## Exanva mooel resienilal Sthiol



HOSTEL WARDEN

## MALE \& FEMALE

## EXAM

## MAIN FEATURES

- Based on Latest Syllabus
- Detailed Concepts
- Chapter wise MCQs
- POCSO Acts Compiled from Authentic Source
- Written \& Compiled by Expert Teachers
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## CONTENTS

## PART - I <br> GENERAL AWARENESS

1. History ..... G-05
2. Geography ..... G-44
3. Polity. ..... G-72
4. Economics ..... G-78
5. Science ..... G-83
6. Traditional General Knowledge ..... G-87
PART - II
REASONING \& NUMERIC ABILITY
7. Puzzles ..... R-02
8. Seating Arrangement ..... R-06
9. Data Sufficiency ..... R-12
10. Statement and Conclusion ..... R-17
11. Inequality ..... R-28
12. Blood Relations ..... R-33
13. Sequences and Series ..... R-40
14. Direction Test ..... R-44
15. Assertion and Reason ..... R-54
16. Venn-Diagrams ..... R-62
17. Analogy ..... R-71
18. Similarities and Differences ..... R-86
19. Coding-Decoding ..... R-89
20. Numeric Ability. ..... R-95
Part - III
KNOWLEDGE OF ICT
21. Fundamentals of Computer System, and internet ..... C-02
PART - IV
KNOWLEDGE OF POCSO AND OTHER CHILDREN SAFETY RELATED ACTS OF GOVT. OF INDIA
22. The Prohibition of Child Marriage Act, 2006 ..... P-02
23. The Protection of Children from Sexual offences Act (2012) and Rules (2020) ..... P-05
24. The Child Labour (Prohibition And Regulation) Act, 1986 ..... P-20
25. The Immoral Traffic Prevention Amendment Bill, 2006 ..... P-25
26. The Commission For Protection of Child Rights Act, 2005 ..... P-27
27. The Right of Children to Free and Compulsory Education Act 2009 (RTE) ..... P-33
28. The Criminal Law Amendment Act, 2013 ..... P-41
29. The National Policy For Children, 2013 ..... P-50
30. National Charter For Children, 2003 ..... P-54
31. The Child Mortality Rate ..... P-57
32. Gender / Sex Ratio ..... P-58
PART - V
ADMINISTRATIVE APTITUDE
33. Regulatory Guidelines For Hostel of Educational Institutions For Children By NCPCR. ..... A-02
34. Handling of Large Number of Students, record Management of Children ..... A-13
PART - VI
GENERAL ENGLISH
35. Verb ..... E-02
36. Tenses ..... E-05
37. Voice ..... E-12
38. Subject-Verb Agreement or Syntax ..... E-16
39. Articles ..... E-21
40. Comprehension/Unseen Passage ..... E-25
41. Fill in the Blanks ..... E-30
42. Adverb ..... E-31
43. Error Correction ..... E-36
44. Sentence Re-arrangement ..... E-38
45. Commonly Mis-spelt Words ..... E-41
46. One Word Substitution ..... E-45
47. Phrasal Verbs ..... E-62
48. Synonyms ..... E-64
49. Antonyms ..... E-65
50. Nouns ..... E-66
51. Idioms and Phrases ..... E-74
PART - VII
GENERAL HINDI
52. संधि ..... H-02
53. समास ..... H-09
54. विलोम शब्द ..... H-12
55. पर्यायवाची शब्द ..... H-24
56. सामान्य अशुद्धियाँ ..... H-29
57. वाक्यांशों के लिए एक शब्द ..... H-32
58. मुहावरें तथा लोकोक्तियाँ ..... H-36
59. अपठित गद्यांश ..... H-42


## History

## INDUS VALLEY CIVILIZATION IN INDIA

- The Indus Valley Civilization was an ancient civilization thriving along the Indus River \& the Ghaggar-Hakra River in what is now Pakistan \& northwestern India.
- According to radio-carbon dating, it spread from the year 2500-1750 BC.
- Dayaram Sahni first discovered Harappa (on Ravi) in 1921. R.D. Banerjee discovered Mohenjodaro or 'Mound of the Dead' (on Indus) in 1922. Sir John Marshal played a crucial role in both these.
- Harappan Civilization forms part of the proto history of India \& belongs to the Bronze Age.
- Copper, bronze, silver, gold were known but not iron.
- The Indus-Valley people were well-acquainted with the use both of cotton \& wool.


## Domestication of animals:

- Stock breeding was important in Indus culture. Besides sheep \& goats, dogs, humped cattle, buffalo \& elephant was certainly domesticated. The camel was rare \& horse was not known.


## Town Planning:

- Elaborate town-planning. It followed the Grid System. Roads were well cut, dividing the town into large rectangular or square blocks.
- Used burnt bricks of good quality as the building material. Elsewhere in the contemporary world, mudbricks were used.
- In Mohenjodaro, a big public bath (Great Bath) measuring 12 m by $7 \mathrm{~m} \& 2.4 \mathrm{~m}$ deep, has been found. Steps led from either end to the surface, with changing rooms alongside. It was probably used for ritual bathing.
- Underground Drainage System.


## Major Cities \& Their Features:

- Mohenjodaro (Sind) is situated on the right bank of the Indus. Great Granary, Great bath, Assembly halls, Shell strips, Pashupati Mahadev/Proto Shiva(Seal), Bronze image of Dancing girl, Steatite image of Bearded man, Clay figure of Mother goddess found in Mohenjodaro.
- Chanhudaro lies on the left bank of the Indus about 130 km south of Mohenjodaro. City without a citadel, Inkpot, Imprints of dog's paw on Brick, Terracotta model of a bullock cart, Bronze toy cart are important archeological findings of Chanhudaro.
- Kalibangan (Rajasthan) was on the banks of the river Ghaggar which dried up centuries ago. Ploughed field surface, 7 Fire alters, decorated bricks, wheels of a toy
cart, Mesopotamian cylindrical seal are found in Kalibangan.
- Lothal is at the head of the Gulf of Cambay. Important excavations are Dockyard, Fire alters, Terracotta figurine of Horses, Double Burial, Terracotta Model of a ship, Dying vat, Persian/Iranian seal, Painted Jar(Bird And Fox).
- Banawali (Haryana) was situated on the banks of the now extinct Saraswati River. Important features of Lothal are lack of grid pattern town planning, lack of systematic drainage pattern, Toy Plough, Clay figures of Mother Goddess.
- Surkotoda (Gujarat) is at the head of the Rann of Kutch. Important archeological excavations are Bones of Horse, Oval Graves and Pot Burials.
- Dholavira (Gujarat) excavated is in the Kutch district. Bronze Images (Charioteer with Chariot, ox, elephant and rhinoceros) are important excavations.


## Trade \& Commerce in Indus Valley Civilization:

- There was no metallic money in circulation \& trade was carried through Barter System.
- Weights \& measures of accuracy existed in Harappan culture (found at Lothal). The weights were made of limestone, steatite, etc. \& were generally cubical in shape.
- 16 was the unit of measurement $(16,64,160,320)$.
- A dockyard has been discovered at Lothal. Rangpur, Somnath \& Balakot functioned as seaports. Sutkagendor \& Sutkakoh functioned as outlets.


## Indus Valley Civilization Script:

- The script is not alphabetical but pictographic (about 600 undeciphered pictographs).
- The script has not been deciphered so far, but overlaps of letters show that it was written from right to left in the first line \& left to right in the second line. This style is called 'Boustrophedon'.


## VEDIC CULTURE ( 1500 BC-600 BC)

The Vedic Civilization was the culture and traditions of the society prevalent during the Vedic age (1500-600 BCE).

## Vedic Literature:

The term Veda means "superior knowledge" in Sanskrit. Four major Vedas constitute the vedic literature. They are Rig Veda, Yajur Veda, Sam Veda, and Atharva Veda.
Rig Veda - Earliest veda. Has 1028 hymns in praise Gods. Yajur Veda - Has details of rules to be followed during sacrifices
ama Veda - Has a collection of songs. The origins of Indian music are traced to it.

Third Anglo-Mysore War (1790-92 A.D) - Fought between the English \& Tipu Sultan (Son of Hyder Ali). Tipu Sultan was compelled to sign the Treaty of Seringapatam.

Fourth Anglo-Mysore War (1799 A.D) - The British forces (Under Arthur Wellesley) defeated \& killed Tipu Sultan.

Second Anglo-Maratha War (1803-1805 A.D) - Fought between English \& the Marathas. British defeated Marathas \& annexed Tanjore, Surat \& Carnatic.

Third Anglo-Maratha War (1817-1818 A.D)- Fought between English (Governor General Hastings) \& the Marathas. British defeated Marathas.Formal end of the Maratha empire.

First Battle of Tarain (1191)-This battle was fought at Tarain near Thaneswar. Prithviraj of Chauhan Dynasty defeated the Mohammad of Ghori.

Second Battle of Tarain(1192)-It was fought at same Tarain battlefield as in the first Tarain battle. This was fought by Mohammad Ghori against Prithvi Raj Chauhan. This time Prithvi Raj was defeated.

Battle of Khanwa(17 March 1527)--Rajputs under Rana of Mewar Rana Sanga, were defeated by Babur of Farghana. Rana Sanga was brutally wounded in the battlefield.
Battle of Chausa (7 June 1539)--Sher Shah defeated the Mughals, but Humayun, the king escaped by crossing over the river.

Battle of Kanauj (17 May 1540)--Sher Shah won against Humayun. Occupied only Agra city.

Battle of Panipat(5 November 1556)--Hem Chandra Vikramaditya (Hemu) was defeated by Mughals under Akbar.

Battle of Haldighati(1576)--This was started between Akbar \& Rana of Mewar Pratap. Mughals won. But Rana did not accept Mughal sovereignty.

First Carnatic War(1745-48)--This war was fought by British \& French armies. French occupied Madras, later returned it to British.

Second Carnatic War(1749-54)--French army under the of Duplex fought with British \& British won. In 1755 they made a provisional treaty.

Third Carnatic War(1756-63)--In 1758 French occupied Fort Saint David. But defeated at Wandiwash (1760). Britishers won.

Battle of Plassey (June-1757)--British Army under the command of Robert Clive fought with Bengal Nawab Siraz-ud-daula \& British won \& Mir Jafar was made Nawab. Siraz-ud-daula was hanged.

Battle of Buxar(1764)--British army under the command of Major Munro defeated the combined army of Mir Kasim nawab of Bengal, Shuja-ud-daulah nawab of Awadh, Shah Alam, Mughal emperor.

First Anglo-Burmese War (1824-1826) Fought between English East India Company \& Burma.Ended in a British East India Company victory.

First Anglo-Afghan war (1839-42 A.D)- British defeated Afghan ruler Dost Mohammad.

Battle of Chillianwala (1849 A.D) - English East India Company under Lord Hugh Gough defeated the Sikhs (under Sher Singh).

## Exercise

1. The Arthashastra was written by
(a) Chanakya
(b) Kalidasa
(c) Harsha Vardhana
(d) Vatsyayana
2. Who wrote the Panchatantra?
(a) Vyasa
(b) Vishnu Sharma
(c) Valmiki
(d) Yajnavalkya
3. Alexander defeated $\qquad$ in the battle of Hydaspes.
(a) Porus
(b) Chandragupta Maurya
(c) Herakles
(d) Eudemus
4. Ramcharitmanas is an epic poem written in which language?
(a) Santali
(b) Munda
(c) Awadhi
(d) Sanskrit
5. From which monument, Gautama Buddha propagated his divine knowledge of Buddhism to the world?
(a) Humayun's Tomb
(b) Sarnath Stupa
(c) Qutub Minar
(d) Red Fort Complex
6. Alexander the Great was born in $\qquad$ -
(a) 356 BC
(b) 189 BC
(c) 189 AD
(d) 356 AD
7. Oil paint was first used for Buddhist paintings by Indian and Chinese painters in western $\qquad$ sometime between the fifth and tenth centuries.
(a) Iraq
(b) Afghanistan
(c) Pakistan
(d) India
8. Kalinga War was fought in the year $\qquad$
(a) 1604 BC
(b) 261 BC
(c) 731 AD
(d) 1113 AD
9. Chandragupta Maurya was born in $\qquad$ .
(a) 340 BC
(b) 563 BC
(c) 189 BC
(d) 99 BC
10. Ashoka was an emperor of the $\qquad$ Dynasty.
(a) Mughal
(b) Chola
(c) Maurya
(d) Gupta
11. Who built the Group of Monuments at Mahabalipuram?
(a) Chola Kings
(b) Pallava Kings
(c) Chera Kings
(d) Chalukya Kings
12. Bimbisara was the king of which dynasty?
(a) Haryanka
(b) Maurya
(c) Shunga
(d) Nanda
13. Ajanta Caves in Maharashtra have rock-cut cave monuments of which religion?
(a) Sikhism
(b) Buddhism
(c) Christianity
(d) Hinduism
14. Whose reign in Indian History is called the Golden Age of India?
(a) Mughal Empire
(b) Maratha Empire
(c) Gupta Empire
(d) Maurya Empire
15. The Buddha has been eulogized as an ocean of wisdom and compassion in
(a) Buddha-Charita
(b) Jataka tales
(c) Amarakosha
(d) The Light of Aisa
16. Tripitakas are related to
(a) Buddhism
(b) Jainism
(c) Hinduism
(d) Zoroastrians
17. The Digambaras and Shvetambaras differ primarily with regard to their
(a) Choice of god
(b) Totally different philosphy
(c) Dress
(d) Rituals
18. When did the first Huna invasion take place?
(a) 358 AD
(b) 458 AD
(c) 558 AD
(d) 658 AD
19. Chandragupta (322-298 BC) was the ruler of which dynasty?
(a) Maurya
(b) Mewar
(c) Mughal
(d) Peshwas
20. Ajatashatru was the son of
(a) Brahmadatta
(b) Bindusara
(c) Bimbisara
(d) Chetaka
21. Ashoka converted to which religion after the Kalinga war?
(a) Jainism
(b) Buddhism
(c) Christianity
(d) Judaism
22. Chandragupta Maurya was an ardent follower of
(a) Sikhism
(b) Jainism
(c) Buddhism
(d) Jewism
23. Chanakya was the chief advisor of $\qquad$ .
(a) Babur
(b) Chandragupta Maurya
(c) Akbar
(d) Kautilya
24. What is the name of the preaching mudra or gesture, in which the Buddha is depicted delivering his first sermon, in the Gandhara Sculptures?
(a) Abhaya
(b) Dharmachakra
(c) Dhyana
(d) Bhumisparsha
25. Chandragupta Maurya was born in Pataliputra, which is now in $\qquad$ -.
(a) Chattisgarh
(b) Madhya Pradesh
(c) Uttar Pradesh
(d) Bihar
26. Ghatotkacha (who ruled in the years 290-305 B.C.) was a king from which dynasty?
(a) Gupta Dynasty
(b) Kanva Dynasty
(c) Shunga Dynasty
(d) Maurya Dynasty
27. Indus Valley Civilization was a
age civilization.
(a) Silver
(b) Tin
(c) Gold
(d) Bronze
28. Which among the following games was very popular in ancient India?
(a) Chess
(b) Cricket
(c) Hockey
(d) Football
29. Ashoka The Great (273-232 B.C.) was the ruler of which dynasty?
(a) Mewar
(b) Mughal
(c) Maurya
(d) Peshwas
30. The first Buddhist Council was held at $\qquad$ .
(a) Kashmir
(b) Rajagriha
(c) Pataliputra
(d) Vaisali
31. Who was the founder of the Satvahana Empire?
(a) Kanha
(b) Simuka
(c) Hala
(d) Gautamiputra
32. The people of the Indus valley civilisation worshipped
(a) Vishnu
(b) Pashupati
(c) Indra
(d) Brahma
33. The Upanishads are the $\qquad$ .
(a) Great Epics
(b) Story Books
(c) Source of Hindu Philosophy
(d) Law Books
34. Gandhara Art is the combination of -
(a) Indo - Roman
(b) Indo - Greek
(c) Indo - Islamic
(d) Indo - China
35. The earliest reference to sati custom is made in which of the following inscriptions?
(a) Allahabad Pillar inscription
(b) Eran inscription of Bhanugupta
(c) Aihole inscription of Pulkesin II
(d) Bhitan inscription of Skandgupta
36. Which of the following is not true about Ajanta Caves?
(a) They are in Maharashtra
(b) They are decorated with Buddhist Art
(c) They depict the techniques used in Ancient India
(d) They do not contain paintings of flora and fauna
37. Gandhiji's 'Satyagraha' meant an attachment to the following two elements -
(a) Knowledge and religion
(b) Truth and non-violence
(c) Truth and chastity
(d) Love of motherland and hate for colonial masters

## Solutions

1. (a); The Arthashastra is the title of a handbook for running an empire, written by Kautilya (also known as Chanakya, c. 350-275 BCE) an Indian statesman and philosopher, chief advisor and Prime Minister of the Indian Emperor Chandragupta, the first ruler of the Mauryan Empire.
2. (b); Vishnu Sharma wrote Panchatantra
3. (a); Alexander defeated Porus in the battle of Hydaspes.
4. (c); Ramcharitmanas is an epic poem wriiten in Awadhi language
5. (b); Gautam Buddha delivered his first sermon to five disciples at Sarnath. Sarnath Stupa monument is built on site where Gautama Buddha propagated his divine knowledge of Buddhism to the world
6. (a); Alexander III of Macedon commonly known as Alexander the Great. He was born in Pella in 356 BC and succeeded his father Philip II to the throne at the age of twenty
7. (b); Oil paint was first used for Buddhist paintings by Indian and Chinese painters in western Afghanistan sometime between the fifth and tenth centuries
8. (b); The Kalinga War (262-261 BCE) was fought between the Maurya Empire under Ashoka and the state of Kalinga, an independent feudal kingdom located on the east coast, in the present-day state of Odisha north of Andhra Pradesh
9. (a); Chandragupta Maurya was born in 340 BC in Pataliputra, in modern-day Bihar. His
background is, however, uncertain. Some claim that he was born to a Nanda prince and his maid-servant, Mura, from the Shudra caste, while others state that he belonged to the Moriya tribe of Peacocktamers
10. (c); Ashoka was an Indian emperor of the Maurya Dynasty, who ruled almost all of the Indian subcontinent from c. 268 to 232 BCE
11 (b); Mahabalipuram is the ancient sea port of the famous Pallava kingdom. According to the inscriptions, the monuments of Mahabalipuram was constructed by Pallava kings Mahendravarman I ( 600 to 630 AD), his son Narasimhavarman I (630 to 668 AD) and their descendants.
11. (a); Bimbisara (ruled 544-491 B.C.E.) was a king of the Magadha empire and belonged to Haryanaka dynasty, which ruled until approximately 326 B.C.E. when Alexander the Great invaded India. He ruled an area of what is now Bihar and Bengal with his capital at modern day Rajgir
12. (b); The Ajanta Caves are a series of 29 Buddhist cave temples in Ajanta, India, some of which date from the 2 nd century BC. Encompassing both Theravada and Mahayana Buddhist traditions, the Ajanta caves preserve some of the best masterpieces of Buddhist art in India
13. (c); The Gupta Empire stretched across northern, central and parts of southern India between c. 320 and 550 CE. The time of the Gupta Empire
is referred to as Golden Age of India in science, mathematics, astronomy, religion and philosophy
14. (c); Buddha has been eulogized as an Ocean of Wisdom and Compassion in Amarkosha. The Amarakosha is a thesaurus of Sanskrit written by the ancient Indian scholar Amarasimha
15. (a); The Tripitakas are sacred books for Buddhists
16. (c); Digambara monks do not wear any clothes. Svetambara "white-clad" is a term describing its ascetics practice of wearing white clothes
17. (b); First Huna invasion take place in 458AD
18. (a); Chandragupta Maurya (reign: 322-298 BCE) was the founder of the Maurya Empire in ancient India.
19. (c); Ajatashatru was a king of the Haryanka dynasty of Magadha in North India. He was the son of King Bimbisara and was a contemporary of both Mahavira and Gautama Buddha
20. (b); Ashoka conerted to Buddhism after Kalinga war
21. (b); Chandragupta Maurya was the founder of the Mauryan empire. He succeeded in conquering most of the Indian subcontinent. With his accession to the throne Janism assumed a new phase in the Indian history
22. (b); Chanakya was an Indian teacher, philosopher, economist, jurist and royal advisor. He is traditionally identified as Kauṭilya or Vishnugupta, who authored the ancient Indian political treatise, the Arthashastra

## Geography

## Solar System

Our Sun (a star) and all the planets around it are part of a galaxy known as the Milky Way Galaxy. A galaxy is a large group of stars, gas, and dust bound together by gravity. They come in a variety of shapes and sizes. The Milky Way is a large barred spiral galaxy. The Milky Way is the galaxy that contains our Solar System.
Earth solar system consists of:

- The Sun
- The Planets (8 Planets)
- Dwarf Planets such as Pluto, Ceres, Eris etc. \& countless fragments of left - overs called asteroids, meteors, comets \& satellites of the planets (called small solar system Bodies).


## Some Facts about Solar System

- Biggest Planet
- Smallest Planet
- Nearest Planet to Sun
- Farthest Planet from Sun
- Nearest Planet to Earth
- Brightest Planet
- Brightest star after Sun
- Planet with maximum satellites
- Coldest Planet
- Hottest Planet
- Heaviest Planet
- Red Planet
- Biggest Satellite
- Smallest Satellite
- Blue Planet
- Morning/Evening Star
- Earth's Twin
- Green Planet
- Planet with a big red spot
- Greatest Diurnal Temperature
: Jupiter
: Mercury
: Mercury
: Neptune
: Venus
Venus
Sirius
Jupiter
Neptune
Venus
Jupiter
Mars
Ganymede
Deimos
Earth
Venus
Venus
Neptune
Jupiter
Mercury


## Earth Latitude \& Longitude

## Earth Latitude

- Imaginary lines drawn parallel to the equator. Measured as an angle whose apex is at the centre of the earth.
- The equator represents $0^{\circ}$ latitude, while the North Pole is $90^{\circ} \mathrm{N} \&$ the South Pole $90^{\circ} \mathrm{S}$.Equator is the 'Greatest Circle' that can be drawn on the earth's surface.
- $231 / 2^{\circ} \mathrm{N}$ represents Tropic of Cancer while $231_{1} 2^{\circ} \mathrm{S}$ represents Tropic of Capricorn.
- $6612^{\circ}$ N represents Arctic Circle while $661_{2}{ }^{\circ}$ S represents Antarctic Circle.
- The distance between any two parallels of latitude is always equal.
- 1 degree latitude $=111 \mathrm{~km}$ (approx.).


## Earth Longitude

- The lines of longitude are drawn as a series of semicircles that extend from the North Pole to the South Pole through the equator. They are also called meridi
- The distance between any two meridians is not equal.
- At the equator, 1 degree $=111 \mathrm{~km}$. At $30^{\circ} \mathrm{N}$ or S , it is 96.5 km . It goes on decreasing this way until it is zero at the poles.
- There are 360 meridians of longitude. The prime meridian is a longitude of $0^{\circ}$, passing through the Royal Observatory at Greenwich near London.
- This meridian is taken by geographers to divide the earth into the eastern \& the western hemispheres.
- Each meridian of longitude is a semi-circle. $180^{\circ}$ meridian (International Date Line) lies exactly opposite to $0^{\circ}$ meridian. Such points are called Antipodal Points. The earth is divided into 24 longitudinal zones, each being $15^{\circ}$ or 1 hour apart in time ( 4 minutes / degree).


## Longitude \& Time

- Places that are on the same meridian have the same local (sun) time. Since the earth makes one complete revolution of $360^{\circ}$ in 24 hours, it passes through $15^{\circ}$ in one hour or $1^{\circ}$ in 4 minutes.
- The earth rotates from west to east, hence places east of Greenwich see the sun earlier \& gain time whereas places west of Greenwich see the sun later \& lose time.
- India, whose longitudinal extent is approx. $30^{\circ}$, has adopted only one time zone, selecting the $82.5^{\circ} \mathrm{E}$ for the standard time which is 5 hours \& 30 minute s ahead of GMT (Greenwich Mean Time).


## International Date Line

- It is the $180^{\circ}$ meridian running over the Pacific Ocean, deviating at Aleutian Islands, Fiji, Samoa \& Gilbert Islands. It is a zig-zag line.
- Travelers crossing the Date Line from west to east (i.e., from Japan to USA) repeat a day \& travelers crossing it from east to west (i.e., from USA to Japan) lose a day.


