

Time Allowed: 2 Hours

M.M.: 100

Important Instructions:

1. This Test Booklet contains **120** items (questions). Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
2. You have to mark all your responses **ONLY** on the separate Answer Sheet provided. See directions in the Answer Sheet.
3. **All** items carry equal marks.
4. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third** (0.33) of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.

1. Which one of the following is the first and the oldest Government-owned coal mining company in India?
 - (a) Neyveli Lignite Corporation
 - (b) Singareni Collieries Company Limited
 - (c) Coal India Limited
 - (d) Mahanadi Coalfields Limited
2. Which one of the following is a tributary of Barak River in Manipur ?
 - (a) Dhaleswari
 - (b) Subansiri
 - (c) Dhansiri
 - (d) Manas
3. Which types of vegetation will you find on the way as you travel from Bikaner to Konark by road by shortest distance ?
 - (a) Tropical thorny, Desert, Moist deciduous, Mangrove
 - (b) Desert, Tropical thorny, Moist deciduous, Mangrove
 - (c) Moist deciduous, Tropical thorny, Mangrove, Desert
 - (d) Desert, Tropical thorny, Mangrove, Moist deciduous
4. Consider the following statements about Karewas:
 1. These are the lacustrine deposits of Pleistocene period.
 2. These are found along the lower slopes of Pir Panjal.
 3. Karewas are well known for the cultivation of saffron, almond and walnut.
5. How many of the above statements is/are correct?
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) None
5. Consider the following statements about an Indian State :
 1. It is well known globally for its variety of rocks and minerals.
 2. It has the largest deposits of Chrysotile Asbestos in the country.
 3. The Neelam Sanjiva Reddy Sagar Hydel Project is located in this State.

Identify the State from the following :

 - (a) Jharkhand
 - (b) Rajasthan
 - (c) Andhra Pradesh
 - (d) Chhattisgarh
6. During 2020-21, when India was passing through the adverse effects of COVID-19, which one of the following sectors witnessed positive growth ?
 - (a) Mining and quarrying
 - (b) Electricity, gas, water supply and other utility services
 - (c) Financial, real estate and professional services
 - (d) Public administration, defence and other services
7. Which one of the following statements about a borrower from a Microfinance Company is **not**

- correct?
- The borrower should not have annual income beyond a limit.
 - The borrower should not seek loan amount beyond a limit.
 - The borrower should not refuse to offer a collateral.
 - The borrower should not refuse to pay any rate of interest offered.
- Which one of the following statements about Non-Banking Financial Companies (NBFCs) is not correct ?
 - NBFCs cannot accept demand deposits.
 - NBFCs cannot give loans.
 - NBFCs cannot issue cheques drawn on themselves.
 - NBFCs cannot offer deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation.
 - The Department for Promotion of Industry and Internal Trade (DPIIT) has revised the base year index of Eight Core having a combined weight 40.27 percent in the Index of Production. Which one of the following is *not* one of the Eight Core Industries?
 - Coal
 - Refinery products
 - Rubber products
 - Cement
 - Consider the following statements about the Micro, Small and Medium Enterprises (MSMEs):
 - The MSMEs comprise a dynamic sector of the Indian economy providing large employment opportunities.
 - MSMEs require low capital cost and help industrialization of backward regions.
 - MSMEs contribute enormously to socio-economic development.
 How many of the above statements is/are correct?

(a) None	(b) 1
(c) 2	(d) 3
 - Stinging hair of nettle leaves inject fluid in the human body causing burning pain. The fluid is

(a) Methanoic acid	(b) Tartaric acid
(c) Hydrochloric acid	(d) Sulphuric acid
 - Milk of Magnesia is used when people suffer from indigestion of food. It is a

(a) Strong base	(b) Mild base
(c) Strong acid	(d) Mild acid
 - Which one of the following pairs of metals are very good conductors of heat ?

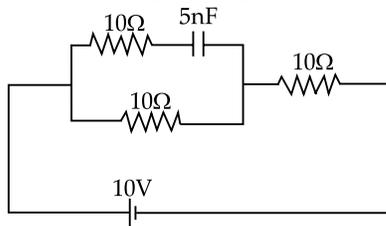
(a) Silver and Copper
(b) Silver and Lead
(c) Copper and Mercury
(d) Lead and Mercury
 - School bells are made of metals because metals are

(a) Malleable	(b) Sonorous
(c) Ductile	(d) Lustrous
 - Consider the following statements about tincture of iodine :
 - It is an antiseptic solution.
 - Iodine is kept in alcohol-water mixture.
 - Concentration of iodine is very low.
 How many of the above statements is/are correct?

(a) 1	(b) 2
(c) 3	(d) None
 - Cl^- is *not* isoelectronic with

(a) K^+	(b) Mg^{2+}
(c) S^{2-}	(d) P^{3-}
 - In plant cells
 - Nucleus does not need a membrane but chloroplasts are surrounded by their own membrane.
 - Nucleus and chloroplasts are surrounded separately by their own membrane.
 - Nucleus is surrounded by membrane but chloroplasts do not need membrane.
 - Both nucleus and chloroplasts are not surrounded by any membrane.
 - Which one of the following statements about starch and glycogen is correct ?
 - Both starch and glycogen are found in plant cells.
 - Both starch and glycogen are found in animal cells.
 - Starch is present in plant cells and glycogen is present in animal cells.
 - Both starch and glycogen are present in plant cells as well as animal cells.
 - Which one of the following statements about the process of photosynthesis is correct ?
 - Light energy is directly converted to kinetic energy which oxidizes carbon dioxide.
 - Light energy is directly converted to chemical energy which causes reduction of water.

- (c) Chlorophyll absorbs the chemical energy of light which causes oxidation of carbon dioxide.
 (d) Chlorophyll absorbs Light energy which causes splitting of water molecules and reduction of carbon dioxide.
20. Kwashiorkor, a form of malnutrition, is caused by the deficiency of
 (a) Minerals (b) Vitamins
 (c) Fats (d) Proteins
21. Which one of the following pairs of enzymes do *not* work at acidic pH ?
 (a) Trypsin and Pepsin
 (b) Chymotrypsin and Pepsin
 (c) Trypsin and Amylase
 (d) Pepsin and Amylase
22. Urea is produced by metabolism of
 (a) Proteins
 (b) Carbohydrates
 (c) Lipids
 (d) Both Proteins and Carbohydrates
23. Deficiency of iron causes
 (a) Anaemia (b) Scurvy
 (c) Rickets (d) Cholera
24. If an object of mass 10 kg is moving with a uniform speed of 10 m/s, then the linear momentum and the kinetic energy of the object, respectively, are
 (a) 100 N.s and 500 J
 (b) 100 N.s and 1000 J
 (c) 200 N.s and 500 J
 (d) 200 N.s and 1000 J
25. An electrical circuit having combinations of resistances and capacitance is given below. The current, flowing through the circuit will be



- (a) 1 A (b) 2 A
 (c) 1.5 A (d) 0.5 A
26. The pitch of a sound wave depends upon which one of its following characteristics ?
 (a) Speed
 (b) Loudness
 (c) Amplitude
 (d) Frequency
27. The device used for measuring electric current in a circuit is called
 (a) Ammeter (b) Motor
 (c) Voltmeter (d) Generator
28. A metal wire of length l and diameter d has a resistance R . What would be the resistance of another wire of the same metal and of same length but having double the diameter ?
 (a) R (b) $R/4$
 (c) $R/2$ (d) $2R$
29. In India, which one of the following is responsible for the implementation of the Government of India's policy in all matters concerning telecommunications ?
 (a) Digital Communications Commission
 (b) Telecom Regulatory Authority of India
 (c) Telecom Advisory Committee
 (d) Telecommunications Consultants India Limited
30. Consider the following statements about James Webb Space Telescope (JWST) :
 1. It is the largest observatory ever launched into space.
 2. It has been developed by NASA in partnership with the European Space Agency and the Canadian Space Agency.
 Which of the statements given above is/are correct?
 (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2
31. India has achieved the 10 percent Ethanol blending much ahead of the targeted date. Which one among the following greatly benefits from this?
 (a) Cassava plantations (b) Maize farming
 (c) Sugar industry (d) Wine industry
32. Consider the following statements regarding e-RUPI prepaid digital vouchers :
 1. The maximum amount of e-RUPI is rupees one lakh.
 2. Beneficiaries can receive e-RUPI without having a bank account.
 3. To receive e-RUPI on mobile phones, beneficiaries need a smart phone with Internet connection.
 Which of the statements given above is/are correct?
 (a) 1 and 2 (b) 3 only
 (c) 1 and 3 (d) 2 only

