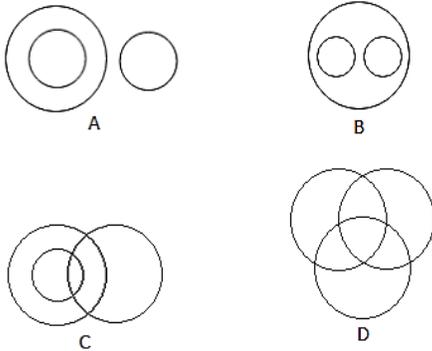


Answer : C

Explanation

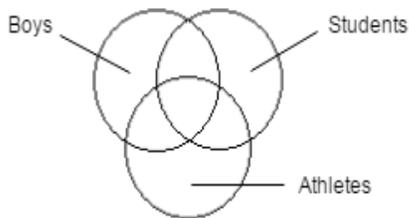
Tea and coffee are different from each other, but both are beverages.

4. Which of the following diagrams correctly shows the relationship between boys, athletes, and students?



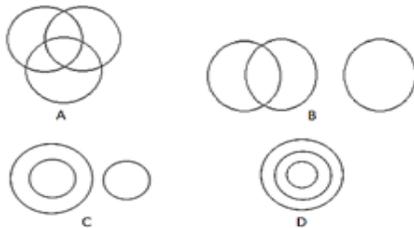
Answer : D

Explanation



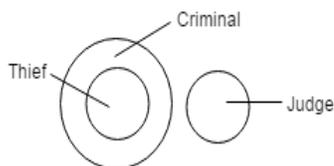
Some boys are athletes, and some boys are students. Also, some students are athletes. So, they are partly related to one another.

5. Select the diagram which correctly illustrates the relationship between a thief, criminal and judge.



Answer : C

Explanation



All thieves are criminals, and a judge is not related to a thief or criminal.

Number, Ranking and Time Sequence Test

In this type of questions, generally, one is given a long series of numbers. The candidate is required to find out how many times a number satisfying the conditions, specified in the question, occurs. This includes the following category of sequences:

- Date-Time Sequence
- Number Sequence
- Ranking Sequence

Number Test

In this type of questions, generally a set, group or series of numerals is given and the candidate is asked to trace out numerals following certain given conditions or lying at specifically mentioned positions after shuffling according to a certain given pattern.

Example

How many such 5s are there in the following number sequence each of which is immediately preceded by 3 or 4 but not immediately followed by 8 or 9?

3 5 9 5 4 5 5 3 5 8 4 5 6 7 3 5 7 5 5 4 5 2 3 5 1 0

(A) One (B) Three (C) Four (D) Five (E) None of these

Solution

As you know, a number which comes after a given number is said to follow it while the one which comes before the given number precedes it.

Thus, the number satisfying the given conditions may be marked as follows:

3 5 9 5 4 5 3 5 8 4 6 7 3 7 5 5 4 2 3 1 0

Clearly, there are five such 5s. Hence, the answer is (d).

Ranking Test

In this type of questions, generally the ranks of a person both from the top and from the bottom are

mentioned and the total number of persons is asked. However, sometimes this question is put in the form of a puzzle of interchanging seats by two persons.

Example

Rohan ranks seventh from the top and twenty-sixth from the bottom in a class. How many students are there in the class?

- (A) 31 (B) 32 (C) 33 (D) 34

Solution

Clearly, the whole class consists of:

- (i) 6 student who have ranks higher than Rohan;
- (ii) Rohan; and
- (iii) 25 students who have ranks lower than Rohan, i.e, $(6+1+25) = 32$ students. Hence, the answer is (b).

Time Sequence Test

Example

Satish remembers that his brother's birthday is after fifteenth but before eighteenth of February whereas his sister Kajal remembers that her brother's birthday is after sixteenth but below nineteenth of February. On which day in February is Satish's brother's birthday?

- (A) 16th (B) 17th (C) 18th (D) 19th (E) None of these

Solution

According to Satish, the brother's birthday is on one of the days among 16th and 17th February. According to Kajal, the brother's birthday is on one of the days among 17th and 18th February. Clearly, Satish's brother's birthday is on the day common to both the above groups, i.e., 17th February.

Syllogism

Syllogism is a form of deductive reasoning where you arrive at a specific conclusion by examining two other premises or ideas. Syllogism derives from the Greek word syllogismos, meaning conclusion or inference.

Some syllogisms contain three components:

- Major Premise
- Minor Premise
- Conclusion

For Example : All roses are flowers (major premise). This is a rose (minor premise). Therefore, I am holding a flower (conclusion).

Types of Syllogism

The type of syllogism that typically contains these three components is categorical syllogism. However, there are two other major kinds of syllogism. We'll discuss each one here, plus enthymemes and syllogistic fallacy.

Categorical Syllogism

As we know, our first example about roses was a categorical syllogism. Categorical syllogisms follow an "If A is part of C, then B is part of C" logic.

Let's look at some more examples.

All cars have wheels. I drive a car. Therefore, my car has wheels.

- Major Premise : All cars have wheels.
- Minor Premise : I drive a car.
- Conclusion : My car has wheels.

All insects frighten me. That is an insect. Therefore, I am frightened.

- Major Premise: All insects frighten me.
- Minor Premise: That is an insect.
- Conclusion: I am frightened.

Conditional Syllogism

Conditional syllogisms follow an "If A is true, then B is true" pattern of logic. They're often referred to as hypothetical syllogisms because the arguments aren't always valid. Sometimes they're merely an accepted truth.

If Katie is smart, then her parents must be smart.

- Major premise : Katie is smart.
- Conclusion : Katie's parents are smart.

If Richard likes Germany, then he must drive an Audi.

- Major premise : Richard likes Germany.
- Conclusion : He must like all things German, including their cars.

Disjunctive Syllogism

Disjunctive syllogisms follow a "Since A is true, B must be false" premise. They don't state if a major or minor premise is correct. But it's understood that one of them is correct.

- Major Premise : This cake is either red velvet or chocolate.
- Minor Premise : It's not chocolate.

- Conclusion : This cake is red velvet.
- Major Premise : On the TV show Outlander, Claire's husband is either dead or alive.
- Minor Premise: He's not alive.
- Conclusion: Claire's husband is dead.

Enthymemes

An enthymeme is not one of the major types of syllogism but is what's known as rhetorical syllogism. These are often used in persuasive speeches and arguments.

Generally, the speaker will omit a major or minor premise, assuming it's already accepted by the audience.

He couldn't have stolen the jewelry. I know him.

- Major Premise: He couldn't have stolen the jewelry.
- Minor Premise: I know his character.

Her new purse can't be ugly. It's a Louis Vuitton.

- Major Premise: Her new accessory can't be ugly.
- Minor Premise: It's made by famous designer Louis Vuitton.

In an enthymeme, one premise remains implied. In the examples above, being familiar with someone or something implies an understanding of them.

Syllogistic Fallacy

Some syllogisms contain false presumptions. When you start assuming one of the major or minor premises to be true, even though they're not based in fact - as with disjunctive syllogisms and enthymemes - you run the risk of making a false presumption.

All crows are black. The bird in my cage is black. Therefore, this bird is a crow.

- Major Premise: All crows are black.
- Minor Premise: The bird in my cage is black.
- Conclusion: This bird is a crow.

The scenery in Ireland is beautiful. I'm in Ireland. Therefore, the scenery must be beautiful.

- Major Premise: The scenery in Ireland is beautiful.
- Minor Premise: I'm in Ireland.
- Conclusion: The scenery is beautiful.

Of course, not every black bird is a crow and not all of Ireland is beautiful. When preparing a speech

or writing a paper, we must always make sure we're not making any sweeping generalizations that will cause people to make false presumptions.

Rules of Syllogism

There are six known rules of syllogism. However, they mainly apply to categorical syllogism, since that is the only category that requires three components: major premise, minor premise, and conclusion. Here are six rules that will ensure you're making a strong and accurate argument.

1. Rule One: There must be three terms: the major premise, the minor premise, and the conclusion - no more, no less.
2. Rule Two: The minor premise must be distributed in at least one other premise.
3. Rule Three: Any terms distributed in the conclusion must be distributed in the relevant premise.
4. Rule Four: Do not use two negative premises.
5. Rule Five: If one of the two premises are negative, the conclusion must be negative.
6. Rule Six: From two universal premises, no conclusion may be drawn.

Sample Questions

In each of the following questions two statements are given and these statements are followed by two conclusions numbered (1) and (2). You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

Give answer:

- (A) If only (1) conclusion follows
- (B) If only (2) conclusion follows
- (C) If either (1) or (2) follows
- (D) If neither (1) nor (2) follows and
- (E) If both (1) and (2) follow.

1. Statements : Some actors are singers. All the singers are dancers.

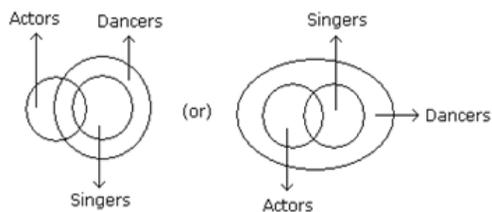
Conclusions:

1. Some actors are dancers.

2. No singer is actor.
- Only (1) conclusion follows
 - Only (2) conclusion follows
 - Either (1) or (2) follows
 - Neither (1) nor (2) follows
 - Both (1) and (2) follow

Answer : Option A

Explanation



Only (1) follows.

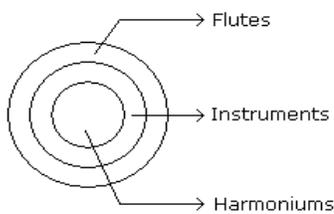
2. **Statements** : All the harmoniums are instruments. All the instruments are flutes.

Conclusions:

- All the flutes are instruments.
 - All the harmoniums are flutes.
- Only (1) conclusion follows
 - Only (2) conclusion follows
 - Either (1) or (2) follows
 - Neither (1) nor (2) follows
 - Both (1) and (2) follow

Answer : Option B

Explanation:



Only (2) follows.

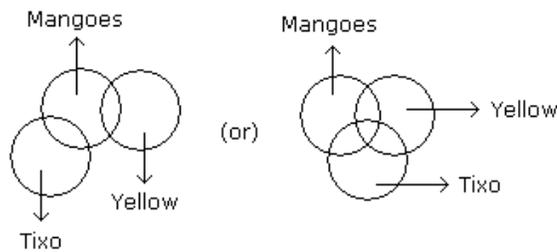
3. **Statements** : Some mangoes are yellow. Some tixo are mangoes.