## Important Parallels of Latitude

1. The Tropic of Cancer: It is in the northern hemisphere at an angular distance of $231 / 2^{\circ}\left(23^{\circ} 30^{\prime} \mathrm{N}\right)$ from the equator.
2. The Tropic of Capricorn : It is in the southern hemisphere at an angular distance of $231 / 2^{\circ}\left(23^{\circ} 30^{\prime} \mathrm{S}\right)$ from the equator.
3. The Arctic Circle : It lies at a distance of $661 / 2^{\circ}$ $\left(66^{\circ} 30^{\prime} \mathrm{N}\right)$ north of the equator.
4. Pink City - Jaipur
5. Gateway of India- Mumbai

## Longest, Largest, Biggest, Smallest, Tallest and Highest

1. Longest river (India) - Ganga
2. Longest river (World) - Nile
3. The longest tributary river of India - Yamuna
4. The longest river of the south -Godavari
5. Highest mountain peak -Godwin Austin (K2)
6. Largest lake (Fresh water)- Wular lake (Kashmir)
7. Highest Dam -Tehri Dam on Bhagirathi River
8. Largest Mosque - Jama Masjid, Delhi
9. Longest Road - Grand Trunk Road
10. State with longest coastline- Gujarat
11. Largest railway route - Dibrugarh in Asom to Kannyakumari in Tamil Nadu
12. Longest tunnel - Jawahar tunnel (Jammu \& Kashmir)
13. Longest national highway- NH-7 which runs from Varanasi to Kanyakumari
14. Longest Dam - Hirakud Dam (Odisha)
15. Longest River Bridge - Mahatma Gandhi Setu, Patna
16. Largest Museum - National Museum, Kolkata
17. Largest Delta - Sunderban Delta, West Bengal
18. Largest Dome -Gol Gumbaz, Bijapur (Karnataka)
19. Largest Zoo- Zoological Gardens, Alipur, Kolkata
20. Largest man-made Lake- Govind Vallabh Pant Sagar (Rihand Dam)
21. Largest Desert(India) - Thar (Rajasthan)
22. Smallest State (Area) - Goa
23. Smallest State (Population) - Sikkim
24. Highest Waterfall - Gersoppa waterfall(Karnataka)
25. Longest Electric railway line - From Delhi to Kolkata via Patna
26. Densest populated State - West Bengal
27. Largest cave temple - Kailash temple, Ellora (Maharashtra)
28. Largest animal Fair - Sonepur (Bihar)
29. Highest Gateway - Buland Darwaza, Fatehpur Sikri (Agra)
30. Biggest Hotel Oberal -Sharaton (Mumbai)
31. Largest State (Area) -Rajasthan
32. Largest State (Population) -Uttar Pradesh
33. Place of heaviest rainfall -Mawsynram (Meghalaya)
34. Largest corridor - Rameshwaram temple corridor (Tamil Nadu)
35. Largest cantilever span bride-Howrah Bridge (Kolkata)
36. Largest forest state - Madhya Pradesh
37. Highest straight gravity Dam - Bhakra Dam
38. Longest Railway Platform - Kharagpur (West Bengal)
39. Highest Lake - Devatal (Garhwal)
40. Largest Lake (Saline water) - Chika lake, Orissa
41. Highest Civilian Award - Bharat Ratna
42. Highest Gallantry Award - Paramveer Chakra
43. Largest Gurudwara -Golden Temple, Amritsar
44. Deepest river valley - Bhagirathi \& Alaknanda
45. State with longest coastline of South India - Andhra Pradesh
46. Longest river which forms estuary -Narmada
47. Largest Church - Saint Cathedral (Goa)
48. Longest Beach -Marina Beach, Chennai
49. Highest Battle field - Siachin Glacier
50. Highest Airport - Leh (Laddakh)
51. Largest river island- Majuli (Brahmaputra river, Assam)
52. Largest Planetarium- Birla Planetarium (Kolkata)

## Exercise

1. Which of the following is not an example of Point Source of pollution?
(a) Oil refinery wastewater
(b) Noise from Jet engine
(c) Air pollution from forest fire
(d) Pollutants mixed in rainwater runoff
2. Among the following states, the literacy rate is highest in?
(a) Orissa
(b) Punjab
(c) Maharashtra
(d) Mizoram
3. The dispute over Siachin Glacier is between -
(a) India and China
(b) India and Afghanistan
(c) India and Pakistan
(d) India and Nepal
4. The Tuirial Hydroelectric Power Project (HEPP) is located in which state?
(a) Kerala
(b) Mizoram
(c) Nagaland
(d) Assam
5. A wide inlet of the sea usually concave in shape, is termed as a:
(a) Strait
(b) Sound
(c) Bay
(d) Fjord
6. Punjab has a large number of inundation canals drawing water from?
(a) Jhelum river
(b) Chenab river
(c) Beas river
(d) Sutlej river
7. Sullage water is $\qquad$
(a) Waste water released from kitchen
(b) Waste water released from toilets
(c) Waste water released from factories
(d) Waste water released from hospitals
8. Continuous chain of mountains that rise abruptly more or less parallel to the coastline of India is -
(a) Aravalli
(b) Satpura
(c) Eastern ghats
(d) Western ghats
9. The biggest reserves of Thorium are in $\qquad$ _.
(a) China
(b) USA
(c) India
(d) France
10. Why the Earth is having its own atmosphere ?
(a) Winds
(b) Clouds
(c) Gravity
(d) Rotation of the Earth
11. A level of atmosphere which is composed partly of electrons and positive ions is called-
(a) Troposphere
(b) Ionosphere
(c) Stratosphere
(d) Mesosphere
12. The smallest island country in the Indian Ocean is?
(a) Maldives
(b) Sri Lanka
(c) Mauritius
(d) Madagascar
13. What is Damodar Valley Corporation?
(a) Statutory body
(b) Municipal Corporation looking after Damodar Valley
(c) A private enterprise located in Bihar
(d) A non government organisation
14. Why is Carbon Monoxide a pollutant?
(a) Reacts with hemoglobin
(b) It inhibits glycolysis
(c) It reacts with Oxygen
(d) None of these
15. Why is Rann of Kutch of India famous for?
(a) Tidal and flats
(b) Fertile soil
(c) Dense Vegetation
(d) All are correct
16. What is the position of the Earth when it is at the greatest distance from the sun?
(a) Aphelion
(b) Apogee
(c) Perihelion
(d) Perigee
17. Which of the following wind is blowing from the Mediterranean sea to the North Western parts of India?
(a) Western disturbances
(b) Norwesters
(c) Loo
(d) Mango showers
18. Which layer of the earth's atmosphere contains the ozone layer?
(a) Troposphere
(b) Mesosphere
(c) Ionosphere
(d) Stratosphere
19. Where is the Great Barrier Reef located ?
(a) Pacific Ocean
(b) Indian Ocean
(c) Atlantic Ocean
(d) Arctic Ocean
20. Among the following States, $\qquad$ has the lowest birth rate in India.
(a) Kerala
(b) Uttar Pradesh
(c) Bihar
(d) West Bengal
21. The Secretariat of SAARC is set up at $\qquad$ .
(a) Washington
(b) Kathmandu
(c) Hague
(d) New Delhi
22. The outermost range of Himalays is called $\qquad$ ـ.
(a) Himadri
(b) Shiwaliks
(c) Himachal
(d) Kumaon
23. The longest river of peninsular India is $\qquad$ .
(a) Narmada
(b) Godavari
(c) Mahanadi
(d) Cauvery
24. The atomic power station in Rajasthan is situated at:
(a) Pokhran
(b) Suratgarh
(c) Rawatbhata
(d) Chittorgarh
25. Which of the following caused radioactive pollution along the coast of Kerala?
(a) Plutonium
(b) Zinc
(c) Thorium
(d) Radium
26. Which of the following causes rainfall during winters in the northwestern part of India?
(a) Western disturbances
(b) Cyclonic depression
(c) Southwest monsoon
(d) Retreating monsoon
27. Which country is separated from India by a narrow channel of sea formed by the Palk Strait and the Gulf of Mannar?
(a) Bangladesh
(b) Myanmar
(c) Sri Lanka
(d) Pakistan
28. Where do the Western and Eastern Ghats meet?
(a) Nilgiri hills
(b) Cardamom hills
(c) Palani hills
(d) Annamalai hills
29. The natural habitat of Rhinoceros in India is -
(a) Bharatpur
(b) Gir forest
(c) Kaziranga
(d) Nilgiris
30. India shares longest international boundary with which country?
(a) Bangladesh
(b) China
(c) Nepal
(d) Bhutan
31. Tsangpo is the other name in Tibet for $\qquad$ .
(a) Kosi
(b) Gandak
(c) Brahmaputra
(d) Ganga
32. The largest herbarium of India is located at -
(a) Kolkata
(b) Lucknow
(c) Mumbai
(d) Coimbatore
33. At Barren Island, the only active volcano in India is situated in -
(a) Andaman Islands
(b) Nicobar Islands
(c) Lakshadweep
(d) Minicoy
34. The transfer of minerals from top soil to subsoil through soil-water is called?
(a) Percolation
(b) Conduction
(c) Leaching
(d) Transpiration
35. The Kovvada Nuclear Park project is proposed to be setup in which State?
(a) Rajasthan
(b) Uttar Pradesh
(c) Andhra Pradesh
(d) Karnataka
36. Molten rock below the surface of the earth is called
(a) Basalt
(b) Laccolith
(c) Lava
(d) Magma
37. The polar regions are sparsely populated because of -
(a) lack of minerals
(b) unsuitable climatic conditions
(c) infertile land
(d) mountainous topography
38. Algal bloom results from -
(a) Global warming
(b) Salination
(c) Eutrophication
(d) Biomagnification
39. Among the world oceans, which ocean is having the widest continental shelf?
(a) Antarctic ocean
(b) Arctic Ocean
(c) Indian Ocean
(d) Atlantic ocean
40. Which is largest peninsular river in India?
(a) Krishna
(b) Godavari
(c) Cauvery
(d) Mahanadi
41. Red soil is normally found in India in which regions?
(a) Eastern Region only
(b) Southern Region only
(c) Eastern \& Southern part of the Deccan Plateau
(d) None of these
42. Which of the following green house gases has the greatest heat trapping ability?
(a) Chloro fluoro carbon(
(b) Methane
(c) Carbon dioxide
(d) Nitrous oxide
43. Which State of India is leading in solar energy generation?
(a) Gujarat
(b) Tamil Nadu
(c) Haryana
(d) Uttar Pradesh
44. Ganga is a result of confluence of rivers Bhagirathi and Alakananda at which place?
(a) Deva Prayag
(b) Karan Prayag
(c) Gangotri
(d) Rudra Prayag
45. Which country is known as 'Land of Midnight Sun'?
(a) Sweden
(b) Norway
(c) Germany
(d) Finland
46. Which river basin is shared by more than 10 States of India?
(a) Indus
(b) Brahmaputra
(c) Ganga
(d) Damodar
47. Which of the following is not a commercial source of energy?
(a) Coal
(b) Petroleum
(c) Natural Gas
(d) Firewood

## Solutions

1. (d); A point source of pollution is a single identifiable source of air, water, thermal, noise or light pollution. Oil refinery waste water, noise from Jet engine and Air pollution from forest fire are examples of point source of pollution.
2. (d); Mizoram with $91.5 \%$ literacy is the second most literate state in India after Kerala with 93.91\% literacy
3. (c); The Siachen conflict, sometimes referred to as the Siachen War, is a military conflict between India and Pakistan over the disputed Siachen Glacier region in Kashmir.
4. (b); Tuirial dam is an earthfill and gravity dam. Prime minister Narendra Modi inaugrated the 60MW Tuirial hydropower project in Aizawal, Mizoram on 16th December 2017.
5. (c); A wide inlet of the sea usually concave in shape, is termed as a Bay.
6. (d); Punjab has a large number of inundation canals drawing water from Satluj river
7. (a); Sullage is all wastewater generated in kitchen households or office buildings from streams without fecal contamination, i.e. all streams except for the waste water from toilets.
8. (d); Western ghats are continuous chain of mountains that rise abruptly more or less parallel to the coastline of India.
9. (c); The biggest estimated reserve of Thorium are in India.
10. (c); An atmosphere, meaning is a layer of gases surrounding a planet or other material body, that is held in place by the gravity of that body. Earth also has its own environment due to gravity.
11. (b); Ionosphere is the layer of atmosphere which is composed partly of electrons and positive ions.
12. (a); The smallest island country in the Indian Ocean is Maldives.
13. (a); Damodar Valley Corporation is a statutory body. The corporation came into being on July 7, 1948 by an Act of the

Constituent Assembly of India.
14. (a); Carbon monoxide (CO) is a colorless, odorless, tasteless, and toxic air pollutant. It is produced in the incomplete combustion of carboncontaining fuels, such as gasoline, natural gas, oil, coal, and wood. Breathing the high concentrations of CO leads to reduced oxygen $(\mathrm{O} 2)$ transport by hemoglobin.
15. (a); The Great Rann of Kutch is a salt marsh located in the Thar Desert in the Kutch District of Gujarat, India. It is famous for tidal and flats
16. (a); The aphelion is the point in the orbit of an object where it is farthest from the Sun.
17. (a); A Western Disturbance is an extratropical storm originating in the Mediterranean region that brings sudden winter rain to the northwestern parts of the Indian subcontinent.
18. (d); About $90 \%$ of the ozone in the Earth's atmosphere is found in the region called the Stratosphere. This is the

## Polity

1. What is the minimum age required to become vicepresident of India?
(a) 30 years
(b) 35 years
(c) 40 years
(d) 37 years
2. Which of the following "writ" of the High Court or the Supreme Court is issued to restrain a person from holding a public office which he is not entitled to?
(a) Centiorari
(b) Mandamus
(c) Prohibition
(d) Quo Warranto
3. NITI Aayog has been formed to replace which of the following institution?
(a) Planning Commission
(b) IRDA
(c) Department of Telecommunications (DoT)
(d) Department of Information Technology
4. How many fundamental Rights are mentioned in Indian constitution?
(a) Five
(b) Six
(c) Seven
(d) Eight
5. Which of the following Article/Articles cannot be suspended even during emergency?
(a) Article 19
(b) Article 20 and 21
(c) Article 22 and 23
(d) Article 24 and 25
6. In which year was Communist Party of India - Marxist (CPI-M) founded?
(a) 1885
(b) 1980
(c) 1984
(d) 1964
7. Which Fundamental Right in the Indian Constitution prohibits trafficking, forced labour, and children working under 14 years of age?
(a) Right to Equality
(b) Right to Freedom
(c) Right against Exploitation
(d) Right to Freedom of Religion
8. In which year was Nationalist Congress Party (NCP) founded?
(a) 1949
(b) 1999
(c) 1972
(d) 1997
9. Which Fundamental Right in the Indian Constitution states that every person has the right to practice, profess and propagate the religion of their choice.
(a) Right to Equality
(b) Right to Freedom
(c) Right against Exploitation
(d) Right to Freedom of Religion
10. Whose recommendation is mandatory to impeach the President of India from his office before the completion of his/her term?
(a)The Prime Minister
(b)The Speaker of the LokSabha
(c) The Chief Justice of India
(d) Two houses of the parliament
11. How many types of writ are there in the Indian Constitution?
(a) 5
(b) 4
(c) 3
(d) 2
12. Which of the following is not included in the Directive Principles of State Policy?
(a) Prohibition of Liquor
(b) Right to Work
(c) Equal Wage for Equal Work
(d) Right to Information
13. How many Fundamental Duties are mentioned in Indian constitution?
(a) Five
(b) Seven
(c) Nine
(d) Eleven
14. Part IV of constitution of India deals with which of the following?
(a) The Union
(b) The States
(c) Fundamental Rights
(d) Directive Principles of State Policy
15. In Indian constitution, the method of election of President has been taken from which country?
(a) Britain
(b) USA
(c) Ireland
(d) Australia
16.What is the literal meaning of the term "Quo-Warranto"?
(a) We command
(b) To forbid
(c) By what authority (or) warrant
(d) None of these
16. Who administers the oath of the President of India?
(a) Governor General of India
(b) Chief Justice of India
(c) Prime Minister of India
(d) Vice President of India
17. Who among the following gave monistic theory of sovereignty?
(a) Austin
(b) Darwin
(c) Aristotle
(d) Marx

## Economics

1. Commercial banks lend to which of the following Priority sectors?
(a) Heavy Industries
(b) Agriculture, Small scale industries
(c) Foreign Companies
(d) State government in emergency situation
2. What is the accounting year of the Reserve Bank of India?
(a) April-March
(b) July-June
(c) October-September
(d) January-December
3. Among the following States, $\qquad$ has the lowest birth rate in India.
(a) Kerala
(b) Uttar Pradesh
(c) Bihar
(d) West Bengal
4. The Secretariat of SAARC is set up at
(a) Washington
(b) Kathmandu
(c) Hague
(d) New Delhi
5. 'Residex' is associated with :
(a) Share prices
(b) Price inflation
(c) Mutual fund prices
(d) Land prices
6. Money market is a market for $\qquad$ .
(a) Short term fund
(b) Long term fund
(c) Negotiable instruments
(d) Sale of shares
7. Which institution is known as 'Soft Loan Window' of World Bank?
(a) IDBI
(b) IDA
(c) IMF
(d) RBI
8. Which curve shows the inverse relationship between unemployment and inflation rates -
(a) Supply curve
(b) Indifference curve
(c) IS curve
(d) Phillips curve
9. Special Drawing Rights were created by -
(a) IBRD
(b) ADB
(c) IMF
(d) WTO
10. In which of the following States India's first Green Rail Corridor was launched in -
(a) Karnataka
(b) Maharashtra
(c) Himachal Pradesh
(d) Tamil Nadu
11. Which place is said to be the Manchester of South India?
(a) Coimbatore
(b) Salem
(c) Thanjavur
(d) Madurai
12. When the demand for a good increase with an increase in income, such a good is called
(a) Superior good
(b) Giffin good
(c) Inferior good
(d) Normal good
13. MUDRA Bank has been launched to help
(a) Small business
(b) Marginal farmers
(c) Poor women
(d) Rural sector
14. Which of the following controls the insurance business of India?
(a) RBI
(b) IDBI
(c) SEBI
(d) IRDA
15. Which State Government has abolished "agriculture income tax" on plantation companies.
(a) Karnataka
(b) Rajasthan
(c) Bihar
(d) Asssam
16. Which of the following is not a method of estimating national income?
(a) Expenditure method
(b) Output method
(c) Matrix method
(d) Income method
17. Which of the following taxes is levied by the State Government only?
(a) Wealth tax
(b) Entertainment tax
(c) Income tax
(d) Corporate tax
18. HDI is an aggregate measure of progress in which of the three dimensions?
(a) Health, Education, Income
(b) Food Security, Employment, Income
(c) Agriculture, Industry, Services
(d) Height, Weight, Colour
19. The operational period of 12 th Five Year Plan is -
(a) 2007-12
(b) 2012-17
(c) 2015-20
(d) 2005-10
20. What is an octroi?
(a) Tax
(b) Tax collection centre
(c) Tax processing centre
(d) Tax information centre
21. Swarna Jayanti Gram Swarojgar Yojna has now been restructured as
(a) Prime Minister's Rojgar Yojna
(b) National Rural Livelihoods Mission
(c) Jawahar Gram Samriddhi Yojana
(d) Sampoorna Gramin Rojgar Yojana
22. Which of the following is not a commercial source of energy?
(a) Coal
(b) Petroleum
(c) Natural Gas
(d) Firewood

## Science

1. What is the minimum distance (in metres) required to hear an echo?
(a) 10
(b) 13
(c) 17
(d) 21
2. Why does a Black board appears black in colour?
(a) It reflects black colour
(b) It absorbs black colour
(c) It reflects all colours
(d) It absorbs all the colours
3. Which of the following instrument is used to measure Soil Water Tension?
(a) Photometer
(b) Pyrometer
(c) Psychrometer
(d) Tensiometer
4. What is the SI unit of Force?
(a) Pascal
(b) Boyle
(c) Newton
(d) Watt
5. Which one of the following is a bad Thermal Conductor?
(a) Aluminium
(b) Copper
(c) Glass
(d) Silver
6. Who invented first working laser?
(a) A. H. Taylor
(b) W. K. Roentgen
(c) T. H. Maiman
(d) Fred Morrission
7. Meter in a vehicle that calculates distance covered by the vehicle is called $\qquad$
(b) Odometer
(a) Speedometer
(d) Kilometre
(c) Thermometer
8. What is the SI unit of pressure?
(a) Newton
(b) Weber
(c) Pascal
(d) Henry
9. Reflection from a smooth surface like that of a mirror is called $\qquad$ reflection.
(a) Regular
(b) Irregular
(c) Diffused
(d) Fused
10. What is the unit of resistance?
(a) Ohm
(b) Farad
(c) Henry
(d) Weber
11. Gravitational force is maximum at which of the following place?
(a) At equator
(b) At tropic of cancer
(c) At tropic of Capricorn
(d) At poles
12. Which of the following device is used to measure humidity?
(a) Hydrometer
(b) Hygrometer
(c) Psycho Meter
(d) Anemometer
13. Which of the following is not a vector quantity?
(a) Momentum
(b) Displacement
(c) Torque
(d) Speed
14. At what temperature (in Fahrenheit) pure water freezes?
(a) 32
(b) 0
(c) 48
(d) 37
15. What is the other name of Galileo's law of falling bodies?
(a) Law of motion
(b) Newton's first law
(c) Newton's second law
(d) Newton's third law
16. Which of the following device is best suited for measuring the temperature inside metallurgical furnaces?
(a) Pyrometer
(b) Thermocouple
(c) Thermometer
(d) Thermistor
17. In a qualitative way, the tendency of undisturbed objects to stay at rest or to keep moving with the same velocity is called $\qquad$ —.
(a) Force
(b)Acceleration
(c) Friction
(d) Inertia
18. The time taken by a pendulum to complete one oscillation is called its?
(a) Maximum speed
(b) Average speed
(c) Time period
(d) Time interval
19. If the mass of an object is 60 kgs , what will be its weight on the moon? ( $\mathrm{N}=$ Newton)
(a) 60 N
(b) 600 N
(c) 100 N
(d) 10 N
20. The side mirrors of vehicles are of which type of mirrors?
(a) Convex
(b) Concave
(c) Plane
(d) Inverted
21. Haematite is an ore/mineral of
(a) Zinc
(b) Iron
(c) Lead
(d) Manganese
22. Which among the following is false about alpha particles?
(a) They have high ionizing power
(b) They have high penetrating power
(c) They have high kinetic energy
(d) They are positively charged heliu m nuclei

## Chapter

## NATIONAL / INTERNATIONAL YEARS

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Year of Woman Empowerment (Govt. of India)
International Year of Mountain (by FAQ)
International Fresh Water Year
International Year of Rice
    International Year of Physics/Sports (by UNO)
    International Year of Deserts and Desertification
    International Polar Year, Year of the Dolphin
    International Year of Sanitation, International Year of Languages
    International Year of Astronomy (UN)
    International Year of Natural Fibers (FAQ)
    International Year of Reconciliation
    International Year of Biodiversity
    International Year of Youth
    International Year of Forests
    International Year of Chemistry
    International year of Cooperatives
    International Year of Water Cooperation
    International Year of Small Island Developing States
    International Year of Solidarity with the Palestinian People
    International Year of Light and Light-based Technologies
    International Year of Pulses
    International Year of Sustainable Tourism for Development
    the United Nations has not declared 2018 as International Year for any specific topic.
    International Year of Indigenous Languages
    International Year of the Periodic Table of Chemical Elements
    International Year for Plant health
    International Year of Creative Economy for Sustainable Development
    International Year of Artisanal Fisheries and Aquaculture
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## THE FIRST'S

- The first person to reach Mount Everest
- The first person to reach North Pole
- The first person to reach South Pole
- The first religion of the world
- The first country to print book
- The first country to issue paper currency
- The first country to commence competitive examination in civil services
- The first President of the U.S.A.
- The first Prime Minister of Britain
- The first Governor General of the United Nations
- The first country to win football World cup
- The first country to prepare a constitution
- The first Governor General of Pakistan
- The first country to host NAM summit
- The first European to attack India
- The first European to reach China
- The first person to fly Aeroplane

Sherpa Tenzing, Edmund Hillary

## Robert Peary

Amundsen
Hinduism
China
China

China
George Washington
Robert Walpole
Trigveli (Norway)
Uruguay
U.S.A.

Mohd. Ali Jinnah
Belgrade (Yugoslavia)
Alexander, The Great
Marco Polo
Wright Brothers

## Miscellaneous Exercise

1. Who is considered as 'Trimurti' (Trinity) of Carnatic Music?
(a) Muthuswami Dikshitar
(b) Thyagaraja
(c) Swami Thirunal
(d) Purandardsa
2. Amjad All Khan is associated with which of the following musical instruments?
(a) Violin
(b) Sitar
(c) Sarod
(d) Veena
3. Chandigarh was designed by
(a) Le Corbusier
(b) Edward Lutyens
(c) Christopher Wren
(d) Michelongo
4. Jamini Roy is a famous
(a) Dancer
(b) Magician
(c) Cartoonist
(d) Painter
5. With which of the following was Satyajit Ray associated?
(a) Commercial art
(b) Classical music
(c) Classical dance
(d) Direction of films
6. Pablo Picasso, the famous painter was
(a) French
(b) Italian
(c) Flemish
(d) Spanish
7. Bachendri Pal became famous for her grand success in the field of:
(a) Athletics skiing
(b) Swimming
(c) Mountaineering
(d) Journalism
8. Who is known as the 'saint of the gutters'?
(a) B.R. Ambedkar
(b) Mother Teresa
(c) Mahatma Gandhi
(d) Baba Amte
9. Mallika Sarabhi is associated with which of the following fields?
(a) Social service
(b) Classical music
(c) Classical dance
(d) Sports
10. Baba Amte is famous as a
(a) Painter
(b) Singer
(c) Politician
(d) Social Worker
11. Who is known as the 'Columbus of the Space Age'?
(a) Mithali Raj
(b) Yuri Gagarin
(c) Kalpana Chawla
(d) Leela Seth
12. The name 'Indian National Congress' was given by-
(a) S. N. Banerjee
(b) Feroz Shah Mehta
(c) Dadabhai Naoroji
(d) M.G. Ranade
13. Bismillah Khan is associated with
(a) Tabla
(b) Sarod
(c) Flute
(d) Shehnai
14. Chandi Prasad Bhatt is a well known:
(a) Environmentalist and Social Activist
(b) Economist and Writer
(c) Painter
(d) Classical Hindustani Vocalist
15. Jaspal Rana is the name associated with which of the following games.
(a) Weight lifting
(b) Archery
(c) Boxing
(d) Shooting
16. Hari Prasad Chaurasia is a renowned player of:
(a) Tabla
(b) Sarod
(c) Flute
(d) Shehnai
17. Zakir Hussain is associated with which of the following musical instruments?
(a) Tabla
(b) Veena
(c) Sitar
(d) Violin
18. Who discovered the X-rays?
(a) Ross Ronald
(b) H. C. Urey
(c) W. K. Roentgen
(d) G. Maroni
19. The first woman Governor of a state in free India was
(a) Mrs. Sarojini Naidu
(b) Mrs. Sucheta Kriplani
(c) Mrs. Indira Gandhi
(d) Mrs. Vijaya Lakshmi Pandit
20. The first President of India who make a sortie in the Sukhoi fighter aircraft of the Indian Air Force is?
(a) A.P.J. Abdul Kalam
(b) Smit. Pratibha Patil
(c) K.R. Narayanan
(d) Dr. Shankar Dayal Sharma
21. Baan Ki-moon, the former UNO Secretary-General belong to
(a) Saudi Arab
(b) Egypt
(c) South Korea
(d) Brazil
22. Who among the following was thrice elected President of the Indian National Congress?
(a) Dadabhai Naoroji
(b) Surendranath Banerjee
(c) Gopal Krishna Gokhale
(d) Shankaran Nair
23. Who among the following was the first Speaker of the Lok Sabha?
(a) M. A. Ayyangar
(b) G. V. Mavalankar
(c) Sardar Hukam Singh
(d) N. Sanjiva Reddy
24. Who was the first Indian to reach Antarctica?
(a) Rakesh Sharma
(b) Ram Charan
(c) B.K. Dutta
(d) K. Karuna Nautial
25. The Chief Minister who remained in the office for the longest period:
(a) Jyoti Basu
(b) Lalu Prasad
(c) Mayawati
(d) M. Karunanidhi
26. Name of S. Chandrashekhar is associated with which of the following subjects?
(a) Cosmology
(b) Chemistry
(c) Fluid Mechanics
(d) Astrophysics


## Chapter

## Puzzles

Directions (1-5): Read the following information's carefully and answer the questions given below:
Eight authors Stephen, George, Nicholas, Gillian, Michael, Laura, Dennis and Suzanne are sitting around a circular table but not necessarily in the same order. Three of them are facing outward while five are facing towards the centre. Michael is third to the right of Nicholas. Laura is sitting third to the left of Michael. Three persons are sitting between Laura and George. Dennis is sitting third to the right of Laura, who is not facing the centre. Gillian is sitting third to the right of Stephen, who is not facing the centre.