33. Recently, India's first green hydrogen-based advanced fuel cell electric vehicle (FCEV) was launched. It has no tailpipe emissions other than
- Hydrogen peroxide
 - Nitrogen
 - Oxygen
 - Water
34. Which one of the following languages was added to the Eighth Schedule by a Constitutional Amendment in 1967 ?
- Khasi
 - Kashmiri
 - Sindhi
 - Urdu
35. What were *Manigramam* and *Nanadesi* in early medieval India ?
- Cluster of non-revenue paying villages
 - Village-level community groups
 - Guilds of Indian merchants
 - Literary societies in the capital towns
36. The Dutch were defeated by Marthanda Varma of Travancore Kingdom in the battle of
- Wandiwash
 - Rakshasi - Tangadi
 - Pullalur
 - Colachel
37. To which one of the following schools of philosophy did Kumarila Bhatta and Prabhakara belong ?
- Lokayata*
 - Madhyamika*
 - Purva-Mimamsa*
 - Uttara-Mimamsa*
38. The *Tolkappiyam* is
- A work of grammar.
 - A Tamil poem in praise of Rajendra Chola.
 - An ancient didactic work in Tamil.
 - A drama composed by a Chera King.
39. On the banks of which one of the following rivers was the ancient Mahishmati located ?
- Sarayu
 - Son
 - Narmada
 - Godavari
40. Which one of the following statements about the Public Accounts Committee (PAC) of the Parliament is *not* correct?
- It examines the Finance Accounts of the Government of India.
 - Fifteen members of the Committee are elected by the Lok Sabha from amongst its members.
 - The Chairperson of the Committee is elected by its members.
 - In case a member of any other Committee constituted by the Government is elected to the PAC, the Speaker of the Lok Sabha decides whether he should continue to be a member of the former Committee.
41. Consider the following :
- M.A. Ayyangar
 - G.S. Dhillon
 - Balram J akhar
 - P.A. Sangma
- How many of them were the Speaker of the Lok Sabha?
- 1
 - 2
 - 3
 - 4
42. Consider the following pairs of Schedule and Content of the Constitution of India :
- First : Forms of Oaths or Schedule Affirmations
 - Third : Allocation of seats in the Schedule Council of States
 - Fifth : Provisions related to the administration of Scheduled Areas and Scheduled Tribes
 - Ninth : Provisions related to the administration of tribal areas in certain States
- How many of the above pairs is/are correctly matched?
- 1
 - 2
 - 3
 - 4
43. Which one of the following statements is correct ?
- Under Article 21A of the Constitution of India, the State shall provide free and compulsory education to all children up to the age of eleven years.
 - Every religious denomination has got absolute power under Article 26 of the Constitution of India to manage its own affairs in matters of religion.
 - Only religious and linguistic minorities find mention in Article 30 of the Constitution of India in reference to the right to establish educational institutions of their choice.
 - Parliament cannot empower, even by law, any court other than the Supreme Court of India the power to issue writs within local limits of its jurisdiction.
44. Which one of the following do not influence the ocean currents ?

- (a) Heating by solar energy
(b) Wind
(c) Gravitational pull by Sun and Moon
(d) Coriolis force
45. Which one of the following sedimentary rocks has not been formed mechanically ?
(a) Sandstone
(b) Conglomerate
(c) Loess
(d) Geysers
46. Which of the following statements about inversion of temperature is/are correct ?
1. Temperature increases with increasing altitude.
2. A long winter night with clear skies is an ideal situation.
3. It is a short term phenomenon and is common all over the globe except at the poles.
- Select the correct answer using the code given below :
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 only (d) 1, 2 and 3
47. In which one of the following States/UT, is the Lake Tsomgo located ?
(a) Ladakh
(b) Himachal Pradesh
(c) Sikkim
(d) Uttarakhand
48. Which of the following statements about the coasts of India is/are correct ?
1. The West Coast of India is a high rocky, retreating coast.
2. The West Coast of India is dominated by erosional landforms.
3. The East Coast of India, however, is a low sedimentary coast exhibiting depositional forms.
- Select the correct answer using the .code given below :
- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 only
(d) 1, 2 and 3
49. Which one of the following States/UTs has the largest area under Coral Reefs in India ?
(a) Gujarat
(b) Tamil Nadu
(c) Andaman and Nicobar Islands
(d) Lakshadweep
50. Which one of the following is considered as an agency function of commercial banks in India ?
(a) Acceptance of deposits
(b) Investment of surplus funds
(c) Acceptance of income tax payments
(d) Providing overdraft facilities
51. Which one of the following forms of money supply is considered as the most widely used in the Indian monetary system ?
(a) M1 (b) M2
(c) M3 (d) M4
52. Which one of the following is the first State in India to have 100 percent households with tap water connection ?
(a) Gujarat (b) Goa
(c) Delhi (d) Andhra Pradesh
53. Which one of the following Labour Codes notified by the Government of India incorporated various provisions of the Central Labour Acts such as the Factories Act, 1948 and Plantations Labour Act, 1951 ?
(a) The Occupational Safety, Health and Working Conditions Code, 2020
(b) The Industrial Relations Code, 2020
(c) The Code on Wages, 2019
(d) The Code on Social Security, 2020
54. If you were to browse a table of a recent period showing life expectancy at birth for all categories of rural-urban and male-female divisions for all States of India, you are *not* likely to observe that
1. Urban life expectancy is higher than the rural one.
2. Male life expectancy is higher than the female one.
- Select the correct answer using the code given below :
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
55. Consider the following statements :
The Government is promoting the 'Kisan Drone' for
1. Spraying weedicides.
2. Digitisation of land records.
3. Crop assessment.
- Which of the statements given above is/are correct ?
(a) 1 and 2 (b) 2 and 3
(c) 1 only (d) 3 only

56. Recently launched 'Jan Samarth' portal
- provides single point access for authenticated health information to citizens.
 - assists farmers to access links to useful farming-specific information.
 - provides access to Pan India e-Government services.
 - provides link to Government credit schemes.
57. Recently India commissioned its first liquid mirror telescope at
- Himachal Pradesh
 - Uttarakhand
 - Ladakh
 - Arunachal Pradesh
58. National Tribal Research Institute is situated at
- Bilaspur
 - Raipur
 - Ranchi
 - New Delhi
59. Avani Lekhara excels in which one of the following sports ?
- Table Tennis
 - Cycling
 - Shooting
 - Boxing
60. The atmosphere of Planet Venus is made up of thick and yellowish clouds of
- Chlorine
 - Sulphuric acid
 - Nitric acid
 - Bromine
61. A patient's abdomen (alimentary canal) can be examined by X-ray after administering which one of the following metal salts in the patient's meal ?
- Barium sulphate
 - Barium chloride
 - Strontium sulphate
 - Magnesium chloride
62. Storage of biological tissues such as blood, organs, semen requires low temperature which is achieved upon the usage of
- Liquid nitrogen
 - Solid carbon dioxide
 - Liquid air
 - Helium
63. In the joining of railway tracks, iron oxide is made to react with
- Aluminium
 - Zinc
 - Copper
 - Tin
64. What was a *munjaniq* in medieval period ?
- Cannon
 - Catapult
 - Gun carriage
 - Portable armoury
65. Match List I with List II and select the correct answer using the code given below the Lists :
- | List I
(Literary Work) | | List II
(Author) | |
|---------------------------|-------------------------|---------------------|----------|
| A. | <i>Duta Ghatotkacha</i> | 1. | Bhatti |
| B. | <i>Mrichchhakatikam</i> | 2. | Bhasa |
| C. | <i>Kiratarjuniyam</i> | 3. | Shudraka |
| D. | <i>Ravanavadha</i> | 4. | Bharavi |
- Code :
- | | A | B | C | D |
|-----|---|---|---|---|
| (a) | 1 | 3 | 4 | 2 |
| (b) | 1 | 4 | 3 | 2 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 2 | 4 | 3 | 1 |
66. At the banks of which of the following rivers was the Battle of Ten Kings fought in the Early Vedic Period ?
- Sarasvati
 - Drishadvati
 - Parushni
 - Shutudri
67. The Bengal Famine of 1769-70 was worsened by
- Locust attacks
 - Rat infestation
 - High levels of taxation
 - Smallpox epidemic
68. Which one of the following is *not* the work of Ashvaghosha ?
- Sariputraprakarana*
 - Buddhacharita*
 - Saundarananda*
 - Manjushrimulakalpa*
69. Fat in human body is stored in
- Adipose tissue
 - Red blood cells
 - Muscle tissue
 - Epithelial tissue
70. Which one of the following is a feature of Membrane ?
- Bilayer of phospholipid molecule in which proteins and cholesterol are embedded
 - Bilayer of proteins molecule in which lipid and cholesterol are embedded
 - Bilayer of neutral lipid in which proteins and cholesterol are embedded
 - Bilayer of neutral lipid lacking cholesterol and proteins

71. Which one of the following parts of human alimentary canal can be of maximum length ?
 (a) Stomach (b) Small intestine
 (c) Large intestine (d) Rectum
72. While forming the 'Indo-Pacific Economic Framework for Prosperity', the member countries launched collective discussions towards future negotiations on four pillars. Which one of the following is *not* one of those pillars?
 (a) Clean energy, decarbonisation and infrastructure
 (b) Defence cooperation and intelligence sharing
 (c) Supply chain
 (d) Tax and anti-corruption
73. The regions known as Donetsk and Luhansk are sometimes mentioned in the news. They are the separatist regions of
 (a) Ethiopia (b) Sudan
 (c) Ukraine (d) Yemen
74. Recently which of the following countries were placed in the 'Grey List' of Financial Action Task Force ?
 (a) Bolivia and Mozambique
 (b) Colombia and Ecuador
 (c) Iraq and Qatar
 (d) Turkey and UAE
75. Which one of the following assists a country through 'Extended Fund Facility', often talked about in news ?
 (a) International Fund for Agricultural Development
 (b) International Monetary Fund
 (c) International Bank for Reconstruction and Development
 (d) United Nations Development Programme
76. The terms 'Ethereum, Solana, Polkadot and Tether', sometimes mentioned in the news, refer to
 (a) Cryptocurrencies
 (b) Earth Observation Satellites
 (c) Hypersonic Cruise Missiles
 (d) Virtual Private Network service providers
77. In which one of the following States has the President's Rule been imposed most number of times ?
 (a) Bihar (b) Karnataka
 (c) Manipur (d) Punjab
78. The use of 'Electors Photo Identity Cards (EPIC)' by the Election Commission of India was started in which one of the following years?
 (a) 1992 (b) 1993
 (c) 1995 (d) 2001
79. Which one of the following best describes the electoral system to elect the President of India ?
 (a) Proportional Representation
 (a) Proportional Representation and Single Transferable Vote System
 (b) First-Past-the-Post System
 (c) List System
80. Which one of the following statements about Money Bill is *not* correct ?
 (a) Money Bill cannot be introduced in the Council of States.
 (b) The Council of States has no power to reject or amend the Money Bill.
 (c) The Speaker of the Lok Sabha has the sole and final power in deciding whether a Bill is a Money Bill or otherwise.
 (d) The Council of States has no power to discuss the Money Bill.
81. Which of the following States has/have bicameral legislature ?
 1. Andhra Pradesh
 2. Telangana
 3. Bihar
 4. Uttar Pradesh
- Select the correct answer using the code given below :
 (a) 1 only (b) 1, 2 and 3 only
 (c) 3 and 4 only (d) 1, 2, 3 and 4
82. By which one of the following Constitutional Amendment Acts, was the Article 21A (Right to Education) inserted into the Constitution of India ?
 (a) 83rd Amendment Act
 (b) 84th Amendment Act
 (c) 85th Amendment Act
 (d) 86th Amendment Act
83. An object is dropped from a height onto the floor. Which one of the following remains uniform as it falls ?
 (a) Its acceleration
 (b) Its momentum
 (c) Its kinetic energy
 (d) Its potential energy