Conclusions:

1. Some mangoes are green.
 2. Tixo is a yellow.
- A. Only (1) conclusion follows
 B. Only (2) conclusion follows
 C. Either (1) or (2) follows
 D. Neither (1) nor (2) follows
 E. Both (1) and (2) follow

Answer : Option D

Explanation :



None of the two follows.

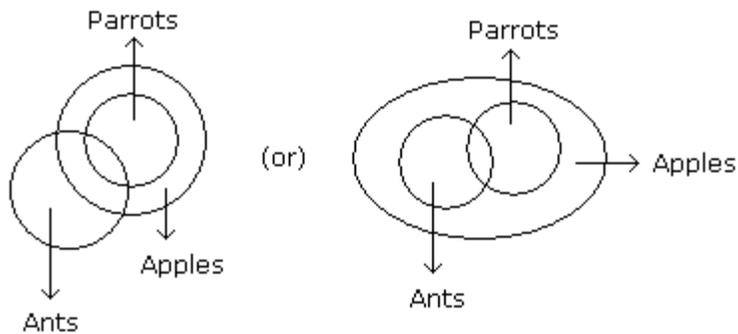
4. **Statements** : Some ants are parrots. All the parrots are apples.

Conclusions :

1. All the apples are parrots.
 2. Some ants are apples.
- A. Only (1) conclusion follows
 B. Only (2) conclusion follows
 C. Either (1) or (2) follows
 D. Neither (1) nor (2) follows
 E. Both (1) and (2) follow

Answer : Option B

Explanation:



Only (2) follow.

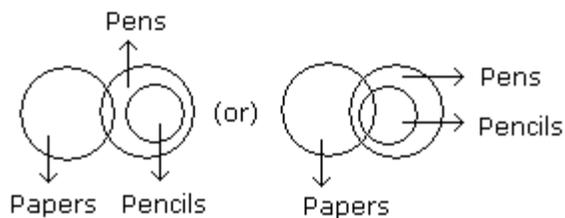
5. **Statements** : Some papers are pens. All the pencils are pens.

Conclusions :

1. Some pens are pencils.
 2. Some pens are papers.
- A. Only (1) conclusion follows
 - B. Only (2) conclusion follows
 - C. Either (1) or (2) follows
 - D. Neither (1) nor (2) follows
 - E. Both (1) and (2) follow

Answer : Option E

Explanation



Both (1) and (2) follow.

Truth Tellers and Liars*

These problems will illustrate some of the logical concepts we've looked at, as well as illustrating some proof techniques that we'll look at in more detail later. These proofs are written entirely in words, so for the moment we don't need to worry about the presentation details associated with mathematical symbols.

The general setup : You're on an island where each inhabitant is a **truth-teller** or a **liar**. Truth-tellers always tell the truth; liars always lie. You're given some information about some people, usually in the form of statements they make. You're asked to determine whether each person is a truth-teller or a liar. In some cases, it may be impossible to determine what everyone is, or the situation may be impossible.

Example. You're on an island where each inhabitant is a truth-teller or a liar. Truth-tellers always tell the truth; liars always lie. Calvin and Phoebe are on the island.

Phoebe says: "If 34 is odd, then I am a truth-teller."

Calvin says: "Phoebe is a liar."

Determine whether each person is a truth-teller or a liar.

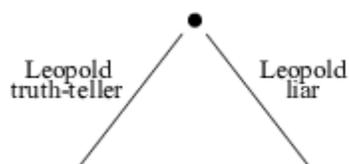
(In this problem, I notice that I can determine the truth or falsity of the statement "34 is odd" without knowing anything about Phoebe or Calvin. So I'll start with it and see what follows from it.)

Since "34 is odd" is false, the "if" part of Phoebe's statement is false. Hence, Phoebe's statement is true. Therefore, Phoebe must be a truth-teller.

Now Calvin says "Phoebe is a liar", and that is false, since I just showed that Phoebe is a truth-teller. Therefore, Calvin is a liar.

Thus, Phoebe is a truth-teller and Calvin is a liar.

Here are some **general ideas** about how you might approach a problem like this. Pick a character in the problem --- let's say you pick "Leopold". Consider the two cases: "Leopold is a truth-teller" or "Leopold is a liar". You can picture the reasoning process as a tree:



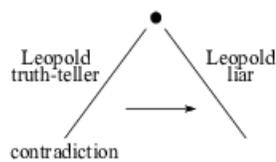
You can start with either case --- let's suppose you start with "Leopold is a truth-teller". (Note that this means anything he said is **true**.) Reason from this until you get a **contradiction**, a solution (that is, you know what all the characters are), or no **conclusion**.

1. See, Raymond Smullyan, What is the name of this book. New York: Dover Publications, 2011.

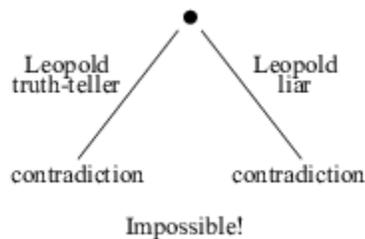
I'll consider the first of these three cases in more detail, but similar ideas hold for the other two cases.

Thus, suppose "Leopold is a truth-teller" gives a contradiction. Then he can't be a truth-teller, so he must be a liar. The "Leopold is a truth-teller" branch of the tree is finished: Switch to the "Leopold is a liar" branch and start reasoning there.

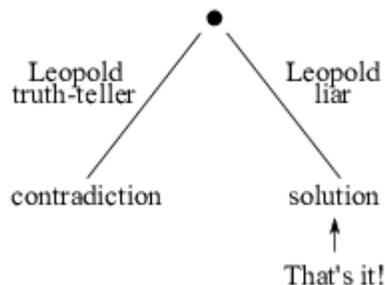
- (a) If "Leopold is a liar" gives a contradiction, then both cases have given a contradiction and the original problem is impossible.



- (b) If "Leopold is a liar" gives a solution, then that's the answer to the original problem.



- (c) If "Leopold is a liar" gives no conclusion, then you need to take cases on another character. Let's say Molly is another character. Then we have the cases "Molly is a truth-teller" and "Molly is a liar", and they are sub-cases of "Leopold is a liar".



Now you have to continue reasoning with the two branches "Molly is a truth-teller" and "Molly is a liar".

If at some point all the branches end in contradictions, then the problem is impossible. If all the branches end in contradictions but one ends in a solution, then the solution is the answer to the

problem. If more than one branch ends in a solution, the problem has multiple answers. If any of the branches ends in no conclusion, and you have no more characters with which to take cases, then again the problem has multiple answers.

Similar things would happen if our original choice ("Leopold is a truth-teller") gave a solution, or no conclusion.

It may also be that you should have started reasoning with another character --- so in the example I just went through, maybe you should have started by taking cases on Molly instead of Leopold. As with a lot of problem-solving and proof-writing, you should become accustomed to working on scratch paper and possibly throwing away early attempts in favor of later ones.

Example. You're on an island where each inhabitant is a **truth-teller** or a **liar**. Truth-tellers always tell the truth; liars always lie. Calvin and Phoebe are on the island.

Calvin says: "One or both of us is a liar."

Determine whether each person is a truth-teller or a liar.

- Suppose Calvin is a liar. Then the statement "One or both of us is a liar" is true, contradicting the fact that Calvin is a liar.
- Hence, Calvin is a truth-teller. Therefore, his statement is true, and at least one of them is a liar. Since it isn't Calvin, it must be Phoebe.
- Thus, Calvin is a truth-teller and Phoebe is a liar.

Here are other ideas for these kinds of problems.

1. If there are statements whose truth value you know (like "34 is odd"), begin with that information and see what you can conclude. For example, if Phoebe says "34 is odd", then (since the statement is false) I know Phoebe is a liar.
2. You must take cases in pairs, e.g. "Calvin is a liar" and "Calvin is a truth teller". And once you take cases, you must consider both.
3. Don't take cases unless you have to --- that is, unless you can't go any further with the information you know.
4. Observe that these solutions are written entirely in words: We aren't using truth tables here. You should avoid using symbols unless they are necessary. Mathematics does not necessarily require the use of symbols!

It's okay to use pictures to clarify your reasoning, but a picture is not a substitute for a verbal proof.

Example. You're on an island where each inhabitant is a **truth-teller** or a **liar**. Truth-tellers always tell the truth; liars always lie. Calvin and Phoebe are on the island.

Calvin says: "If I am a liar, then Phoebe is a liar."

Phoebe says: "Calvin is a truth-teller."

Determine whether each person is a truth-teller or a liar.

Suppose Calvin is a liar. Then his statement is false. Since it's an if-then statement, the if-part must be true and the then-part must be false. The if-part is "I am a liar", which is indeed true (by assumption). Then then-part must be false, so "Phoebe is a liar" is false, and hence Phoebe is a truth-teller. This means Phoebe's statement "Calvin is a truth-teller" is true, which contradicts our assumption that Calvin is a liar.

Since "Calvin is a liar" led to a contradiction, Calvin must be a truth-teller. Now Phoebe says "Calvin is a truth-teller", so she is telling the truth, and she is a truth-teller. Calvin's statement is "If I am a liar, then Phoebe is a liar". Both parts ("I am a liar" and "Phoebe is a liar") are false, so the if-then statement is true, consistent with Calvin being a truth-teller.

Since "Calvin is a liar" led to a contradiction and "Calvin is a truth-teller" led to a solution (consistent with both characters' statements), we find that Calvin is a truth-teller and Phoebe is a truth-teller.

It is noted that it's possible that a problem like this can't be solved, for either of the following reasons:

- (a) There isn't enough information to determine what all the characters are.
- (b) The given situation is impossible: All the cases lead to contradictions.

Lesson 8

**NON-VERBAL
REASONING**

Analytical Reasoning

Analytical Reasoning is Qualitative and Quantitative reasoning in nature. People use analytical reasoning to scrutinise speech, documents, diagrams, charts and graphs, and gather the most relevant information. Those with strong analytical skills will consider how key elements within that information relate to one another, and are more likely to notice crucial patterns and details.

Analytical reasoning measure a candidate's critical thinking and problem-solving skills.