1. Who sits between Laura and Stephen?
(a) George
(b) Gillian
(c) Michael
(d) None of these
2. Who among the following is second to the right of George?
(a) Gillian
(b) Nicholas
(c) Michael
(d) Laura
3. Which of the following statements is/are true with respect to Suzanne?
(a) Suzanne is opposite of Dennis.
(b) Suzanne is fourth to the right of Dennis.
(c) Suzanne is fourth to the left of Dennis.
(d) All are true
4. Which of the following groups represents the group, of those facing away from the centre?
(a) Stephen, Nicholas, Laura
(b) Ncholas, Laura, Gillian
(c) Stephen, George, Nicholas
(d) Gillian, Michael, Laura
5. What is the position of Nicholas with respect to Suzanne?
(a) Nicholas is third to the right of Suzanne.
(b) Nicholas is second to the left of Suzanne.
(c) Nicholas is third to the left of Suzanne.
(d) Nicholas is in front of Suzanne.

Directions (6-10): Study the following information carefully to answer the given questions:
There are six roads, G, H, I, J, K and L which go through six different cities - Chandigarh, Jammu, Kolkata, Delhi, Lucknow and Aligarh, but not necessarily in the same order. I and K go through the cities of the same state. J goes through Jammu. G does not go through Kolkata or Chandigarh. Similarly, H and K don't go through Kolkata and Lucknow. (Aligarh and Lucknow are cities of same state).
6. I goes through which of the following cities?
(a) Aligarh
(b) Chandigarh
(c) Lucknow
(d) Either Aligarh or Lucknow
7. Which of the following road goes through Delhi?
(a) G
(b) H
(c) I
(d) J
8. L goes through which of the following cities?
(a) Jammu
(b) Kolkata
(c) Delhi
(d) Chandigarh
9. Which of the following statements/information is true?
(a) H-Chandigarh
(b) J-Lucknow
(c) G-Kolkata
(d) I-Jammu
10. Jammu is connected by which of the following roads?
(a) G
(b) H
(c) I
(d) J

Directions (11-15): Study the following information carefully to answer these questions.
Eight friends A, B, C, D E, F G and H are sitting around a circle facing the center. A sits third to the left of $B$, while second to the right of F. D does not sit next to A or B. C and $G$ always sit next to each other. H never sits next to $D$ and C does not sit next to $B$.
11. Which of the following pairs sits between H and E ?
(a) F, D
(b) H, B
(c) $C, G$
(d) E, G
12. Starting from A's position, if all the eight friends were arranged in alphabetical order in clockwise direction, then the seating position of how many members (excluding A) not change?
(a) None
(b) one
(c) Two
(d) Three
13. Which of the following pairs has only one person sitting between them, if the counting is done in clockwise direction?
(a) A, B
(b) C, D
(c) F, E
(d) G,H
14. Who sits to the immediate right of E ?
(a) A
(b) D
(c) F
(d) H
15. What is the position of $B$ with respect to $C$ ?
(a) Second to the left
(b) Third to the right
(c) Third to the left
(d) None of these

## SeatingArrangement

## Order \& Ranking Concepts:-

In this topic, generally theranks of a person from both thesides left or right or fromtop and bottom arementioned and total numbers of a persons are asked . sometimethe questions are based on their interchanged positions.

Formulasto determinethepositioning of a person
(1) Left + Right $=$ Total +1
(2) Left $=$ Total $+1-$ Right
(3) Right $=$ Total +1 - left
(4) Total $=$ left + Right -1

Note : the above formulas are only for a single person's position

Example 1.


3rd from left
3rd from right
Total $=3+3-1$
Samefor vertical \& H orizontal
(1) Total $+1=$ top + Bottom
(2) Top $=$ Total +1 - Bottom
(3) Bottom $=$ Total +1 - Top
(4) Total $=$ Top + Bottom -1

## SEATING ARRANGEMENET

+ In seating arrangement, we are generally asked to arrange a group of people according to the given conditions. They may have to be seated around a table, thetablecould be of any shape-circular, square, rectangular, pentagonal or any other. To solveseating arrangement problems on thebasis of theinformation given in the equation.
+ These type of questions judge the ability of the candidates to analyzetheinformation and solvethe questions by thehelp of pictorial figures.
- Linear arrangement: - In this arrangement, there can be single row or parallel rows facing each other or opposite.
(i) Left $\longleftrightarrow$ Right (Directions if thepeoplearefacing north)
(ii) Right $\longleftrightarrow$ Left (Directions if thepeoplearefacing South)
(iii)


$$
\text { Left } \longleftrightarrow \text { Right }
$$

(Directions if the people are seating parallel to each other facing South and North)

- Circular A rrangement: In this Arrangement, peoplearesitting around a circlefacing towards or outside thecentre.
(i)

(Facing outside the Centre)
(iii)

(Peoplesitting around the circle facing towards and outside the centre)
- Rectangular/square Arrangement: In this Arrangement, people are sitting around a rectangleor squarefacing towards or outsidethe centre.
(i)

(Facing towards the centre)

6. Who is second to the left of $G$ ?
(a) H
(b) D
(c) A
(d) E
7. Who isfourth to theright of $C$ ?
(a) B
(b) A
(c) H
(d) E
8. In which pair second person is just right to first?
(a) HE
(b) FB
(c) GF
(d) CA
9. Who is theimmediateneighbour of H from both side?
(a) AG
(b) EG
(c) AE
(d) BC

Sol. When eight persons aresitting in a circlewearrange them in following way.


It should bekept in mind that left and right sides are al ways opposite, thosefacing each other in a circle.
A ccording to the question, sitting arrangements of eight friends are shown in thefiguregiven below:-

6. (a); H
7. (d); E
8. (a); HE
9. (c); AE
10. A group of friends aresitting in an arrangement one each at the corner of an octagon. All are facing the centre. Mahima issitting diagonally oppositeto Rama, who is on sushma's right. Ravi is next to sushma and oppositeto Girdhar, who is on chandra's left. Savitri is not on Mahima's right but opposite to shalini. Who is on shalini's right?
(a) Ravi
(b) Mahima
(c) Girdhar
(d) Rama

Sol.


Ravi is on shalini's right.

## Exercise

1 In a dass of 45 student A ditya's rank is twel vefrom top what is his rank from bottom.
(a) 33
(b) 34
(c) 35
(d) None of these

2 In a class of 42 students Nutan's Rank is 22 from bottom. What is her rank from top?
(a) 21
(b) 22
(c) 23
(d) cannot bedetermined
3. In a class, Sonal rank is $10^{\text {th }}$ from top. What is his rank from below?
(a) 24
(b) 25
(c) 26
(d) cannot bedetermined
4. In a class Sonu's rank is $15^{\text {th }}$ from top and twelve from bottom. How many students arethere in that class?
(a) 21
(b) 25
(c) 26
(d) cannot bedetermine
5. In a class of 80 boy a student rank is $48^{\text {th }}$ from top. What is his rank from bottom?
(a) 32
(b) 34
(c) 35
(d) 33
6. In a class, A bhinav's rank is 79 from bottom while there are 80 boy in class what isA bhinav rank from top?
(a) 2
(b) 3
(c) 4
(d) cannot bedetermine
7. In a class of 41 children, A ditya's rank is eight from top. Mamta is seven ranks below Aditya. What is Mamtarank from bottom?
(a) 26
(b) 27
(c) 25
(d) Cannot bedetermine
8. In a class of 34 children, Ajay's rank from the top is twelve. Manoj is eight ranks below Ajay. What is Manoj's rank from the bottom?
(a) 15
(b) 16
(c) 14
(d) cannot bedetermine
9. In a row of boys, A ditya is seventh from thestartand eleventh from theend. In another row of girl, Nutan istenth from thestart and twelth from theend. How many student aretherein both the rows together?
arefacing towards north. Linell, A, B, C, D aresitting (not necessary they are sitting in a series given above) they are facing south. They areall sitting in such a way that linel and linell persons facing to each other.
$B$ is second to the left of $D$. $R$ issitting to next who is facing D. Only oneperson is sitting between R and P.C. is not facing to R . Two persons aresitting between R and Q .
25. Who is facing to $P$ ?
(a) A
(b) B
(c) C
(d) D
26. Which of the following is sitting to next to the left who is facing $D$ ?
(a) $P$
(b) Q
(c) R
(d) S
27. Which of the following is sitting to next to the left who is facing $B$ ?
(a) $P$
(b) Q
(c) R
(d) S
28. Which of the following statement is true aboutS?
(a) S is the last person in a line
(b) Sis second to theright of Q.
(c) Sis not an immediateneighbour of $P$
(d) None of these
29. Four of thefollowing fiveare a likein a certain way and makes a group. Which is one that does not belong to that group?
(a) DS
(b) PB
(c) QB
(d) RA
30. $A, B, C, D, E, F$ and $G$ are sitting in a row facing north. $F$ is sitting next to the right of $E$. $C$ is the neighbour of $B$ and $D$. The person who is sitting third to theleft of $D$ is ist of an end of row, E is fourth to the right of G . Then which position for A is?
(a) between C and E
(b) Ist from rightend
(c) Ist from leftend
(d) Data inadequate

Directions (31-35) : Read the following information carefully and answer thequestion given below it:
$A, B, C, D, E, F, G$ and $H$ aresitting in a circle facing centre. $C$ is third to the left of $A$ and second to right of $E$. $B$ is second to theright of $C$. $D$ is second to theright of $F$, who issecond to theright of A. G is not an immediateneighbour of C.
31. Who is immediateright of C ?
(a) H
(b) G
(c) D
(d) Data inadequate
32. Who is immediateright of H ?
(a) $D$
(b) G
(c) A
(d) None of these
33. Who is immediate left of $D$ ?
(a) C
(b) H
(c) F
(d) E
34. Who is third to theright of $D$ ?
(a) C
(b) H
(c) E
(d) Noneof these
35. Who is second to theright of G ?
(a) A
(b) D
(c) E
(d) B

## Solutions

1. (b); rank from bottom [(total no. of students +1 ) rank from top $)]=[(45+1)-12]=34^{\text {th }}$
2 (a); $(42+1)-22=21$
2. (d); cannotbedetermined
3. (c); total no. of student $=[$ (rank from top + rank from bottom) -1$]=15+12-1=26$
4. (d); $[(80+1)-48]=81-48=33$
5. (a); $[(80+1)-79]=2$
6. (b); Mamta Rank from top $=8+7=15$

From bel ow her rank $=(41+1-15)=27$
8. (a); Ajay rank from top $=12+8=20$

Ajay rank from bottom $=(34+1-20)=35-20$ $=15$
9. (d); in first row $=(7+11-1)=17$ students In second row $=(10+12-1)=21$ students Total $=21+17=38$ students
10. (b); Clearly, Priya is $13^{\text {th }}$ from the left and $11^{\text {th }}$ from the right end of therow. So, number of girls in the row $=(13+11-1)=23$. Now, Dauli is $17^{\text {th }}$ from theright. Number of girls to theleft of Dauli
$=[(23+1)-17]=7$. Hence, Dauli is $7^{\text {th }}$ from the leftend of therow.
11. (c); Number of boysin front of Sonu =14. N umber of boysbehind Sonu $=(14 * 3)=42$. So, Total number of boys in the column $=(14+1+42)=57$. In a column of 57 boys, theseventh boy from theend is clearly $51^{\text {st }}$ from the start. Thus, we have to find the number of boys between the $15^{\text {th }}$ and the $51^{\text {st }}$ boy, which is clearly 35 .
12. (c); Number of boys to the left of Sanjay =(40-31) = 9. So, Sanjay is $10^{\text {th }}$ from the left end. Shreya is third to theright of A mit. So, Shreyais $14^{\text {th }}$ from theleft end. Clearly, Shreya isfourth to theright of Sanjay.
13. (b); A mishais $22^{\text {nd }}$ from thetop and A nuja is 5 ranks below Amisha. So, Anuja is $27^{\text {th }}$ from thetop. Also, A nuja is $34^{\text {th }}$ from thebottom. So, N umber of students passed $=(26+1+33)=60$; Let the number of students passed and the number

## Chapter

## 03

## Data Sufficiency

Directions (1-5): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements. Give answer-
(a) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) If the data in both statements I and II together are necessary to answer the question.
(d) If the data in both statements I and II together are not sufficient to answer the question.

1. How is Ritika related to Ritesh?
I. Ritika who has two children is daughter of Radhika. Radhika has only one grandson named Ritesh.
II. Paras who is brother of Ritika has only one child named Ridhi.
2. Who stays at 4 th floor of the building having 5 floors (15, ground floor empty)?
I. Madhuri stays on an odd-numbered floor.
II. Akshay stays three floors above Madhuri.
3. What is the distance between points X and Y ?
I. Point $P$ is 10 m west of point C . Point D is 5 m north of point $X$ which is 5 m west of point $C$.
II. Point D is equidistant from points X and Y .
4. How is 'great' written in that code?
I. In a certain code, 'great are those days' is written as 'ki vo tu mpi' and 'those days were good' is written as 'ki fo mpi ta'
II. In a certain code, 'many days passed' is written as 'ti mpi dis' and 'those good years' is written as 'ko ki ka'.
5. On which day is Nikita's birthday?
I. Shruti remembers that Nikita's birthday falls in February. Preeti remembers that Nikita's birthday fall on either 29 or 30.
II. Krish remembers that Nikita's birthday occurs in the last week of a month.

Directions (6-10): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.
(a) If both the statements I and II taken together are sufficient to answer the questions.
(b) If statement II alone is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
(c) If statement either I or II is sufficient to answer the question.
(d) If both the statements I and II taken together are not sufficient to answer the questions.
6. What is Sonali's position from the left end of a row?
I. There are 4 students between Gauri and Sonali. Bhavna is 6 th to the right of Gauri.
II. Gini is 6th to the left of Sonali and is 2nd from the left end.
7. How many children are sitting between $P$ and $Q$ ?
I. $\quad P$ is 5 th to the right of $R$ and 6 th to the left of $S . Q$ is 6th to the right of R.
II. In a row of 25 students, $P$ is 5 th from left end and $Q$ is 20th from the right end.
8. Among G, H, I, J and K who has got the marks in middle position?
I. G has got 1 mark less than H and has got greater marks than K.
II. I and J have got greater marks than G.
9. How is N related to Q ?
I. $\quad \mathrm{C}$ is daughter of Q and also mother of D .
II. B is brother of C and N is the wife of D .
10. Who has got highest marks among $A, B, C, D$ and $E$ ?
I. D has got greater marks than A and less than C. Also B has got greater marks than A and less than E.
II. E has got less marks than $C$ and greater than $B$ and D. A has got the lowest marks.

Directions (11-15): Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements.
23. In which of the following years pair the difference between number of deaths maximum?
(a) 2013-2015
(b) 2013-2016
(c) 2016-2012
(d) 2012-2017
24. In which year the number of deaths is $3^{\text {rd }}$ minimum?
(a) 2017
(b) 2012
(c) 2015
(d) 2013
25. The minimum number of deaths is what percent less than the maximum number of deaths?
(a) $75 \%$
(b) $150 \%$
(c) $81.25 \%$
(d) $50.25 \%$

Directions (26-29): The following pie-chart shows the distribution of total cost per day incurred to a manufacturer. Study the chart to answer the questions based on it.

26. Which cost is second highest?
(a) Miscellaneous Cost
(b) Transportation Cost
(c) Labor Cost
(d) Machinery Cost
27. Packaging cost is what percent of total cost?
(a) $4.16 \%$
(b) $3.24 \%$
(c) $8 \%$
(d) $5.25 \%$
28. What would be the central angle for material cost?
(a) $75^{\circ}$
(b) $60^{\circ}$
(c) $120^{\circ}$
(d) $90^{\circ}$
29. Machinery cost is what percent more than power cost?
(a) 250
(b) 150
(c) 100
(d) 75

Directions (30-31): The bar-chart is showing the number of accidents in a city during the first six month of a year. Examine the bar chart and answer the following questions:

30. Compared to the month of January, what is the percentage of decrease in accidents in the month of February?
(a) 25
(b) 24
(c) 30
(d) 27
31. Percentage of decrease in the number of accidents from May to June is:
(a) $15 \frac{4}{7} \%$
(b) $27 \frac{3}{7} \%$
(c) $22 \frac{6}{7} \%$
(d) $18 \frac{5}{7} \%$

Directions (32-36): Study the following questions and choose the correct answer.

State wise production of different crops for the year 1993-94 (in million tonnes)

| State | Rice | Wheat | Pulses |
| :--- | :--- | :--- | :--- |
| U.P. | 7.18 | 15.97 | 2.76 |
| W.B. | 8.09 | 0.81 | 0.35 |
| M.P. | 3.67 | 3.72 | 2.32 |
| Maharashtra | 1.94 | 0.86 | 1.11 |
| Haryana | 1.36 | 4.42 | 0.36 |
| All India | 58.64 | 44.23 | 12.2 |

32. W.B. produces approximately what percent of the total rice produced in India?
(a) $12.2 \%$
(b) $13.5 \%$
(c) $18 \%$
(d) $15 \%$
33. The amount of wheat produced by U.P. is more than the amount of wheat produced by the other four states listed in the table, by
(a) 6.97 m tonnes
(b) 6.16 m tonnes
(c) 5.52 m tonnes
(d) 5.89 m tonnes
34. What percentage of the total wheat production was produced by states other than those who are not given in the table? (approximately)
(a) $38 \%$
(b) $42 \%$
(c) $48 \%$
(d) $58 \%$
35. U.P. produced approximately what percent of the all India production of all the three crops take together?
(a) $27.75 \%$
(b) $26.2 \%$
(c) $24.18 \%$
(d) $22.52 \%$
36. Which of the following statements is true?
(a) U.P. was the top producer of all the three crops.
(b) M.P. ranked third in the production of all three crops.
(c) Maharashtra was the lowest producer of rice.
(d) Haryana was the lowest producer of wheat.
37. (d); The data given in both I and II together are not sufficient to answer the question.
Since it is not known that how many children does Radhika has, it cannot be answered. Ritesh can be son or nephew of Ritika.
38. (c); The data in both the statements I and II together are necessary to answer the question.
From both:
Madhuri can stay at either1, 3 or 5. Akshay to be at 3 floors above Madhuri, she should be at 1st floor, then Akshay at 4th.
39. (d); The data given in both I and II together are not sufficient to answer the question.
Point $D$ is 5 m north of $X$, so $Y$ is also 5 m from $D$, but it is not necessary that Y is in straight distance to $X$ through $D$, so can't be determined.
40. (d); The data given in both I and II together are not sufficient to answer the question.
From both, those' and 'days' can be find out. 'great' and 'are' only present in I statement, so can't be determined.
41. (a); The data in statement I alone is sufficient to answer the question.
From I: Nikita's birthday is on 29 Feb, Since Feb has no 30 date.
42. (b); If the data in statement II alone is sufficient to answer the question.
From I: it is given that Gauri is 5th to Sonali but not given left or right
From II: Gini is 2 nd from left end, and then Sonali is 6th to right of Gini, so Sonali is 8th from left end.
43. (c); If the data either in statement I alone or statement II alone are sufficient to answer the question.
From either statement, it says that there is no one between P and Q , or 0 students between P and Q .
44. (d); If the data given in both I and II together are not sufficient to answer the question.
From both:
H has got 1 marks greater than $G$, and I and J have marks greater than $G$, it can be possible that either of I or J have 0.5 marks greater than G. middle position can't be determined.
45. (a); If the data in both the statements I and II together are necessary to answer the question.
From both N is grand daughter-in-law of Q .

46. (b); If the data in statement II alone is sufficient to answer the question.
From I C $>\mathrm{D}>\mathrm{A}$
$\mathrm{E}>\mathrm{B}>\mathrm{A}$
From II $C>E>B$
D $>\mathrm{A}$
47. (d); From I, Buy three dusters get one free
dd ee jj oo tt yy
From II, Purchase one sharpener get three free dd ee ll oo ww yy
From I and II code for 'Buy dusters'
Jj tt
48. (d); From I,


From II,


In the above figure M can be placed at any point towards South-west of C. so we cannot get the specific position of M . We can't answer the question. Again, statement II alone is not sufficient because it tasks information regarding M .
From I \& II, we get


D
13. (d); Comparisons of strike ratio and centuries along with fifties are not enough to answer the question.
14. (b); From I- The person who is sitting right of $Q$ cannot be find.


From II- R is on the immediate right of Q.so the answer can be find by only II.

## Statement and Conclusion

Syllogism is a kind of logical argument drawn from given statements. It is an art of thinking and reasoning in strict accordancewih the limitations and incapacities of the human misunderstandings, thats why sometimes irrel evant statements aregiven and on thebasis of which wehaveto draw conclusions.

## Types of Statements

(a) Universal Statements (All TypeStatements)
(1) Universal A ffirmative/ Positive i.e. All A 's areB's


Note: Converse : All B's AreA's is a Possibility
(2) Universal Negative:All A'sarenot B


Converse: All B's arenot A
(b) Particular Statements
(3) Particular Affirmative/ Positive SomeA 's areB's


Converse: SomeB's areA's
(4) Particular Negative SomeA'sAreNot B


## Types of Syllogism

Type 1. All, All related statement
Statements: All potatoes areOnions. All Onions areTomatoes.
All Tomatoes areSpinach.
All Spinach areCabbages.

Sol.


In this typeof questions, conclusions haveword 'AlI'.
Conclusions:All potatoes aretomatoes
All onions are cabbage.
All tomatoes are cabbage.
but when they come inner side from outer side, then the conclusionsmusthaveword 'Some'
Conclusions: Some cabbages aretomatoes.
Sometomatoes are potatoes.
Someonions are potatoes.
Type 2. Some, Somerelated statements.
Statements: Somechains arerings.
Somerings are anklerings.
Someanklerings arebangles.
Somebangles arehand.
Somehansds arefingers.

2. Statements: Someactorsaresingers.

All thesingers aredancers.
Conclusions: 1. Someactors aredancers.
2. No singer is actor.
(a) Only (1) conclusion follows
(b) Only (2) conclusion follows
(c) Either (1) or (2) follows
(d) Neither (1) nor (2) follows

Sol. (a);


Actors
Only (1) follows.
3. Statements : Somepapers arepens. All the pencils arepens.
Conclusions: 1. Some pens are pencils.
2. Somepens arepapers.
(a) Only (1) conclusion follows
(b) Only (2) conclusion follows
(c) Either (1) or (2) follows
(d) Neither (1) nor (2) follows

Sol. (c);


Papers Pencils
(or)


Papers
4. Statements: Somecows arecrows. Somecrows areelephants.
Conclusions: 1. Some cows areelephants.
2. All crows areelephants.
(a) Only (1) conclusion follows
(b) Only (2) conclusion follows
(c) Either (1) or (2) follows
(d) Neither (1) nor (2) follows

Sol. (d);

(or)


None of the two follows.
5. Statements: Someants are parrots. All the parrots areapples.
Conclusions: 1. All theapples areparrots.
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

Sol. (b);


Only (2) follows.

## Exercise

Directions (1-20) : In each of thequestions given below are given some statements followed by some conclusions. Read all conclusions and give the answer as follows-
(a) If only conclusion I follows.
(b) If only conclusion II follows.
(c) If either conclusion I or II follows.
(d) If neither conclusion I nor II follows.

1. Statements : All cots aretables. All tables aretrains. All trains arebuses.
Conclusions: I. All tables are buses.
II. All trains aretables.
2. Statements: Somemobilearecomputers.

Some computers arecalculators.
Somecal culators arephones.
Conclusions: I. Somephones arecomputers.
II. Somecomputers aremobile.
3. Statements: All spoons arebowls.

Somebowls areglasses.
Someglasses areplates.
Conclusions: I. Someglasses are spoons.
II. Someplates arebowls.

## Blood Relations

Relationship means persons connected by relationslike- father, mother, son-daughter, brother-sister, grand father, grand mother, uncle-aunty, nephew-niece, brother-in-law, sister-in-law etc. Thelist can go on and on adding members from father's sideand mother's side etc.

Question in Test of Reasoning on Family/ Blood relationship are about the relationship of a particular person with another person of thefamily, based on thechain of relationships between other members of that family.

Family/ Blood Relation Tests arean exercise to test the candidates ability to comprehend and cometo thecrux of an issue from complex, lengthy and unclear data.