84. If an object is placed at the focus of a convex lens, its image is
 (a) at the focus on the same side.
 (b) at the focus on the opposite side.
 (c) coincident with the lens.
 (d) at infinity.
85. Which one of the following statements about the aperture of a convex lens is correct ?
 (a) It is equal to its radius of curvature.
 (b) It is equal to its focal length.
 (c) It is independent of its radius of curvature.
 (d) It is equal to half of its focal length.
86. When water is heated from 0°C to 4°C, its density
 (a) remains constant.
 (b) increases.
 (c) decreases.
 (d) first increases then decreases to its original value.
87. The acceleration due to gravity at the Earth's surface depends on
 (a) its mass only.
 (b) its radius only.
 (c) both its mass and radius.
 (d) either its mass or its radius.
88. In which one of the following highlands of India can you find temperate forests called 'Sholas' ?
 (a) Nilgiris (b) Vindhya
 (c) Satpuras (d) Himalayas
89. 'Pingos' are associated with which one of the following process ?
 (a) Glacial (b) Peri-glacial
 (c) Aeolian (d) Fluvial
90. Match List I with List II and select the correct answer using the code given below the Lists :

List I (Drainage Pattern of River)	List II (Feature)
A. Insequent	1. Whose direction of flow is controlled by the rock Structure
B. Consequent	2. No apparent reason why it follows the path it takes
C. Subsequent	3. Flow in the same direction as the consequent stream but at a lower level

- D. Resequent 4. Whose course is determined by the original slope of the land

Code:

	A	B	C	D
(a)	2	1	4	3
(b)	2	4	1	3
(c)	3	4	1	2
(d)	3	1	4	2

91. Which one of the following processes leads to expansion of certain minerals as they take up water, causing additional stress in the rock ?
 (a) Hydrolysis (b) Hydration
 (c) Oxidation (d) Carbonation
92. The Indian desert also known as *Marusthali* is believed to be under the sea during which one of the following eras ?
 (a) Cenozoic era
 (b) Palaeozoic era
 (c) Mesozoic era
 (d) Archaean and Pre-Cambrian era
93. Which among the following are Charvaka Schools of Philosophy ?
 1. Dhurttā 2. Nyaya
 3. Sushikshita 4. Vaisheshika

Select the correct answer using the code given below:

- (a) 1, 2 and 3 (b) 2 and 3 only
 (c) 2 and 4 only (d) 1 and 3 only

94. During the 8th - 14th centuries, in the Sanskrit texts and inscriptions, which of the following terms were used to denote Muslims ?
 1. Turushka 2. Tajika
 3. Parashika 4. Kardamaka

Select the correct answer using the code given below :

- (a) 1, 2 and 3 (b) 1, 2 and 4
 (c) 2 and 3 only (d) 1, 3 and 4

95. In the citadel and lower-town areas of which one of the following Harappan cities, have several large cisterns and reservoirs been found?
 (a) Banawali (b) Mohenjodaro
 (c) Dholavira (d) Rakhigarhi
96. Consider the following statements about cavalry warfare in India :
1. The iron stirrup made it possible for the armoured warrior to sit firmly on a horse without falling off.

2. The iron stirrup also allowed a cavalry charge with lances held tightly to the body, without the rider being thrown off by the shock of impact.
- Which of the statements given above is/are correct ?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
97. The British policy towards Afghanistan in the first half of the 19th century aimed at
- (a) Strengthening Afghanistan as a buffer against Russia.
(b) Weakening Russian influence in Afghanistan but not promoting a strong Afghanistan either.
(c) Promoting Russian influence in Afghanistan to control insurgent tribal-leaders.
(d) Annexing Afghanistan as a directly-controlled British Territory.
98. Recently, the United Nations agreed to change the name of which one of the following countries?
- (a) Algeria (b) Jordan
(c) Morocco (d) Turkey
99. The SWIFT (The Society for Worldwide Interbank Financial Telecommunication) frequently mentioned in news, is essentially a
- (a) Global financial intelligence agency
(b) Global terror finance detection system
(c) Global money transfer system
(d) Global stock-market information sharing system
100. P-75 I (or P-75 India) project refers to manufacture of
- (a) Diesel-electric submarines.
(b) Nuclear-powered submarines.
(c) Aircraft carrier warships.
(d) Field guns.
101. The term "Thermal High Altitude Area Defense", sometimes mentioned in news, refers to
- (a) Anti-Missile system.
(b) Air-launched cruise missile.
(c) Aircraft navigation system.
(d) Surface-to-air guided weapon.
102. With reference to BrahMos missile, consider the following statements :
1. It has a flight range of up to 290 km.
 2. It is capable of attaining a speed of 2-8 Mach.
 3. Its cruising altitude could be up to 30 km.
- Which of the statements given above is/are correct ?
- (a) 1 and 2 (b) 2 only
(c) 1 and 3 (d) 3 only
103. Which one of the following is *not* a category under which the President of India nominates Members of Parliament ?
- (a) Literature (b) Science
(c) Art (d) State Service
104. India is still a young country as the median age of its population is
- (a) Less than 25 years
(b) Between 25 to 30 years
(c) Between 30 to 35 years
(d) Between 35 to 40 years
105. Blue Helmets are
- (a) United Nations Peacekeepers
(b) Violent Non-State Actors
(c) Civil Society Organisations
(d) Environmental Organisations
106. Which one of the following central features is *not* associated with Capitalist Economy ?
- (a) There is generalised commodity production - it has market value.
(b) Productive wealth is held predominantly in private hands.
(c) Economic life is organised according to market principles.
(d) Economic organisation is based on planning, a supposedly rational process of resource allocation.
107. Which among the following is *not* the strength or chief benefit of Bicameralism ?
- (a) Second chambers check the first chambers and prevent majoritarian rule.
(b) It checks the powers of the executive.
(c) The second chambers can act as a constitutional safeguard.
(d) It often acts as a check on democratic rule, particularly when their members are non-elected or indirectly elected.
108. The Insolvency and Bankruptcy Board of India (IBBI) was established in the year
- (a) 2014 (b) 2015
(c) 2016 (d) 2017
109. Which one of the following is the other term used for 'Focus' in relation with an earthquake?
- (a) Hypocentre (b) Epicentre
(c) Isocentre (d) Principal Point
110. Which one of the following is *not* a mountain

peak of the Andaman and Nicobar Islands ?

- (a) Saddle Peak (b) Mount Thuillier
(c) Lhotse Peak (d) Mount Diavolo

111. Match List I with List II and select the correct answer using the code given below the Lists :

<i>List I</i> (Cloud Form)	<i>List II</i> (Characteristic)
A. Cirrus	1. Storm clouds
B. Cumulus	2. High fog "Low Ceiling"
C. Nimbostratus	3. Fair-weather clouds
D. Stratus	4. Entirely of ice particles

Code:

	A	B	C	D
(a)	2	1	3	4
(b)	2	3	1	4
(c)	4	3	1	2
(d)	4	1	3	2

112. Which one among the following planets has the largest number of known satellites ?

- (a) Mars (b) Neptune
(c) Jupiter (d) Saturn

113. Who among the following usurped power in Kanyakubja after the death of Harshavardhana?

- (a) Adityasena (b) Arunashva
(c) Shashanka (d) Lalitaditya

114. The legend of Prahlad and his father Hiranyakashyap was first set out in the

- (a) Bhagwat Purana (b) Vishnu Purana
(c) Vamana Purana (d) Agni Purana

115. Which one of the following statements on the issue of ownership according to *Smriti* literature is *not* correct ?

- (a) The paternal estate was to be divided equally amongst sons.
(b) Women were allowed to retain the gifts they received on the occasion of their marriage.

- (c) The gifts to women on the occasion of their marriage were known as *Stridhana*.
(d) *Stridhana* was not inherited by the children without the permission of the husband.

116. Who among the following was *not* a woman labour leader who organised workers in the strikes in the 1920s ?

- (a) Sarala Devi Chaudhurani
(b) Ushabai Dange
(c) Prabhavati Devi
(d) Anasuya Behn

117. Among the following countries, where did the idea of 'Social Market Economy' emerge in 1950s ?

- (a) Germany
(b) France
(c) United States of America
(d) United Kingdom

118. Who among the following Indian thinkers first spoke of food-for-work programmes to counteract the effects of famines ?

- (a) Kautilya (b) Aryabhata
(c) Chandragomin (d) Prabhakara

119. The 'Ramsar Convention' relates to which one of the following areas ?

- (a) Wetland preservation
(b) Promote afforestation
(c) Action plan on climate change
(d) Combat desertification

120. Which one among the following reports defines Sustainable Development as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs ?