- Data may be presented in the form of written passages, graphs, tables or shapes.
- Where questions are based on a series of images, they have much in common with inductive reasoning and non-verbal reasoning tests.
- Written analytical reasoning questions assess many of the same skills as verbal reasoning tests.

Analytical reasoning evaluate Inductive and Deductive reasoning

Inductive reasoning involves obtaining specific information relating to a topic/subject in order to make predictions based on such information.

Example of Inductive Reasoning

1. Every quiz has been easy. Therefore the test will be easy.
2. The teacher used power point in the last few classes. Therefore, the teacher will use power point tomorrow.
3. Every fall there have been huricanes in the tropics this coming fall.

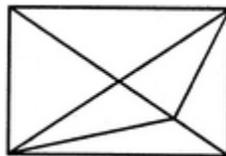
Deductive reasoning is the process of reaching a logical conclusion based on one or more given statements, or premises.

Example of deductive Reasoning

1. All Students eat pizza. Raman is a students at KKM. Therefore, Raman eats Pizza
2. All athletes work out in the gym. Karan is an athlete. Therefore, Karan works out in the gym.

Analytical Reasoning Thinking Approach

Suppose you have to find the number of triangles in the given figure



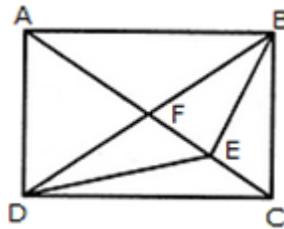
Solution : The simplest triangles are AFB, FEB, EBC, DEC, DFE and AFD i.e. 6 in number.

The triangles composed of two components each are AEB, FBC, DFC, ADE, DBE and ABD i.e. 6 in number.

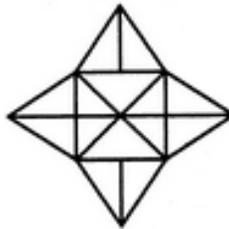
The triangles composed of three components each are ADC and ABC i.e. 2 in number.

There is only one triangle i.e. DBC which is composed of four components.

Thus, there are $6 + 6 + 2 + 1 = 15$ triangles in the figure.



Let's take the one more example, Find the number of triangles in the given figure.

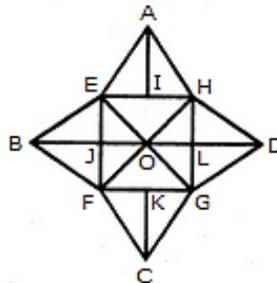


Solution : The simplest triangles are AEI, AIH, BEJ, BHF, CFK, CKG, DGL, DLH, EOJ, FOJ, FOG, LOG, HOL and HOE i.e. 14 in number.

The triangles composed of two components each are EAH, FBE, BEO, EOF, BFO, FCG, GDH, HOD, HOG and GOD i.e. 10 in number.

The triangles composed of three components each are EFH, EHG, FGH and EFG i.e. 4 in number.

Thus, there are $14 + 10 + 4 = 28$ triangles in the given figure



Study the given information carefully and answer the questions that follow:

Analytical Reasoning Conditional Based

A team of five is to be selected from amongst five boys A, B, C, D and E and four girls P, Q, R and S. Some criteria for selection are:

- (a) A and S have to be together.
- (b) P cannot be put with R.
- (c) D and Q cannot go together.
- (d) C and E have to be together.
- (e) R cannot be put with B.

Unless otherwise stated, these criteria are applicable to all the questions below

1. If two of the members have to be boys, the team will consist of:

- (a) A, B, S, P, Q (b) A, D, S, Q, R (c) B, D, S, R, Q (d) C, E, S, P,

Solution : Here we have, If A is selected, S has to be selected. If B is selected, R cannot be selected.

If D is selected, Q cannot be selected. Hence A, D, S, Q, R and B, D, S, R, Q are wrong. C, E, S, P, Q is not possible because A and S should be together. So answer is option 1.

2. If R be one of the members, the other members of the team are;

- (a) P, S, A, D (b) Q, S, A, D (c) P, S, C, E (d) S, A, C, E

Solution : If R is selected, P cannot be selected. So, P, S, A, D is wrong.

D and Q cannot be together. So, Q, S, A, D is wrong.

S and A have to be together. So, P, S, C, E is wrong. The option (d) satisfies all the conditions. Hence it is the answer.

3. If two of the members are girls and D is one of the members, the members of the team other than D are:

- (a) P, Q, B, C (b) P, Q, C, E (c) P, S, A, B (d) P, S, C, E

Solution : If D is selected, Q cannot be selected. So P, Q, B, C and P, Q, C, E are incorrect. S and A have to be together. So, P, S, C, E is also wrong. The third option P, S, A, B satisfies all the conditions, hence it is the answer.

Classification

Classification means to 'assort the items of a given group on the basis of a certain common quality they possess and spot the odd one out.

In these types of questions we will be provided with a group of 5 items out of which 4 would be similar to one another in a certain relationship among themselves and 1 would differ from them

Example 1: Choose the odd one

- (a) Horse
- (b) lion
- (c) giraffe
- (d) cheetah
- (e) Panda

Solution : option(A) Except Horse all are wild animals

Example 2 : Choose the odd one

- (a) 1728
- (b) 64
- (c) 1331
- (d) 343
- (e) 441

Solution : option(e) except 441 all are perfect cube

Example 3 : Choose the odd one

- (a) Iron
- (b) mercury
- (c) Copper
- (d) zinc
- (e) aluminum

Solution : (b) mercury

Explanation

Among all of the above only mercury is in liquid state at room temperature

1. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
 - (A) Badminton
 - (B) Table Tennis

(C) Lawn Tennis

(D) Hockey

(E) Rugby

Solution : (E) Rugby

Explanation

Only sport Rugby contains a single thing Rugby, all other contain 2 things: racket and ball, stick and ball, etc

*Rugby is not a ball

2. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?

(A) Morarji Desai

(B) Lal Bahadur Shastri

(C) R. Vekataraman

(D) Rajiv Gandhi

(E) P. V. Narasimha Rao

Solution : (C) R. Vekataraman

Explanation

Venkataraman had been the President, all others PMs

3. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?

(A) Lima

(B) Wellington

(C) Cairo

(D) Cuba

(E) Kingston

Solution : (D) Cuba

Explanation

Cuba is a country and all other are capitals

4. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?

(1) Groundnut

- (2) Cumin
- (3) Cinnamon
- (4) Pepper
- (5) Clove

Solution : (1) Groundnut

Explanation : Remaining all are spice

5. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?

- (1) 1936
- (2) 2916
- (3) 2304
- (4) 3364
- (5) 2744

Solution : (5) 2744 (14^3)

Explanation : Remaining all the numbers are Square number

6. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?

- (1) Butterfly
- (2) Crow
- (3) Pigeon
- (4) Parrot
- (5) Peacock

Solution : (1) Butterfly (Insect)

Explanation : Remaining all are birds

7. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?

- (1) Pelvis
- (2) Fibula
- (3) Vertebra

- (4) Skull
- (5) Appendix

Solution : (5) Appendix (Organ)

Explanation : Remaining all are bones

8. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?

- (1) Ginger
- (2) Onion
- (3) Beetroot
- (4) Coriander
- (5) Potato

Solution : (4) Coriander

Explanation : Coriander – modified stem

9. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?

- (1) Snake
- (2) Frog
- (3) Rat
- (4) Mongoose
- (5) Tortoise

Solution : (1) Snake

Explanation : Snake is only poisonous animal

10. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?

- (1) Italy
- (2) Europe
- (3) Greece
- (4) Poland
- (5) Spain

Solution : (2) Europe

Explanation : It is a continent rest all are countries.

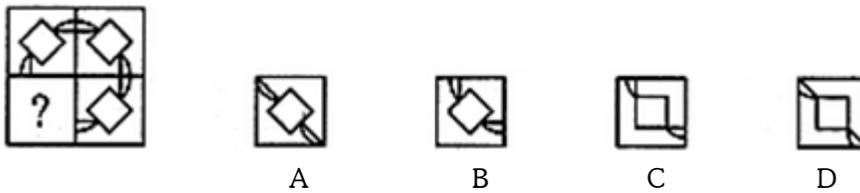
Completion of Incomplete Pattern

In this given “Completion of Incomplete Pattern Verbal Reasoning” questions, a figure or a network or a matrix, containing an arrangement of figures taking after the specific sequence or pattern is given, in which a section, for the most part, a quarter, is left blank. Contenders need to choose the one which best fits into the blank space of problem figure to finish the original pattern.

We have to approach the Question according to the Sequence of the given pattern. There are generally two types of Questions comes in this “Completion of incomplete pattern”

1. Finding the missing figure
2. The movement of the figure in clockwise and anticlockwise in 90-degree pattern or any movement According to degree.

Example : Complete the given Figure



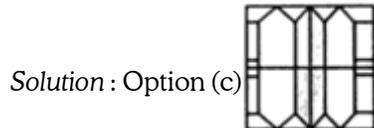
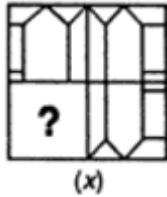
Solution

From the given four option the most appropriate figure which complete it is option(B)



Sample Questions

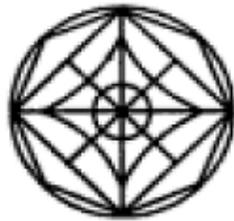
1. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).



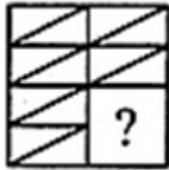
2. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).



Solution : Option (A)



3. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).



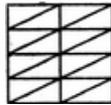
A

B

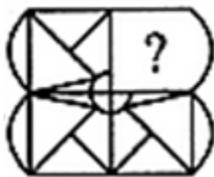
C

D

Solution : Option (D)



4. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).