+ Relations from Paternal Side
- Father's Father $\rightarrow$ Grandfather
- Father's Mother $\rightarrow$ Grand mother
- Father's Sister $\rightarrow$ Aunt
- Father's Brother $\rightarrow$ Uncle
- Wife of Uncle $\rightarrow$ Aunt
- Husband of Aunt $\rightarrow$ Uncle
- Children of Uncle/ Aunt $\rightarrow$ cousin


## + Relations from $M$ aternal Side

- M other's father $\rightarrow$ Maternal grandfather
- M other's brother $\rightarrow$ Maternal Uncle
- Children of maternal Uncle $\rightarrow$ Cousin
+ Other Relations
- Grand father's son $\rightarrow$ Father/ Uncle
- Grand mother's only son $\rightarrow$ Father
- Father's son $\rightarrow$ brother
- Son's wife $\rightarrow$ Daughter-in-law
- Brother's/ Sister's son $\rightarrow$ Nephew
- Brother's wife $\rightarrow$ Sister-in-law
- Husband's or wifebrother $\rightarrow$ Brother-in-law
- Grandson's or grand daughter's daughter $\rightarrow$ Great grand daughter.
+ Wecan denote malecandidates with (+) sign and female candidate with (-) sign.


## Some examples are:-



Father - Daughter

$\stackrel{\ominus}{\text { M other - Daughter }}$

## Exercise

1 Pointing to a photograph, a man said, "I have no brother or sister but that man's father is my father's son." Whose photograph was it?
(a) Hisown
(b) His son
(c) His father's
(d) His nephew's

2 Pointing towards a boy, Veena said, "He is the son of only son of my grandfather." How is that boy related to Veena?
(a) Aunt
(b) Uncle
(c) Mother
(d) Datainadequate
3. Introducing Reena, Monika said, "She is the only daughter of my father's only daughter." How is M onika related to Reena?
(a) Aunt
(b) Niece
(c) Cousin
(d) Data inadequate
4. Pointing to a man a woman said, "His mother is theonly daughter of my mother." How is the woman related to themother?
(a) Mother
(b) Daughter
(c) Sister
(d) Grandmother
5. If $X$ is thebrother of theson of $Y$ 's son, how is $X$ related to $Y$ ?
(a) Son
(b) Brother
(c) Cousin
(d) Grandson

6 Pointing towards Rita, Nikhil said." I am theonly son of her mother's son." How is Rita related to Nikhil?
(a) Aunt
(b) Niece
(c) Mother
(d) Cousin
7. Pointing to a lady, a man said," The son of her only brother is the brother of my wife." How is the lady related to theman?
(a) Mother'ssister
(b) Grandmother
(c) Mother-in-law
(d) Sister of father-in-law

8 Pointing to Ketan, Namrata said, "He is the son of my father's only son." How is Ketan's mother related to Namrata?
(a) Daughter
(b) Aunt
(c) Sister
(d) Cantbedetermined
9. Pointing to a man on the stage, Rashi said, "He is the brother of thedaughter of thewife of my husband." How is theman on the stage rel ated to Rashi?
(a) Son
(b) Husband
(c) Cousin
(d) Nephew
10. A woman introduces a man as the son of the brother of her mother. How is theman related to the woman?
(a) nephew
(b) Son
(c) Cousin
(d) Uncle

11 Introducing a man, a woman said, "Heisthe only son of my mother's mother." How is the woman related to the man?
(a) Mother
(b) Aunt
(c) Sister
(d) Niece
12. Looking at a portrait of a man, H arsh said, "H is mother is the wife of my father's son. Brother and sisters I have none." At whose portrait was H arsh looking?
(a) Hisson
(b) His cousin
(c) His uncle
(d) His nephew
13. Pointing to a man in a photograph, Asha said, "His mother's only daughter is my mother." How is A sha related to that man?
(a) Nephew
(b) Sister
(c) Wife
(d) Can't bedetermined
14. Introducing a man, a woman said, "His wifeis theonly daughter of my father." How is that man related to the woman?
(a) Brother
(b) Father-in-law
(c) Maternal uncle
(d) Husband
15. Pointing towards a girl in the picture, Sarita said, "She is themother of Neha whose father is my son." How is Sarita related to the girl in the picture?
(a) Mother
(b) Aunt
(c) Cousin
(d) Datainadequate
16. Deepak said to Nitin," That boy playing football is the younger of the wo brothers of the daughter of my father's wife." H ow is the boy playing football related to Deepak?
(a) Son
(b) Brother
(c) Cousin
(d) Nephew
17. Pointing to a lady on the platform, M anju said," She is the sister of the father of my mother's son." Who is the lady to Manju?
(a) Mother
(b) Sister
(c) Aunt
(d) Niece
18. Introducing man to her husband, a woman said, "His brother's father is theonly son of my grandfather." How is the woman related to this man?
(a) Mother
(b) Aunt
(c) Sister
(d) Can't bedetermined.
19. A is mother of $D$ and sister of $B$. $B$ has a daughter $C$. Who is married to $F$.G is the husband of A. H ow is $G$ related to D?
(a) husband
(b) son
(c) father
(d) uncle
20. Pointing to Kapil, Shilpa said, "His mother's brother is the father of my son, A shish." How is Kapil related to Shilpa?
(a) Sister-in-law
(b) Nephew
(c) Niece
(d) Aunt
21. Showing theman receiving the prize, Saroj said, "H eis thebrother of my uncle's daughter." Who istheman to Saroj?
(a) Son
(b) Brother-in-law
(c) Nephew
(d) Cousin
44. Which of the following expression represents $T$ is nephew of J?
(a) $J \times M-F+T$
(b) $J \times M-F+T$
(c) $J \times M \div F \times T$
(d) None of these
45. Which of the following expression represents $B$ is the paternal uncleof H ?
(a) $B \times M \div H$
(b) $\mathrm{B}+\mathrm{H} \div \mathrm{H}$
(c) $B \times M+H$
(d) $\mathrm{B}+\mathrm{M}-\mathrm{H}$
46. P'sfather $Q$ is $B$ 's paternal uncle and $A$ 's husband $M$ is P'spaternal uncle. How is $A$ related to $B$ ?
(a) Cousin
(b) Aunt
(c) Mother
(d) Datainadequate
47. Shobha is the niece of A shish. Ashish's mother is Priya. Kamla is Priya's mother. Kamla's husband is Hari. Krishna is the mother-in-law of Hari. How is Shobha related to Hari?
(a) Daughter
(b) Great grand daughter
(c) Grand niece
(d) Great grandson's daughter
48. Kalyani is mother-in-law of Veena who is sister-in-law of A shok. Dheeraj is father of Sudeep, theonly brother of Ashok. Veena is the only daughter of her parents. How is Kalyani related to A shok?
(a) Cousin
(b) Wife
(c) Mother-in-law
(d) None of these
49. Nandini is only daughter of Madan's sister Sangita's brother. How is Nandini related to Madan?
(a) Daughter
(b) Niece
(c) Cousin
(d) Nieceor Daughter
50. Pointing to M ona, Swarup says, "She is the daughter of only onechild of my grandfather. "How is M ona related Swarup?
(a) Aunt
(b) Cousin
(c) Data inadequate
(d) Sister

## Solutions

1. (b); Since the narrator has no brother, his father's son is hehimself. Thephotograph is of his son.
2 (d); Only son of grandfather can be father or uncle. So, son of father would be brother and son of uncle would becousin. Hencedata inadequate.
2. (d); My fathers' only daughter can beherself or hissister. In thefirst case, she would be the mother (M onika may bemalename).
In thesecond case, hewould become uncle. So data inadequate.
3. (b); Only daughter of my mother-Myself. So, thewoman is mother's daughter.
4. (d); Son of Y's son-Grandson; Brother of Y's grandson- $Y$ 's grandson. So, $X$ is $Y$ 's grandson
5. (a); Rita's mother son-Rita's brother. Henceshe is aunt.
6. (d); Wife's brother-Brother-in-law. Son of lady's brother is thebrother-in-law of theman. So, lady's brother is man's father -in-law i.e. thelady is thesister of man's father-in-law.
8 (d); My father's only Son, can be Namrata himself or N amrata's brother. In thefirst case M other of ketan will be Namrata's wife, and in the latter case she would besister in law of Namrata. Thus Cannot be answered
7. (a); Wife of Rashi's husband-Rashi; Brother of daughter-Son. So, the man on the stage is Rashi's son.
8. (c); Brother of mother-Uncle; Uncle'sson--Cousin.
9. (d); Woman is theniece of theman.

12 (a); Since Harsh has no brother or sister, so he is his father's only son. So, wife of H arsh's father's sonHarsh's wife. Thus, Harsh's wifeistheman'smother or theman is Harsh's son.
13. (d); Asha's mother's mother is man's mother i.e., A sha's mother is man's sister. But Asha can be niece or nephew as gender not known.
14. (d); Only daughter of woman's father-woman herself. So, the man is woman's husband.
15. (d); Neha is the daughter of Sarita's son, and the girl is Neha's mother. So, thegirl is Sarita's son's wifei.e. Sarita is thegirl's mother-in-law or father-in-law as gender cannot bedetermined.
16. (b); Father's wife-M other; mother's daughter-sister; Deepak's sister's younger brother-Deepak's younger brother. So, theboy is Deepak's brother.
17. (c); Manju's mother's son-Manju's brother; Manju's brother's father-M anju's father, Manju's father's sister-M anju's aunt.
18. (d); My grandfather's Only son-father, or uncle. If man is the son of father, the woman becomes sister. But if heis uncle, shebecomes cousin.
19. (c);


From the diagram it is clear that $G$ is Father of $D$
20. (b); Father of Shilpa's son-Shilpa's husband. So, Kapil is the son of sister of Shil pa's husband. Thus, kapil is Shilpa's nephew.
21. (d); Brother of uncle's daughter-Unde's son-Cousin. So, the man is Saroj's cousin.
22. (d); Only son of Amar's mother's father-Amar's maternal uncle. So, the girl's maternal uncle is Amar's maternal unde. Thus, the girl's mother is Amar's aunt. Or, if thegirl is Amar's sister, thegirl's mother is his mother.

## Assertion \& Reason

The word 'Assertion' means a confident and forceful statement of fact or belief when we talk about it as a noun. In these questions, the candidate is provided with a statement. This statement presents an opinion, a fact, or a comment. We call it the assertion. The other statement is the 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. Given below are two statements, one labelled as Assertion (A) and other as the Reason (R).
Assertion (A) : Sustainable development is important for well-being of human society.
Reason (R) : Sustainable development is a kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

## Codes :

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true
2. Given below are two statements, one labelled as Assertion (A) and other as the Reason (R).
Assertion (A) : Forests are a renewable resource.
Reason (R) : They enhance the quality of environment. Select the correct answer from codes given below :
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true
3. Given below are two statements, one labelled as Assertion (A) and other as the Reason (R).
Assertion (A) : The biosphere is an example of an open system.
Reason (R) : There cannot be reinvestment of new substances in the biosphere, but there is no restriction on the investment and exit of energy.
Select the correct answer using the codes below :
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true
4. Consider the following statements and select the correct answer from the codes given below :
Assertion (A) : India is a case of an over-urbanized country.
Reason (R): Most of the large cities in India do not have adequate infrastructure.

## Codes :

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true
5. Consider the following statements :

Assertion (A) : Natural resources are those that exist in a region and can also be used in future.
Reason (R): The development of an actual natural resource depends upon the technology and cost of production.
Select the correct answer from codes given below :
(a) Both Assertion (A) and Reason (R) are true and Reason (R) correctly explains Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason (R) does not the correctly explain Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true

## Solution (1-5)

1. (a): Sustainable development is important for wellbeing of human society. Sustainable development has been defined in many ways. The most frequently quoted definition is from our common future, also known as the Brundtland Report "Sustainable development is development that meets the needs of the present without compromising the ability of future generation to meet their own needs". Thus, both assertion and reason are true and reason is correct explanation of assertion.
2. (b): Renewable resources are the resources which can be reused. Thus, forest is a renewable resource as it can be reused after its sustainable exploitation. Forests enhance the quality of the environment as it absorbs carbon dioxide and produces oxygen. Thus, assertion and reason both are correct, but reason is not the correct explanation of assertion.
3. (c): The biosphere is an example of an open system. The input and output of substances take place in their
system. There can be reinvestment of new substances in the biosphere. Thus, assertion is true, but reason is false.
4. (d): According to the Census of 2011 approximately 121 crore people $(68.9 \%$ ) still live in rural areas as compared to 37.7 crores ( $31.1 \%$ ) people living in the urban areas. Although, the rate of urbanization in India is high yet the process lacks solutions to provide basic infrastructural amenities like drinking water, transport, sanitation, electricity, etc. Thus, assertion is false, but reason is true.
5. (b): Potential resources are those which exist in a particular area and can be used in future. Actual resources are those which have been surveyed and their volume and quality have been determined and there are being used currently. The development of an actual resource depends upon technology and cost of production. Thus, assertion and reason both are correct however reason does not explain the assertion.

## EXERCISE

1. Consider the following statements:

Assertion (A) : Natural vegetation is the true index of climate.
Reason (R): Water-loving plants are found in a moist climate.
Codes :
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason ( $R$ ) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true
2. Consider the following statements :

Assertion (A) : There is a positive relation between Human Development Index (HDI) and Sustainable Development Goals (SDG) ranking of Indian State.
Reason (R): The underlying dimension of Sustainable Development Goals (SDG) targets are closely related to education and health aspect.

## Codes :

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason ( R ) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true
3. Consider the following statements :

Assertion (A) : Various components of an ecosystem are not interdependent.
Reason (R) : Human activities have the impacts the environment.
Codes:
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason ( R ) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true
4. Consider the following statements :

Assertion (A) : Maximum number of the species of butterflies are found in tropical countries.
Reason (R) : Butterflies cannot tolerate low temperatures.
Codes :
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason ( R ) is not the correct explanation of Assertion (A)
29. Consider the following statements :

Assertion (A) : The Supreme Command of the Defence Forces is vested in the President.
Reason (R) : The President's powers as Commander-inChief are independent of Legislative control.
Codes :
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason ( $R$ ) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true
30. Consider the following statements:

Assertion (A) : The Council of Ministers in the Union of India is collectively responsible both to the Lok Sabha and the Rajya Sabha.
Reason (R): The members of both the Lok Sabha and the Rajya Sabha are eligible to be the Ministers of the Union Government.
Codes :
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true, but Reason ( R ) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true, but Reason (R) is false
(d) Assertion (A) is false, but Reason (R) is true

## SOLUTIONS

1. (a): Natural vegetation is the true index of climate and an increase in the quantity of carbon dioxide in the atmosphere also affects the natural vegetation. Water-loving or aquatic plants are those which are found mostly in muddy land and near the ponds. They are found in the moist climate. Reduction of moisture in the atmosphere results in the erosion of such plants. Thus, Assertion (A) and Reason (R) both are correct and Reason ( R ) is the correct explanation of Assertion (A).
2. (a): The underlying dimension of Sustainable Development Goals (SDG) targets are closely related to education and health aspect as evident in the positive correlation between Human Development Index (HDI) and Sustainable Development Goals (SDG) rankings of Indian State. Thus, Assertion (A) and Reason (R) both are correct and Reason ( R ) is the correct explanation of Assertion (A).
3. (d): Various components of an ecosystem are interdependent. Human activities (pollution, overpopulation, burning fossil fuels, deforestation, etc.) have the impacts on the environment. Thus, Assertion (A) is not correct, but Reason (R) is correct.
4. (a): It is generally accepted that climate factors regulate most insect species' life cycle, including butterflies. It is well established that temperature is a key factor for increasing daily activities (flight, foraging, movements) of butterflies. Butterflies cannot tolerate low temperatures. So, maximum number of the species of butterflies are found in tropical countries. Thus, Assertion (A) and Reason (R) both
are correct and Reason (R) is the correct explanation of Assertion (A).
5. (a): Climate change is increasing the pressure on resources. There are many evidences available which prove that climate change has an adverse impact on both production and productivity of agriculture and forestry. Therefore, the possibility of a more complex situation in the future cannot be denied. The agriculture sector is most affected by the extreme weather conditions which raise the question of food security. In the case of food insecurity, there is a tendency for control over unnecessary food storage which ultimately leads to social stress. So, food insecurity is also a major factor of social stress. Thus, Assertion (A) and Reason (R) both are correct and Reason (R) is the correct explanation of Assertion (A).
6. (a): The ozone layer is a layer in Earth's atmosphere which contains relatively high concentrations of ozone $\left(\mathrm{O}_{3}\right)$. This layer absorbs $93-99 \%$ of the sun's high frequency ultraviolet light, which is potentially detrimental to life on earth. Thus, Assertion (A) and Reason (R) both are correct and Reason (R) is the correct explanation of Assertion (A).
7. (a): A growing population means increased demand for food and a corresponding need to convert forests to agriculture land. Demographic factors including population growth, density, distribution, migration and urbanization are important drivers of deforestation. Thus, Assertion (A) and Reason $(\mathrm{R})$ both are correct and Reason (R) is the correct explanation of Assertion (A).


## Introductions

The word Computer in earlier times meant a person who performed calculations or computations. With years its definition changed to a machine that performs calculations. It can perform all type of mathematical and logical operations;
it can accept data, store data, retrieve data, process data and produce output.
Charles Babbage was known as father of computer. He invented two machines in 1822 introduced Difference Engine and in 1834, introduced Analytical engine

| Difference Engine | Charles Babbage | First automatic mechanical calculator |
| :---: | :---: | :---: |
| Analytical Engine | Charles Babbage | Mechanical general-purpose computer |
| Z1 | KonradZuse | World's first freely programmable computer |
| MARK-1 | KonradZuse | First Freely programmable Computer |
| ENIAC | John W. Mauchly and <br> J. Presper Eckert | First general purpose programmable electronic computer |
| EDSAC | JohnvonNeumann | First computer to store program |
| EDVAC | John W. Mauchly and J. Presper Eckert | Binary serial computer |
| UNIVAC | John W. Mauchly and J. Presper Eckert | First general-purpose computer for commercial use |
| Intel 4004 | Intel <br> Intel, a 4-bitCPU | First commercially available microprocessor by |
| LISA (Local <br> Integrated Software Architecture) | Apple Inc. | First commercial personal computers to have a GUI |
| Dataphone | AT\&T | First AT\&T Commercial modem |
| ARPANET | United States Department network to | Early packet switching network and the first implement the protocol suite TCP/IP. |
| NEXUS Browser | Tim Berners-Lee named Nexus. The first browser with a graphic (WorldWideWeb) Erwi | First Web Browser was WorldWideWeb later only available web interface was |

Generation of Computer

| Subject | 1st generation | 2nd generation | 3rd generation | 4th generation | 5th <br> generation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Period | 1940-1956 | $1956-1963$ | $1964-1971$ | 1971-present |  <br> beyond |
| Circuitry | Vacuum tube | Transistor | Integrated chips <br> (IC) | Microprocessor <br> (VLSI) | ULSI (Ultra <br> Large Scale <br> Integration) <br> technology |
| Memory Capacity | 20 KB | 128 KB | 1MB | Semiconductor type <br> and very high | VLSI and ULSI |
| Processing Speed | 300 IPS inst. Per <br> sec. | 300 IPS | 1MIPS(1 <br> million inst. Per <br> sec.) | Faster than 3rd <br> generation | Very fast |
| Programming <br> Language | Assembly <br> Language | High level <br> language <br> (FORTRAN, <br> COBOL, ALGOL) | C,C++ | C,C++,Java | All the Higher <br> level languages, <br> Neural <br> networks, |
| Example of <br> computers | UNIVAC, EDVAC | IBM 1401, IBM <br> 7094, CDC 3600,D <br> UNIVAC 1108 | IBM 360 series, <br> 1900 series | Pentium series <br> Multimedia, <br> Stimulation | Artificial <br> Intelligence, <br> Robotics |

## Types of computer



Analog computer introduced by Lord Kelvin. Numerical data are represented by measurable physical variables such as electrical voltage. A thermometer is a simple analog computer.
Digital computer that accepts and process data in the form of numbers and all the character are converted into binary code. Hybrid computer used the combined feature of analog and digital machine. you can see hybrid computer in geological departments.
Microcomputer these are small relatively inexpensive computer designed for personal and office use. It has lowest storing and processing speed. These can be laptop or desktop. Minicomputer powerful as compare to microcomputer it has higher memory provide faster operating speeds and large storage capacities than microcomputers. It can be used as a server and capable of supporting from 2 to 200 users.
Mainframe computer it has very high memory and processing speed and used as a server (can support thousands of users)

Super computer can be used for complex type of application i.e. specific research, weather forecasting, Weapon designing etc. CDC 6600 was the first successful supercomputer.
Sunway TaihuLight of China is the fastest supercomputer in the world.
PARAM-8000 India's first Super Computer developed by C- DAC Pune in 1998.
Shasra T is considered as India's fastest super computer, manufactured by Indian Institute of Science.

Servers are dedicated computers that serve the needs or request of other programs or computer.
Workstations serve usually one user only.
Information appliances are computers specially designed to perform a specific "user-friendly" function-such as playing music, photography.
An embedded system is a computer system with a dedicated function within a larger system.

## Hardware and I/0

A computer is an electronic device that accepts data from the user (input), processes the data by performing calculations and operations on it and generates the desired Output.
An unprocessed collection or representation of raw facts represented in a manner suitable for communication, interpretation or processing by humans or by automatic means, is known as Data.
Personal computers use a number of chips mounted on a maincircuitboard called Motherboard. A motherboard is the physical arrangement in a computer that contains the computer's basic circuitry and components.

An output device is any piece of computer hardware equipment used to communicate the results of data processing carried out by an information processing system (such as a computer) which converts the electronically generated information into human-readable form.
The CPU is fabricated as a single Integrated Circuit (IC) chip. It is also known as the Microprocessor. Multiprocessor Computers uses two or more central processing units (CPUs) within a single computer system. The term
 also refers to the ability of a system to support more than one processor and/or the ability to allocate tasks between them.

The central processing unit (CPU) is the brain of your computer. It handles all the instructions you give your computer. The control unit (CU) is a component of a computer's central processing unit (CPU) that directs operation of the processor. It tells the computer's memory, arithmetic/logic unit and input and output devices how to respond to a program's instructions.
An arithmetic logic unit (ALU) is a digital circuit used to perform arithmetic and logic operations. It represents the fundamental building block of the central processing unit (CPU) of a computer.
Instruction Execution: the program which is to be executed is a set of instruction which are stored in memory. The CPU executes the instructions of program to complete a task and this execution takes place inside the CPU with the help of registers ALU (arithmetic logic unit) and CU(control unit). When the processor executes instructions, data is temporarily stored in small local memory location and these are called registers.
Accumulator Register:- which stores the immediate result of arithmetic and logical operations.
Memory address register (MAR) :- which contain the address of memory location to which data is to be stored.
Program counter :- which contain the address of the next instruction to process.
Instruction register:- which contain the current instruction being processed


1. Short title, extent and commencement.
(1) This Act may be called the Prohibition of Child Marriage Act, 2006.
(2) It extends to the whole of India1 ${ }^{* * *}$; and it applies also to all citizens of India without and beyond India: Provided that nothing contained in this Act shall apply to the Renoncants of the Union territory of Pondicherry.
(3) It shall come into force on such date2 as the Central Government may, by notification in the Official Gazette, appoint; and different dates may be appointed for different States and any reference in any provision to the commencement of this Act shall be construed in relation to any State as a reference to the coming into force of that provision in that State.
2. Definitions: In this Act, unless the context otherwise requires,-
(a) "child" means a person who, if a male, has not completed twenty-one years of age, and if a female, has not completed eighteen years of age;
(b) "child marriage" means a marriage to which either of the contracting parties is a child;
(c) "contracting party", in relation to a marriage, means either of the parties whose marriage is or is about to be thereby solemnised;
(d) "Child Marriage Prohibition Officer" includes the Child Marriage Prohibition Officer appointed under subsection (1) of section 16 ;
(e) "district court" means, in any area for which a Family Court established under section 3 of the Family Courts Act, 1984 (66 of 1984) exists, such Family Court, and in any area for which there is no Family Court but a city civil court exists, that court and in any other area, the principal civil court of original jurisdiction and includes any other civil court which may be specified by the State Government, by notification in the Official Gazette, as having jurisdiction in respect of the matters dealt with in this Act;
(f) "minor" means a person who, under the provisions of the Majority Act, 1875 ( 9 of 1875), is to be deemed not to have attained his majority.
3. Child marriages to be voidable at the option of contracting party being a child. -
(1) Every child marriage, whether solemnised before or after the commencement of this Act, shall be voidable at the option of the contracting party who was a child at the time of the marriage:
Provided that a petition for annulling a child marriage by a decree of nullity may be filed in the district court only by a contracting party to the marriage who was a child at the time of the marriage.
(2) If at the time of filing a petition, the petitioner is a minor, the petition may be filed through his or her guardian or next friend along with the Child Marriage Prohibition Officer.
(3) The petition under this section may be filed at any time but before the child filing the petition completes two years of attaining majority.
[Note: 1. The words "except the State of Jammu and Kashmir" omitted by Act 34 of 2019, s. 95 and the Fifth Schedule (w.e.f. 31-10-2019).
4. 1st November, 2007, vide notification No. S.O. 1850(E), dated 30th October, 2007, see Gazette of India, Extraordinary, Part II, sec. 3(ii). ]
(4) While granting a decree of nullity under this section, the district court shall make an order directing both the parties to the marriage and their parents or their guardians to return to the other party, his or her parents or guardian, as the case may be, the money, valuables, ornaments and other gifts received on the occasion of the marriage by them from the other side, or an amount equal to the value of such valuables, ornaments, other gifts and money:
Provided that no order under this section shall be passed unless the concerned parties have been given notices to appear before the district court and show cause why such order should not be passed.
5. Provision for maintenance and residence to female contracting party to child marriage. -
(1) While granting a decree under section 3 , the district court may also make an interim or final order directing the male contracting party to the child marriage, and in case the male contracting party to such marriage is a minor, his parent or guardian to pay maintenance to the female contracting party to the marriage until her remarriage.
(2) The quantum of maintenance payable shall be determined by the district court having regard to the needs of the child, the lifestyle enjoyed by such child during her marriage and the means of income of the paying party.
(3) The amount of maintenance may be directed to be paid monthly or in lump sum.
(4) In case the party making the petition under section 3 is the female contracting party, the district court may also make a suitable order as to her residence until her remarriage.
6. Custody and maintenance of children of child marriages.-
(1) Where there are children born of the child marriage, the district court shall make an appropriate order for the custody of such children.
(ii) whether the procedures prescribed under the Act and rules were followed, including those regarding timeframes;
(iii) details of arrangements for care and protection of victims of offences under this Act, including arrangements for emergency medical care and medical examination; and
(iv) details regarding assessment of the need for care and protection of a child by the concerned CWC in any specific case;
(h) use the information so collected to assess the implementation of the provisions of the Act. The report on monitoring of the Act shall be included in a separate chapter in the annual report of the NCPCR or the SCPCR.
(2) The concerned authorities mandated to collect data, under the Act, shall share such data with the Central Government and every State Government, NCPCR and SCPCRS.
7. Repeal.-The Protection of Children from Sexual Offences Rules, 2012 are hereby repealed, except as respects things done or omitted to be done before such repeal.