- (a) Brundtland Report
(b) United Nations Human Development Report
(c) Agenda-21 of the Rio Earth Summit
(d) OECD Policy Brief (2006)

Answers

General Knowledge

Q No	Answer Key	Topic Name	Chapter Name
1	(c)	Coal India Ltd	Static GK
2	(a)	Rivers & Tributaries	Static GK
3	(b)	Types of Vegetation	Geography
4	(c)	Karewa formations	Geography
5	(c)	States	Static GK
6	(b)	Economic Survey	Current Affairs
7	(d)	Monetary policy of RBI	Economics
8	(b)	NBFC	Economics
9	(c)	Industrial growth	Current Affairs
10	(d)	MSME & Business Entrepreneurship	Economics
11	(a)	Organic acids	Acids, Bases and Salts
12	(b)	Therapeutic Action of Different Classes of Drugs	Chemistry in Everyday in Life
13	(a)	Properties of metals	Classification of Elements
14	(b)	Properties of Metals	Metals & Non-metals
15	(c)	<i>p</i> -Block elements	Classification of Elements
16	(b)	Isoelectronic	Structure of Atom
17	(b)	Plant Cells	Physiology of Plants and Animals
18	(c)	Animal & Plant Cells	Physiology of Plants and Animals
19	(d)	Photosynthesis	Physiology of Plants and Animals
20	(d)	Absorption	Physiology of Plants and Animals
21	(c)	Enzymes	Biomolecules
22	(a)	Urea Metabolism	Physiology of Plants and Animals
23	(a)	Vitamins	Chemistry in Everyday in Life
24	(a)	Kinetic Energy/ Momentum	Work, Energy and Power
25	(d)	Equivalent Resistance	Electricity & Magnetism
26	(d)	Properties of Sound	Sound
27	(a)	Electric Current	Electricity & Magnetism
28	(b)	Resistivity	Electricity & Magnetism
29	(b)	TRAI	Static GK
30	(c)	Telescope	Science & Technology
31	(c)	Ethanol Blending	Current Affairs
32	(a)	e-RUPI	Current Affairs
33	(d)	FCEV	Current Affairs
34	(c)	Amendments	Indian Constitution
35	(c)	Merchant Guilds	Ancient History
36	(d)	Battle of Colachel	Modern History

Q No	Answer Key	Topic Name	Chapter Name
37	(c)	School of philosophy	Art & Culture
38	(a)	Literary work	Art & Culture
39	(c)	Mahishmati Kingdom	Ancient History
40	(c)	Public Accounts Committee	Indian Polity
41	(d)	Speakers of India	Static GK
42	(a)	Schedules	Indian Polity
43	(c)	Articles	Indian Constitution
44	(c)	Ocean Currents	Geography
45	(d)	Sedimentary Rocks	Geography
46	(d)	Temperature Inversion	Geography
47	(c)	Lake Tsomgo	Geography
48	(d)	Landforms and their evolution	Geography
49	(d)	Coral reefs	Geography
50	(a)	Commercial banks	Economics
51	(c)	Money Supply	Economics
52	(b)	Tap water connection	Current Affairs
53	(a)	Labour Codes	Current Affairs
54	(b)	Life expectancy	Current Affairs
55	(b)	Kisan drones	Current Affairs
56	(d)	Jan Samarth portal	Current Affairs
57	(b)	Telescope	Current Affairs
58	(d)	Institution	Current Affairs
59	(c)	Sports	Current Affairs
60	(b)	Planets	Science & Technology
61	(a)	Properties of X ray	Science & Technology
62	(a)	Chemical in Food	Chemistry in Everyday in Life
63	(a)	Properties of metals	Metals and non-metals
64	(b)	Catapult	Medieval History
65	(c)	Literary Work	Art & Culture
66	(c)	Battle	Ancient History
67	(c)	Bengal Famine	Modern History
68	(d)	Literary work	Art & Culture
69	(a)	Fat Metabolism	Tissues
70	(a)	Cell Membrane	Cell & its Division
71	(b)	Body parts	Physiology of Plants and Animals
72	(b)	Indo-Pacific Economic Framework	Current Affairs
73	(c)	Regions	Current Affairs
74	(d)	FATF	Current Affairs
75	(b)	IMF	Static GK
76	(a)	Cryptocurrencies	Current Affairs

Q No	Answer Key	Topic Name	Chapter Name
77	(a)	President's Rule	Indian Constitution
78	(b)	Voter ID Card	Indian Polity
79	(b)	President of India	Indian Polity
80	(d)	Money Bills	Economics
81	(d)	Bicameral Legislatute	Indian Constitution
82	(d)	Constitutional Amendment	Indian Constitution
83	(a)	Momentum	Laws of Motion
84	(d)	Image formation by Convex Lens	Ray Optics
85	(c)	Properties of Lens	Laws of Motion
86	(b)	Thermal Expansion	Heat & Thermodynamics
87	(c)	Acceleration Due to Gravity	Gravitation
88	(a)	Sholas	Geography
89	(b)	Pingos	Geography
90	(b)	Drainage Pattern	Geography
91	(b)	Hydration	Geography
92	(c)	Marusthali	Geography
93	(d)	Schools of Philosophy	Art & Culture
94	(a)	Sanskrit texts	Art & Culture
95	(c)	Indus Valley Civilization	Ancient History
96	(b)	Cavalry Warfare	Medieval History
97	(b)	British policy	Modern History
98	(d)	UN	Current Affairs
99	(c)	SWIFT	Economics
100	(a)	Project 75	Defence
101	(a)	THAAD	Current Affairs
102	(a)	BrahMos	Current Affairs
103	(d)	Nominate Members	Indian Polity
104	(b)	Population of India	Economics
105	(a)	Blue Helmets	Static GK
106	(d)	Planned economy	Economics
107	(d)	Bicameral legislature	Indian Constitution
108	(c)	IBBI	Static GK
109	(a)	Hypocentre	Geography
110	(c)	Lhotse	Geography
111	(c)	Cirrus clouds	Geography
112	(d)	Natural satellites	Science & Technology
113	(b)	Harshavardhana	Medieval History
114	(b)	Vishnu Purana	Art & Culture
115	(d)	Manusmriti	Ancient History
116	(c)	Women Leaders	Modern History
117	(a)	Social Market Economy	Economics

Q No	Answer Key	Topic Name	Chapter Name
118	(a)	Kautilya	Ancient History
119	(a)	Ramsar Convention	Static GK
120	(a)	Brundtland Report	Static GK

ANSWERS WITH EXPLANATIONS

1. Option (c) is correct.

Coal India Limited (CIL)

- It is a government-owned coal mining and refining corporation of India.
- Its headquarters are located in Kolkata, West Bengal.
- It was founded in 1975.
- It is a Maharatna public sector undertaking (PSU) and, is the largest coal-producer in the world.

Neyveli India Limited (NLC) was formerly known as Neyveli Lignite Corporation Limited). It is a government-owned-fossil fuel miner and thermal power generator. It comes under the ownership of Ministry of Coal. It annually produces about 30 million tonnes of Lignite. It was incorporated in 1956.

The Singareni Collieries Company Limited or SCCL comes under the ownership of Ministry of Energy, Government of Telangana. It was founded on 23 December 1920.

Mahanadi Coalfields Limited (MCL) is one of the eight subsidiaries of Coal India Limited. It was carved out of South Eastern Coalfields Limited in 1992. It's headquartered at Sambalpur, Odisha.

2. Option (a) is correct.

Barak River

- It flows through the states of Mizoram, Nagaland and Manipur and Assam.
- When it reaches Bangladesh, it is called the Surma and the Kushiya. Later on, it is called as Meghna before receiving the combined flow of the Ganga and the Brahmaputra.
- It flows into the Bay of Bengal via Bangladesh.
- The principal tributaries of this river are all in India. These are:
- Sonai (or Tuirial).

- Jiri.
- Tlawng (or Dhaleswari, or Katakai).
- Jatinga.
- Longai.
- Madhura.

3. Option (b) is correct.

As you travel from Bikaner to Konark by road through shortest distance, you will cross the following states of India:

- Rajasthan
- Uttar Pradesh
- Bihar
- Jharkhand
- West Bengal
- Odisha
- Deserts, lies in Rajasthan.
- **Tropical thorn forests:** These are found in the areas of southwest Punjab, in Haryana, Gujarat, Madhya Pradesh, Rajasthan, and also in Uttar Pradesh.
- **Moist deciduous forests:** These are found in the eastern part of the country such as north-eastern states along the foothills of the Himalayas. They are also found in Jharkhand, West Orissa and Chhattisgarh.
- **Mangrove:** West Bengal has 42.45% of India's mangrove cover, followed by Gujarat 23.66% and Andaman & Nicobar Islands 12.39%.

4. Option (c) is correct.

Karewas:

- Karewa in the Kashmiri dialect means "elevated table land".
- These are the thick deposits of glacial clay and other materials embedded with moraines.
- These are unconsolidated lacustrine deposits (deposits in lakes) of Plio Pleistocene age.

- Karewa formations are useful for the cultivation of Zafran, a local variety of saffron in Kashmir Valley.
- Kashmir Valley resides between the Great Himalayas and the Pir Panjal ranges of the Kashmir Himalayas.

5. Option (c) is correct.

Andhra Pradesh

- It is well known globally for a variety of rocks & minerals, and called 'Ratna Garbha'.
- Neelam Sanjeeva Reddy Sagar (Srisailem) Project, is a project of Andhra Pradesh.
- It has the largest deposits of Chrysotile Asbestos in the country. There are two asbestos mines in Kadapa district of Andhra Pradesh.

6. Option (b) is correct.

As per the Economic Survey 2021-22

The utilities segment experienced a muted cycle as basic services, such as electricity and water supply, were maintained even at the height of the national lockdown.

Share of Sectors in Nominal GVA (Percentage):

Sector	2019-20 (Ist RE)	2020-21 (PE)	2021-22 (Ist AE)
Agriculture & Allied Sectors	18.4	20.2	18.8
Industry	26.7	25.9	28.2
Mining & quarrying	1.9	1.6	2.3
Manufacturing	14.7	14.4	15.4
Electricity, gas, water supply & other utility services	2.6	2.7	2.5
Construction Sector	7.4	7.2	8.0

Note: RE: Revised Estimates, PE: Provisional Estimates, AE: Advance Estimates

7. Option (d) is correct.

- The Reserve Bank of India (RBI) in March 2022, revised some norms related to Microfinance loans.
- It allowed to micro-finance institutions freedom to set interest rates, they charge borrowers with a caution that the rates should not be exorbitant.
- Each regulated entity shall disclose pricing-related information to a prospective borrower in a standardised, simplified

factsheet.