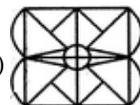
A

B

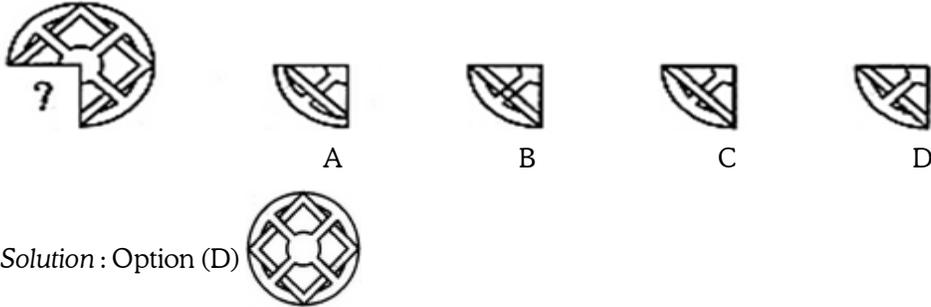
C

D

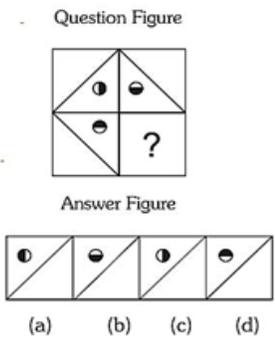
Solution : Option (D)



5. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).

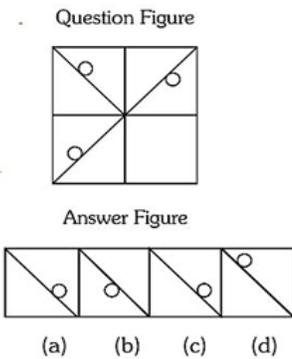


6. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).



Solution : Option(A) figure inside the box moves 90 degree in clockwise direction each time.

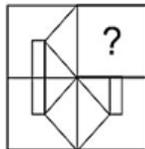
7. Select a figure from the four alternatives, which when placed in the blank space of fig. (x).



Solution : Option (B) Rod is moving 90 degree in clockwise direction. Move the Rod from 3rd box by 90 degree in clockwise direction.

8. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).

Question Figure



Answer Figure



(a) (b) (c) (d)

Solution : Option (B) Choose the figure which complete the rectangle and square. The answer figure (b) will complete the figure correctly.

9. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).

Question figure : Answer figures :



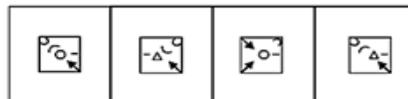
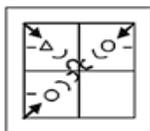
(1) (2) (3) (4)

Solution : Option (2)



10. Select a figure from the four alternatives, which can be placed in the blank space of fig. (x).

Question Figure : Answer Figures :



(1) (2) (3) (4)

Solution : Option (4)

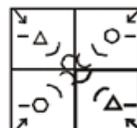
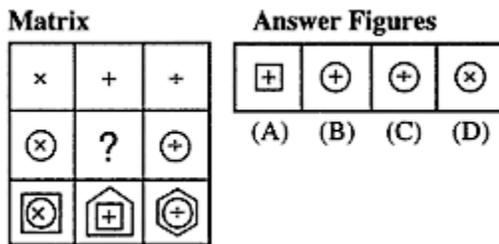


Figure Matrix

There are rows and columns in the matrix. Horizontal line is called row while the vertical line is called column. There is a certain relation between the elements of rows and columns. In this type of questions, a matrix is given in which one space is left blank or denoted by a question mark. Four answer figures are followed by the matrix. The candidate has to find out which answer figure will be replaced by the question mark.

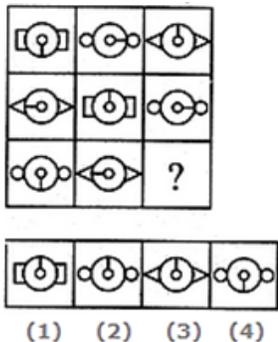
Example : In the following matrix, which of the answer figure will replace the questions mark?



Answer with Explanation (B) : Here the relation is in the columns. In the first column, in the (I) row is x, in the (II) row the design of (I) is enclosed by a circle while in (III) row the design of (II) is enclosed by a square. By the same relation in Second column in place of ? The design '+' will be enclosed by a circle of. Hence the answer is (B).

Sample Questions

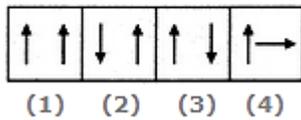
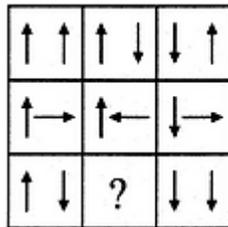
1. Select a suitable figure from the four alternatives that would complete the figure matrix.



Solution : Option (1)

In each row, the central part of the first figure rotates either 90° CW or 90° ACW to form the central part of the second figure and the central part of the first figure rotates through 180° to form the central part of the third figure. Also, in each row, there are 3 types of side elements- rectangles, circles and triangles.

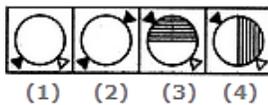
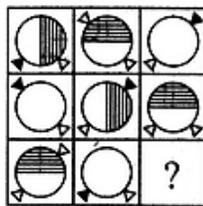
2. Select a suitable figure from the four alternatives that would complete the figure matrix.



Solution : Option (1)

In each row, the second figure is obtained from the first figure by reversing the direction of the RHS arrow and the third figure is obtained from the second figure by reversing the direction of both the arrows.

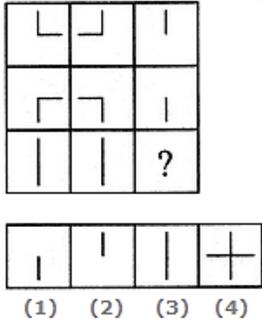
3. Select a suitable figure from the four alternatives that would complete the figure matrix.



Solution : Option (4)

In each row, there are 3 types of shadings of circles - a circle is unshaded, another circle has its right half shaded with vertical lines and yet another circle has its upper half shaded with horizontal lines. There are three specified positions of the two triangles each of which is used only once in a row. Also, two of the figures in each row have one triangle shaded.

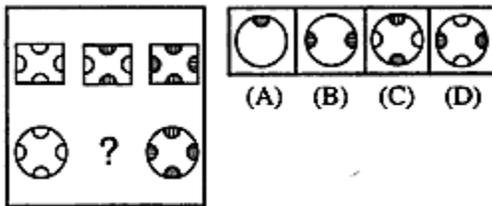
4. Select a suitable figure from the four alternatives that would complete the figure matrix.



Solution : Option (3)

In each row, the third figure is a collection of the common elements (line segments) of the first and the second figures.

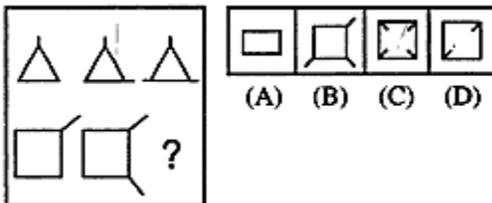
5. Select a suitable figure from the four alternatives that would complete the figure matrix.



Solution : Option (C)

Square is related to circle, in first column no shading in square or circle, in second column two shaded region in both square and circle, hence option (c) satisfy the given figure.

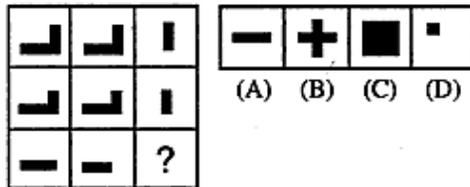
6. Select a suitable figure from the four alternatives that would complete the figure matrix.



Solution : Option (B)

One small line is adding to next figure so according to given figure there will be three in line in next.

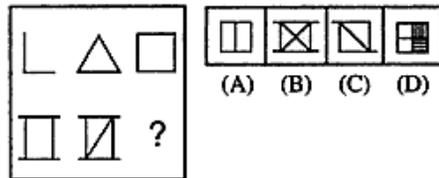
7. Select a suitable figure from the four alternatives that would complete the figure matrix



Solution : Option (D)

The given figure is in decreasing order , we can clearly see in the picture the first row is in decreasing and same as the second hence third row also will be in decreasing , then option (D) satisfy the condition

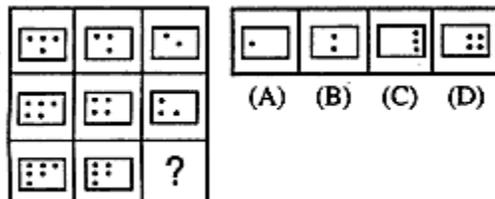
8. Select a suitable figure from the four alternatives that would complete the figure matrix



Solution : Option (B)

In the given picture one line is increasing in row and same as follow in second row.

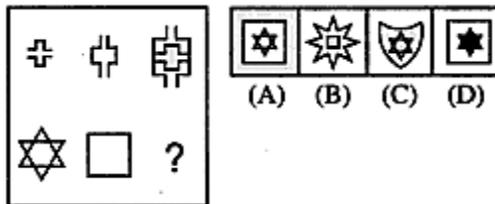
9. Select a suitable figure from the four alternatives that would complete the figure matrix



Solution : Option (D)

In the given figure one dot is decreasing in a sequence order in a row, same as in second row and third row

10. Select a suitable figure from the four alternatives that would complete the figure matrix



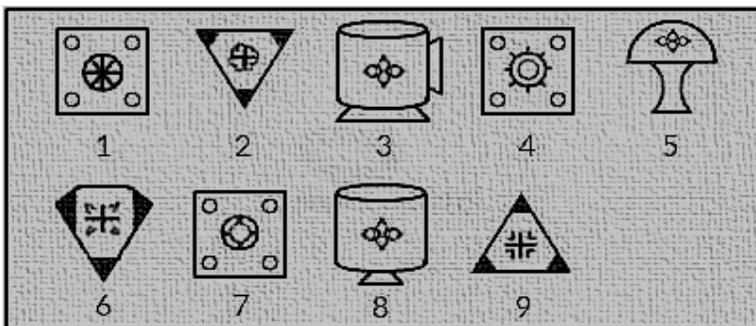
Solution : Option (A)

In a given figure in first row 1st figure is merged to second hence the third figure comes, so according to it option (A)

Grouping of Identical Figures

Arrangements of nine figures, which are numbered, are given. Examine these figures and characterise them along with gatherings comprising of figures having more or less the same properties. The best answer is to be chosen from a given arrangement of genuinely close options.

Example : Select the given figures into three sections using each figure only once.



