

CDS

Combined Defence Services

EXAM

I

2025

General Knowledge

Time: 2 hours

Total Marks: 100

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** 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 of the following is one of the 'three gems' (triratna) of Jainism?
(a) Brahmacharya (b) Samyag-darshana
(c) Sunrita (d) Asteya
2. Which one among the following motifs does not appear on Harappan seals?
(a) Humped Bull (b) Elephant
(c) Lion (d) Crocodile
3. Which one among the following is the earliest text?
(a) Natyashastra of Bharata
(b) Sushruta Samhita
(c) Ashtadhyayi
(d) Manusmriti
4. Which one of the following statements about Ashoka's inscriptions is correct?
(a) The Major Rock Edict found in Kerala is in Sanskrit
(b) Minor Rock Edicts in Bihar are found only in Pataliputra.
(c) The Dhauli Major Rock Edict makes a mention of the kalinga War.
(d) Kalsi in Uttarkhand is a site of Major Rock Edicts.
5. Which one of the following statement about the Ajivikas is not correct?
(a) They did not practise discrimination on the basis of caste or class.
(b) They had a corporate organisation and canonical texts.
(c) They practised severe asceticism, often eating very little food.
(d) They formed an alliance with Jainas against Buddhists.
6. Consider the following statements about the use of stirrup in India
 1. The Konarak horse sculpture (c. 1250) shows a ring-stirrup.
 2. A broad, probably wooden, stirrup appears in Khajuraho sculptures (probably 10th century).
 3. The iron-stirrup was used in the Delhi Sultan's armies from the thirteen century onwards.How many of the above statements is/are correct?
(a) 1 (b) 2
(c) 3 (d) Nil
7. In the Rig Veda Samhita, use of the terms ishukrit and isukara referred to the marker of:
(a) Arrows (b) Swords
(c) Vajra (Thunderbolt)(d) Maces
8. Which one of the following does **not** refer to the bow (and arrow) as a weapon of war in ancient India?
(a) Sharnga (b) Kunta
(c) Kodanda (d) Karmuka
9. What is the military-device referred to by the term manjanik?
(a) A device for loading field-guns with gunpowder
(b) Preparing cavalry for rapid charge

- (c) A bolting device for strengthening the gates of forts
(d) A device for throwing stones (mangonel)
10. In medieval India, the process of indigo extraction underwent great improvement as a result of the:
(a) use of fertiliser enhancing the quality of indigo crop.
(b) introduction of mechanical crushing tools for indigo stems.
(c) use of gypsum and lime mortars in making the inner surfaces of indigo vats water-proof.
(d) employment of slave labour in quick distilling of indigo curcibles.
11. Which one of the following is listed in the Ain-i Akbari as one of the 'Indian sciences' prescribed by Akbar for scholars to learn at school?
(a) Ayurveda (b) Vyakarana
(c) Ganita (d) Jyotisha
12. Consider the following statements about the arms used by Europeans in warfare in India:
1. The flint-lock muskets could work even in wet weather.
2. The addition of bayonet made musket a more effective and dangerous weapon in close combat.
3. The wrought-iron cannon barrels were easy to move and manoeuvre.
(a) 1 (b) 2
(c) 3 (d) Nil
13. Which one of the following statements about the grammarian Katyayana is correct?
(a) He was a contemporary of Panini.
(b) He was a contemporary of Patanjali.
(c) He belonged to a period between Panini and Patanjali.
(d) He belonged to a period later than both Panini and Patanjali.
14. Which one of the following statements about Rig Vedic goddesses is correct?
(a) Ushas represents freedom from sickness.
(b) Sinivali bestows children.
(c) Aditi is goddess of dawn.
(d) Raka is goddess of speech
15. Which one of the following statements about the Buddhist Goddess Hariti is correct?
(a) She was converted by the Buddha from a blood-thirsty yakshi to a benevolent maternal figure.
(b) She is the feminine personification of wisdom.
(c) She Protects people from eight great fears.
(d) She is a warrior goddess associated with the dawn.
16. Consider the following statements about the literary language Apabhramsha:
1. It appeared in recognisable forms by the sixth century.
2. It developed out of mixtures of regional vernaculars with the Prakrits and Sanskrit.
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
17. Who composed Zainavilas, a history of the rules of Kashmir, in the time of Zainul Abidin?
(a) Bhattavajara (b) Jonaraja
(c) Shrivara (d) Vachaspati
18. In which one of the following works has Amir Khusrau praised the climate of India, its languages, notably Sanskrit, its arts and music and even its animals?
(a) Ljaz-i Khusrawi
(b) Dewal Rani Khizr Khani
(c) Khazainul Futuh
(d) Nuh Sipihir
19. Which one of the following works was written in early eighteenth century by the Bengali poet Rameshwar Bhattacharya?
(a) Dharmamangal (b) Shivsankirtan
(c) Mansimha (d) Vidyasundar
20. Which one of the following present day territories was outside the limits of Ashoka's empire?
(a) Brahmaputra valley, Assam
(b) Baluchistan
(c) North Bengal
(d) Kashmir valley
21. If your image appears to be erect, no matter how far you stand from a mirror, the mirror is likely to be:
(a) Plane
(b) Concave
(c) Convex
(d) Either plane or convex
22. The rule that determines the direction of a magnetic field produced around a straight conductor carrying current is:
(a) Right-hand thumb rule
(b) Fleming's left-hand rule
(c) Fleming's right-hand rule
(d) Hund's rule
23. A motorcycle has initial velocity of 5 m/s. After 3 seconds, the velocity is 7 m/s. The displacement of the motorcycle in 3 seconds is:
(a) 21 m (b) 18 m
(c) 36 m (d) 6 m