- The borrower shall not be charged any amount, which is not explicitly mentioned in the factsheet.

8. Option (b) is correct.

- NBFCs can lend and make investments.
- Their activities are similar to that of banks. However, there are a few differences as given below:
 - NBFC cannot accept demand deposits.
 - NBFCs do not form part of the payment and settlement system.
 - NBFCs cannot issue cheques drawn on it.
 - Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation (DICGC) is not available to depositors of NBFCs.

9. Option (c) is correct.

The combined Index of Eight Core Industries increased by 4.5 per cent (provisional) in July 2022, as compared to the Index of July 2021.

ICI measures combined and individual performance of production in selected eight core industries, viz.

1. Coal
2. Crude Oil
3. Natural Gas
4. Refinery
5. Products
6. Fertilizers
7. Steel
8. Cement and Electricity

These Eight Core Industries consists of 40.27 percent of the weight of items included in the Index of Industrial Production (IIP).

10. Option (d) is correct.

- Over the last five decades, Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy
- MSMEs provide large employment opportunities at comparatively lower capital cost than large industries.
- MSMEs help in industrialization of rural & backward areas.
- They help in reducing regional imbalances, assuring more equitable distribution of income and wealth.
- This sector contributes extremely to the socio-economic development of the country.

11. Option (a) is correct.

The acid found in the stinging hair of leaves of nettle plant is methanoic acid. Stinging hair of nettle leaves inject methanoic acid causing burning pain.

12. Option (b) is correct.

Milk of magnesia is alkaline, which means that it would neutralise any acidic substance encountered. Hence, it is an excellent antacid. It neutralises excess stomach acid or hydrochloric acid. The hydroxide ions of the milk of magnesia combine with the hydrogen ions in the stomach acid to reduce excess acidity in the stomach.

13. Option (a) is correct.

Most metals are the good conductors of heat, Au, Ag, Cu, Al, etc., are good heat conductors as well as electrical conductors. But silver and copper are the best conductors of heat.

14. Option (b) is correct.

Bells made up of metals because metals are sonorous, i.e., they produce sound when struck with a hard substance. Therefore, students will be able to hear the sound loud when bell hits.

15. Option (c) is correct.

Tincture of iodine is a solution of I_2 in aqueous KI. It is an antiseptic. 2-3% solution of iodine in alcohol-water mixture is known as tincture of iodine.

Tincture of iodine is a solution of iodine 5% plus potassium iodide 10% in water, which is used to reduce the vascularity of the thyroid gland in thyrotoxicosis before surgery.

16. Option (b) is correct.

Mg^{2+} and Cl^- are not isoelectronic as they contain different number of electrons. An isoelectronic series is a group of atoms/ions that have the same number of electrons.

The number of electrons present are not same electrons, $Mg^{2+} = 10$ electrons, $Cl^- = 18$ electrons. So this group does not represent the isoelectronic species.

17. Option (b) is correct.

The nucleus of a plant cell is a membrane-bound organelle that contains the cell's DNA. This organelle is crucial because it serves as the cell's information and administrative centre.

A chloroplast is also a type of plant cell organelle known as a plastid. This organelle is bounded by a double membrane called as outer and inner membrane, but it also contains a third internal membrane system, called the thylakoid membrane. Chloroplasts also have their own DNA and ribosomes which is involved in the process of photosynthesis.

18. Option (c) is correct.

Starch is the stored form of sugar in plants which is stored in the amyloplast cells in plants whereas glycogen is the storage form of sugar in humans and other vertebrates which is usually stored in liver and muscle cells.

19. Option (d) is correct.

Photosynthesis is the process by which plants use sunlight, water, and carbon dioxide to create oxygen and energy as sugar. During the initial phase of photosynthesis, chlorophyll in the leaves of the plants absorbs the light energy which produce ATP and NADPH where water molecules splits into its elements – oxygen and hydrogen ions.

After this stage, energy from the ATP and NADPH molecules is used for the reduction of carbon dioxide to carbohydrates.

The plant then releases the oxygen back into the air and stores energy within the carbohydrates (glucose) molecules.

20. Option (d) is correct.

Kwashiorkor is an acute form of malnutrition caused by the lack of protein. This is a serious illness that can occur when a person does not consume enough protein. A severe protein deficiency can lead to fluid retention, which causes stomach bloating. It is more common in children, especially if they do not have access to adequate nutrition immediately after stopping breastfeeding.

21. Option (c) is correct.

The enzymes trypsin and amylase do not work at acidic pH. Trypsin and chymotrypsin are active in alkaline pH, i.e., 7.5 to 8 while, the enzyme amylase works best at a slightly alkaline pH. On the other hand, pepsin is a strong endopeptidase which acts best at highly acidic pH i.e., 1 to 3.

22. Option (a) is correct.

The main nitrogenous waste that many terrestrial amphibians, mammals, and marine fishes emit is urea. Amino acids, which are the building blocks of proteins, are broken down and transformed into ammonia, carbon dioxide, water, and energy in the liver at the end of metabolic pathway chain reactions. Ammonia must be eliminated from the body since it is extremely harmful. Due to its high water solubility, urea is expelled from the body in the form of urine. As a result, we can state that amino acids (proteins) are a source of urea.

23. Option (a) is correct.

Deficiency of iron in the body is one of the causes of anaemia. It is a condition in which deficiency of enough healthy red blood cells takes place which leads to reduced oxygen flow to the body's organs. On the other hand, deficiency of vitamin C and vitamin D causes scurvy and rickets, respectively. While, cholera is caused by ingestion of food or water contaminated with the bacterium *Vibrio cholerae*.

24. Option (a) is correct.

Given, mass of object, $m = 10 \text{ kg}$
 speed of object, $v = 10 \text{ ms}^{-1}$
 Linear momentum, $p = mv = 10 \times 10 = 100 \text{ Ns}$
 Kinetic energy, $K = \frac{1}{2} mv^2 = \frac{1}{2} \times 10 \times 10^2$
 $= 500 \text{ J}$

25. Option (d) is correct.

In a dc circuit, capacitors gets charged during the time the current in the circuit reaches its maximum value, and after that they do not allow the current to pass through, thus acting as an open circuit. So no current will pass through the upper branch.

Net resistance of the circuit, $R_{\text{net}} = 10 + 10 = 20 \Omega$

current, $I = \frac{V}{R_{\text{net}}} = \frac{10}{20} = 0.5 \text{ A}$

26. Option (d) is correct.

Pitch of a sound depends upon its frequency. Higher the frequency, higher will be pitch.

27. Option (a) is correct.

Ammeter or galvanometer is used to measure amount of current in a circuit. They are connected in series.

28. Option (b) is correct.

$$\text{Resistance} \propto \frac{1}{A} \text{ or } \frac{1}{\pi r^2}$$

Since diameter is doubled, it means radius is also doubled. So resistance will reduce by 4 times.

29. Option (b) is correct.

Telecom Regulatory Authority of India (TRAI):

- It is a regulatory body which was set up by the Government of India under the Telecom Regulatory Authority of India Act, 1997.
- It is responsible for regulating telecommunications sector in India.
- The TRAI Act was amended through the TRAI (Amendment) Act, 2000 under which a Telecom Disputes Settlement and Appellate Tribunal (TDSAT) were established to take over the adjudicatory and disputes related functions from TRAI.

30. Option (c) is correct.

James Webb Space Telescope (JWST):

- It is a largest optical telescope in space which is designed mainly to conduct infrared astronomy.
- It has been designed by NASA in collaboration with the European Space Agency (ESA) and the Canadian Space Agency (CSA).

31. Option (c) is correct.

- India has achieved the target of blending 10% sugarcane-extracted ethanol in petrol ahead of schedule.
- The target of supplying petrol mixed with 10% ethanol was achieved in June, ahead of the original schedule of November 2022.
- The government has now to advance the date, the target of making petrol with 20% ethanol from 2030 to 2025.
- India is the world's fifth largest producer of ethanol after the U.S., Brazil, the EU and China.

32. Option (a) is correct.

e-RUPI

It is basically a digital voucher, which a beneficiary gets on his phone in the form of an SMS or QR code.

New guidelines for e-RUPI as issued by RBI in February 2022:

- The maximum amount of e-RUPI from ₹ 10,000 to ₹ 1 lakh.
- The voucher can be used more than once, until the amount is fully redeemed.
- Beneficiaries can receive e-RUPI, even without having a bank account.
- Can be received on smart phones without internet connection.

33. Option (d) is correct.

- In March 2020, Union Minister (Road Transport and Highways) Nitin Gadkari, launched the world's most advanced technology - developed Green Hydrogen Fuel Cell Electric Vehicle (FCEV), Toyota Mirai.
- Fuel Cell Electric Vehicle (FCEV) is powered by Hydrogen and, is one of the best Zero Emission solutions.
- It is completely environment friendly with no tailpipe emissions other than water.
- Green Hydrogen can be generated by utilizing biomass that is widely available and renewable energy sources.

34. Option (c) is correct.

The Twenty-first Amendment Act, 1967, amended the Eighth Schedule of the Constitution. It included Sindhi, as one of the languages, as a result the total number of languages listed in the schedule raised to fifteen.

35. Option (c) is correct.

- **Manigramam** refers to a medieval merchant guild, which was organised by itinerant ethnic Indian traders who were primarily active in south India.
- **Nanadesis** were a guild of traders during the Hoysala Empire. They organised themselves, into one of the biggest trading associations.