Options :

- (a) 1, 4, 7; 3, 6, 9; 2, 5, 8
- (b) 1, 6, 9; 2, 4, 7; 3, 5, 8
- (c) 1, 4, 7; 2, 6, 9; 3, 5, 8
- (d) 1, 5, 7; 2, 6, 9; 3, 4, 8

Solution

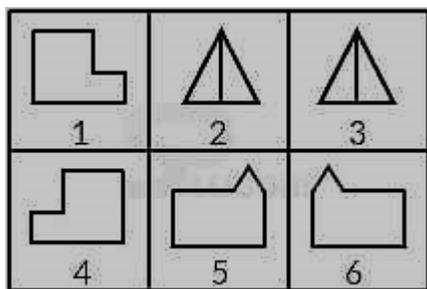
3, 5, 8 have similar designs with four leaves placed close to a small circle and forming a symmetrical design at the centre of the figure.

2, 6, 9 have a similar designs with three of the corners of the main figure are shaded black and there is a pattern formed around a '+' sign at the centre of the figure.

1, 4, 7 have similar designs with four small circles at the corners of the main figure and there is a wheel shaped element at the centre of the figure.

Hence, figure (c) is the answer.

1. Select the given figures into three sections using each figure only once.



Options

- (a) 1, 3, 9; 2, 5, 8; 4, 6, 7
- (b) 1, 5, 8; 4, 6, 7; 2, 3, 9
- (c) 2, 5, 9; 1, 3, 8; 2, 6, 7
- (d) 1, 8, 9, 4, 6, 7; 2, 3, 5

Solution

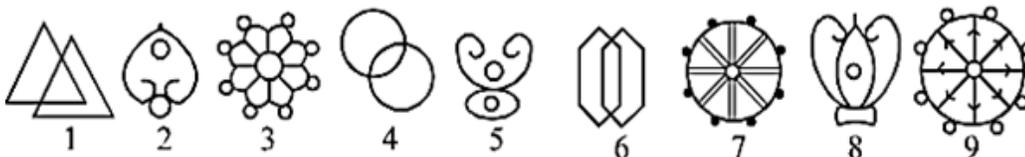
1,5,8 are all open figures bisected by a line segment.

4,6,7 are all closed figures touching a line segment.

2,3,9 are all closed figures intersected by a line.

Hence, figure (b) is the answer.

2. A series of figures are given which can be grouped into classes. Select the groups into which the figures can be classified from the given responses.



- A. 1, 4, 8; 2, 5, 7; 3, 9, 6
 B. 1, 4, 6; 2, 5, 8; 3, 7, 9
 C. 1, 4, 6; 2, 5, 7; 3, 8, 9
 D. 1, 2, 3; 4, 5, 6; 7, 8, 9

Solution : Correct Option: B

As we can see that, Figures (1, 4, 6) \Rightarrow There are two similar designs.

Figures (2, 5, 8) \Rightarrow Irregular figures

Figures (3, 7, 9) \Rightarrow The main design is divided into eight parts.

3. A series of figures are given which can be grouped into classes. Select the group into which the figures can be classified from the given responses.



- A. 1, 4, 5; 2, 6, 8; 3, 7, 9
 B. 1, 3, 7; 4, 6, 9; 2, 5, 8
 C. 1, 3, 7; 2, 5, 8; 4, 6, 9
 D. 1, 3, 8; 2, 5, 7; 4, 6, 9

Correct Option : D

As per the given series of figures, which can be classified as:-

Figures 1, 3 and 8 \Rightarrow One big design and one smaller shaded design.

Figures 2, 5 and 7 \Rightarrow Each design has a black dot.

Figures 4, 6 and 9 \Rightarrow Two similar designs

4. A series of figures are given which can be grouped into classes. Select the groups into which the figures can be classified from the given responses.



- A. 1, 7, 8; 2, 6, 5; 3, 4, 9
- B. 1, 8, 9; 2, 3, 5; 4, 6, 7
- C. 2, 3, 5; 1, 7, 8; 4, 6, 9
- D. 2, 6, 7; 1, 3, 4; 5, 8, 9

Correct Option : B

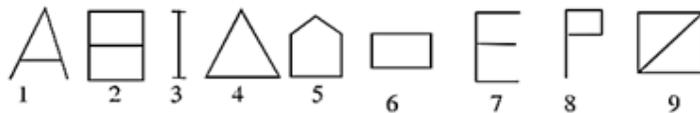
On the basis of above given series of figures, which can be classified as

Figures (1), (8) and (9): Two black dots

Figures (2), (3) and (5): One black dot

Figures (4), (6) and (7): Three black dots

5. A series of figures are given which can be grouped into classes. Select the group into which the figures can be classified.



- A. 1,3,4 2,5,9 6,7,8
- B. 1,2,3 4,5,6 7,8,9
- C. 1,5,9 2,4,7 3,6,8
- D. 3,7,8 1,6,5 4,2,9

Solution

Figures (1), (3) and (4) : having three sides .

Figures (2), (5) and (9) : having five sides .

Figures (6), (7) and (8) : having four sides .

6. A series of figures are given which can be grouped into classes. From the responses, select the groups into which the figures can be classified.



- A. 1, 4, 7; 2, 5, 8; 3, 6, 9
- B. 1, 4, 5; 2, 6, 8; 3, 7, 9

C. 1, 7, 9; 3, 5, 8; 2, 4, 6

D. 1, 6, 9; 2, 5, 8; 3, 4, 7

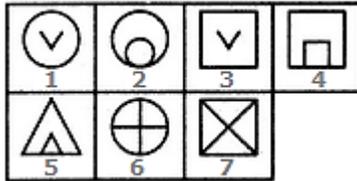
Solution

Figures 1, 4 and 7 \Rightarrow Vessels with lids

Figures 2, 5 and 8 \Rightarrow Kettle like vessels

Figure 3, 6 and 9 \Rightarrow Flowers

7. A series of figures are given which can be grouped into classes. From the responses, select the groups into which the figures can be classified.



A. 1,2,6; 3,4,7; 5

B. 1,3; 2,6; 4,5,7

C. 1,2,6,7; 3; 4,5

D. 1,3; 2,4,5; 6,7

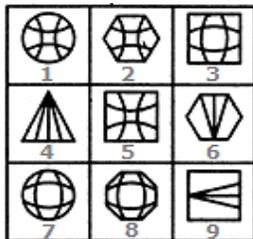
Solution

1, 3 contain a V-shaped element inside a geometrical figure.

2, 4, 5 contain two similar elements, one placed inside the other and touching it.

6, 7 contain geometrical figures which are divided into four equal parts by two mutually perpendicular straight lines

8. A series of figures are given which can be grouped into classes. From the responses, select the groups into which the figures can be classified ?

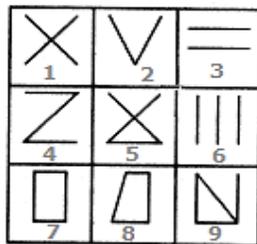


- A. 1,2,5 ; 3,7,8 ; 4,6,9
- B. 1,7,2 ; 3,9,6 ; 4,5,8
- C. 2,3,8 ; 4,6,9 ; 1,5,7
- D. 5,6,9 ; 3,4,1 ; 2,7,8

Solution

1, 2, 5 are figures that have patterns formed from four lines curved in a concave direction.
 3, 7, 8 are figures that have patterns formed from four lines curved in a convex direction.
 4, 6, 9 are figures that have patterns formed from these straight line.

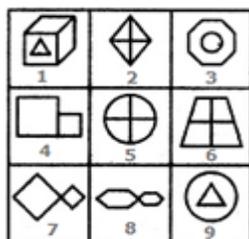
9. A series of figures are given which can be grouped into classes. From the responses, select the groups into which the figures can be classified ?



Answer : Option A

Explanation

- 1, 2, 3 are figures composed of two straight lines.
 - 4, 5, 6 are figures composed of three straight lines.
 - 7, 8, 9 are figures composed of four straight lines.
10. A series of figures are given which can be grouped into classes. From the responses, select the groups into which the figures can be classified ?



- A. 1,3,9; 2,5,6; 4,7,8
- B. 1,3,9; 2,7,8; 4,5,6
- C. 1,2,4; 3,5,7; 6,8,9
- D. 1,3,6; 2,4,8; 5,7,9

Answer : Option A

Explanation

- 1, 3, 9 have one element placed inside a different element.
- 2, 5, 6 contain two mutually perpendicular lines dividing the figure into four parts.
- 4, 7, 8 have two similar elements (unequal in size) attached to each other.

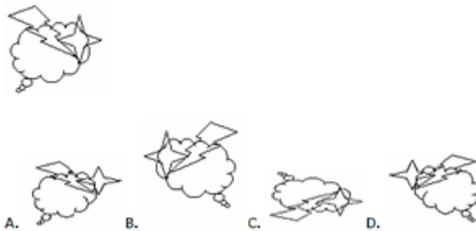
Mirror Image

Letters Mirror Image Chart:

Letters	Mirror Image						
A	A	H	H	O	O	V	V
B	Ɔ	I	I	P	Ԁ	W	W
C	C	J	L	Q	Q	X	X
D	D	K	K	R	Я	Y	Y
E	Ǝ	L	J	S	S	Z	Z
F	Ǝ	M	M	T	T		
G	G	N	N	U	U		

The picture obtained by putting a mirror in front of the real image is known as a mirror image, or we can say that the reflection of an object into the mirror is called its mirror image. There are two types of the questions, which are generally asked in examinations, regarding mirror images. They are Letter/Number Images and Geometrical Images. In Letter/Number Images the question will be given with a combination of letters/words/numbers. The users need to find their mirror images out of given alternatives. In Geometrical Images, we deal with figures having defined geometrical shapes. Hence, the candidates can know all the type of Mirror Images.

Example 1: Find the mirror image of the given figure from options



Solution : Option (B)

It shows that left art of the figure come towards right part of the figure

Example 2 : Choose the alternative which is closely resembles the mirror image of the given combination

hAr13YdAV!dS0h

A. h02b1VAbY€1rAd

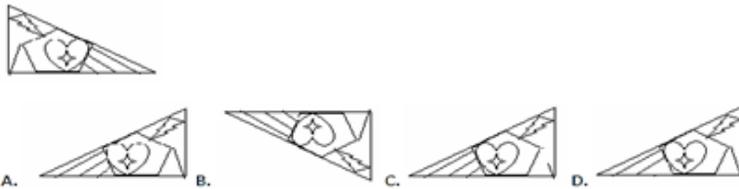
B. h02b1VAbY€1rAd

C. h02b1VAbY€1rAd

D. hAr13YdAV!dS0h

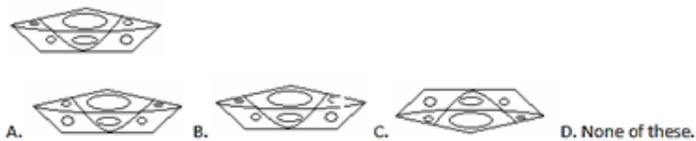
Solution : Option (D). It is clear that letter also behave same left part became right and vice versa.