## CHAPTER-03

## The Child Labour (Prohibition and Regulation) Act, 1986

1. Short title, extent and commencement.
(1) This Act may be called ${ }^{2}$ [the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986].
(2) It extends to the whole of India.
(3) The provisions of this Act, other than Part III, shall come into force at once, and Part III shall come into force on such date ${ }^{3}$ as the Central Government may, by notification in the Official Gazette, appoint, and different dates may be appointed for different States and for different classes of establishments.
2. Definitions.-In this Act, unless the context otherwise requires,-
${ }^{4}$ [(ia)] "appropriate Government" means, in relation to an establishment under the control of the Central Government or a railway administration or a major port or a mine or oilfield, the Central Government, and in all other cases, the State Government;
${ }^{5}$ [(i) "adolescent" means a person who has completed his fourteenth year of age but has not completed his eighteenth year;]
${ }^{6}[(i i)$ "child" means a person who has not completed his fourteenth year of age or such age as may be specified in the Right of Children to Free and Compulsory Education Act, 2009 (35 of 2009), whichever is more;]
(iii) "day" means a period of twenty-four hours beginning at mid-night;
(iv) "establishment" includes a shop, commercial establishment, workshop, farm, residential hotel, restaurant, eating house, theatre or other place of public amusement or entertainment;
(v) "family", in relation to an occupier, means the individual, the wife or husband, as the case may be, of such individual, and their children, brother or sister of such individual;
(vi) "occupier", in relation to an establishment or a workshop, means the person who has the ultimate control over the affairs of the establishment or workshop;
(vii) "port authority" means any authority administering a port;
(viii) "prescribed" means prescribed by rules made under section 18 ;
(ix) "week" means a period of seven days beginning at midnight on Saturday night or such other night as may be approved in writing for a particular area by the Inspector;
[Note: 1. Subs. by Act 35 of 2016, s. 2, for the long title (w.e.f. 1-9-2016).
3. Subs. by s. 4, ibid., for "the Child Labour (Prohibition and Regulation) Act, 1986 (61 of 1986)" (w.e.f. 1-9-2016).
4. 26th May, 1993, vide notification No. S.O. 333(E), dated 26th March, 1993, see Gazette of India, Extraordinary, Part II, sec. 3(ii).
5. Clause (i) renumbered as clause (ia) thereof by Act 35 of 2016, s. 4 (w.e.f. 1-9-2016).
6. Ins. by s. 4, ibid. (w.e.f. 1-9-2016).
7. Subs. by s. 4, ibid., for clause (ii) (w.e.f. 1-9-2016).]
(x) "workshop" means any premises (including the precincts thereof) wherein any industrial process is carried on, but does not include any premises to which the provisions of section 67 of the Factories Act, 1948 (63 of 1948), for the time being, apply.
${ }^{1}$ [3. Prohibition of employment of children in any occupation and process. -
(1) No child shall be employed or permitted to work in any occupation or process.
(2) Nothing in sub-section (1) shall apply where the child,-
(a) helps his family or family enterprise, which is other than any hazardous occupations or processes set forth in the Schedule, after his school hours or during vacations;
(b) works as an artist in an audio-visual entertainment industry, including advertisement, films, television serials or any such other entertainment or sports activities except the circus, subject to such conditions and safety measures, as may be prescribed:
8. Clause (c) relettered as clause (d) thereof by s. 21, ibid. (w.e.f. 1-9-2016).
9. Clause (d) relettered as clause (e) thereof by s. 21, ibid. (w.e.f. 1-9-2016).

## 8. Ins. by Act 35 of 2016, s. 21 (w.e.f. 1-9-2016).]

(2) Every rule made by a State Government under this Act shall be laid as soon as may be after it is made, before the legislature of that State.
20. Certain other provisions of law not barred.-Subject to the provisions contained in section 15, the provisions of this Act and the rules made thereunder shall be in addition to, and not in derogation of, the provisions of the Factories Act, 1948 (63 of 1948), the Plantations Labour Act, 1951 (69 of 1951) and the Mines Act, 1952 (35 of 1952).
21. Power to remove difficulties.-
(1) If any difficulty arises in giving effect to the provisions of this Act, the Central Government may, by order published in the Official Gazette, make such provisions not inconsistent with the provisions of this

Act as appear to it to be necessary or expedient for removal of the difficulty:
Provided that no such order shall be made after the expiry of a period of three years from the date on which this Act receives the assent of the President.
(2) Every order made under this section shall, as soon as may be after it is made, be laid before the Houses of Parliament.
22. Repeal and savings.-
(1) The Employment of Children Act, 1938 (26 of 1938) is hereby repealed.
(2) Notwithstanding such repeal, anything done or any action taken or purported to have been done or taken under the Act so repealed shall, in so far as it is not inconsistent with the provisions of this Act, be deemed to have been done or taken under the corresponding provisions of this Act.
[Sections 23 to 26.]—Rep. by the Repealing and Amending Act, 2001 (30 of 2001), s. 2 and the First Schedule (w.e.f. 3-9-2001).

## CHAPTER-04

## The Immoral Traffic Prevention Amendment Bill, 2006

1. Short title and commencement.
(1) This Act may be called the Immoral Traffic (Prevention) Amendment Act, 2006.
(2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint and different dates may be appointed for different provisions of this Act.
2. Amendment of section 2

In section 2 of the Immoral Traffic (Prevention) Act, 1956 (hereinafter referred to as the principal Act), - [105 of 1956]
(i) in clause (aa), for the words "sixteen years", the words "eighteen years" shall be substituted;
(ii) clauses (ca) and (cb) shall be omitted;
(iii) in clause (f), after the words "for commercial purposes", the words "or for consideration in money or in any other kind" shall be inserted.
3. Amendment of section

In section 3 of the principal Act, for sub-section (1), the following sub-section shall be substituted, namely:- [10]
"(1) Any person who keeps or manages, or acts or assists in the keeping or management of, a brothel shall be punishable on first conviction with rigorous imprisonment for a term of not less than two years and which may extend to three years and also with fine which may extend to ten thousand rupees and in the event of a second or subsequent conviction, with rigorous imprisonment for a term which shall not be less than three years and which may extend to seven years and shall also be liable to fine which may extend to two lakh rupees.".
4. Amendment of section 4.

In section 4 of the principal Act, in sub-section (1), the words "or a minor to" shall be omitted.
5. Amendment of section 5.

In section 5 of the princpal Act, in sub-section (1), for the proviso, the following proviso shall be substituted, namely:-
"Provided that if the person in respect of whom an offence committed under this sub-section, is a child, the punishment provided under this sub-section shall extend to rigorous imprisonment for a term of not less than seven years but may extend to life.".
6. Insertion of new sections 5A, 5B and 5C.

After section 5 of the principal Act, the following sections shall be inserted, namely:-
5A. Whoever recruits, transports, transfers, harbours, or receives a person for the purpose of prostitution by means of,-
(a) threat or use of force or coercion, abduction, fraud, deception; or
(b) abuse of power or a position of vulnerability; or
(c) giving or receiving of payments or benefits to achieve the consent of such person having control over another person, commits the offence of trafficking in persons.
Explanation-Where any person recruits, transports, transfers, harbours or receives a person for the purposes of prostitution, such person shall, until the contrary is proved, be presumed to have recruited, transported, transferred, harboured or received the person with the intent that the person shall be used for the purpose of prostitution.
(1) If any difficulty arises in giving effect to the provisions of this Act, the Central Government may, by order, published in the Official Gazette, make such provisions not inconsistent with the provisions of this Act, as may appear to it to be necessary for removing the difficulty:
Provided that no order shall be made under this section after the expiry of three years from the
commencement of the Right of Children to Free and Compulsory Education (Amendment) Act, 2012 (30 of 2012).
(2) Every order made under this section shall be laid, as soon as may be after it is made, before each House of Parliament.]

## CHAPTER-07

## The Criminal Law Amendment Act, 2013

1. Short title and commencement.
(1) This Act may be called the Criminal Law (Amendment) Act, 2013.
(2) It shall be deemed to have come into force on the 3rd day of February, 2013.
2. Amendment of section 100 .
(1) In the Indian Penal Code (hereafter in this Chapter referred to as the Penal Code), in section 100, after clause Sixthly, the following clause shall be inserted, namely:-
"Seventhly.-An act of throwing or administering acid or an attempt to throw or administer acid which may reasonably cause the apprehension that grievous hurt will otherwise be the consequence of such act."
3. Insertion of new sections 166 A. and 166B.
(1) After section 166 of the Penal Code, the following sections shall be inserted, namely:-
"166A. Whoever, being a publc servant,-
(a) knowingly disobeys any direction of the law which prohibits him from requiring the attendance at any place of any person for the purpose of investigation into an offence or any other matter, or
(b) knowingly disobeys, to the prejudice of any person, any other direction of the law regulating the manner in which he shall conduct such investigation, or
(c) fails to record any information given to him under sub-section (1) of section 154 of the Code of Criminal Procedure, 1973, in relation to cognizable offence punishable under section 326A, section 326B, section 354, section 354B, section 370, section 370A, section 376, section 376A, section 376B, section 376C, section 376D, section 376E or section 509, shall be punished with rigorous imprisonment for a term which shall not be less than six months but which may extend to two years, and shall also be liable to fine.
166B. Whoever, being in charge of a hospital, public or private, whether run by the Central Government, the State Government, local bodies
or any other person, contravenes the provisions of section 357C of the Code of Criminal Procedure, 1973, shall be punished with imprisonment for a term which may extend to one year or with fine or with both.".
4. Amendment of section 228A.
(1) In section 228A of the Penal Code, in sub-section (/), for the words, figures and letters "offence under section 376 , section 376 A, section 376 , section 376 C or section 376 D ", the words, figures and letters "offence under section 376, section 376A, section $376 B$, section 376C, section 376D or section 376E" shall be substituted.
5. Insertion of new sections 326A and 326B.
(1) After section 326 of the Penal Code, the following sections shall be inserted, namely:-
'326A. Whoever causes permanent or partial damage or deformity to, or burns or maims or disfigures or disables, any part or parts of the body of a person or causes grievous hurt by throwing acid on or by administering acid to that person, or by using any other means with the intention of causing or with the knowledge that he is likely to cause such injury or hurt, shall be punished with imprisonment of either description for a term which shall not be less than ten years but which may extend to imprisonment for life, and with fine:
Provided that such fine shall be just and reasonable to meet the medical expenses of the treatment of the victim:
Provided further that any fine imposed under this section shall be paid to the victim.
326B. Whoever throws or attempts to throw acid on any person or attempts to administer acid to any person, or attempts to use any other means, with the intention of causing permanent or partial damage or deformity or burns or maiming or disfigurement or disability or grievous hurt to that person, shall be punished with imprisonment of either description for a term which shall not be less than five years but which may extend to seven years, and shall also be liable to fine.
"42. Where an act or omission constitutes an offence punishable under this Act and also under sections 166A, 354A, 354B, 354C, 354D, 370, 370A, 375, 376, 376A, 376C, 376D, 376B or section 509 of the Indian Penal Code, then, notwithstanding anything contained in any law for the time being in force, the offender found guilty of such offence shall be liable to punishment under this Act or under the Indian Penal Code as provides for punishment which is greater in degree.
42A. The provisions of this Act shall be in addition to and not in derogation of the provisions of any other law for the time being in force and, in case of any inconsistency, the provisions of this Act shall have
overriding effect on the provisions of any such law to the extent of the inconsistency."
6. Repeal and savings.
(1) The Criminal Law (Amendment) Ordinance, 2013 is hereby repealed.
(2) Notwithstanding such repeal, anything done or any action taken under the Indian Penal Code, the Code of Criminal Procedure, 1973 and the Indian Evidence Act, 1872, as amended by the said Ordinance, shall be deemed to have been done or taken under the corresponding provisions of those Acts, as amended by this Act.

## CHAPTER-08

## The National Policy for Children, 2013

## 1. Introduction

(1.1) India is home to the largest child population in the world. The Constitution of India guarantees Fundamental Rights to all children in the country and empowers the State to make special provisions for children. The Directive Principles of State Policy specifically guide the State in securing the tender age of children from abuse and ensuring that children are given opportunities and facilities to develop in a healthy manner in conditions of freedom and dignity. The State is responsible for ensuring that childhood is protected from exploitation and moral and material abandonment.
(1.2) Declaring its children as the nation's "supremely important asset" in the National Policy for Children, 1974, the Government of India reiterated its commitment to secure the rights of its children by ratifying related international conventions and treaties. These include the Declaration of the Rights of the Child, Universal Declaration of Human Rights and its Covenants, the Convention on the Rights of the Child and its two Optional Protocols, the United Nations Convention on the Rights of Persons with Disabilities, the United Nations Convention against Transnational Organized Crime, the Protocol to Prevent, Suppress and Punish Trafficking in Women and Children, the Hague Convention on Protection of Children and Cooperation in respect of Inter-Country Adoption, and the Convention on the Elimination of All Forms of Discrimination against Women.
(1.3) The National Policy for Children, 1974 recognised that programmes for children should find prominent place in national plans for the development of human resources, so that children grow up to become robust citizens, physically fit, mentally alert and morally healthy, endowed with the skills and motivations provided by society. The Policy also laid emphasis on equal opportunities for the development of all children during the period of growth.
(1.4) The National Charter for Children, 2003 adopted on 9th February 2004, underlined the intent to secure for every child its inherent right to be a child and enjoy a healthy and
happy childhood, to address the, root causes that negate the healthy growth and development 6 f children, and to awaken the conscience of the community in the wider, societal context to protect children from all forms of abuse, while strengthening the family, society and the Nation.
(1.5) To affirm the Government's commitment to the rights based approach in addressing the continuing and emerging challenges in the situation of children, the Government of India hereby adopts this Resolution on the National Policy for Children, 2013.

## 2. Preamble

(2.1) Recognising that:
a child is any person below the age of eighteen years;

- childhood is an integral part of life with a value of its own;
- children are not a homogenous group and their ' different needs need different responses, especially the multidimensional vulnerabilities experienced by children in different circumstances;
- a long term, sustainable, multi-sectorai, integrated and inclusive approach is necessary for the overall and harmonious development and protection of children;
(2.2) Reaffirming that :
- every child is unique and a supremely important national asset;
- special measures and affirmative action are required to diminish or eliminate conditions that cause discrimination;
- all children have the right to grow in a family environment, in an atmosphere of happiness, love and understanding;
- families are to be supported by a strong social safety net in caring for and nurturing their children;
the Government of India reiterates its commitment to safeguard, inform, include, support and empower all children within its territory and jurisdiction, both in their individual situation and as a national asset. The State is committed to take affirmative measures--legislative, policy or otherwise-to promote and safeguard the right of all children to live and grow with equity, dignity, security and The Child Mortality Rate

Child Mortality is the death (mortality) of children under 5 years of age. According to UNICEF, Child Mortality or Under-5 Mortality Rate refers to the probability a newborn would die before reaching exactly 5 years of age, expressed per 1,000 live births.

Infant Mortality Rate (IMR) refers to the probability of dying between birth and exactly 1 year of age, expressed per 1,000 live births.

Neonatal Mortality Rate (NMR) refers to the probability of dying during the first 28 days of life, expressed per 1,000 live births.
Trends in India: According to the Sample Registration System (SRS) Statistical Report, 2020 released in September 2022, India's Under-5 Mortality Rate stood at $\mathbf{3 2}$ while Infant and Neonatal Mortality Rates were $\mathbf{2 8}$ and $\mathbf{2 0}$ respectively.

| INDICATOR | SRS 2014 | SRS 2019 | SRS 2020 |
| :--- | :---: | :---: | :---: |
| Crude Birth Rate (CBR) | 21.0 | 19.7 | 19.5 |
| Total Fertility Rate | 2.3 | 2.1 | 2.0 |
| Early Neonatal Mortality <br> Rate (ENMR) - 0- 7 days | 20 | 16 | 15 |
| Neonatal Mortality Rate (NMR) | 26 | 22 | 20 |
| Infant Mortality Rate (IMR) | 39 | 30 | 28 |
| Under 5 Mortality Rate (U5MR) | 45 | 35 | 32 |

The NMR ranges from 23 in rural areas to 12 in urban areas. The IMR ranges from 31 in rural areas to 19 in urban areas.
According to the SRS 2020 Report, 6 States/ UTs have already attained SDG target of NMR (<=12 by 2030). These are Kerala (4), Delhi (9), Tamil Nadu (9), Maharashtra (11), Jammu \& Kashmir (12) and Punjab (12).

11 States/UTs have already attained SDGs target of U5MR (<=25 by 2030). These are Kerala (8), Tamil Nadu (13), Delhi (14), Maharashtra (18), J\&K (17), Karnataka(21), Punjab (22), West Bengal (22), Telangana (23), Gujarat (24), and Himachal Pradesh (24).

| States/UTs |  | Birth rate |  | Death rate | Infant mortality rate |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 1 0}$ |
| $\mathbf{2 0 2 0}$ |  |  |  |  |  |  |
|  | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | (7) |
| Andhra Pradesh | 17.9 | 15.7 | 7.6 | 6.3 | 46.0 | $\mathbf{2 4 . 0}$ |
| Assam | 23.2 | 20.8 | 8.2 | 6.2 | 58.0 | 36.0 |
| Bihar | 28.1 | 25.5 | 6.8 | 5.4 | 48.0 | $\mathbf{2 7 . 0}$ |
| Chhattisgarh | 25.3 | 22.0 | 8.0 | 7.9 | 51.0 | 38.0 |
| NCT of Delhi | 17.8 | 14.2 | 4.2 | 3.6 | 30.0 | 12.0 |
| Gujarat | 21.8 | 19.3 | 6.7 | 5.6 | 44.0 | 23.0 |
| Haryana | 22.3 | 19.9 | 6.6 | 6.1 | 48.0 | 28.0 |
| Jammu \& Kashmir | 18.3 | 14.6 | 5.7 | 4.6 | 43.0 | 17.0 |
| Jharkhand | 25.3 | 22.0 | 7.0 | 5.2 | 42.0 | 25.0 |
| Karnataka | 19.2 | 16.5 | 7.1 | 6.2 | 38.0 | 19.0 |
| Kerala | 14.8 | 13.2 | 7.0 | 7.0 | 13.0 | 6.0 |
| Madhya Pradesh | 27.3 | 24.1 | 8.3 | 6.5 | 62.0 | 43.0 |
| Maharashtra | 17.1 | 15.0 | 6.5 | 5.5 | 28.0 | 16.0 |
| Odisha | 20.5 | 17.7 | 8.6 | 7.3 | 61.0 | 36.0 |
| Punjab | 16.6 | 14.3 | 7.0 | 7.2 | 34.0 | 18.0 |
| Rajasthan | 26.7 | 23.5 | 6.7 | 5.6 | 55.0 | 32.0 |
| Tamil Nadu | 15.9 | 13.8 | 7.6 | 6.1 | 24.0 | 13.0 |

1. The commission for the Protection of Child Right Act 2005 receive the assent of the President $\qquad$ _.
(a) 1 January
(b) 20 January
(c) 15 August
(d) 26 January
2. What is defined in Section 2 (ii) of the Child Labour (Prohibition and Regulation) Act, 1986?
(a) Workshop
(b) Child
(c) Week
(d)Appropriate Government
3. The National charter for children was notified in the Gazette of India on
(a) 26 January 2004
(b) 9 February 2005
(c) 15 August 2005
(d) 9 February 2004
4. Under the protection of children from sexual offecnces Act, 2012 Who will conduct the cases before the Special Court:
(a) Additional district public prosecutor
(b) Government pleader
(c) Special public prosecutor
(d) District prosecution officer
5. According to census 2011 sex ratio per 1000 male was
(a) 950 females
(b) 943 females
(c) 940 females
(d) 945 females
6. The Right of children to free and compulsory Education Act 2009 provides free and compulsory education to all children -
(a) between the age of four to fourteen year
(b) between the age of six to fourteen year
(c) between the age of six to Eighteen year
(d) between the age of five to fifteen year
7. The Immoral Traffic (Prevention) Act extend to-
(a) Both above are incorrect.
(b) Whole of India except Jammu \& Kashmir
(c) Both above are correct
(d) Whole of India
8. Which Article of constitution of India empowered the state to make special provision for children?
(a) Article 16(3)
(b) Article 15 (2)
(c) Article 15 (3)
(d) Article 15 (1)
9. Under which section the definition of a child is given in the prohibition of child marriage Act, 2006
(a) Sec-3 (c)
(b) Sec-3 (a)
(c) Sec-2 (c)
(d) Sec-2 (a)
10. According to the data of the United Nations International Children's Emergency Fund, the infant mortality rate in the year 2021 was $\qquad$ _.
(a) 25
(b) 18
(c) 21
(d) 20
11. Brothel is defined under the Immoral Traffic (Prevention) Act 1956 in
(a) Section 2 (d)
(b) Section 2 (b)
(c) Section 2 (c)
(d) Section 2 (a)
12. Which provision of the constitution of India provision early childhood care and education to children below the age of 6 years.
(a) Article 46
(b) Article 44
(c) Article 45
(d) Article 43
13. What is object of National charter of children?
(a) All of these
(b) to protect the health of child
(c) to make provision for healthy growth
(d) to protect right of child
14. Under which section of the Right of children to free and compulsory Education Act 2009 Child has been defined?
(a) Section 2 (d)
(b) Section 2 (b)
(c) Section 2 (c)
(d) Section 2 (a)
(a)
15. Child Labour Technical Advisory Committee is constituted under Section 5 of the Child Labour (Prohibition and Regulation) Act, 1986?
(a) By the President
(b) By the state government
(c) By the central government
(d) By the appropriate government
16. At present the infant mortality rate under the age of 5 in India is?
(a) 40
(b) 34
(c) 32
(d) 35
17. Under Section 2 (b) of the commission for the Protection of Child Right Act 2005 defined?
(a) Member
(b) Right
(c) Commission
(d) Child Right
18. Which section is related to the provisions for the appointment of child marriage prohibition officer under the prohibition of child marriage Act, 2006.
(a) Section 16
(b) Section 15
(c) Section 18
(d) Section 14
19. Under the protection of children from sexual offences Act, 2012 the special court shall complete the trial as form as possible within a period from taking congizance of the offence.
(a) 1 year
(b) 9 months
(c) 2 years
(d) 6 months
20. Estimated sex ratio per 1000 males in the year 2023 is?
(a) 943 females
(b) 995 females
(c) 1020 females
(d) 990 females
21. Under the protection of children from sexual offence Act, 2012 in which section the sexual Harassment defined
(a) Section 11
(b) Section 5
(c) Section 9
(d) Section 2


The guidelines for regulating hostels of educational institutions.

## (1) Title and Scope of the Guidelines

a) These guidelines may be called "Regulatory Guidelines for hostel of educational institutions for children".
b) These guidelines shall apply to all institutions wherever children in the age group of 6-18 years are in accommodation for the purpose of imparting education.
c) These guidelines shall be applicable to any/all such institutions functioning under various nomenclature viz. College, hostel, coaching centres, remedial centres and any other institution wherever children in the age group of below 18 years are in accommodation for the purpose of imparting education.
d) Nothing contained in these guidelines shall apply to any institution that falls under the purview of Juvenile Justice (Care and Protection of Children) Act, 2015.
e) The State may notify these guidelines as legislation in their respective States to regulate hostels of educational institutions.
f) the schemes/regulatory bodies under various ministries of union/state government responsible for regulating institutions imparting education to the children below the age of below 18 years shall notify these guidelines to bring uniformity in norms and standards, wherever children in the age below 18 years are in accommodation for the purpose of imparting education.
(2) Definitions
a) "Appropriate Government" In Relation To A Hostel Of Educational Institutions For Children Established Within Territory Of A State, The State Government; And Union Territory Having Legislature, The Government Of That Union Territory.
b) "Competent authority" means an officer who is head of district education department as applicable in respective States/UTs.
c) "Child" means a student below the age of eighteen years.
d) "District" means jurisdiction of District of the competent authority in respective states/UT.
e) Hostel of Educational Institutions for children" means wherever children in the age of below 18 years are in accommodation for the purpose of imparting education.
f) "Employee" means any person appointed/engaged by the management of the Hostel of Educational Institutions who is involved in any activity of the said institution.
g) "Fee" means expenditure of any kind incurred by the parents/guardian of child for the purpose of accommodation in such residential facility.
h) "Guardian" in relation to a child, means a person having the care and custody of that child and includes a natural guardian or guardian appointed or declared by a court or a statute.
i) NCPCR means the "National Commission for Protection of Child Rights (NCPCR)" constituted under Section 3 of the Commissions for Protection of Child Rights Act, 2005 (4 of 2006)
j) "Norms and Standards" means minimum mandatory requirements to establish and run a "hostel of educational institutions for children" as in point 4 (b) of these guidelines
k) "Parent" means either the biological or step or adoptive father or mother of a child.
I) "Educational Institution" means any aided/unaided institution, private aided and unaided Minority institutions imparting education to the children in the age group of 6-18 year.
m) SCPCR means "State Commission for Protection of Child Rights" constituted under Section 17 of the Commissions for Protection of Child Rights Act, 2005 (4 of 2006).
n) "Screening Procedure" means method other than that of random selection for admission of a child.
o) RTE Act, 2009- The Right of Children to Free and Compulsory Education Act, 2009
(3) Establishment of hostel
a) After the enforcement of the guidelines by notification, no hostel of educational institution shall run without registration within the time period of six months (or as stated in notification) from the date of notification of the said guidelines.
b) Registration under these guidelines shall be deemed mandatory for any/all educational institutions having hostels/residential facilities for children below 18 years either regulated or affiliated or recognized by any other council/statutory body/department/board or not.
(4) Procedure of Registration
a) The management of every hostel in existence on the date of the enforcement of these guidelines as per point 3 and of every hostel proposed to be established on or after that date shall make an application, in prescribed format, to the competent authority for registration to run such hostels or to establish such institution, as the case may be;
b) Every such application shall-
i. be in the prescribed form as annexed;
ii. be accompanied by such processing fee as prescribed by respective appropriate Government; and
iii. contain the particulars as per the annexed norms and standards,

| 72. | Is the hostel situated on hilltops or where there is a possibility of landslide? |  |  |
| :---: | :---: | :---: | :---: |
| 73. | Is the hostel located near an industry or a chemical factory producing fatal chemical products? |  |  |
| Safety from Constructional Hazards |  |  |  |
| 74. | Does the hostel have any ongoing construction? |  |  |
| 75. | Are barricades and signboards being put in the construction area prohibiting the movement of students? |  |  |
| Safety in the Playground |  |  |  |
| 76. | Is the playground safe for the students to play games? Are they being maintained well? |  |  |
| 77. | What are the different sports facilities available in the hostel? |  |  |
| 78. | Are the SAI guidelines followed in providing these facilities? (give details) |  |  |
| 79. | Have adequate precautions for the safety of the students being taken by the hostel? |  |  |
| Water Safety |  |  |  |
| 80. | Is the drinking water safe in the hostel plant? Is the water source well protected? |  |  |
| 81. | Is the water provided to the students tested by the inspection teams periodically? |  | - |



## CHAPTER-02

Handling of Large Number of Students.
Record Management of Children

Effectively managing a large number of students as a hostel warden requires careful planning, strong organizational skills, and the ability to build a positive and inclusive community. Here are some strategies and organizational tips to handle this responsibility effectively:

1. Clear Communication:

- Maintain open and transparent communication channels with students. Establish regular meetings or check-ins to address concerns and provide updates.
- Ensure that students are aware of the rules, regulations, and expectations within the hostel. Clearly communicate consequences for rule violations.