36. Option (d) is correct.

The Battle of Colachel

- It is also known as the Battle of Kulachal.
- It was fought in 1741.
- It was fought between the Indian kingdom of Travancore and the Dutch East India Company.
- During the Travancore-Dutch War, the forces of King Marthanda Varma's defeated the Dutch East India Company's forces, which were led by Admiral Eustachius De Lannoy.
- The Dutch, after this battle, never recovered from the defeat and no longer posed a large

colonial threat to India.

37. Option (c) is correct.

- Kumarila Bhatta and Prabhakara were associated with the Purva-Mimamsa school of philosophy.
- This school believed in the complete authority of Vedas.
- It is based on sage Jaimini's Mimamsa Sutras.
- It highlighted the power of yajnas and mantras in sustaining the activities of the universe.
- It stated that, a human being can attain salvation only by acting in accordance with the principles of Vedas.

38. Option (a) is correct.

- **Tolkappiyam** is the most ancient surviving Tamil grammar text and also the oldest surviving long work of Tamil literature.
- It is a unique work on grammar and poetics and deals with Ezhuttu (letter), Col (word) and Porul (subject matter).

39. Option (c) is correct.

- It was an ancient kingdom which is located in present-day Maheshwar town in Madhya Pradesh.
- It is located on the banks of Narmada River.
- It is said to have been ruled by the legendary Haihaya ruler Kartavirya Arjuna, and is mentioned in various ancient texts.

40. Option (c) is correct.

Public Accounts Committee:

- The committee was set up first in 1921 under the provisions of the Government of India Act of 1919.
- It has been in existence since then.
- At present, it consists of 22 members (15 members are from the Lok Sabha and 7 from the Rajya Sabha).
- The members are elected by the Parliament every year from amongst its members.
- The members are elected according to the principle of proportional representation by means of the single transferable vote and thus, all parties get due representation in it.
- The term of office of the members is one year.
- A minister cannot be elected as a member of the committee.
- The chairman of the committee is appointed from amongst its members by the Speaker.

- Its function is to examine the annual audit reports of the Comptroller and Auditor General of India (CAG), which are laid before the Parliament by the President.

41. **Option (d) is correct.**

List of Speaker of the Lok Sabha:

M. A. Ayyangar, from Chittoor constituency was the second Speaker of Lok Sabha from 1956 to 1962.

Gurdial Singh Dhillon, from Tarn Taran (Punjab) constituency from 1969 to 1971 and from 1971 to 1975.

Balram Jakhar, from Ferozepur (Punjab) constituency was the 7th Speaker of Lok Sabha.

P. A. Sangma, from Tura (Meghalaya) constituency was the 11th Speaker of Lok Sabha.

42. **Option (a) is correct.**

First Schedule: The names of states and union territories and their territorial extent are mentioned in it.

Third Schedule: Contains forms of Oaths or Affirmations

Fifth Schedule: Administration of scheduled areas and scheduled tribes

Ninth Schedule: Contains a list of central and state laws which cannot be challenged in courts.

43. **Option (c) is correct.**

Under Article 21 (A), the State shall provide free and compulsory education to all children of the age of six to fourteen years. This provision makes only elementary education as a Fundamental Right and not higher or professional education.

Article 26 guarantees rights of religious denominations or their sections. The Supreme Court in its judgement in 2020, stated that **the fundamental right guaranteed under Article 25 and 26 is not absolute and is subject to public order.**

Under article 30, all minorities shall have the right to establish and administer educational institutions of their choice. The protection under Article 30 is confined only to minorities (religious or linguistic) and does not extend to other section of citizens.

Both **Supreme Court and High Court can issue writs**. However, Supreme Court can issue writs only for the enforcement of fundamental rights whereas a high court can issue writs not only for the enforcement of Fundamental Rights but also for any other purpose.

44. **Option (c) is correct.**

The following are the factors which influence the ocean currents:

- Wind
- Tides
- Earth's rotation (Coriolis effect)
- Sun (solar energy)
- Water density differences.
- The topography and shape of ocean basins and nearby landmasses also influence ocean currents.

45. **Option (d) is correct.**

When this water reaches the surface and erupts as a geyser, the silica-rich waters cool to the surrounding temperature and evaporates. Silica is left behind and forms a deposit of sinter, known as Geyserite. Geyserites are rocks which is not formed mechanically.

Some of the common examples of mechanically formed sedimentary rocks are:

- Sandstone (cemented sand grains)
- Siltstone (Cemented silt particles)
- Conglomerate (sandstone containing pebbles of hard rocks)
- Mudstone (mainly silt and clay)
- Claystone (mainly clay)
- Shale (clay mud rock which breaks easily into flat flakes and plates)

46. **Option (d) is correct.**

Temperature inversion: It is a reversal of the normal behaviour of temperature. Under normal conditions, temperature usually decreases with increase in altitude in the troposphere, however, on some occasions, the situations get reversed and temperature starts increasing with increasing height rather than decreasing. This is called temperature inversion. It is usually of short duration but quite common.

Favourable Conditions for Temperature Inversion:

- Dry air near the ground surface
- Long winter nights
- Cloudless and clear sky
- Snow covered ground surface

47. **Option (c) is correct.**

Lake Tsomgo:

- It is also known as Tsongmo Lake or Changgu Lake.
- It is a glacial lake in the East Sikkim district.
- In Bhutia language the name Tsomgo is

divided into two words 'Tso' meaning "lake" and 'Mgo' meaning "head", this gives the literal meaning as "source of the lake.

- This lake remains frozen during the winter season.

48. Option (d) is correct.

- The west coast of our country is a high rocky retreating coast.
- Erosion forms dominate in the west coast. Cliffs, Terraces, Caves and Stacks are examples of Erosion landforms.
- The east coast of India is a low sedimentary coast. The rivers appear to extend their length by building coastal plains and deltas along low sedimentary coasts. And we know that, east flowing rivers in India forms huge delta.
- Depositional forms dominate in the east coast. Beaches and Dunes are examples of depositional landforms.

49. Option (d) is correct.

- The Coral reefs in India are mainly restricted to the Andaman and Nicobar, Palk Strait, Lakshadweep islands, Islands, Gulf of Mannar, and Gulf of Kutch.
- The Lakshadweep Islands have the largest area of coral reefs in India. These are also known as coral islands, as they are formed by coral polyps.
- Corals are skeletons of tiny marine animals called polyps. When they die their skeletal remains accumulate on the sea bed which grows higher and higher to form coral islands.

50. Option (a) is correct.

Agency functions of Commercial banks include offering specific services to their clients/customers in exchange for a commission.

Agency functions of the Commercial banks are:

- Acceptance of deposits (installments of loans, insurance premium).
- Collection of cheques, bills and drafts.
- Payment of interest.
- Purchase and sale of securities.
- Remittance of funds.
- Purchase and sale of foreign exchange.

51. Option (c) is correct

- M3 is the most commonly used measure of money supply. It is also known as aggregate monetary resources.
- M1 and M2 are known as narrow money.
- The total stock of money in circulation

among the public at a particular point of time is called money supply.

52. Option (b) is correct.

Goa is the first state in the country to provide 100 percentage tap water connections in rural areas covering 2.30 lakh households.

The Jal Jeevan Mission of Government of India aims to provide piped water to all rural households by 2024.

53. Option (a) is correct.

Occupational Safety, Health and Working Conditions Code, 2020:

- It is a code to merge and amend the laws regulating the occupational safety and health and working conditions of the persons employed in an establishment.
- The Act replaces 13 old central labour laws.
- It amalgamated The Factories Act, 1948, The Plantations Labour Act, 1951, The Mines Act, 1952, etc.

54. Option (b) is correct.

According to World Health Statistics report published in 2021, the global average life expectancy was at 73.3 years, while the healthy life expectancy figures stood at 63.7 years in 2019.

In India, life expectancy stood at 70.8 years, and healthy life expectancy was at 60.3 years.

The life expectancy in women was 2.7 years higher than men in India.

55. Option (b) is correct.

Recently, Prime Minister Narendra Modi flagged off 100 Kisan drones in different cities and towns of India to spray pesticides in farms across India.

The government is promoting the use of 'Kisan Drone' for:

- Crop assessment.
- Digitization of land records.
- spraying of pesticides and nutrients.

Kisan Drone will be used to carry vegetables, fruits, fishes to the market directly from the farms and these items will be supplied directly to the market with minimal damage, consuming lesser time, resulting in more profits to farmers and fishermen.

56. **Option (d) is correct.**

Jan Samarth Portal:

The government has launched the Jan Samarth Portal as a one-stop digital national portal to avail loans under certain credit-linked government schemes.

With this portal around 13 credit-linked government schemes catering to youth, students, entrepreneurs and farmers through education loans, agricultural loans, business activity loans and livelihood loans can be accessed.

57. **Option (b) is correct.**

India's first Liquid Mirror Telescope was commissioned at Devasthal Observatory in Uttarakhand.

This is the largest telescope in Asia. It will observe the overhead sky to identify transient or variable objects such as supernovae, space debris, gravitational lenses, and asteroids.

The telescope is dubbed as the Indian Liquid Mirror Telescope (ILMT) and is built by astronomers from India, Belgium, and Canada.

58. **Option (d) is correct.**

- The National Tribal Research Institute is located in New Delhi.
- It will be the premier national institute for the promotion and preservation of tribal heritage and culture.
- It will be the apex institution of tribal concerns, issues and matters in academic, executive and legislative fields.

59. **Option (c) is correct.**

Avani Lekhara

- She is a Paralympian and rifle shooter from India.
- She hails from Jaipur, Rajasthan.
- She had won India's first gold medal at the 2020 Summer Paralympics.
- She was awarded Padma Shri in 2022.

60. **Option (b) is correct.**

No life possible on Venus as due to atmosphere that contains H_2SO_4 (Sulphuric acid) which acts as a dehydrating agent and dehydrate water molecules. Venus is entirely covered with a thick carbon dioxide atmosphere and sulphuric acid clouds which give it a light yellowish appearance.