1. Find the mirror image of the given figure from options



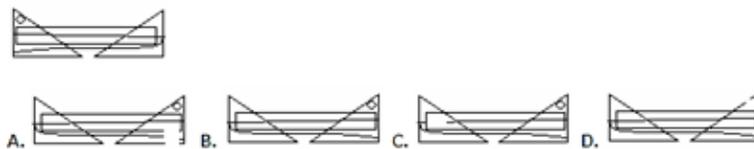
Solution : Option (a)

2. Find the mirror image of the given figure from options



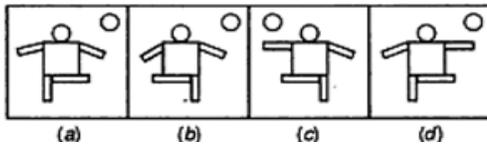
Solution : Option (a)

3. Find the mirror image of the given figure from options



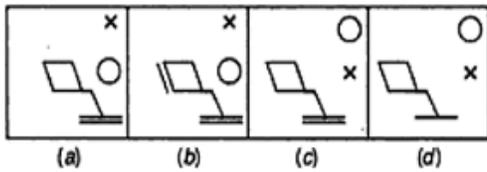
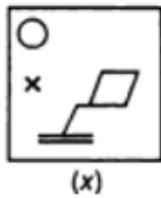
Solution : Option (B)

4. Find the mirror image of the given figure from options



Solution : Option (D)

5. Find the mirror image of the given figure from options



Solution : Option (C)

6. Choose the alternative which is closely resembles the mirror image of the given combination

ANS43Q12

(1) AN24EQ1S

(2) S1Q3E2NA

(3) 2NAE4QS1

(4) 1SQ4EQ1S

Solution : Option (2)

7. Choose the alternative which is closely resembles the mirror image of the given combination

m i R 1 1 T m i m T m

A. **w ! B T T ! w ! w ! w**

B. **w ! w ! w ! T T T R ! w**

C. **m T m i m T ! ! R i m**

D. None of these.

Solution : Option (c)

8. Choose the alternative which is closely resembles the mirror image of the given combination

T A R A I N 1 0 1 4 A

(1) **A 4 1 0 1 N I A R A L**

(2) **A 1 0 1 4 N I A R A T**

(3) **A 1 0 1 4 T A R A I N**

(4) **A 4 1 0 1 N I A R A T**

Solution : Option (4)

9. Choose the alternative which is closely resembles the mirror image of the given combination

G E O G R A P H Y

(1) **Y H P A R G O E G**

(2) **Y H P A R G O E G**

(3) **Y H P A R G O E G**

(4) **G E O G R A P H Y**

Solution : Option (1)

10. Choose the alternative which is closely resembles the mirror image of the given combination

P A I N T E D

(1) **P A I N T E D**

(2) **P A I N T E D**

(3) **P A I N T E D**

(4) **P A I N T E D**

Solution : Option (B)

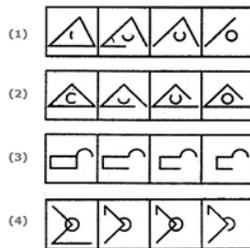
Rule Detection

Non-verbal communication includes problem-solving through various diagrams and pictures. Thereby testing the ability of a student to analyze the visual information and try and solve the problems based on his/her visual ability. Many times figures are given and you need to find the odd figure among them. For rule-detection, we are given some figures and based on the rules we need to determine the correct figure.

For example, you could be asked to identify which figure among the following could become more open or more closed? You only need to find the figure that obeys the rule given in the question. This type of questions requires your imaginary as well as logical skills. This can be developed through practice. When you practice with different figures and shapes, you develop a different mind-set and thus this allows you to imagine out-of-box. These questions are not at all time consuming so it can help you boost your score as well.

Example : Choose the set of figures which follows the given rule.

Rule : Closed figures become more and more open and open figures become more and more closed.

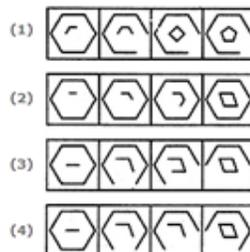


Solution : Option (1)

In the given Figure the rule is satisfy in option (1) the figure is getting more and more open, and in other it doesn't follows.

1. Choose the set of figures which follows the given rule.

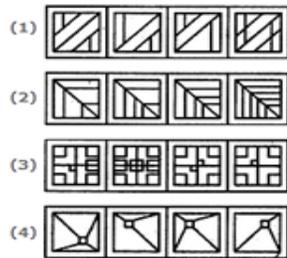
Rule : Closed figures losing their sides and open figures gaining their sides.



Solution : Option : (C) 3

2. Choose the set of figures which follows the given rule.

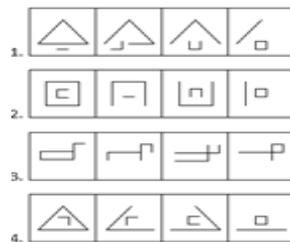
Rule : The series becomes complex as it proceeds.



Solution : Option : (B) 2

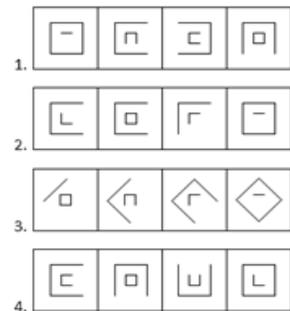
3. Which of the following series of figures follows the given rule?

Rule : Closed figure becomes more and more open, and the open figure becomes more and more closed.



Solution : Option (A)

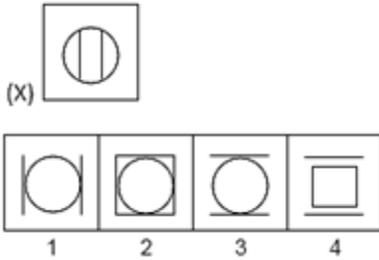
4. Rule: Open figure becomes more and more closed, and the closed figure becomes more and more open.



Solution:-option(C)

5. If the given rule is applied to figure X, which of the following figures (1, 2, 3, 4, 5) would be the right answer figure?

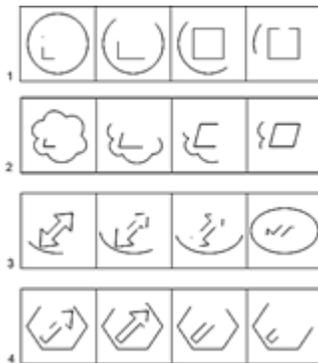
Rule : The curves turn into straight lines and the straight lines turn into curves.



Solution : Option (B)

6. Which of the following series follows the given rule?

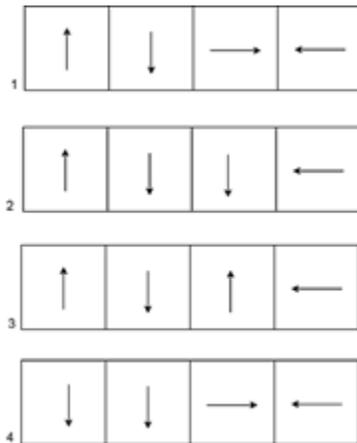
Rule : The outer shape disappears gradually, whereas the inner shape appears slowly as the series moves one step forward towards the right side.



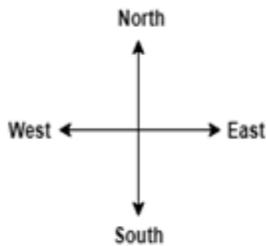
Solution : Option (B) Only in the second series, the outer shape disappears gradually, and the inner shape appears gradually as we move one step forward towards the right side. The third series follows the reverse order; the outer shape appears gradually, and inner shape disappears gradually. The first and fourth series also do not follow the given rule. So, the answer is option B.

7. Which of the following series of arrows follows the given rule?

Rule : The arrows of the given series can be combined without changing their direction to form a meaningful sequence.

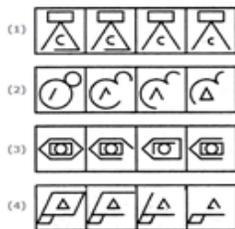


Solution : Option (A)



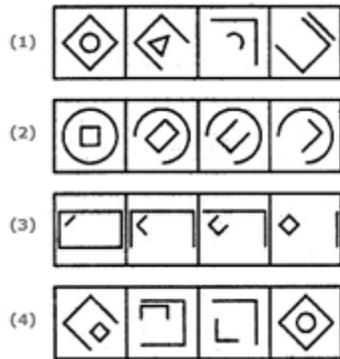
This image indicates the four cardinal directions, which are generally denoted by their initials N, E, S, and W. The arrows of any other series can't be combined, without changing their directions, into any meaningful information.

8. Among the following options which closed figure will become more and more open and which figure that is open will be gradually closed.



Solution : Option (2)

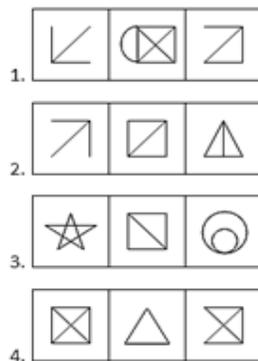
9. Out of the following figures, which figure is closed initially and will be opened gradually and which open figure will be closed?



Solution : Option (C)

10. Which of the following series of figures follows the given rule?

Rule : A single unbroken line can trace any figure in the series without retracting.



Solution : Option (C)

Numeric and Alphabet Series

This chapter covers the following types of questions:

- (I) Coding—Decoding
- (II) Series

Coding—Decoding

Group of letters consists of alphabet and the English alphabet consists of 26 letters.

You have to remember the position of all the letters from left to right and vice-versa.

A B C D E F G H I J K L M

1 2 3 4 5 6 7 8 9 10 11 12 13

N O P Q R S T U V W X Y Z

14 15 16 17 18 19 20 21 22 23 24 25 26.

Trick to remember:

With the help of this trick, you can easily locate the position of letters.