24. The minimum power required to lift a mass of 50 kg up to a vertical distance of 8 m in 10 s is: (Take $g = 10 \text{ m/s}^2$)
 (a) 400 W (b) 40 W
 (c) 50 W (d) 500 W
25. Which one among the following statements is *not* correct?
 (a) All bodies in the universe attract each other due to the gravitational force.
 (b) Newton's law of gravitation follows from Newton's laws of motion
 (c) The value of g (acceleration due to gravity) at the centre of the Earth is zero.
 (d) Mass and weight are measured in different units.
26. A body floats in a liquid if the buoyant force is:
 (a) equal to its weight.
 (b) less than its weight.
 (c) greater than its weight.
 (d) zero.
27. A metallic sphere of mass 1 kg and volume $2 \times 10^{-4} \text{ m}^3$ is completely immersed in water. The buoyant force exerted by water on the sphere is:
 (Given: density of water = 1000 kg/m^3 , $g = 10 \text{ m/s}^2$)
 (a) 0.5 N (b) 1.5 N
 (c) 2 N (d) 2.5 N
28. A light bulb rated as 60 W at 220 V has a potential difference of 110 V across its ends, The power dissipated in this light bulb is:
 (a) 30 W (b) 45 W
 (c) 15 W (d) 2 W
29. Which one among the following is used in a simple microscope?
 (a) Diverging lens (b) Concave mirror
 (c) Converging lens (d) Plane Mirror
30. The force with which the Earth attracts an object is called:
 (a) Weight of the object
 (b) Mass of the object
 (c) Density of the object
 (d) Magnitude of the object
31. Considered the following statements with reference to Secondary waves (S-Waves) generated during an earthquake:
 1. They create troughs and crests in the material through which they pass.
 2. The direction of vibrations of S-waves is perpendicular to the wave direction in the vertical plane.
- 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
32. Identify the Mineral on the basis of the following characteristics relating to it.
 I. It is usually a greenish crystal.
 II. It is often found in basaltic rocks.
 III. Magnesium, iron and silica are its major elements.
 Select the answer using the code given below:
 (a) Amphibolite (b) Feldspar
 (c) Pyroxene (d) Olivine
33. Which of the following statements with reference to Salt Weathering is/are correct?
 1. Salt Crystallisation is the most effective of all the salt weathering processes.
 2. Salt crystal growth is more effective over sedimentary rocks as compared to igneous rocks.
 (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2
34. Which of the following statements with reference to Surface inversion of temperature is/are correct?
 1. It causes instability in the lower layers of the atmosphere.
 2. This inversion commonly lasts for a few hours until the Sun comes up.
 Select the answer using the code given below:
 (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2
35. Identify the cloud on the basis of the following characteristics relating to it:
 I. They look like cotton wool.
 II. They exist in patches and have flat base.
 III. They are generally formed at a height of 4 to 7 km.
 Select the answer using the code given below:
 (a) Cirrus (b) Cumulus
 (c) Nimbus (d) Stratus
36. Identify the type of climate on the basis of the following characteristics relating to it:
 I. Temperature is high throughout the year.
 II. Rainfall is variable with a short wet season and a longer dry season.
 III. Climate of Sudan and Paraguay is an example of this climate type.
 (a) Sub-tropical steppe climate
 (b) Mid-latitude steppe
 (c) Tropical monsoon climate
 (d) Tropical wet and dry climate
37. What is the correct sequence of the following salts in ascending order according to their presence in the sea water?