61. **Option (a) is correct.**

Barium tests are used to examine the digestive tract using a white powder called barium sulphate. This powder can be seen on x-rays. Barium is given in adequate amount to patients before X-ray examination. The gut gastrointestinal tract does not show up very well on ordinary X-ray pictures. However if you drink a white liquid that contains a chemical called barium sulphate the outline of the upper parts of the gut oesophagus stomach and small intestines shows up clearly on X-ray pictures. This is because X-rays do not pass through barium.

62. **Option (a) is correct.**

Liquid nitrogen has many uses, mainly based on its cold temperature and low reactivity.

The preservation of biological sample such as sperm, eggs and animal genetic sample. It is also used in as a coolant for superconductors, vacuum pumps and other materials and equipment.

63. **Option (a) is correct.**

The reaction of iron oxide with aluminium is used to join railway tracks. This is because the aluminium is able to form more stable bonds with oxygen than hydrogen. Aluminium has a unique reduction property which helps in the generation of enormous amounts of heat. This way aluminium helps in joining railway tracks. The metal and metal oxide involved in this case are aluminium and iron (III) oxide respectively. In this reaction the aluminium metal reacts with iron (III) oxide to produce iron and aluminium oxide.



64. **Option (b) is correct.**

- A trebuchet is a type of catapult that uses a long arm to throw a projectile. Until the advent of gunpowder, it was a common powerful siege engine.
- The counterweight trebuchet was called manjaniq maghribi or majaniq ifranji in Arabic.

65. **Option (c) is correct.**

- Dutaghatokcha is a Drama of Mahakavi Bhasa.
- Mrcchakatika or Mrichchhakatika (The Little Clay Cart) is a ten-act Sanskrit drama attributed to playwright Sudraka.

- Kiratarjuniya is considered to be the most powerful poem in Sanskrit written by Bharavi. It consists of eighteen cantos describing the combat between Arjuna and Lord Shiva at Indrakeeladri Hills in present-day Vijayawada.
- Bhattikavya (Bhatti's Poem) is a Sanskrit-language poem of 7th century CE. It also has Ravanavadha (The Death of Ravana) as an alternative title.

66. Option (c) is correct.

The Battle of the Ten Kings:

- The battle was fought between a Bharata king and a federation of tribes.
- The battle was first mentioned in the 7th Mandala of the Rigveda (RV).
- It resulted in a decisive victory for the Bharatas and resulted into the formation of the Kuru polity.
- The first phase of the battle was fought on the banks of the river Ravi (known as Parushni in the Vedic times).

67. Option (c) is correct.

The Bengal Famine of 1770

- The Bengal Famine of 1770 affected the regions of Bengal and Bihar between 1769 and 1770 and affected 30 million people.
- It occurred during the period of dual governance in Bengal.
- People started dying due to Starvation.
- In order to make up for the loss in agricultural revenue brought on by the famine, the company continued to collect taxes from farmers, who could pay by further increasing the tax rate. The apathy of the company officials worsened the situation.

68. Option (d) is correct.

- Asvaghosa was a Mahasanghika Buddhist philosopher, poet, and dramatist from India.
- He was born in Saketa in northern India which is also known as Ayodhya.
- He was considered as the greatest Indian poet prior to Kalidasa.

- Buddhist literature had been composed in Pali and Prakrit prior to the time of Asvaghosa.
- His literary works are: Buddhacharita (Acts of the Buddha), Saundarananda and Sariputraprakarana.

69. Option (a) is correct.

Adipose tissue is a type of fat-storing tissue that is found beneath the skin and between internal organs. Their cells contain fat globules and serve as an insulator. These tissues also serve as the body's key metabolic organ, controlling the energy homeostasis of the body. Adipose tissue is broken down to provide the body with energy when people are starving or fasting for a prolonged period of time.

70. Option (a) is correct.

A phospholipid bilayer - two phospholipid layers with the tails pointing inward is typically seen in biological membranes. Cholesterol and membrane proteins are embedded in this layer. The second most important component of plasma membranes is protein. Membrane proteins fall into two basic categories: integral and peripheral. While, cholesterol is the another type of lipid which contributes to the fluidity.

71. Option (b) is correct.

The alimentary canal's small intestine is its longest section. It makes up the longest portion of the digestive tube but is narrower than the large intestine. The length is about 6.7 meters which is 3.5 times the length of the human body. Small intestines have three parts-Duodenum, jejunum and ileum. The short and broader anterior section is the duodenum where the stomach empties. While the ileum is the longest terminal segment, the jejunum is the coil-shaped middle portion. Food is absorbed in the small intestine.

72. Option (b) is correct.

The Indo-Pacific Economic Framework (IPEF)
It was launched by the President of United

States, Joe Biden, in Tokyo on May 23, 2022.

The IPEF has four pillars:

1. Trade
2. Supply chains
3. Clean energy, decarbonisation and infrastructure
4. Tax and anti-corruption.

73. Option (c) is correct.

- Donetsk and Luhansk are two Russian puppet states in the Donbas region of Ukraine.
- The two states were seized by force by Russian-backed separatists in 2014.
- The government of Ukraine considers both the states as being under terrorist control.

74. Option (d) is correct.

The Financial Action Task Force

- It is an intergovernmental organisation founded in 1989 on the initiative of the G7 group.
- It was constituted to develop policies to combat money laundering.
- In 2001, its mandate was expanded to include terrorism financing.
- Recently, UAE was added to the grey list of FATF because of “strategic
- Pakistan, Turkey, Jordan, Yemen are some of the other countries on the list.

75. Option (b) is correct.

- The Extended Fund Facility, a credit programme run by the International Monetary Fund (IMF), was created in 1974 to assist nations in addressing their medium- and long-term balance of payments issues.
- The EFF is prescribed for a country who is experiencing a balance of payment issue as a result of structural flaws and need fundamental economic reforms.

76. Option (a) is correct.

- A cryptocurrency is a type of digital or virtual currency, that uses encryption to protect it from counterfeiting or duplicate spending.

- Ethereum, Solana, Polkadot and Tether are some of the names of the cryptocurrencies.

77. Option (a) is correct.

President’s Rule in India

- Under Article 356, if a state government is unable to function according to the provisions of the Constitution, the Union government can take direct control of the state machinery.
- Chhattisgarh and Telangana are the only states where the President’s rule has not been imposed so far.
- The President’s Rule was imposed maximum number of times in Uttar Pradesh (10) followed by Bihar (9).

78. Option (b) is correct.

The Electronic Photo Identity Card (EPIC) or Voter ID Card

- It is issued by the Election Commission of India to the adult domiciles of India who have reached the age of 18.
- It serves as an identity proof for Indian citizens while casting their vote in the country and also served as a Travel Document to travel to Bhutan and Nepal by Land or Air.
- It was first introduced in 1993 during the tenure of the Chief Election Commissioner T. N. Seshan.

79. Option (b) is correct.

The President’s election in India is held in accordance with the system of proportional representation by means of the single transferable vote and the voting is done by secret ballot.

80. Option (d) is correct.

Article 110: Definition of Money Bills

Money Bill

- It can be introduced only in the House of the People (Lok Sabha) and not in the Council of States (Rajya Sabha).
- The Speaker of the Lok Sabha decides whether a bill is a money bill or not and his decision on this question is final.
- The Speaker signs his certificate indicating a bill is a money bill when it is sent to the Rajya Sabha for recommendation and presented to the President for approval.

- The President can either give his assent to a money bill or withhold his assent to a money bill. He cannot return it for the reconsideration of the Parliament.
- It cannot be amended or rejected by the Rajya Sabha.
- The Rajya Sabha should return the bill with or without recommendations, which may be accepted or rejected by the Lok Sabha.

81. Option (d) is correct.

Under Bicameral system, the state's legislature is divided into two parts:

1. Legislative Assembly (Vidhan Sabha)
2. Legislative Council (Vidhan Parishad)

The following states have bicameral legislature:

- Andhra Pradesh.
- Bihar.
- Karnataka.
- Maharashtra.
- Telangana.
- Uttar Pradesh

82. Option (d) is correct.

- Article 21 A was added by the 86th Constitutional Amendment Act of 2002.
- Under Article 21 (A), a State shall provide free and compulsory education to all children of the age of six to fourteen years in such a manner as the State may choose.

83. Option (a) is correct.

As the object falls under the influence of the gravitational force due to Earth, its acceleration (g) and total energy (potential + kinetic) remain constant through out the fall. Since the velocity and height of the object is constantly changing, the momentum, kinetic energy and potential energy also change continuously during the fall.

84. Option (d) is correct.

When object is placed at the focal point of a convex lens, its image will form at infinity.

85. Option (c) is correct.

Aperture of any lens is the effective length of its refracting surface. It does not depend upon the radius of curvature or focal length.

86. Option (b) is correct.

On heating from 0°C to 4°C, the density of water increases. Water contracts on heating from 0°C to 4°C and expands on heating above 4°C.

As the density of water is maximum at 4°C.

87. Option (c) is correct.

Acceleration due to gravitational pull of a body

is given by, $g = \frac{GM}{R^2}$

So at Earth's surface gravity depends upon both mass as well as radius of Earth.

88. Option (a) is correct.

- The Western Ghats, the Vindhyas, and the Nilgiris are just three of the Peninsular India regions that are home to India's southern mountain forests.
- As they are closer to the tropics, and only 1,500 m above the sea level, vegetation is subtropical on the lower regions of the Western Ghats, especially in Kerala, Tamil Nadu and Karnataka and temperate in the higher regions.
- The temperate forests are called Sholas in the Nilgiris, Anaimalai and Palani hills.

89. Option (b) is correct.

- A periglacial landform is a kind of feature which results from the action of intense frost, often combined with the presence of permafrost.
- A pingo is an example of a periglacial landform.
- They are often conical in shape and grow and persist only in permafrost environments, such as the Arctic and subarctic.