2. Delegation of Responsibilities:

- Delegate specific responsibilities to assistant wardens or student leaders to help with day-to-day tasks, such as managing common areas, conducting inspections, or organizing events.
- Create a structured system for students to report maintenance issues or concerns, and ensure these are addressed promptly.

Community Building: Community building is a crucial aspect of being an effective hostel warden, especially when managing a large number of students. Building a strong and supportive community can lead to a more harmonious living environment and better overall well-being for the students. Here are some strategies and ideas for community building:

1. Welcome and Orientation: Begin by welcoming new students to the hostel with an orientation program. This can include introductions, tours, and information about hostel rules and resources.
2. Icebreaker Activities: Organize icebreaker activities and events at the beginning of each semester or academic year. These activities can help students get to know each other and build friendships.
3. Common Spaces: Create inviting and functional common spaces within the hostel where students can socialize, study, and relax. Arrange furniture in a way that encourages interaction.
4. What is the person who runs the hostel called?
(a) Clerk
(b) Peon
(c) Warden
(d) Teacher
5. How can warden ensure peaceful environment for study in Hostel?
(a) Give permission to students to take his pet in study zone.
(b) Ignore any problem in study zone.
(c) Promote meetings and celebrations full of noise in study zone.
(d) Decide peaceful time and study zone in Hostel.
6. In which register the behavior done by the student is recorded?
(a) Consultation register
(b) Academic register
(c) Attendance register
(d) None of these
7. How many times in a year the accounts of the hostel required to be audited?
(a) Four times
(b) Two times
(c) Three times
(d) Once
8. Who controls hostel and mess?
(a) Chief Director
(b) Director
(c) Warden
(d) None of these
9. How can a Hostel warden ensure that the hostel with disabilities
(a) Refusal to make any accommodation for students with disabilities.
(b) Regular audit and improvement in hostel premises to make accessible to disabled
(c) Exclusion of students with disabilities from living in the hostel.
(d) Ignore the accessibility needs of students with disabilities.
10. Reporting system established
(a) Adaptability to change
(b) Better productivity
(c) Clarity of working relation
(d) Specialization
11. Which consumable goods are provided to students in the hostel?
(a) The mug, bucket, a mop, A.C
(b) Almirah, light iron box, inverter, broom
(c) Mattress, pillow, a dustbin, bicycle
(d) Bed, table, chair, bookshelf
12. What type of information is required in modern management for financial statements like profit and loss account and balance sheet
(a) Less detailed
(b) Limited only
(c) More detailed
(d) Too restricted
13. Regular Health Checkup should be conducted in hostel after how much time interval?
(a) once in 5 months
(b) once in 2 month
(c) once in 6 months
(d) once in 3 month
14. How often should the warden conduct regular hostel meetings with the student?
(a) whenever they feel like
(b) once a month
(c) once in semester
(d) once in a year
15. A wordern is oppointed on how many students?
(a) 40-60
(b) $60-80$
(c) $80-100$
(d) 100-120
16. For Girls Hostel how much percentage of management and teachers reserved for females
(a) $50 \%$
(b) $75 \%$
(c) $35 \%$
(d) $25 \%$
17. As a Hostel Warden what is your primary responsibility?
(a) Handling academic affairs of the students
(b) To manage the finances of the hostel
(c) Organizing extra curricular activities
(d) To ensure safety and well being of students
18. Which deficiency test conducted for girls on regular basis in the hostel ?
(a) Phosphorus
(b) Vitamin A
(c) Iron
(d) Calcium
19. What are the benefits of hostel to students?
(a) Sense of cooperation
(b) Discipline
(c) Self dependency
(d) All of the above
20. What is the main objective of hostel life?
(a) Conduct extra curricular activities
(b) Availability of sufficient time for study and research
(c) Companion spirit and spirit of living together
(d) All of the above
21. What are things being given for the entertainment of students in the hostel?
(a) Valley ball
(b) Badminton
(c) T.V.
(d) All of the above
22. Who is not included in hostel management committee?
(a) Deputy warden
(b) Secretary
(c) Warden
(d) Principal
23. If any group is not following cleanliness norms, problem will be solved by which official in the hostel.
(a) By meeting of Students
(b) By Hostel Superintendent
(c) By Hostel care taker
(d) By warden
24. A suggestion box is setup in the hostel who controls the complaint box?
(a) Intra hall committee
(b) Mess committee
(c) Student committee
(d) Management committee
25. The data contained in the cumulative record card should be.
(a) Extensive
(b) Accurate
(c) Usable
(d) All of the above
26. Consider the following statements and give correct answer.

Statement I: It is necessary to maintain healthy lifestyle and healthy environment.

## PART - VI GENERAL ENGLISH

## Verb

Verbs have traditionally been defined as "action" words or "doing" words. The verb in the following sentence is rides:

## Paul ridesa bicycle

Here, the verb rides certainly denotes an action which Paul performs - the action of riding a bicycle. However, there are many verbs which do not denote an action at all. For example, in Paul seems unhappy, we cannot say that the verb seems denotes an action. We would hardly say that Paul is performing any action when he seems unhappy. So the notion of verbs as "action" words is somewhat limited.

## KINDSOFVERBS:

1. Finite verbs
2. Non-finite verbs
3. Transitive verbs 4. Intransitive verbs
4. Finite Verbs: Finite Verbs are those verbs that have a definite relation with the subject or noun. These verbs are usually the main verb of a clause or sentence and can be changed according to the noun. They are used only in present and past tense.
She walks home.

- Here we see that the finite verb is walks and the pronoun is 'she'.
She walked home.
- Here we can see how the verb changed/modified to change the tense of the sentence.

2. Non-finite verbs: These verbs cannot be the main verb of a clause or sentence as they do not talk about the action that is being performed by the subject or noun. They do not indicate any tense, mood or gender. They are used as nouns, adverbs and adjectives. They are also used to form non-finite clauses which are simply dependent clauses that use nonfinite verbs.
Non-finite verbs are of the following three types:

## (a) Infinite (b) Gerund (c) Participle

(a) Infinite verbs: An infinitive is formed by using the word 'to' before the verb in its stem word. It functions as a noun, adjective or adverb.
Ex- (a) He was made to clean his room.
(b) Shalini loves to talk.
(b) Gerund verbs: A gerund is formed by adding -ing to a verb. It functions as a noun.
Ex- (a) Swimming is very good for the body.
(b) Smoking is prohibited in the hospital.

Note: With the following verbs/ adjectives/ phrases ' $\mathrm{V}_{1}{ }^{+ \text {ing }}$ ' is used after 'to'.

Ex- Verb+used to, accustomed to, averse to, with a view to, addicted to, devoted to, in addition to, look
forward to, object to, owing to, given to, taken to, prone to.
Ex- I. He is addicted to smoking.
II. I am looking forward to meeting you.

In other words, after all the prepositions (including 'to'), if a verb comes, the verb has to be in ' $\mathrm{V}_{1}$ +ing'

Ex-
(a) I am looking forward to meeting you.
(b) He is given to drinking.
(c) He is prone to making the same mistake again and again.
(c) Participe Verb: A participle is usually formed by adding -ing or -ed to a verb. It functions as an adjective.
Ex- (a) The singing bird was the main attraction at the event.
(b) The injured man was waiting for the doctor.
3. Transitive Verb: If a verb requires an object after it, it is called a transitive verb.
I saw the dog.
(the dog - direct object)
Lee ate the pie.
(the pie - direct object)
4. Intransitive Verb: An intransitive verb is one that does not take a direct object. In other words, it is not done to someone or something. It only involves the subject.
He laughed.
(Laughed is an intransitive verb. It has no direct object.)
He told a joke.
(Told is a transitive verb. The direct object is a joke. You can tell something. You can tell a story, a lie, a joke, etc.)

## MODALS

A modal (like can, must, should, etc.) is a verb which is used with another verb in order to express an idea such as possibility, responsibility, compulsion, etc.

For Ex- (a) You must come on Wednesday.
(b) You should bring this book tomorrow.

Note: A modal is always followed by the first form of verb.
For Ex - One must obey one's elders.

## USE OF MODALS:

1. Can: 'Can' is used to denote 'ability'.

For Ex - I can run as fast as you.
'Can' is also used to denote request.
For Ex- Can I use your pen?
Can is also used for giving 'Permission'.
For Ex - You can use my pen.
2. Could: 'Could' is used as past participle of can.

For Ex - When she was younger, she could run 10 km and not get without tired.
'Could' can also be used to show possibility.
For Ex - A lot of money could be saved.
3. May: 'M ay' is used to denote possibility.

For Ex- I maycometomorrow.
May is used to denote 'permission'.
For Ex- You may come in.
'May' can also be used for taking permission.

##  <br> 2



On the basis of time of an action performed, we can divide sentences into the following three tenses:
(i) Present Tense
(ii) Past Tense
(iii) Future Tense

Again on the basis of state of an action performed, we can further classify each tense into the following four parts:
(i) Simple Indefinite Tense
(ii) Progressive/ Continuous Tense
(iii) Perfect Tense
(iv) Perfect Continuous Tense

## Present Tense

This Tense expresses an action that is currently going on or habitually performed or a state that currently or generally exists. We can classify present Tense into the following four parts:
(i) Present Indefinite (Simple Present)
(ii) Present Continuous (Present Progressive)
(iii) Present Perfect
(iv) Present Perfect Continuous
(i) Present Indefinite Tense

This Tense is called Present 'Indefinite' Tense because in this Tense, the action is simply mentioned and nothing can be said about its completeness. This Tense is used to express an action which occurs on regular basis.

## Structure

For Singular:
$\rightarrow \mathrm{Sub}+\mathrm{V}_{1}+\mathrm{s} / \mathrm{es}+\mathrm{Obj}$. (Affirmative)
For Ex - She writes a letter
$\rightarrow$ Sub + does not $+V_{1}+$ Obj. (Negative)
For Ex - She does not write a letter.
$\rightarrow$ Does + Sub + V 1 + Obj. + '?' (Interrogative)
For Ex - Does she write a letter?
$\rightarrow$ Does + Sub + not $+\mathrm{V}_{1}+\mathrm{Obj}+{ }^{\prime}$ ?'
(Interrogative - Negative)
For Ex - Does she not write a letter?

## Tenses

## For Plural:

$\rightarrow$ Sub $+\mathrm{V}_{1}+$ Obj (Affirmative)
For Ex - They play cricket.
$\rightarrow$ Sub + do not $+\mathrm{V}_{1}+$ Obj (Negative)
For Ex - They do not play cricket.
$\rightarrow \mathrm{Do}+\mathrm{Sub}+\mathrm{V}_{1}+\mathrm{Obj}+{ }^{\text {' } ? '}$ (Interrogative)
For Ex - Do they play cricket?
$\rightarrow \mathrm{Do}+\mathrm{Sub}+\operatorname{not}+\mathrm{V}_{1}+\mathrm{obj}+{ }^{\prime} ?{ }^{\prime}$
(Interrogative - Negative)
For Ex - Do they not play cricket?
Note: I is treated as 'Plural' in Present Tense.
For Ex - I eat dinner at $8 \mathrm{O}^{\prime}$ clock daily.
Uses:

## 1. To show Habitual Actions

For Ex - (a) He goes out for a walk every day.
(b) My father visits temple thrice a week.
2. To show General truth/Universal truth/ permanent truth etc.
For Ex - (a) The sun rises in the east.
(b) Wate $r$ boils at $100^{\circ} \mathrm{C}$.
3. To show imperative sentences.

For Ex - (a) Always obey your parents.
(b) Do not play on the road.
4. In exclamatory sentences which start with 'Here' and 'There'
For Ex -
(a) Here comes the train!
(b) There rings the bell!
5. In newspaper headlines and commentary of sports.

For Ex - (a) India launches a satellite.
(b) Sachin hits a boundary.
6. To describe the events that occurred in past in a dramatic way.
For Ex - (a) India uproots the British Empire.
(b) Alexander defeats Paurus.
7. This Tense is also used to express professional activities.
For Ex - (a) A barber cuts hair.
(b) A confectioner sells sweets.
(ii) Present Continuous Tense

This Tense is used to express action that is currently in progress.

## Structure

## For Singular:

$\rightarrow \mathrm{Sub}+\mathrm{is}+\mathrm{V}_{1}$ ing +Obj (Affirmative) For Ex - She is singing a song.
$\rightarrow$ Sub + is not $+\mathrm{V}_{1}$ ing + Obj (Negative)
For Ex - She is not singing a song

Note: In future perfect Tense, when an action is expected to be completed in near future, till/by are used before the adverb of future.
For Ex - "by tomorrow, till next week, by ! Monday"
Uses:
To show an action in which 'when' or 'before' is ' followed by present Tense.
For Ex - (a) I will have completed this task before she comes.
(b) He will have reached school before the bell rings.
(iv) Future Perfect Continuous Tense:

This Tense is used to express an action that continues upto some point of time in future.
Structure:
$\rightarrow$ Sub + will have been $+\mathrm{V}_{1}$ ing + Obj. + Since/ for + Time being (Affirmative)
For Ex - She will have been washing clothes for 3 hours.

```
Sub + will not have been + V V ing + Obj +
    since/for + Time being (Negative)
    For Ex - Will not have been washing clothes
        for 3 hrs.
    -> Will + Sub + have been + V V ing + Obj +
    Since/for + time being + '?' (Interrogative)
    For Ex - Will she have been washing clothes
        for 3 hours?
    Will + Sub + not + have been + V Ving + Obj + since/
    for + time being + '?' (Interrogative - Negative)
    For Ex - Will she not have been washing
        clothes for 3 hrs?
    Note: Future perfect progressive denotes
        continuous action while future perfect
        denotes completed action.
    For Ex - (a) By the end of this month, I will
        have been travelling for }6\mathrm{ months
        (Continuous action)
        (b) By the end of this month, I will have
        travelled for }6\mathrm{ months (Completed
        Action)
```


## Exercise

Directions: Read each sentence to find ' out whether there is any grammatical error in it. The error, if any, will be in i one part of the sentence. The number 1 of that part is the answer. If there is no error, the answer is ' 4 ' i.e. No error, (Ignore the errors of punctuation, if any).

1. The question is $(1)$ / so complicated that (2)/it could not besolved immediately. (3)/No error (4)
2. Ragesh finished his work (1)/ just before you came to see him (2)/ at his residence. (3)/No er- ! ror (4)
3. Rakesh asked me (1)/why was I I angry at his remarks (2)/which ! he had not made deliberately. I (3)/No error (4)
4. If I would have spoken to my ' father (1)/as you spoke to me (2)/ he would have beaten me. ' (3)/No error (4)
5. Foolishly Dhananjay threw (1)/ ' some water on the electric heater (2)/when it catches fire and he got a shock. (3)/No error (4)
6. The enmity between the (1)/ two ' groups had reached a level (2)/ where reconciliation has become impossible. (3)/No error (4)
7. If Deepak had been with us (1)/ from the beginning (2)/we would be much happier. (3)/ No I error (4)
8. As soon as Sujeet saw the tiger, (1)/ he run (2)/and climbed up the tree. (3)/No error (4)
9. Rakesh has already gone (1)/ before the (2)/roof fell down to the earth. (3)/ No error (4)
10. The film started (1)/ before we reached (2)/because we were ' late. (3)/ No error (4)
11. When you will find out (1)/ any solution to this problem you will become able (2)/ to finalise the project. (3)/ No error (4)
12. Whenever you are coming here, (1)/ you bring a lot of (2)/ sweets for me.(3)/ No error (4)
13. A misogynist is a person (1)/ who is hating woman but a philogynist is a person (2)/ who
loves woman.(3)/ No error (4)
14. Now-a-days he teaches physics (1)/ because the teacher of physics (2)/ has been absenting himself for a month.(3)/ No error (4)
15. 'It is high time (1)/ you are starting this work.' (2)/ my friend said to me.(3)/ No error (4)
16. Many of my friends (1)/ wished to come here today but (2)/ none of them arrived yet.(3)/ No error (4)
17. She says that she will take (1)/ her umbrella (2)/ in case it will rain.(3)/ No error (4)
18. When I will be thirty (1)/ most of my friends (2)/ will be above thirty five, be sure. (3)/ No error (4)
19. This is, indeed, (1)/ the first time in my life that I hear (2)/ such an interesting story.(3)/ No error (4)
20. Before the alarm (1)/ had stopped ringing (2)/ John had pulled up the shade. (3)/ No error (4)

## Subject Verb Agreement or Syntax

In English, the basic structure of a sentence is as follows:

## 'Subject + Verb + Object'

Now, for a sentence to be grammatically correct, the verb must agree with the subject. In the other words, the verb used must be in accordance with the person and number of subject.
For example, look at the following sentence
(a) Shivam writes a letter (Singular verb is used with singular Subject)
(b) They write a letter (Plural verb used with Plural subject)

In order to attain grammatical accuracy some rules must be followed which are as follows
Rule 1: If two subjects are joined by 'and' and they denote two separate entities or ideas, plural verb will be used
For Ex- (a) Ravi and Rakesh are playing.
(b) You and Amit are late today.

Rule 2: If two (or more) nouns or adjectives are joined by 'and' but they denote a single person/thing idea, singular verb is used.
For Ex- (a) This black and white tie is mine.
(b) Bread and butter, is my favourite breakfast.
(c) Slow and steady, wins the race

Rule 3: If the subjects are joined by expressions like "alongwith, with, as well as, In addition to, besides, nothing, unlike, like, no less than, etc" the verb that follows agrees with the first subject
For Ex-
(a) Rohan as well as his friends is playing.
(b) They along with their teacher are going on vacations.
Rule 4: If two subjects are joined by "either.........or, neither.........nor, nor, or, not only.............but also" the verb agrees with the subject nearest to it.
For Ex- (a) Neither Ram nor Rohan is coming today.
(b) Not only Shyam but also his parents were present in the wedding.
Rule 5: "Neither of, either of, none of" etc. are followed by plural noun and singular verb.
For Ex- (a) Neither of these two girls is clever.
(b) Either of you was absent from the class.

Rule 6: Sometimes words like "Somebody, Everybody, each, nobody, anybody, everyone, everybody, nothing, ' every, anything" are used as subjects. In such case singular verb agrees with them.
For Ex- (a) Nobody knows about the future.
(b) Nothing is impossible if you have determination.
(c) Each boy is good in Maths.

Rule 7: If following expressions are followed by uncountable noun. We use singular verb with them.
"Most of, Half of, some of, enough of, plenty of, a lot of"
For Ex-
(a) Some milk is needed.
(b) Most of the work has been done.

Rule 8: Similarly if following expressions are followed by countable noun we use plural verb with them.
"Most of/Half of, some of, enough of, plenty of, a lot of"
For Ex- (a) Some questions are difficult.
(b) Most of the boys were absent.

Rule 9: "More than one" is followed by singular countable noun and singular verb.
For Ex- (a) More than one boy was absent.
(b) More than one man was against the proposal.
$\Rightarrow$ But, "More than two/three/four" is followed by plural noun and plural verb.
For Ex- (a) More than two boys were absent.
(b) More than ten houses were damaged in the flood.
$\Rightarrow$ Similarly, sentences with following structure use plural verb.
For Ex- (a) More teachers than one are present.
(b) More books than one are new.

Rule 10: Following expression are followed by plural noun and plural verb.
"A large number of, A number of, A great number of, large number of"
For Ex- $\quad$ (a) A large number of cows are grazing in the field.
(b) A number of boys are playing cricket.
$\Rightarrow$ But, 'the number of' is always followed by singular verb
For Ex- (a) The number of children is twenty.
(b) The number of passenger in Metro is increasing.
Rule 11: We use plural subject and Plural verb with the following:
"Many, A great many, A good many, Many of, A great many of, A good many of, both, several, various, Both of, Several of, various of, few, a few, very few, few of, a few of, very few of"
For Ex- (a) Many boy are absent today.
(b) A great many actors are coming.
(c) Many of the girls are taking part in the contest.
(d) Very few students are hard working.

Directions: Read each sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of 1 the sentence. The number of that part is i the answer. If there is no error, the answer I is ' 4 ' i.e. No error, (Ignore the errors of punctuation, if any).

1. He is one of the richest and (1)/most , generous men of (2)/ the town. (3)/ I No error (4)
2. Computerand(1)/telecommunication ' has(2)/developed of information technology. (3)/No error (4)
3. Bread and butter (1)/are essential for (2)/ one's life. (3)/No error (4)
4. Every man and woman in a family (1)/ , are responsible for (2)/the upbringing I of a child (3)/No error(4)
5. Either she (1)/or I will pay (2)/ the fees. (3)/No error (4)
6. Nothing but (1)/trees were seen (2)/ I in the garden. (3)/No error (4)
7. Each and every (1)/man, woman and ' child (2)/were given food yesterday evening. (3)/No error (4)
8. Five hours are too short (1)/a time ' to judge (2)/ one's character. (3)/No I error (4)
9. Many a passenger (1)/have been (2)/ I taken to the hospital. (3)/No error (4)
10. The teacher as well as (1)/his students I has committed (2)/ this mistake. (3)/ I No error (4)
11. The behaviour (1)/of the students , (2)/wasnot proper. (3)/No error (4)
12. Twenty miles (1)/are not a great (2)/ distance in these daysof rapid travel. I (3)/No error (4)
13. A group of (1)/people were (2)/sitting I at the street corner. (3)/No error (4)
14. The economics (1)/of the situation I (2)/has been discussed at some length. (3)/No error (4)
15. The teacher along with his two sons (1)/is doing research (2)/ these days. I (3)/No error (4)
16. Either of the two boys (1)/are eligible I
(2)/ for selection for the post. (3)/No ' error (4)
17. Forty kilometers is a big (1)/distance ! for me, (2)/ I am unable to walk on I foot. (3)/No error (4)
18. Physics is an important (1)/subject in (2)/the modern world. (3)/No error (4)
19. One of his (1)/friend was injured (2)/ in a railway accident. (3)/No error (4) I
20. I met the chairman (1)/and the । director who claims to be (2)/ Ram's father. (3)/No error (4)
21. Four miles beyond (1)/ that pasture was seen thousands (2)/ of cattle including some lambs. (3)/ No error (4)
22. It is noticed that the elite class have no soft (1)/ corner for the downtrodden who are the $(2) /$ real victims of the present social set-up. (3)/ No error (4)
23. Is there any difficulties (1)/ in disposing of this gorgeous building (2)/ built on such a spacious and beautiful north campus. (3)/ No error (4)
24. The request of the workers' union that their wages should be (1)/ increased were supported by (2)/ a vast majority. (3)/ No error (4)
25. The publisher says that there is (1)/ many important details to attend (2)/ to before this book gets printed. (3)/ No error (4)
26. We should not forget that we have a right to criticize but (1)/ at the same time each of us (2)/ have to remember the duty also. (3)/ No error (4)
27. One of the biggest industrial houses in (1)/Chennai is on the verge of (2)/ declaring a lock out. (3)/ No error (4)
28. A body of volunteers have been organized (1)/ to help the faculty ' members (2)/ in their attempt to raise the funds. (3)/ No error (4)
29. Everybody among the businessmen (1)/ were enjoying drinking when the Manager of the hotel (2)/ was shot dead by the thief. (3)/ No error (4)
30. Although these building are in need of repair, (1)/ there have been much improvement (2)/ in their appearance. (3)/ No error (4)
31. Not only the doctor but also the nurses of this nursing (1)/ home
is very kind and helpful (2)/ to the attendants. (3)/ No error (4)
32. There appears a number of new faces in the hall (1)/ and I really do not know where they have (2)/ come from and why. (3)/ No error (4)
33. The available statistics indicate that the population of the world (1)/will double in about 30 years and human life will become (2)/ more and more miserable. (3)/ No error (4)
34. What were once glorious forts (1)/ are now nothing but piles of (2)/ rubble. (3)/ No error (4)
35. Whether you should get married (1)/ now or whether you should remain single all your life (2)/ are your personal problem. (3)/ No error (4)
36. Does his daily struggle (1)/ for existence leave time to ponder over (2)/ international affairs? (3)/ No error (4)
37. Either the manager (1)/ or his assistants always try to misguide the public (2)/ regarding the vacancy in the factory. (3)/ No error (4)
38. In our college, it was obligatory for each of (1)/ the students to buy (2)/ his own instruments. (3)/ No error (4)
39. Those athletes who did not adhere to the rules of athletics (1)/ was deprived of taking part (2)/ in the summer Olympics. (3)/ No error (4)
40. Not Shawn and his friends (1)/ but Harry has surreptitiously taken (2)/ your photographs and sent them to her friends. (3)/ No error (4)
41. An ability to shrink and reduce oneself to a tiny form and reverse the process whenever desired (1)/ belongs to the realm of fantasy and is heard of only (2)/ in fairy tales or tales of magic. (3)/No error (4)
42. Neither Rajni nor Ragini (1)/ were to take to her heels (2)/ when they saw a cobra lying at the gate. (3)/No error (4)
43. None of the five players (1)/ who have been given a chance (2)/ to join this team play confidently. (3)/No error (4)
44. (2); Use 'is' in place of 'are'.
45. (2); Use 'was' in place of 'were'.