From Left to Right—**Ejoty**

E J O T Y

5 10 15 20 25

From Right to Left—**bglqv**

B G L Q V

25 20 15 10 5

Type 1 : Letter Coding

In these questions, the real letters in a word are replaced by certain other letters according to a specific rule to form the code. The candidate is required to detect the common rule and answer the questions accordingly.

Examples

1. If in a certain language MYSTIFY is coded as NZTUJGZ, how is NEMESIS coded in that language?
 - (a) MDLHRDR
 - (b) OFNFTJT
 - (c) ODNHTDR
 - (d) PGOKUGU.

Solution

Each letter in MYSTIFY is moved one step forward to obtain the corresponding letter of the code.

MYSTIFY

+1 ↓

NZTUJGZ

So, in NEMESIS, N will be coded as O, E as F, M as N and so on. Thus, code becomes OFNFTJT. Hence, answer is (b).

2. If TAP is coded as SZO, then how is FREEZE coded?

- (a) EQDFYG
- (b) ESDFYF
- (c) GQFDYF
- (d) EQDDYD.

Solution

Each letter in the word TAP is moved one step backward to obtain the corresponding letter of the code.

S Z O

-1 ↑

T A P

Thus, in freeze, F will be coded as E, R as Q, E as D and Z as Y. So the code becomes EQDDYD.

Hence, the answer is (d).

3. In a certain code SIKKIM is written as THLJLL. How is TRAINING written in that code?

- (a) SQBHOHOH
- (b) UQBHOHOF
- (c) UQBJOHHO
- (d) UQBJOHOH.

Solution

The letters in the word SIKKIM are moved alternately one step forward and one step backward to obtain the letters of the code.

-1

H -1 J -1 L

↑ ↑ ↑

S I K K I M

+1 ↓ -1 ↓ -1 ↓

T L J

In TRAINING, T will be coded as U, R as Q, A as B, I as H and so on. Thus, the code becomes UQBHOHOF.

Hence, answer is (b)

4. In a certain code, MENTION is written as LNEITNO. How is PATTERN written in that code?
- (a) APTTREM
 - (b) PTAETNR
 - (c) OTAETNR
 - (d) OTAETRN.

Solution

To obtain the code, the first letter of the word MENTION is removed one step backward and the remaining letters are reversed in order, taking two at a time,

M E N T I O N

-1↓

L

Thus, PATTERN becomes OTAETNR.

Hence, answer is (c).

5. In a certain code FORGE is written as FPTJI. How is CULPRIT written in that code?
- (a) CSJNPGR
 - (b) CVMQSTU
 - (c) CVNSVNZ
 - (d) CXOSULN.

Solution

The first letter in FORGE remains as it is and the second, third, fourth and fifth letters are respectively moved one, two, three and four steps forward to obtain the corresponding letters of the code.

Thus, the code for CULPRIT becomes CVNSVNZ.

Hence, answer is (c).

Sample Questions

Exercise 1

Likewise, HEARTEN would be coded as BFIQOFU.

1. In a certain code, TRIPPLE is written as SQHOOKD. How is DISPOSE written in that code?
 - (a) CPNCBX
 - (b) CPNCBZ
 - (c) CPOCBZ
 - (d) None of these.
2. If in a certain code, COULD is written as BNTKC and MARGIN is written as LZQFHM, how will MOULDING be written in that code?
 - (a) CHMFINTK
 - (b) LNKTCHEMF
 - (c) LNTKCHEMF
 - (d) NITKHCMF.
3. In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code?
 - (a) QDFHS
 - (b) SDFHS
 - (c) SHFDQ
 - (d) UJHFS.
4. If VICTORY is coded as YLFWRUB, how can SUCCESS be coded?
 - (a) VXEEIVV
 - (b) VXFFHVV
 - (c) VYEEHVV
 - (d) VYEFIVV.

5. In a certain code TOGETHER is written as RQEGRJCT. In the same code PAROLE will be written as
 - (a) NCPQJG
 - (b) NCQPJG
 - (c) RCPQJK
 - (d) RCTQNG.
6. If in a certain code COUNSEL is written as BITIRAK, how will GUIDANCE be written in that code?
 - (a) EOHYZKBB
 - (b) FOHYZJBB
 - (c) FPHZZKAB
 - (d) HOHYBJBA.
7. In a code, CORNER is written as GSVRIV. How will CENTRAL be written in that code?
 - (a) DFOUSBM
 - (b) GIRXVEP
 - (c) GJRYVEP
 - (d) GNFJKER.
8. If BEAUTY is coded as "DHEZZF", then how will "FLOWER" be written in that language?
 - (a) HSOBYK
 - (b) HBOSKY
 - (c) HOSEKY
 - (d) SBKYOH.
9. According to a code CERTAIN is written as XVIGZRM, how will MUNDANE be coded?
 - (a) MFHXZMV
 - (b) NFMWZMV
 - (c) NFMWZMX
 - (d) VMZWWMFN.
10. If CIGARETTE is coded as GICERAETT, then DIRECTION will be coded as
 - (a) RIDTCENOI
 - (b) NORTECDII
 - (c) NOIETCRID
 - (d) IRDCTIONE.

11. In a certain code language the word DIPLOMA is written as FERHQIC. How will the word FOREIGN be written in that code?
- (a) HJTAKCP
 - (b) HKTALCP
 - (c) HKTAKCP
 - (d) HKTAKBP.
12. In a certain code language CREATIVE is written as BDSBFUJS. How is TRIANGLE written in that code?
- (a) BSHSFHKM
 - (b) BHSSMHFF
 - (c) BSSHFMKH
 - (d) BHSSFKHM
13. In a certain code language POETRY is written as QONDSQX and OVER is written as PNUDQ. How is MORE written in that code?
- (a) NNNQD
 - (b) NLPQD
 - (c) NLNQD
 - (d) LNNQD.
14. In certain code ELECTION is written as GLGCVIQN, then VOTER will be coded as
- (a) XOVET
 - (b) VOXET
 - (c) WPUFU
 - (d) VQTGR.
15. If BEAUTY is coded as "DHEZZF", then how will "FLOWER" be written in that language?
- (a) HSOBYK
 - (b) HBOSKY
 - (c) HOSBKY
 - (d) SBKYOH

Type 2 : Number Coding

In these questions, either numerical code values are assigned to a word or alphabetical code letters are assigned to a number. The candidate is required to analyse the code as per the directions.

Examples:

1. If PAINT is coded as 74128 and EXCEL is coded as 93596, then how would you code ACCEPT?
(a) 455978
(b) 547978
(c) 554978
(d) 735961.

Solution

In the given code, the letters are coded as follows.

P A I N T E X C L

7 4 1 2 8 9 3 5 6

So in ACCEPT, A is coded as 4, C as 5, E as 9 and so on.

Therefore answer is (a).

2. If D = 4 and COVER = 63, then BASIS = ?
(a) 49
(b) 50
(c) 54
(d) 55

Sample Questions

Exercise 2

1. If in a certain code, BEAUTIFUL is coded as 573041208, BUTTER as 504479, how is FUTURE coded in that code?
 - (a) 201497
 - (b) 204097
 - (c) 704092
 - (d) 204079.
2. In a certain code, 5 is coded as Z, 7 as E, 2 as S, 9 as T, and 4 as W. How is 977452 coded in that code?
 - (a) SEEWZT
 - (b) TEEWZS
 - (c) ZEEWST
 - (d) WEEZST.
3. In a certain language, if A is coded as 1, B is coded as 2, and so on, how is STAR coded in that language?
 - (a) 1810291
 - (b) 9120118
 - (c) 1920118
 - (d) 1920811.
4. In a certain code, if SCHOOL is coded as 123445, TEAM as 6078, how is HOTEL coded in that code?
 - (a) 34605
 - (b) 43605
 - (c) 60734
 - (d) 34785.

5. In a certain code, if BOX is coded as 213, BITTER as 207749, how is BOXER coded in that code?
 - (a) 21359
 - (b) 23159
 - (c) 23149
 - (d) 21349.
6. If ROSE is coded as 6821, CHAIR is coded as 73456 and PREACH is coded as 961473, what will be the code for SEARCH?
 - (a) 246173
 - (b) 214673
 - (c) 214763
 - (d) 216473.
7. In a certain code language, QUEUE is written as Q 22, and CHURCH is written as 1UR 1. Which of the following would be most appropriate code for BANANA in that language?
 - (a) B5A5
 - (b) 5N5A
 - (c) B55A
 - (d) BA5A5A.
8. If PERFECT is coded as "116" then how will COMPACT be written in that code?
 - (a) 85
 - (b) 111
 - (c) 98
 - (d) 118.
9. If ACNE is coded as 3, 7, 29, 11, then BOIL will be coded as
 - (a) 5, 31, 21, 25
 - (b) 5, 31, 19, 25
 - (c) 5, 29, 19, 25
 - (d) 5, 29, 19, 27.
10. If FLARE is coded as 21, 15, 26, 9, 22, how will BREIF be coded in the same language?
 - (a) 25, 9, 22, 21, 18
 - (b) 5, 37, 11, 19, 13
 - (c) 13, 19, 11, 37, 5
 - (d) 25, 9, 22, 18, 21.

Series

This deals with the questions in which series of numbers or alphabetical letters are given, which are generally called terms of the series. These terms follow a certain pattern throughout.

The candidate is required to recognize this pattern and either complete the given series with the most suitable alternative or find the wrong term in the series.

Type 1: Number Series

Important Patterns:

- (1) $a, a \pm d, a \pm 2d, a \pm 3d, \dots$
- (2) a, ak, ak^2, ak^3, \dots
- (3) $a, a/k, a/k^2, a/k^3, \dots$
- (4) $(a)^n, (a \pm d)^n, (a \pm 2d)^n, (a \pm 3d)^n, \dots$
- (5) $an + k, (a + k)^n + k, [(an + k)]^n + k, \dots$
- (6) $an + k, (a + 1)^n + k, (a + 2)^n + k, \dots$
- (7) $1n, 1n + 2n, 1n + 2n + 3n, 1n + 2n + 3n + 4n, \dots$
- (8) Series of prime numbers i.e. 2, 3, 5, 7, 11, 13, 17, 19, 23, etc.