90. Option (b) is correct.

- **Resequent:** It is a stream which flows in a direction identical with that of the consequent drainage, but which develops at a lower level than the initial slope.
- **Consequent drainage system:** The river follows the general direction of the slope. Examples are Godavari, Krishna, and Cauvery Rivers.

- **Subsequent:** A tributary stream that is formed by headward erosion along an underlying rock after the consequent drainage pattern (consequent river) has been established. Examples: Chambal, Sind, Ken, Betwa, Tons and Son.
- **Discordant or Insequent drainage patterns:** In this pattern the river does not correlate to the surface relief features and geology of the area.
- In other words, the river follows its initial path irrespective of the changes in topography.

91. Option (b) is correct.

- Hydration is the absorption of water into the mineral structure.
- Anhydrite absorbing water and forming gypsum is an excellent illustration of hydration.
- Hydration expands volume and also results in rock deformation.

92. Option (c) is correct.

- In Sanskrit Marusthali means 'dead land'.
- Because of the arid climatic conditions and low vegetation cover in this region, the Great Indian Desert is called marusthali.
- It is believed that this region during the Mesozoic era, was under the sea.
- And this belief is made strong by the pieces of evidence found at the wood fossils park at Aakal, marine deposits around Brahmsar, near Jaisalmer.

93. Option (d) is correct.

Charvaka or Carvaka School of Philosophy

- The foundation stone of this school was laid by Brihaspati.
- The Charvaka School was the main propounder of the materialistic view to achieve salvation.
- As it was targeted towards the common people, the philosophy was soon dubbed as Lokayata or something derived from the common people.
- They denied the existence of brahma and God.
- Dhurta Carvakas hold that there is no soul

apart from the body.

- The Sushikshita Carvakas hold that there is a soul apart from the body as the constant knower and enjoyer of all experiences but it is destroyed along with the body at death.

94. Option (a) is correct.

- It is a noteworthy fact that the Sanskrit texts and inscriptions of rarely referred to the Muslims in religious terms.
- Ethnic or regional terms were generally employed to refer to them.
- They included terms such as Turushka, Tajika, Mlechchha, Parasika, Yavana, Hammira, Gori, Turaka, Matanga and Garjanaka.
- Only the Veraval inscription, which was written during the reign of Vaghela Arjunadeva and was published in 1264, uses the name Musalmaana to refer to Muslims.

95. Option (c) is correct.

- Dholavira is located on Khadir Beyt, an island in the Great Rann of Kutch in Gujarat in India.
- The city is referred to as 'Kotada Timba' in the local language
- It has been excavated since 1990 by a team lead by R S Bisht of ASI.
- Unique features of Dholavira is the sophisticated water conservation system, giant water reservoir, unique water harnessing system, stadium, dams and embankments.

96. Option (b) is correct.

- In cavalry warfare, soldiers or warriors fought on horseback.
- A stirrup is a light frame or ring that holds the foot of a rider.
- The iron stirrup greatly increases the rider's ability to stay in the saddle and control the mount, increasing the animal's usefulness to humans in areas such as communication, transportation, and warfare.

- Stirrups enabled the horseman to use a lance (a spear designed to be used by a mounted warrior or cavalry soldier) more effectively.
97. **Option (b) is correct.**
- The British policy towards Afghanistan in the first half of the 19th century aimed at weakening Russian influence in Afghanistan but not promoting a strong Afghanistan either
 - The First Anglo-Afghan War was one of the first major conflicts during the Great Game for power and influence in Central Asia between Britain and Russia.
 - The Great Game was a political and diplomatic confrontation that existed for most of the 19th century and beginning of the 20th century between the British Empire and the Russian Empire over Afghanistan.
98. **Option (d) is correct.**
- Following a request from Ankara for the change in the name of the country, the United Nations has changed the Republic of Turkey's country name at the organisation from "Turkey" to "Türkiye".
99. **Option (c) is correct.**
- The Society for Worldwide Interbank Financial Telecommunication (SWIFT):**
- It is a Belgian cooperative society.
 - It provides services related to the execution of financial transactions and payments between banks worldwide.
 - Its primary function is to serve as the main messaging network through which international payments are initiated.
100. **Option (a) is correct.**
- The Project 75 (India) or P-75I is a project of planned class of diesel-electric submarines to be built for the Indian Navy.
 - Under this project, six submarines will be constructed in India.
 - On 21 January 2020, the Government of India (GoI) shortlisted two Indian shipyards - Larsen & Toubro (L&T) and Mazagon Dock Limited (MDL), as the two Indian finalists in P-75.
- Ministry of Defence has cleared Rs 43,000 crore projects to build six submarines.
101. **Option (a) is correct.**
- Terminal High Altitude Area Defense (THAAD):**
- It is an American anti-ballistic missile defense system.
 - It is designed to shoot down short, medium, and intermediate-range ballistic missiles in their terminal phase by intercepting with a hit-to-kill approach.
 - On January 17, 2022, THAAD made its first intercept against an incoming Houthi ballistic missile in the UAE.
102. **Option (a) is correct.**
- BrahMos**
- It is a medium-range stealth ramjet supersonic cruise missile
 - It can be launched from submarine, ships, aircraft or land.
 - The 290-km BrahMos flies at a speed of 2.8 Mach and carries a conventional warhead of up to 300 kg.
 - The range of the missile was originally capped at 290 km as per orders of the Missile Technology Control Regime (MTCR).
 - The range would be extended to 450 km and to 600 km at a later stage.
103. **Option (d) is correct.**
- Twelve members are nominated to the Rajya Sabha by the President of India for six-year term.
 - They are nominated for their contributions towards arts, literature, sciences, and social services.
104. **Option (b) is correct.**
- The median age of the population in India is between 25 to 30 years.
 - In 2022, the median age of an Indian was 28.7 years.
105. **Option (a) is correct.**
- UN peacekeepers are often referred to as Blue Berets or Blue Helmets because of their light blue berets or helmets.

- They can include soldiers, police officers, and civilian personnel.

106. Option (d) is correct.

- An economy primarily based on planning is referred to as a planned economy.
- It is in a planned economic system, resources are allocated by central edicts and rationing.

107. Option (d) is correct.

A Bicameral legislature is a legislature with two legislative houses or bodies.

Advantages of bicameralism:

- Checks and balances: The second chamber checks and prevents hasty and ill considered bills introduced in the first chamber.
- Bills are properly debated in bicameralism thereby, making it possible for better laws to be made in the country. Thus, it can act as a constitutional safeguard.
- The second Chambers corrects any error and faulty legislations committed in the first chamber.
- The second chamber checks the excesses and guards against the tyranny of a one chamber.
- Bicameral legislature makes it difficult for the executive arm to dominate the two chambers.

108. Option (c) is correct.

- The Insolvency and Bankruptcy Board of India was established on 1st October, 2016 under the Insolvency and Bankruptcy Code, 2016 (Code)
- It covers Individuals, Companies, Limited Liability Partnerships and Partnership firms.
- It attempts to simplify the process of insolvency and bankruptcy proceedings.

109. Option (a) is correct.

- The hypocentre or focus is the point within the earth where an earthquake rupture starts.
- The epicentre is the point on the Earth's surface that is directly above the

hypocentre.

110. Option (c) is correct.

- Lhotse is the fourth highest mountain in the world after Mount Everest, K2, and Kangchenjunga.
- The main summit is located on the border between Tibet Autonomous Region of China and the Khumbu region of Nepal.

111. Option (c) is correct.

- Cirrus clouds are wispy, feathery, and composed entirely of ice crystals
- Cumulus clouds look like cotton wool. They are fair weather clouds.
- Nimbostratus is dark, grey, low-level clouds accompanied by light to moderately falling precipitation. They are known as thunderstorm clouds.
- Stratus is layered clouds covering large portions of the sky. Stratus is very low cloud which is uniformly grey and thick which appears like a low ceiling or Highland fog.

112. Option (d) is correct.

- Saturn has the largest number of natural satellites or moons.
- It has 82 moons.
- Fifty-three moons are confirmed and named.
- Another 29 moons are awaiting confirmation of discovery and official naming.

113. Option (b) is correct.

- After the death of emperor Harshavardhana, Arunasva, usurped the throne and became the new king of Kannauj.
- He was the former minister of Harshavardhana.

114. Option (b) is correct.**Vishnu Purana**

- The chapters 1.16 through 1.20 of the Vishnu Purana tell us about the devotee Prahlada and his persecution by his demon king father Hiranyakasipu.
- And how Prahlada is ultimately saved by Vishnu when Vishnu's Narashima Avatar kills Hiranyakashipu.

115. Option (d) is correct.

According to the Manusmriti:

- The paternal estate was to be divided equally amongst sons after the death of the parents, with a special share for the eldest.
- Women could not claim a share of these resources.
- The presents that women received on the occasion of their marriage were allowed to be kept as stridhana, or a woman's wealth.
- Stridhana could be inherited by their children, without the husband having any claim on it.
- However, the Manusmriti warned women against hoarding family property, or even their own valuables, without the husband's permission.

116. Option (c) is correct.

Woman labour leader who organised workers in the strikes in the 1920s were:

- Sarala Devi Chaudhurani
- Ushabai Dange
- Anasuya Behn

117. Option (a) is correct.

The idea of the Social Market Economy is based on the principles of economic order by the German economist Walter Eucken.

It was introduced in West Germany after WW

II by Minister of Economic Affairs Ludwig Erhard.

118. Option (a) is correct.

The Indian thinker who first spoke of food-for-work programmes to counteract the effects of famine was Kautilya.

119. Option (a) is correct.

- The Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat is an international treaty for the conservation and sustainable use of wetlands.
- It is also known as the Convention on Wetlands.
- The convention was signed in 1971 in city of Ramsar in Iran and thus the name Ramsar Convention.

120. Option (a) is correct.

Brundtland Report

- It is also known as the Our Common Future Report.
- It was first published on October 1987 by the United Nations.
- The report defined 'sustainable development' as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.