## Example\&

A word of collective Noun + of + PCN + SV
Example\&
A panel of expert has come.
$\downarrow \quad \downarrow$
SCN SV
A panel of experts have come.
$\downarrow \quad \downarrow$
PCN PV
A panel of experts has come.
(A world of collective noun)
PCN SV
A ban of musicians have come.
A band of musicians has come.
14. (3); Use 'have been' in place of 'has been'.
15. (4); No error
16. (2); Use 'is' in place of 'are'. Either/Neither/One/ Each/ Every / anyone/everything etc. take singular verb.
17. (4); No error
18. (4); No error
19. (2); Use 'friends' in place of 'friend'.
20. (2); Remove 'the' before the word 'director' because both Nouns (Chairman and Director) are used for one person (Ram's father). So article(the) is used before first noun.
21. (2); Use 'were' in place of 'was'.
122. (1); 'Have’ should be replaced by 'has'.
23. (1); Use 'are' in place of 'is'.
24. (2); Use 'was' in place of 'were'.
25. (1); Use 'are' in place of 'is'.
26. (1); Use 'has' in place of 'have'.
27. (4); No error.
28. (1); Use 'has' in place of 'have'.
29. (2); Use 'was' in place of 'were'.
30. (2); Use 'has' in place of 'have'.
31. (2); Use 'are' in place of 'is'.
32. (1); Use 'appear' in place of 'appears'.
33. (4); No error.
34. (4); No error.
35. (3); Use 'is' in place of 'are'.
36. (4); No error.
37. (4); No error.
(x) I 38. (4); No error.
39. (2); Use 'were' in place of 'was'.
40. (4); No error.
41. (4); No error.
42. (2); Use 'was' in place of 'were'.
43. (4); No error.
44. (4); No error.
45. (4); No error.
46. (1); Use 'have' in place of 'has'.
47. (2); Use 'has' in place of 'have'.
48. (1); Use 'were' in place of 'was'.
49. (1); Use 'were' in place of 'was'.
50. (4); No error.


## Chapter <br> 11

## Commonly Mis-spelt Words

About three-four questions(based on spellings) are asked in ! all kinds of SSC exams. Some spellings always confuse the aspi- । rants so it becomes necessary for the students to cover as many ' spellings as possible. So we have decided to cover all the important spellings. Students need to go through all the basic rules for spellings and practice the questions based on spellings.
Spelling related questions are always in the following question forms-
(a) four words are given out of which only one is correctly spelt. (So three spellings will be wrong.)
(b) four words are given out of which only one is misspelt. (So three spellings will be right.)
In both cases we are asked to find out the correct spelling. So it is required for the aspirants to practise questions based on spellings and study all the rules of spellings.

## Some rules for spelling

## Rule 1

When the suffix 'full' is added to a word, one ' 1 ' is removed. Example-
(i) faith + full - faithful
(ii) use + full - useful

If the word to which the suffix 'full' is added ends in '-Il' one 'I' is removed from the word. Example-
(i) skill + full - skilful
(ii) will + full - wilful

## Rule 2

One syllable words ending in single vowel + single consonant double the consonant before a suffix beginning with a vowel. Example-
(i) beg + ed - begged
(ii) big + er - bigger
(iii) trim + ing - trimming
(iv) sad + est - saddest

## Rule 3

A final ' $y$ ' following a vowel does not change before a suffix. Example-
(i) obey + ed - obeyed
(ii) play +er - player
(iii) pray + ed - prayed

## Rule 4

Words ending in silent ' $e$ ' drop the ' $e$ ' before a suffix beginning with a vowel. Example-
(i) hope +ing - hoping
(ii) live + ed - lived
(iii) drive + er - driver

If the suffix begins with a consonant, ' $e$ ' is not dropped. Ex ample-
(i) hope + full - hopeful
(ii) sincere + ly - sincerely

## Some Exceptions to this rule are-

(i) True + ly - truly
(ii) argue + ment - argument
(iii) nine + th - ninth

## Rule 5

Consonant ' $I$ ' is doubled in the words ending in single vowel + 'I' before a suffix beginning with a vowel. Example-
(i) repel + ent - repellent
(ii) travel + er - traveller
(iii) quarrel + ed - quarrelled

## Rule 6

When the suffix 'ing' is added to a word ending in 'ie, this 'ie' is changed to ' $y$ '. Example-
(i) lie + ing - lying
(ii) tie + ing - tying
(iii) die + ing - dying

## Rule 7

Words of two or three syllables ending in single vowel + single consonant double the final consonant if the last syllable is stressed. Example-
(i) permit +ed - permitted
(ii) occur + ing - occurring
(iii) control + er - controller
(iv) begin + ing - beginning

## Rule 8

When the suffix 'ous' is added to a word ending in 'ce', ' $e$ ' is changed to ' $i$ '. Example-
(i) space + ous - spacious
(ii) vice + ous - vicious
(iii) malice + ous - malicious
(iv) grace + our - gracious

Rule 9
A final ' $y$ ' following a consonant changes to ' $i$ ' before a suffix except 'ing'. Example-
(i) carry + ed - carried
(ii) happy + ly - happily
(iii) marry + age - marriage
(iv) carry + ing - carrying

Rule 10
Words ending in 'ee' do not drop an 'e' before a suffix. Exam ple-
(i) see + ing - seeing
(ii) agree + ment - agreement


## Chapter

01

जब दो शब्द मिलते हैं तो पहले शब्द की अंतिम धवनि और दूसरे शब्द की पहली धवनि आपस में मिलकर, जो परिवर्तन लाती हैं, उसे ‘संधि’ कहते हैं अर्थात् जब दो शब्द आपस में मिलकर कोई तीसरा शब्द बनाते हैं तब जो परिवर्तन होता है, उसे संधि कहते हैं। संधि किये गये शब्दों को अलग-अलग करके पहले की तरह करना ही संधि-विच्छेद कहलाता है।

संधि शब्द की व्युत्पत्ति :- सम् + डुधाज (धा) धातु = संधि "उपसर्गे धो: कि: * सूत्र से ‘कि’ प्रत्यय करने पर संधि ' शब्द निष्पत्न होता है।
सन्धि की परिभाषा - "वर्ण-सन्धान सन्धि:" इस नियम के अनुसार, दो वर्णों के मेल को सन्धि कहते हैं अर्थात् दो वर्णों के मेल से जो विकार उत्पत्न होता है, उसे ‘सन्धि’ कहते हैं। वर्ण सन्धान को संधि कहते हैं।
जैसे - अ+ अ - आ यहाँ पर दो अ (अ+ अ) मिलकर 'आ' हो गया है, अतः इसे 'सन्धि' कहते हैं।
पाणिनीय परिभाषा - "पर: सन्निकर्ष: संहिता" अर्थात् वर्णों की निकटता को ‘संहिता' कहा जाता है।
प्रथम पद के अन्तिम वर्ण तथा द्वितीय पद के प्रथम वर्ण में सन्धि होती है, जैसे-उप के अ तथा इन्द्र के ‘इ’ को मिलाकर ‘ए’ बना और ‘उपेन्द्र' पद का निर्माण हुआ।

भाषा व्यवहार में जब दो पद या शब्द आपस में मिलते हैं तो प्रथम पद की अंतिम ध्वनि और द्वितीय पद की पहली धवनि के मेल से जो परिवर्तन होता हे उसे संधि कहते हैं। इस प्रक्रिया में कभी पहली, कभी दूसरी या कभी दोनों धवनियों में यह तीनों स्थितियाँ निम्न प्रकार से होती हैं-
(क) पहली ध्वनि में परिवर्तन, किंतु दूसरी ध्वनि में नहीं, जैसे

- यथा + अवसर $=$ यथावसर
- मही + इंद्र = महींद्र
(ख) दूसरी ध्वनि में परिवर्तन, किंतु पहली ध्वनि में नहीं, जैसे-
- गिरि + ईश = गिरीश
- सत् + जन = सजन
(ग) पहली एवं दूसरी दोनों ध्वनियों में परिवर्तन, जैसे-
- उत् + श्वास = उच्छवास
- देव + इंद्र = देवेंद्र


## संधि विच्छेद

वर्णों में संधि कभी स्वरों के बीच में होती है, तो कभी स्वर और व्यंजन के बीच में होती है। इसी तरह कभी विसर्ग और स्वर के साथ होती है और कभी विसर्ग और व्यंजन के साथ। इन्हीं संधियुक्त पदों को जब अलग-अलग किया जाता है, तब उसे 'संधि-विच्छेद' कहते हैं, जैसे-
विद्यार्थी $=$ विद्या + अर्थी
देवालय $=$ देव + आलय
सन्धि के तीन प्रकार हैं-

1. स्वर सन्धि (अच् संधि)
2. व्यंजन सन्धि ( हल् संधि)
3. विसर्ग सन्धि।
4. स्वर सन्धि- (अच् संधि)

मूल स्वर चार हैं- अ, इ, उ, ऋ। इन्हें ह्रस्व स्वर कहते हैं। स्वर के बाद स्वर अर्थात् दो स्वरों के मेल को स्वर सन्धि कहते है।
उदाहरण-
अ + अ $=$ आ - पुष्प + अवली $=$ पुष्पावली

$$
\begin{aligned}
& \text { इ + ई = ई - नदी + ईश = नदीश } \\
& \text { उ + उ = ऊ - सु + उक्ति = सूक्ति } \\
& \text { उ + ऊ = ऊ - सिन्धु + ऊर्मि = सिन्धूर्मि } \\
& \text { ऊ + उ = ऊ - वधू + उत्सव = वधूत्सव } \\
& \text { ऊ + ऊ = ऊ - भू + ऊर्ध्व = भूध्र्व } \\
& \text { ऋ }+ \text { ॠ = - मातृ + ऋण = मातॄण }
\end{aligned}
$$

स्वर सन्धि के 5 भेद होते हैं-
(i) दीर्घ सन्धि
(ii) गुण सन्धि
(iii) वृद्धि सन्धि
(iv) यण सन्धि
(v) अयादि सन्धि

## विसर्ग सन्धि

विसर्ग-सन्धि - विसर्ग के बाद स्वर या व्यंजन आने पर विसर्ग में जो विकार होता है. उसे 'विसर्ग सन्धि' कहते हैं।

1. विसर्ग का ‘ओ’ हो जाना- यदि विसर्ग के पहले ‘अ’ और बाद में ‘अ’ अथवा तीसरा वर्ण, चौथा वर्ण, पाँचवा वर्ण अथवा य, र, ल, व, ह हो तो विसर्ग का' 'ओ’ हो जाता है; जैसे
मनः + अनुकूल = मनोनुकूल
वयः + वृद्ध $=$ वयोवृद्ध
मन: + हर = मनोहर
तप: + बल = तपोबल
पयः + द = पयोद
पुनः + जन्म = पुनर्जन्म
अधः + गति = अधोगति
मनः + रथ $=$ मनोरथ
अंतः + धान = अंतर्धान
तपः + भूमि = तपोभूमि
मनः + योग $=$ मनोयोग
2. विसर्ग का र हो जाना- यदि विसर्ग से पहले अ, आ को छोडकर कोई दूसरा स्वर हो और बाद में आ, उ, ऊ, तीसरा वर्ण, चौथा वर्ण, पाँचवा वर्ण या य, र, ल, व में से कोई हो तो विसर्ग का 'र' हो जाता है; जैसे-
निः + आशा = निराशा
नि: + बल = निर्बल
दुः + उपयोग $=$ दुरुपयो
निः + धन = निर्धन
आशीः + बाद $=$ आशीर्वाद
3. विसर्ग का ‘श' हो जाना- यदि विसर्ग के पहले कोई, स्वर हो और बाद में च, छ, या श हो तो विसर्ग का श् हो जाता है; जैसे-

निः + चिन्त =निश्चिन्त
दुः + शासन $=$ दुश्शासन
निः+ छल = निश्छल
दु: + चरित्र = दुश्चरित
4. विसर्ग का ‘ब्’ हो जाना- विसर्ग के पहले इ, उ और बाद में क, ख, ट, ठ, प, फ में से कोई वर्ण हो तो विसर्ग का ‘ष’ हो जाता है; जैसे-
नि: + कपट = निष्कपट,
निः + ठुर = निष्टुर
निः + फल = निष्फल
धनु + टकांर = धनुत्टंकार
निः + प्राण = निष्प्राण
5. विसर्ग का ‘स’ हो जाना - विसर्ग के बाद यदि ‘त' या ‘स’ हो तो विसर्ग का ‘स्’ हो जाता है; जैसे-
निः + तेज = निस्तेज,
मनः + ताप = मनस्ताप
दुः + तर = दुस्तर
निः + सार $=$ निस्सार
नमः + ते = नमस्ते
दुः + साहस = दुस्साहस
6. विसर्ग का लोप हो जाना-
(i) यदि विसर्ग के बाद 'र' हो, तो विसर्ग लुप्त हो जाता है और उससे पहले का स्वर दीर्घ हो जाता है; जैसे-

नि: + रोग = नीरोग
निः + रस $=$ नीरस
(ii) यदि विसर्ग से पहले ‘अ’ या ‘आ’ हो, तो और विसर्ग के बाद कोई भिन्न स्वर हो, तो विसर्ग लुप्त हो जाता है; जैसेअतः + एव = अतएव
7. विसर्ग में परिवर्तन नहीं होना- यदि विसर्ग के पूर्व ‘अ’ हो तथा बाद में ‘क’ या ‘प’ हो तो विसर्ग में परिवर्तन नही होता; है; जैसे-

प्रातः + काल = प्रातः काल
अन्तः + पुर = अन्तः पुर
अधः + पतन = अथः पतन

## वस्तुनिष्ठ प्रश्न

1. निम्र में से किस शब्द में 'अ अ-आ' का मेल नहीं हुआ है?
(a) कृष्णार्जुन
(b) सावधान
(c) विद्यार्थी
(d) उत्तराधिकार
2. 'उद्धृत' शब्द का सही सन्धि विग्रह होगा-
(a) उत्+हृत
(b) उद्+हृत
(c) उत्+धृत
(d) उद्+धृत
3. निम्न में से सही सन्धि किसमें हुई है -
(a) यशः+दा =यशोदा
(b) सद+एव सदैव
(c) मनः+हर $=$ मनहर
(d) उत्+ः्वास उच्छवास
4. 'मृत्युम्+जय' की संधि है
(a) मृत्युक्जय
(b) मृत्युंजय
(c) मृत्युन्जय
(d) मृत्युजय
5. 'सम्+चालन' की संधि है
(a) सग्चालन
(b) संचलन
(c) सन्चालन
(d) सम्चालन
6. 'महन्झंकार' का संधि विच्छेद निम्र में से कौन सा है?
(a) महत्+झंकार
(b) महज्+झंकार
(c) महद्+झंकार
(d) महत+झंकार
7. 'विद्युत्+लेखा' की उपयुक्त संधि होगी
(a) विद्युल्लेखा
(b) विधुत्लेखा
(c) विद्युतलेखा
(d) विद्यलेखा
8. ‘मनोनिग्रह’ का संधि-विच्छेद कीजिए -
(a) मनु+अनिग्रह
(b) मनो:+निग्रह
(c) मनः+निग्रह
(d) मनु:+निग्रह
9. ‘रातोंरात’ का संधि-विच्छेद होगा
(a) रात ही+रात
(b) रात+रात
(c) रातों+रात्रि
(d) रातों+रात
10. 'दिन-दिन’ की संधि कीजिए
(a) दिनोंदिन
(b) दिनदिन
(c) दिनादिन
(d) दिन और दिन
11. 'वधूक्ति' का संधि-विच्छेद होगा
(a) वधू+ऊक्ति
(b) वधु + उक्ति
(c) वधू+उक्ति
(d) वधु+ऊक्ति
12. 'शीतर्तु' का संधि-विच्छेद होगा
(a) शीतृ+ ऋतु
(b) शीत+ ऋतु
(c) शोत्+ऋतु
(d) शीत+तु
13. ‘विश्व एकता’ की संधि होगी
(a) विश्वेकता
(b) विश्वेक्यता
(c) विश्वैक्यता
(d) विश्वैकता

Chapter
04

## पर्यायवाची शब्द

जिन शब्दों के अर्थ में समानता होती है, उन्हें हम पर्यायवाची शब्द अथवा प्रतिशब्द कहते हैं। हिन्दी में तत्सम पर्यायवाची शब्द ही अधिक पाए जाते हैं, जो संस्कृत से हिन्दी में आए हैं। हिन्दी में तद्धव पर्यायवाची शब्दों का अभाव है। एक जैसे अर्थ का बोध करने वाले शब्द एक-दूसरे के पर्यायवाची कहलाते हैं, इसे समानार्थी भी कहते हैं। पयार्यवाची के दो प्रकार हैं-

1. पूर्ण पयार्यवाची :- वे शब्द, जो ठीक वही अर्थ अथवा यथावत अर्थ का बोथ कराते हैं, वे, पूर्ण पयार्यवाची शब्द कहलाते हैं; जैसे- पितृ- पिता
2. अपूर्ण पर्यायवाची :- वे शब्द, जो समान अर्थ का बोध कराए, किन्तु अनेकार्थी हो तो वो है; अपूर्ण पयार्यवाची या समानार्थी शब्द कहलाते है।

## पर्यायवाची एवं समानार्थी शब्दों में अंतर

1. पर्यायवाची - ऐसे शब्द-समूह जो किसी एक ही बात, वस्तु या भाव के अर्थ को प्रकट करने के लिए प्रयुक्त होते हैं, पर्यायवाची कहलाते हैं। उदाहरण के लिए - घोटक, बाजी, हय, तुरंग, दधिका, सैंधव, अश्व, रविपुत्र, सर्ता शब्दों का यह समूह 'घोड़ा' के लिए प्रयुक्त हुए हैं। अतः उपरोक्त सभी शब्द 'घोड़ा' के पर्यायवाची होंगे। जब किसी एक ही वस्तु, बात (विचार) या भाव का अर्थ स्पष्ट करने के लिए अलग-अलग शब्दों का प्रयोग किया जाता है, ऐसी स्थिति में वे सभी शब्द पर्यायवाची शब्द होते हैं।
2. समानार्थी शब्द - नाम से ही स्पष्ट है 'समान अर्थ प्रकट करने वाला' शब्द। उदाहरण स्वरूप यदि पूछा जाए 'अश्व' शब्द का क्या अर्थ है? तो इसका अर्थ दूसरे शब्दों में प्रकट करते हुए कहा जाएगा 'घोड़ा'। अतः यहाँ 'अश्व' का समानार्थी 'घोड़ा' होगा। इसके विपरीत यदि यहाँ यह कहा जाये कि अश्व को और किन-किन शब्दों से संबोधित किया जाता है तब उत्तर में घोटक, बाजी, हय, तुरंग, दधिका, सैंधव, घोड़ा, रविपुत्र, सर्ता आदि बताए जायेंगे और ये सभी शब्द 'अश्व' के पर्यायवाची होंगे। अतः हम कह सकते हैं कि जब किसी बात (विचार), वस्तु या भाव का केवल अर्थ बताना हो और उसके अर्थ को बताने के लिए, जिस शब्द का प्रयोग किया जाता है, वह शब्द समानार्थी शब्द कहलाता है। जबकि किसी एक ही बात (विचार), वस्तु, भाव को किनकिन नामों से या किन किन शब्दों से जाना जाता है यह पूछा जाए तो बताने के लिए प्रयुक्त शब्दों के समूह में सभी पर्यायवाची होंगे। यहाँ पर एक बात जानने योग्य है कि किसी बात (विचार), वस्तु या भाव के अर्थ को प्रकट करने वाला शब्द 'समानार्थी' और 'पर्यायवाची' भी होता है। किंतु जब वह शब्द केवल अर्थ स्पष्ट करने के लिए प्रयुक्त हो तब 'समानार्थी' होगा और बात (विचार), वस्तु या भाव को किन-किन शब्दों से जाना जाता है यह बताने के लिए शब्दों की सूची में प्रयुक्त हो तब वही शब्द पर्यायवाची होगा।

सामान्य शब्दों में, समान अर्थ देने वाले जैसे नेत्र,अक्षि दोनों को एक ही समझा जाता है परन्तु पर्यायवाची शब्दों का अर्थ, बहु अर्थक होता है, जैसे कनक का नाम धतूरा,सोना भी है।एक आशय अर्थ से ,अधिक अर्थों में प्रयुक्त होते हैं,पर्यायवाची शब्द होते हैं।

| अ | आ |
| :---: | :---: |
| - अंक - चिहन, निशान, प्रतीक, पहचान <br> - अंग - काया, शरीर, गात, बदन तन, वपु, देह <br> - अंश - भाग, हिस्सा, भंग, अवयव, खण्ड, सोपान <br> - अग्रि - धनउजय, जातवेद, हुताशन, कृषानु, रोहिताश्व, आग, अनल, पावक <br> - अचल - गिर, शैल, नग, महिधर | - आँख - लोचन, नयन, नेत्र, दृग्, आक्ष, चक्षु, दीदा, विलोचन <br> - आँगन - अँगना, अजिर, प्रांगण, अँगनाई <br> - आँचल - पल्ला, छोर, दामर, कोना, कोर <br> - आँसू - अश्रु, नेत्रनीर, नयनजल, नेत्रवारि, नयन-नीर <br> - आकर्षण - दिलकशी, खिंचाव, विमोहन, सम्मोहन, प्रभावकारी |
| इ | ई |
| - इच्छा - अभिलाषा, आकांक्षा, कामना, लालसा, उत्कण्ठा, रूचि, ईप्सा, अभीप्सा, चाहत, मनोरथ <br> - इच्छुक - अभिलाषी, लालायित, आतुर, उत्सुक, उत्कण्ठित <br> - इठलाना - शेखी मारना, ऐंठना, इतराना, शान दिखाना <br> - इनकार - प्रत्याख्यान, अनगीकार, निषेध, अस्वीकृति <br> - इनाम - उपहार, पुरस्कार पारितोषिक | - ईख - गन्ना, ऊख, रसडण्ड, रसाल, पैंडी, रसद <br> - ईधन - जलावन, जलाने की लकड़ी, कण्डा, जरनी <br> - ईदृश - इस प्रकार, इस तरह, ऐसे, इस रीति से <br> - ईप्सा - चाह, अभिलाषा, इच्छा, अभीप्सा <br> - ईमानदारी - निष्कपटता, निश्छलता, सदाशयता |

## Chapter

05

भाषा हमारी अभिव्यक्ति का माध्यम है। भाषा में धवनि से शब्द, शब्द से पद, पद से वाक्यांश एवं वाक्यांश से पूर्ण वाक्य की रचना होती है। अत: संरचना की दृष्टि से पदों का सार्थक समूह ही वाक्य कहलाता है। वाक्य रचना में संज्ञा, सर्वनाम, विशेष क्रिया, अव्यय आदि से सम्बन्धित या अन्य प्रकार की अशुद्धियाँ हो सकती हैं।
इस प्रकार की त्रुटियों को उदाहरण सहित दिया गया है, जो निम्न प्रकार हैं -

## 1. संज्ञा सम्बन्धी अशुद्धियाँ

वाक्य संरचना में संज्ञा सम्बन्धी अशुद्धियाँ प्राय: दो प्रकार की होती हैं- अनावश्यक संज्ञा शब्दों का प्रयोग तथा अनुपयुक्त संज्ञा शब्द का प्रयोग। जैसे-

- आपके प्रश्न का समाधान मिल गया।

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(उत्तर)
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- हमारे प्रदेश के मनुष्य परिश्रमी हैं।
- प्रेम करना तलवार की नोक पर चलना है।
- सफलता के मार्ग में संकट आते ही है।
- तुमने इस पुस्तक का कितना भाग पढ़ लिया?