Example

1. Which number would replace question mark in the series 7, 12, 19, ?, 39.
 - (a) 29
 - (b) 28
 - (c) 26
 - (d) 24

Solution

The given sequence follows the pattern:

$$+ 5, + 7, + 9, \dots \text{ i.e. } 7 + 5 = 12$$

$$12 + 7 = 19, \dots$$

$$\therefore \text{Missing number} = 19 + 9 = 28$$

Hence, answer is (b).

2. Find out the missing number in the following sequence:

1, 3, 3, 6, 7, 9, ?, 12, 21

(a) 10

(b) 11

(c) 12

(d) 13.

Solution:

The given sequence is a combination of two series

I. 1, 3, 7, ?, 21 and

II. 3, 6, 9, 12

The pattern followed in I is + 2, + 4,.....; and the pattern followed in II is + 3.

Thus, missing number = $7 + 6 = 13$.

Hence, the answer is (d).

Sample Questions

Exercise 3

Directions: (Qs. 1-22) Find the missing number in the series.

1. 3, 4, 12, 48,, 27648
 - (a) 488
 - (b) 576
 - (c) 492
 - (d) 528.
2. 19, 2, 38, 3, 114, 4,,
 - (a) 228
 - (b) 256
 - (c) 352
 - (d) 456.
3. 95, 115.5, 138,, 189
 - (a) 154.5
 - (b) 162.5
 - (c) 164.5
 - (d) 166.5.
4. 11, 22, 35, 50,, 86
 - (a) 80
 - (b) 67
 - (c) 68
 - (d) 70.

5. 1, 4, 9, 16, 25,
 - (a) 35
 - (b) 36
 - (c) 48
 - (d) 49.
6. 20, 19, 17,, 10, 5
 - (a) 12
 - (b) 13
 - (c) 14
 - (d) 15.
7. 2, 3, 5, 7, 11,, 17
 - (a) 12
 - (b) 13
 - (c) 14
 - (d) 15.
8. 1, 5, 15, 19, 57,
 - (a) 65
 - (b) 59
 - (c) 63
 - (d) 61.
9. 2, 5, 9, 19, 37,
 - (a) 76
 - (b) 75
 - (c) 74
 - (d) 72.
10. 345, 534, 264, 804,
 - (a) 552
 - (b) 662
 - (c) 442
 - (d) 384.

11. 363, 275, 484, 891,
- (a) 393
 - (b) 582
 - (c) 211
 - (d) 286.
12. 5, 17, 37, 65,, 145
- (a) 95
 - (b) 97
 - (c) 99
 - (d) 101.
13. 9, 11, 20, 31,, 82
- (a) 41
 - (b) 51
 - (c) 60
 - (d) 71.
14. 3, 10, 101,
- (a) 10101
 - (b) 10201
 - (c) 10202
 - (d) 11012.
15. 1, 2, 8, 24,, 864
- (a) 96
 - (b) 120
 - (c) 206
 - (d) 21

Answers**Exercise 1**

1. (d); TRIPPLE

SQHOOKD

-1 -1 -1 -1 -1 -1 -1

Each letter in TRIPPLE is moved one step backward to obtain the corresponding letter of the code.

DISPOSE

-1 -1 -1 -1 -1 -1 -1

CHRONRD

Similarly moving each letter of DISPOSE one step backward, the coded word is CHRONRD, which is not among the options. Hence (d)

2. (c); COULDMARGIN

BNTKCLZQFHM

-1 -1 -1 -1 -1 -1 -1 -1 -1 -1

Moving letters of MOULDING one step backward, we get LNTKCHMF. Hence (c).

3. (a); Each letter of word MONKEY is written in reverse order i.e. YEKNOM and then each letter is moved one step backward to get XDJMNL. Writing TIGER in reverse order, we get REGIT. Moving one step backward we get QDFHS.
4. (b); Each letter in the word VICTORY is moved two steps forward i.e. V becomes Y, I becomes L, C becomes F and so on. Similarly, Success becomes VXFFHV.

5. (a); TOGETHER

RQEGRJCT

-2 +2 -2 +2 -2 +2 -2 +2

Each letter in TOGETHER is alternatively moved two steps backward and two steps forward. In the same code PAROLE will be written as NCPQJG.

6. (b); The word COUNSEL is divided into two separate parts. Each alternate letter starting with C is moved one step backward and remaining letters are respectively moved five, four and three steps backward.

Thus

CB, OI, UT, NI, SR, EA and CK

In the same manner GF, UO, IH and so on.

7. (b); Each letter in the word CORNER is moved four steps forward to get GSVRIV. Moving each letter of CENTRAL four steps forward, we get GIRXVEP.
8. (c); Each letter in JOSEPH is moved four steps backward. Similarly GEORGE is coded as CAKNCA.
9. (b); In the English alphabet, C is third letter from the left and X is the third letter from the right. Similarly E and V are the fifth letters from left and right respectively.
10. (a); The word CIGARETTE is divided into 3 groups of 3 letters each.

CIG – ARE – TTE. In each group, the first and third letters are interchanged. So the code becomes GICERAETT. Similarly working for DIR – ECT – ION, we get RIDTCENOI. Hence (a).

11. (c); The letters in DIPLOMA are alternatively moved two steps forward and four steps backward.

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12. (d); Step 1: The word Creative is divided into two parts CREA and Tive.

Step 2: In each sub-word, the first letter is replaced with fourth and second with third. So, we get AERC and EVIT.

Steps 3: Each letter is now moved one step forward and one step backward to get BDSBFUJS. Similarly working for TRIANGLE we get BHSSFKHM.

13. (c); In both the words POETRY and OVER, each letter is moved one step backward to get ONDSQX and NUDQ respectively. Then the first letter of the original word is moved one step forward and added on the left to get QONDSQX and PNUDQ.
14. (a); The letters in the word ELECTION are alternatively moved two steps forward and left unchanged. Thus E G, L remains unchanged, E G, C C, T V, I I, O Q, N N.

In VOTER.

V X, O O, T V, E E, R T.

15. (c); BEAUTY

+2 +3 +4 +5 +6 +7

DHEZZF

Similarly

FLOWER

+2 +3 +4 +5 +6 +7

HOSBKY

Exercise 2

1. (b); As given the letter are coded as:

BEAUTIFUL

5 7 3 0 4 1 2 0 8

So in FUTURE, F is coded as 2, U as 0, T as 4, R as 9 and E as 7. Therefore, FUTURE is coded as 204097.

Hence, the answer is (b).

As $F = 2$, (c) is eliminated. Again as the second digit of the other three choices is same, then check for the third, fourth and fifth digit which gives (b) as the answer.

2. (b); 977452 is coded as TEEWZS. Hence, the answer is (b).

3. (c); S 19 T 20 A 1 R 18. Hence, code is 1920118.

4. (a); SCHOOLTEAM

1 2 3 4 4 5 6 0 7 8

Hence HOTEL 34605

5. (d); BOXBITTER

2 1 3 2 0 7 7 4 9

Hence BOXER 21349

6. (b); From the coding pattern, it is clear that codes for S, E, A, R, C and H are 2, 1, 4, 6, 7 and 3, respectively as letters of the word are directly substituted.

7. (c); Similar pairs of letters have been given the same numeric in each word. As a result pair UE in word QUEUE has been coded 2, pair CH has been coded 1 and likewise the pair An has been coded 5. Hence, the word BANANA would be coded as B55A.

8. (d); In the given code $A = 26$, $B = 25$, $C = 24$ and so on.

So PERFECT $11 + 22 + 9 + 21 + 22 + 24 + 7 = 116$

Similarly

COMPACT $24 + 12 + 14 + 11 + 26 + 24 + 7 = 118$

i.e., opposite value concept.

9. (b); $(2n+1)$ is the coding pattern used, where n = position of the alphabet in the alphabetical order.

10. (d); Numbers in the coding show the positions of the respective letters from the end of the alphabetical series.

Exercise 3

1. (b); $3 \times 4 = 12$
 $4 \times 12 = 48$
Similarly $12 \times 48 = 576$
Also $576 \times 48 = 27648$
2. (d); The sequence is a combination of two series:
I. 19, 38, 114, and II. 2, 3, 4
The pattern followed in I is $\times 2, \times 3, \dots$
 \therefore The missing no. = $114 \times 4 = 456$
3. (b); The pattern is $+ 20.5, + 22.5, \dots$
 \therefore Missing term = $138 + 24.5 = 162.5$
4. (b); The given sequence follows the pattern:
 $+ 11, + 13, + 15 \dots$ i.e. $11 + 11 = 22, 22 + 13 = 35$
 $35 + 15 = 50$
 \therefore Missing number = $50 + 17 = 67$
Hence, the answer is (b).
5. (b); The numbers are 12, 22, 32, 42, 52.
 \therefore Missing number = $62 = 36$.
6. (c); The pattern is $-1, -2, \dots$
 \therefore Missing number = $17 - 3 = 14$.
7. (b); Clearly, the given series consists of prime numbers starting from 2. The prime number after 11 is 13. So, 13 is the missing number.
8. (d); The pattern is
 $1 + 4 = 5$
 $5 \times 3 = 15$
 $15 + 4 = 19$
 $19 \times 3 = 57$
Hence the next number in the series should be $57 + 4 = 61$.

- 9 (b); The pattern is $x^2+1, x^2-1, x^2+1, x^2-1, \dots$
 \therefore Missing number = $37 \times 2 + 1 = 75$.
10. (a); $3 + 4 + 5 = 12$
 $5 + 3 + 4 = 12$
 $2 + 6 + 4 = 12$
 $8 + 0 + 4 = 12$
 So, $5 + 5 + 2 = 12$.
11. (d); Adding of two corner numbers is equal to the middle number:
 $3 \ 6 \ 3$
 $+$
 $2 \ 7 \ 5$, and so on.
 $+$
 Similarly, $2 \ 8 \ 6$
 $+$
12. (d); The numbers are $2^2 + 1, 4^2 + 1, 6^2 + 1, 8^2 + 1, \dots, 12^2 + 1$.
 \therefore Missing number = $10^2 + 1 = 101$.
13. (b); Each term in the series is the sum of the preceding two terms.
 \therefore Missing number = $20 + 31 = 51$.
14. (c); Each term in the series is obtained by adding 1 to the square of the preceding term.
 So, missing term
 $= (101)^2 + 1 = 10202$
15. (d); The series is $x^2; x^2 \times 2; x^3; x^3 \times 2; x^4; x^4 \times 2$
 So correct answer would be $(24 \times 3^2) = 216$