## 2. सर्वनाम सम्बन्धी अशुद्धियाँ

संज्ञा के स्थान पर प्रयुक्त होने वाले शब्द सर्वनाम कहलाते हैं। वाक्य में उनका प्रयोग करते समय उचित सावधानी रखनी चाहिए। हिन्दी में सर्वनाम सम्बन्धी अनेक प्रकार की अशुद्धियाँ देखी जाती हैं।
जैसे -

- उसने वहाँ जाना है।

> (उसे)

- मैंने यह नहीं करना है।
- कहिए, आपको मेरे से क्या काम है?
(मुझसे)
- मैं तेरे को बता दूंगा।
- कोई ने यह करने को बोला था।
(किसी, कहा)


## 3. विशेषण सम्बन्धी अशुद्धियाँ

विशेषणों का अनावश्यक, अनुपयुक्त अथवा अनियमित प्रयोग करने से वाक्य में अनेक अशुद्धियाँ आ जाती हैं, जिनका निराकरण करना आवश्यक है। जैसे -

- आगामी दुर्घटना के बारे में मुझे कुछ भी पता न था।
- आप लोग अपनी राय दें।

> (भावी)

- वहाँ दो दिवसीय गोष्ठी थी।
(अपनी-अपनी)
- प्रत्येक बालक को चार-चार केले दे दें।
(द्वि-दिवसीय)
(विशालकाय)


## 4. क्रिया सम्बन्धी अशुद्धियाँ

वाक्य में ‘अन्वय’ का होना परम आवश्यक है। अन्वय का तात्पर्य है कर्ता और क्रिया तथा कर्म और क्रिया का पारस्परिक समन्वय। किन स्थितियों में कर्ता के अनुरूप क्रिया होगी और किन स्थितियों में क्रिया कर्म के अनुरूप होगी, इसका ध्यान रखा जाना चाहिए।

## जैसे-

- पत्र मेज पर डाल दो।
- कुलपति ने उपाधियाँ वितरित की।
- यह अपराधी दण्ड देने योग्य है।
- वह कमीज डालकर सो गया।
- जब से नौकरी पाई है, दिमाग सातवें आसमान पर है।
(रख दो)
(पहनकर)
(मिली)


## 5. अव्यय सम्बन्धी अशुद्धियाँ (केवल, मात्र, भर, ही)

इन अव्ययों के अर्थों में बहुत कुछ समानता है। अतः इनमें से किन्हीं दो शब्दों का प्रयोग नहीं करना चाहिए, जैसे-

- एकमात्र दो उपाय हैं।
(केवल)
- यह पत्र आपके अनुसार है।

काव्य जगत में यह मान्यता बहुत समय से चली आ रही है कि Brevity is the soul of wit अर्थात् संक्षिप्रता बुद्धि की आत्मा है।
इसी आधार पर प्रायः Short and sweet संक्षित्त एवं मधुर प्रशंसात्मक वाक्यांश का प्रयोग किया जाता है। अनेक शब्दों के स्थान पर यदि एक ऐसे शब्द का प्रयोग किया जाता है, जो विशिष्ट अर्थ-गर्भित होता है, तो कथन अधिक प्रभावशाली एवं भावपूर्ण बन जाता है। उदाहरण के लिए हम यह वाक्यांश लेते हैंवह जमीन जिसमें कुछ भी पैदा न हो। इसके स्थान पर यदि एक शब्द का प्रयोग करते है- ऊसर, अनुपजाऊ अथवा अनुर्वर, तो हम समझते हैं कि बात को अधिक अच्छी तरह कहा गया है। इन तीन शब्दों में भी ऊसर शब्द का उच्चारण सर्वाधिक सरल है।

वाक्य और वाक्यांश में अंतर
वाक्य और वाक्यांश में अर्थ के आधार पर तथा रूप के आधार पर बहुत अंतर होता है। वाक्य और वाक्यांश में अंतर निम्न है-

| क्र॰ | वाक्य | वाक्यांश |
| :---: | :--- | :--- |
| 1. | शब्द का वह सार्थक रूप, जिससे एक विचार की स्पष्ट एवं पूर्ण <br> अभिव्यक्ति होती हो, उसे वाक्य कहते हैं। | शब्द समूह का वह सार्थक रूप, जिससे एक विचार की स्पष्ट एवं पूर्ण <br> अभिव्यक्ति होती हो, उसे वाक्यांश कहते हैं। |
| 2. | वाक्य शब्दों का सार्थक समूह होता है। | वाक्यांश शब्दों का समूह होता है। |
| 3. | वाक्य एक पूर्ण विचार को व्यक्तक करता है। | वाक्यांश एक या एक से अधिक भावनाओं को व्यक्त करता है। |
| 4. | वाक्य में क्रिया होती है। | वाक्यांश में क्रिया नहीं होती बल्कि है, ज़्यादातर वाक्यांश कृदन्त <br> या सम्बन्धबोधक अव्यय होते हैं। |

## कुछ प्रमुख वाक्यांश निम्र हैं-

- जिस पर किसी ने अधिकार कर लिया हो - अधिकृत
- वह सूचना जो सरकार की ओर से जारी हो — अधिसूचना
- विधायिका द्वारा स्वीकृत नियम - अधिनियम
- अविवाहित महिला — अनूढ़ा
- वह स्त्री जिसके पति ने दूसरी शादी कर ली हो — अध्यूढ़ा
- दूसरे की विवाहित स्त्री — अन्योढ़ा
- गुरु के पास रहकर पढ़ने वाला — अन्तेवासी
- पहाड़ के ऊपर की समतल जमीन - अधित्यका
- जिसके हस्तक्षर नीचे अंकित है — अधोहस्ताक्षरकर्ता
- महल का वह भाग जहाँ रानियाँ निवास करती हैँ — अंतःपुर/रनिवास
- जिसे किसी बात का पता न हो — अनभिज्ञ/अज्ञ
- जिसका आदर न किया गया हो — अनादृत
- जिसका मन कहीं अन्यत्र लगा हो — अन्यमनस्क
- जिसके पास कुछ न हो अर्थात् दरिद्र — अकिंचन
- जो कभी मरता न हो — अमर
- जो सुना हुआ न हो — अश्रव्य
- जिसको भेदा न जा सके — अभेद्य
- जो साधा न जा सके — असाध्य
- जो चीज इस संसार में न हो — अलौकिक
- जो बाह्य संसार के ज्ञान से अनभिज्ञ हो — अलोकज
- जिसे लाँघा न जा सके — अलंघनीय
- जिसकी तुलना न हो सके — अतुलनीय
- जिसके आदि (प्रारम्भ) का पता न हो — अनादि
- जिसके आने की तिथि निश्चित न हो - अतिथि
- कमर के नीचे पहने जाने वाला वस्त्र — अधोवस्त्र
- जिस पुस्तक में आठ अध्याय हो — अष्टध्यायी
- जिसका भाषा द्वारा वर्णन असंभव हो - अनिर्वचनीय
- अत्यधिक बढ़ा-चढ़ा कर कही गई बात — अतिशयोक्ति
- सबसे आगे रहने वाला — अग्रणी
- जो पहले जन्मा हो — अग्रज
- जो बाद में जन्मा हो — अनुज
- जो इंद्रियों द्वारा न जाना जा सके — अगोचर
- जिसका पता न हो — अज्ञात
- आगे आने वाला — आगामी
- अण्डे से जन्म लेने वाला — अण्डज
- जो छूने योग्य न हो — अछूत
- जो छुआ न गया हो — अदूता
- जो अपने स्थान या स्थिति से अलग न किया जा सके — अच्युत
- जो अपनी बात से टले नहीं — अटल
- आवश्यकता से अधिक बरसात - अतिवृष्टि
- बरसात बिल्कुल न होना — अनावृष्टि
- बहुत कम बरसात होना — अल्पवृष्टि
- इंद्रियों की पहुँच से बाहर — अतीन्द्रिय/इंद्रियातीत
- सीमा का अनुचित उल्लंघन — अतिक्रमण
- जो बीत गया हो - अतीत
- जिसकी गहराई का पता न लग सके — अथाह
- आगे का विचार न कर सकने वाला — अदूरदर्शी
- जो आज तक से सम्बन्ध रखता है — अद्यतन
- आदेश जो निश्चित अवधि तक लागू हो — अध्यादेश
- जिसके बारे में कोई निश्चित न हो — अनिश्चित
‘मुहावरा’ शब्द मूलतः अरबी भाषा का शब्द है, जिसका शाब्दिक अर्थ होता है- अभ्यास करना।


## मुहावरें की विशेषताएँ

- मुहवरा प्रसंग के अनुरूप अर्थ देता है।
- मुहावरा पूर्ण वाक्य नहीं होता है।
- मुहावरे का सामान्य अर्थ नहीं, विशिष्ट अर्थ लिया जाता है।


## लोकोक्ति

- किसी दृष्टन्त, घटना या परिस्थिति पर आधारित कथन होता है।
- लोकोक्तियाँ सामाजिक नीति और आदर्श स्थापित करने का माध्यम बनती हैं।


## महत्वपूर्ण मुहावरें और उनके अर्थ

- अंक भरना/या लगाना (गले लगाना, आलिंगन करना) — माँ ने बच्चे को अंक लगाया (भर लिया)।
- अंग-अंग फूले न समाना (बहुत आनंदित होना) — मैच जीतने पर कप्तान अंग-अंग फूले न समा रहा था।
- अंगारों पर लोटना (रोष और डाह के मारे कुढ़ना) — मेरी उन्नति देखदेख कर मेरा एक मित्र अंगारों पर लोटता है।
- अँगूठा दिखाना (समय पर इन्कार कर देना) — विनोद ने मेरी सहायता करने का वादा किया था, पर कल जब उसके पास गए तो अँगूठा दिखा दिया।
- अँगूठे पर मारना (परवाह न करना) — वह अपने तीसमार खाँ समझता है, मैं ऐसे वैसों को अँगूठे पर मारता हूँ।
- अँतड़ियाँ गले पड़ना (संकट में पड़ना) — पिताजी की मृत्यु के बाद अँतड़ियाँ मेरे गले पड़ी।
- अंधा बनाना (मूर्ख बनाकर धोखा देना) — मैं सावधान हूँ, वह मुझे अंधा नहीं बना सकता।
- अंधे के हाथ बटेर लगना (बिना प्रयास भारी चीज पा लेना) — लाटरी क्या मिली, अंधे के हाथ बटेर लग गई।
- अँधेर में रखना (भेद छिपाना) — मुझे इस बारें मे कुछ नहीं बताया, मुझे तो सदा अँधेरे में रखा।
- अक्ल के पीछे लट्टु लिये फिरना (मूर्खता का काम करना) — हर काम बिगाड देते हो, क्यों अक्ल के पीछे लट्टु लिये फिरते हो।
- अधर में लटकना या झूलना (द्विविधा में पड़ा रह जाना) — अभी कोई फैसला नहीं हुआ, सारा मामला अधर में लटका है।
- अन्न न लगना (खा-पीकर भी मोटा न होना) — अच्छे से अच्छा खाना खाता है, फिर भी लड़के के अन्न नहीं लगता।
- अपना उल्लू सीधा करना (अपना मतलब निकालना) -ये राजनीतिक लोग जनता के हित की नहीं सोचते, अपना उल्लू सीधा करते हैं।
- अपनी खाल में मस्त रहना (अपनी दशा से संतुष्ट रहना) -कोई माल मस्त, कोई हाल मस्त, हम है अपनी खाल में मस्त।
- लोकोक्तियों को सूक्ति अथवा सुभाषित भी कहा जाता है।


## मुहावरों और लोकोक्तियों में अन्तर

- मुहावरे का स्वतन्त्र प्रयोग नहीं होता है तथा लोकोक्ति का स्वतन्त्र प्रयोग होता है।
- मुहावरा वाक्यांश है तथा लोकोक्ति वाक्य है।
- मुहावरे में काल, वचन और पुरूष के अनुरूप परिवर्तन हो जाता है तथा लोकोक्ति का स्वरूप अपरिवर्तित रहता है।
- अपनी खिचड़ी अलग पकाना (अलग-थलग रहना) -हम तो सहकारिता में विश्वास रखते हैं, पर वह अपनी खिचड़ी अलग पकाता है।
- आँख आना (आँख दुखना) — न जाने, किसी चीज, ने काट लिया है, आँख आ गई है।
- आँख का काजल (अत्यंत प्रिय) -उसका प्रेमी उसकी आँख का काजल बना है।
- आँख खुलना (सावधान होना) -पिछले चुनाव में हारने के बाद इस पार्टी के नेताओं की आँख खुली।
- आँख रखना (निगरानी करना) — मेरा सूटकेश यहीं पड़ा है, जरा आँख रखना।
- आँखों का काजल चुराना (गहरी चोरी कर लेना) — गार्ड सोते रह गए और चोर सेठजी की आँखों का काजल चुरा ले गए।
- आँखों में खून उतरना (गुस्से से आँखें लाल हो जाना) — गुंडे की हरकत देखकर मेरी आँखों में खून उतर आया।
- आँखों से गिरना (आदर भाव घट जाना) — जब से उसने वह कुकर्म किया, वह मेरी आँखों से गिर गया है।
- आग पर तेल छिड़कना (और भड़काना) — दोनों में सुलह-सफाई कराने की बजाय तुम तो लगे हो आग पर तेल छिड़कने।
- आग बबूला होना (बहुत गुस्सा होना) — शिव धनुष टूटा तो परशु आग बवूला हो गया।
- आग में कूदना (जान जोखिम में डालना) — हमारे जवान देश के लिए आग में कूदने को तैयार रहते हैं।
- आग लगने पर कुआँ खोदना (पहले से कोई उपाय न कर रखना) मकान आधा तैयार है और अब कहते हो बैंक से ऋण लेना चाहता हूँआग लगने पर कुआँ खोदते हो।
- आग लगाकर तमाशा देखा (झगड़ा पैदा करके खुश होना) — बुरे लोग पड़ोसियों में आग लगाकर तमाशा देखते हैं।
- आठ-आठ आँसू रोना (बहुत पछताना) — पत्नी को तलाक देने के बाद वह आठ-आठ आँसू रोता था।

Chapter
08
‘अपठित’ का अर्थ होता है जो पढ़ा नहीं गया हो। यह किसी पाठ्यक्रम की पुस्तक से नहीं लिया जाता है। यह कला, विज्ञान, राजनीति, साहित्य या अर्थशास्त्र, किसी भी विषय का हो सकता है। दिए गए गद्यांश से संबंधित प्रश्न पूछे जाते हैं। इससे परीक्षार्थी का मानसिक व्यायाम होता है तथा उनकी भाषा और सामान्य ज्ञान का अवलोकन किया जाता है। इससे परीक्षार्थी की व्यक्तिगत योग्यता व अभिव्यक्ति की क्षमता बढ़ती है।
अपठित गद्यांश पर आधारित प्रश्नों को हल करने के लिए निम्नलिखित बातों का ध्यान रखना आवश्यक है

1. दिए गए गद्यांश को ध्यान से पढ़ना चाहिए।
2. गद्यांश को पढ़ते समय मुख्य बातों को ध्यान में रखना चाहिए।
3. पूछे गए प्रश्नों को धैर्यपूर्वक पढ़ते हुए समझना चाहिए, क्योंकि पढ़े गए गद्यांश से ही प्रश्न पूछे जाते हैं और प्रश्नों को पढ़ते समय गद्यांश आपके मस्तिष्क में होता है।
4. प्रश्नों के उत्तर देते समय सभी विकल्पों का अवलोकन करें।
5. यदि गद्यांश का शीर्षक पूछा जाए तो शीर्षक गद्यांश के शुरू या अंत में छिपा रहता है।
6. मूलभाव के आधार पर शीर्षक बताना चाहिए।
7. यदि आवश्यकता हो, तो एक बार और गद्यांश को पढ़ लें।

## शीर्षक का चुनाव- शीर्षक चुनते समय ध्यान रखें-

1. शीर्षक मूल विषय से संबंधित होना चाहिए।
2. शीर्षक संक्षित्त, आकर्षक तथा सार्थक होना चाहिए।
3. शीर्षक में अनुच्छेद से संबंधित सारी बातें आ जानी चाहिए।
4. शीर्षक का विषय मूल विषय से अधिक नहीं होना चाहिए।

## वस्तुनिष्ठ प्रश्र

निर्देश: नीचे दिए गए गद्यांश को ध्यानपूर्वक पढ़िए और उस पर आधारित प्रश्नों के उत्तर दीजिए।

## गद्यांश-1

कुछ लाख वर्षों की ही बात है, जब मनुष्य जंगली था, वनमानुष जैसा। उसे नाखून की जरूरत थी। उसकी जीवन-रक्षा के लिए नाखून बहुत जरूरी थे। असल में वही उसके अस्त्र थे। दाँत भी थे, पर नाखून के बाद ही उनका स्थान था। इन दिनों उसे जूझना पड़ता था। प्रतिद्वन्द्दियों को पछाड़ना पड़ता था। नाखून उसके लिए आवश्यक अंग था, फिर धीरे-धीरे वह अपने अंग से बाहर की वस्तुओं का सहारा लेने लगा। पत्थर के ढेले और पेड़ की डालें काम में लाने लगा। रामचन्द्रजी की वानरी सेना के पास ऐसे ही अस्त्र थे। उसने हड्डी के भी हथियार बनाए। हड्डी के इन हथियारों में सबसे मजबूत और सबसे ऐतिहासिक था देवताओं के राजा का 'वज्र', जो दधीचि मुनि की हड्डियों से बना था। मनुष्य और आगे बढ़ा। उसने धातु के हथियार बनाए, जिनके पास लोहे के अस्त्र और शस्त्र थे, वे विजयी हुए। देवताओं के राजा तक को मनुष्यों के राजा से इसलिए सहायता लेनी पड़ती थी कि मनुष्यों के राजा के पास लोहे के अस्त्र थे। असुरों के पास अनेक विद्याएँ थीं, पर लोहे के अस्त्र नहीं थे। शायद घोड़े भी नहीं थे। आर्यों के पास ये दोनों चीजें थीं। आर्य विजयी हुए। फिर इतिहास अपनी गति से बढ़ता गया। नाग हारे, सुपर्ण हारे, यक्ष हारे, असुर हारे, राक्षस हारे, लोहे के अस्त्रों ने बाजी मार ली। इतिहास आगे बढ़ा। पलीते वाली बन्दूकों ने, कारतूसों ने, तोपों ने, बमों ने, बमवर्षक वायुयानों ने इतिहास को किस कीचड़-भरे घाट तक घसीटा है, वह सबको मालूम है। नखधर मनुष्य अब एटमबम पर भरोसा करके आगे की ओर चल पड़ा है।

1. गद्यांश के अनुसार, आर्य इसलिए जीते, क्योंकि उनके पास-
(a) अनेक विद्याएँ थीं
(b) अश्व थे
(c) वज्र था
(d) अश्व और लोहे के अस्त्र दोनों थे
2. गद्यांश के अनुसार, नख-धर मनुष्य को आज सबसे अधिक विश्वास है-
(a) पलीते वाले कारतूसों और बमों पर
(b) अपने बमों पर
(c) अपनी विद्याओं पर
(d) लोहे से बने अस्त्रों पर
3. गद्यांश के अनुसार, लाखों वर्ष पहले मनुष्य को नाखूनों की आवश्यकता इसलिए थी, क्योंकि वह इनसे
(a) अपने शरीर को खुजला सकता था।
(b) फलों को छील या काट सकता था।
(c) अपने विरोधियों को पछाड़ सकता था।
(d) जमीन को खोद सकता था।
4. गद्यांश के अनुसार, आरम्भ में मनुष्य के अस्त्र थे, उसके
(a) नाखून
(b) भुजाएँ
(c) दाँत
(d) पैर
5. गद्यांश के अनुसार, रामचन्द्रजी की वानरी सेना के अस्त्र थे
(a) लोहे के बने बाण, भाले आदि
(b) पत्थरों के ढेले और वृक्षों की डालें
(c) हड्डियों से बने बज़ आदि
(d) बारूद से बने गोले-बम आदि

## गद्यांश-2

महाकवि सूरदास का ‘सूर-सागर’ भागवत के आधार पर लिखा हुआ ग्रंथ है। इसीलिए महाकवि 'सूर' ने भी व्रह्म का यही स्वरूप ग्रहण किया और भगवान श्रीकृष्ण को अपनी उपासना का केन्द्र मानकर वैष्णव सम्प्रदाय के सिद्धान्तों का ही प्रतिपादन किया है। वास्तव में वैदिक ॠचाओं में वर्णित सिद्धान्त ही वैदिक धर्म के प्रकाण्ड आचार्यों द्वारा प्रचारित हुए हैं। काल और स्थिति के
66. गद्यांश में इस बात की ओर संकेत किया गया है कि
(a) बच्चों को खिलौने खरीदकर देने की आवश्यकता नहीं है।
(b) बच्चे अपने आस-पास की चीजों को खिलौने बना लेते हैं।
(c) पुराने जमाने में बच्चे केवल कागज की नाव से ही खेलते थे।
(d) बच्चों की टूटी-फूटी चीजें ही देनी चाहिए।
67. खिलौने बच्चों में किसका विकास करते हैं?
(a) भावनाओं
(b) सृजनात्मकता
(c) सामाजिकता
(d) ऊर्जा
68. बच्चों की रचनात्मक ऊर्जा को उभारने के लिए क्या कर सकते हैं?
(a) घर का सारा समान उन्हें दे देना चाहिए।
(b) अनुपयोगी परन्तु सुरक्षित सामान दे सकते हैं।
(c) सारा टूटा-फूटा समान दे देना चाहिए।
(d) उन्हें खिलौने बनाने का औपचारिक प्रशिक्षण देना चाहिए।
69. 'अतीत में गोता लगाने' का अर्थ है
(a) अतीत की झील में डुबकी लगाना
(b) अतीत की स्मृतियों को बनाए रखना
(c) अतीत में इस तरह के व्यवहार की खोज करना
(d) अतीत के बारे में जानना
70. 'बचपन' शब्द किस प्रकार का शब्द है?
(a) व्यक्तिवाचक संज्ञा
(b) जातिवाचक संज्ञा
(c) विशेषण
(d) भाववाचक संज्ञा

## गद्यांश - 13

वैज्ञानिक प्रयोग की सफलता ने मनुष्य की बुद्धि का अपूर्व विकास कर दिया है। द्वितीय महायुद्ध में एटम बम की शक्ति ने कुछ क्षणों में ही जापान की अजेय शक्ति को पराजित कर दिया। इस शक्ति की युद्धकालीन सफलता ने अमेरिका, रूस, ब्रिटेन, फ्रांस आदि सभी देशों को ऐसे शस्त्रों के निर्माण की प्रेरणा दी कि सभी भयंकर और सर्वविनाशकारी शस्त्र बनाने लगे। अब सेना को पराजित करने तथा शत्रु देश पर पैदल सेना द्वारा आक्रमण करने के लिए शस्त्र निर्माण के स्थान पर देश का विनाश करने की दिशा में शस्त्र बनने लगे हैं। इन हथियारों का प्रयोग होने पर शत्रु देशों की अधिकांश जनता और सम्पत्ति थोड़े समय में ही नष्ट की जा सकेगी। चूँकि इसे शस्त्र प्रायः सभी स्वतन्त्र देशों के संग्राहलयों में कुछ- न-कुछ आ गए हैं। अतः युद्ध की स्थिति

में उनका प्रयोग भी अनिवार्य हो जायेगा, जिससे बड़ी जनसंख्या प्रभावित हो सकती है। इसीलिए निशस्त्रीकरण की योजनाएँ बन रही है। शस्त्र के निर्माण की जो प्रक्रिया अपनायी गई, उसी के कारण आज इतने उन्नत शस्त्र बन गए हैं, जिनके प्रयोग से व्यापक विनाश आसान दिखाई पड़ता है। अब भी परीक्षणों की रोकथाम तथा बने शस्त्रों का प्रयोग रोकने के मार्ग खोजे जा रहे हैं। इन प्रयासों के मूल में एक भयंकर आतंक और विश्व विनाश का भय कार्य कर रहा है।
71. इस गद्यांश का मूल कथ्य क्या है?
(a) आतंक और सर्वनाश का भय
(b) विश्व और शस्त्रों की होड़
(c) द्वितीय विश्वयुद्ध की विभीषिका
(d) निशस्त्रीकरण और विश्व शान्ति
72. भयंकर विनाशकारी आधुनिक शस्त्रों को बनाने की प्रेरणा किसने दी?
(a) अमेरिका ने
(b) अमेरिका की विजय ने
(c) आधुनिकता ने
(d) बड़े देशों की पारस्परिक प्रतिस्पर्धा ने
73. एटम-बम की अपार शक्ति का प्रथम अनुभव कैसे हुआ?
(a) जापान में हुई भयंकर विनाशलीला से
(b) जापान की अजेय शक्ति की पराजय से
(c) अमेरिका, रूस, ब्रिटेन और फ्रांस की प्रतिस्पर्धा से
(d) अमेरिका की विजय से
74. बड़े-बड़े देश आधुनिक विनाशकारी शस्त्र क्यों बना रहे हैं?
(a) अपनी-अपनी सेनाओं में कमी करने के उद्देश्य से
(b) अपने संसाधनों का प्रयोग करने के उद्देश्य से
(c) अपना-अपना सामरिक व्यापार बढ़ाने के उद्देश्य से
(d) पारस्परिक भय के कारण
75. आधुनिक युद्ध भयंकर व विनाशकारी होते हैं, क्योंकि-
(a) दोनों देशों के शस्त्र इन युद्धों में समाप्त हो जाते हैं
(b) अधिकांश जनता और उनकी सम्पत्ति नष्ट हो जाती है
(c) दोनों देशों में महामारी और भुखमरी फैल जाती है
(d) दोनों देशों की सेनाएँ इन युद्धों में मारी जाती है

1. (d): अश्व और लोहे के अस्त्र दोनों थे।
2. (b): अपने बमों पर
3. (c): अपने विरोधियों को पछाड़ सकता था।
4. (a): नाखून
5. (b): पत्थरों के ढेले और वृक्षों की डालें
6. (a): श्रीमद्धागवत ग्रंथ सूर-सागर की रचना का आधार है।
7. (a): सूरदास का है।
8. (a): कृष्ण भक्ति शाखा के कवि थे।
9. (b): वैण्णव धर्म के प्रथम आचार्य श्र्क्षृष्ण
10. (a): दशम स्कंध से ली गई है।
11. (b): पश्चिमी शक्तिशाली और विकसित राष्ट्रों की अपनी संस्कृतियों के वर्चस्ववादी अभियान के तहत वैल्वीकरण की आधुनिक संकल्पना का प्रसार चरम पर है।
12. (c): बाज़ारवाद के वृहद शक्तिशाली जाल में पूरी दुनिया को जकड़कर स्थानीयता से बेदखल करने के षड्यंत्र को, संवेदनशील प्रबुद्ध व्यक्ति भली-भाँति समझने लगा है।
13. (a): आज पुनः लोक से जुड़ी अस्मिताओं की पहचान और संरक्षण के सवाल उठने लगे हैं।
14. (d): हमारी संस्कृति लोक साहित्य में अपने खालिस रूप में अजस्र रूप से बहती नजर आती है।
15. (b): लोकसाहित्य की जड़ें वैदिक साहित्य में भी मिलती हैं।
16. (a): भारत में आर्यों के आगमन के बाद 'आर्य' एवं 'आर्येतर' जातियों के मध्य 'वेद' एवं 'वेदेतर' स्थिति का आविर्भाव हुआ।
17. (c): बौद्ध धर्म के विकास के साथ मानव भावना का महत्व बढ़ने लगा।
18. (d): डा० हजारी प्रसाद द्विवेदी का कथन है कि ‘लोक’ शब्द का अर्थ 'जनपद' या 'ग्राम्य' नहीं है।