1. Calcium Carbonate
 2. Calcium Sulphate
 3. Magnesium Chloride
- Select the answer using the code given below:
- (a) 3, 1, 2 (b) 1, 3, 2
(c) 1, 2, 3 (d) 2, 1, 3
38. Which of the following statements with reference to Humus is/are correct?
1. It is a dark coloured amorphous substance.
 2. Being colloidal in nature, it serve as a reservoir of nutrients.
- Select the answer using the code given below:
- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 and 2
39. Which one among the following Biosphere Reserves is spread over three states in India?
- (a) Dehang Debang (b) Nilgiris
(c) Nokrek (d) Seshachalam
40. River Danube does not flow through which one of the following capital cities in Europe?
- (a) Belgrade (b) Budapest
(c) Prague (d) Vienna
41. Which of the following statements with reference to Easter Island, a UNESCO world Heritage Site, is/are correct?
1. It is part of Polynesia group of islands.
 2. It is a territory of the South American nation Chile.
- Select the answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
42. Which one among the following is home to the endangered mountain gorillas in Africa?
- (a) Mount Kenya (b) Mount Kilimanjaro
(c) Ngorongoro Crater (d) Virunga Mountains
43. Which of the following statements with reference to Jordan is/are correct?
1. The country of Jordan was created through the British Mandate after World War I.
 2. It is a landlocked country.
- Select the answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
44. Which one among the following places is situated close to the Pearl River Estuary in Asia?
- (a) Bangkok (b) Hong Kong
(c) Macau (d) Singapore
45. Consider the following statements with regard to Australia:
1. The Coral Sea separates the Great Barrier Reef from the South Pacific.
 2. The Great Dividing Range extends from Melbourne to Perth in Australia.
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
46. What is the correct sequence of the following mountain ranges as one moves from North towards South?
1. Karakoram 2. Kunlun
 3. Ladakh 4. Zaskar
- Select the answer using the code given below:
- (a) 1, 2, 3, 4 (b) 1, 2, 4, 3
(c) 2, 1, 4, 3 (d) 2, 1, 3, 4
47. Which of the following statements with reference to saline soil in India is/are correct?
1. They are rich in nitrogen
 2. They occur in arid and semi-arid regions, and in waterlogged and swampy areas.
- Select the answer using the code given below:
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
48. Salal Power Project is situated on which one among the following rivers?
- (a) Chenab (b) Jhelum
(c) Nubra (d) Shyok
49. Which one among the following tributaries of Indus River does *not* originate in the Himalayas?
- (a) Gilgit (b) Gomai
(c) Hunza (d) Zaskar
50. As per the Annual Report 2023–24 of the Ministry of Mines, Government of India, which of the following are the major bauxite producing states in India?
- (a) Odisha and Madhya Pradesh
(b) Odisha and Jharkhand
(c) Jharkhand and Madhya Pradesh
(d) Jharkhand and Karnataka
51. Which one among the following is the purpose of firewall?
- (a) Preventing unauthorised access to computer via the internet
(b) Installation of software that can harm the computer
(c) Recording everything that is done on computer
(d) Running checks to prevent virus attacks
52. Which one of the following is *not* an application software?
- (a) Spreadsheet (b) Auto CAD
(c) MS Power Point (d) Linker
53. Which among the following is a malicious software?
- (a) Hacking (b) Password Cracking
(c) Trojan Horse (d) Firewall

54. What is an interactive combination of text, graphics, video, audio and images termed as?
 (a) JPEG (b) Multimedia
 (c) AVA (d) PNG
55. Which one of the following is the characteristic of Artificial Intelligence?
 (a) Replicates human decision making
 (b) Stores relevant information
 (c) Stores similar kind of data for a specific purpose
 (d) Allows user to interact with media
56. Which organisation/institute has recently started the new initiatives such as Bharat Vidya Pariyojana, Brihattar Bharat and Nari Samvaad Prakalp?
 (a) IGNOU (b) Sahitya Akademi
 (c) Centre for Cultural Resources and Training (CCRT)
 (d) Indira Gandhi National Centre for Arts (IGNCA)
57. Which one among the following educational institutions established under the Union Ministry of Culture is Promoting to preserve, protect and promote Lord Buddha's teaching and value of love, compassion and non-violence for developing good moral values and practices?
 (a) Indian Institute of Advanced Study, Shimla
 (b) National Council of Educational Research and Training, New Delhi
 (c) Nava Nalanda Mahavihara, Nalanda
 (d) IGNOU, New Delhi
58. "Nirbhaya Fund", a non-lapsable corpus fund, which is to be utilised for the projects specifically designed to improve the safety and security of women is administered by:
 (a) The Ministry of Women and Child Development
 (b) The Ministry of Home Affairs the Ministry of Finance
 (c) The Ministry of Finance
 (d) The Ministry of Education
59. The Paramparagat Krishi Vikas Yojana (PKVY) launched in 2015-16 by the Central Government is aimed to:
 (a) make agriculture more modern and globally competitive.
 (b) provide improved access to irrigation and enhanced water efficiency.
 (c) support promotion of organic farming in the country.
 (d) reduce depends of agriculture on monsoon.
60. When did the Union Government establish a separate 'Ministry of Cooperation' with the vision of "Sahkar Se Samridhhi"?
 (a) 2014 (b) 2016
 (c) 2018 (d) 2021
61. The Ministry of Defence, Government of India, has declared 2025 as the year of:
 (a) Rehabilitation of the families of martyrs
 (b) Reforms
 (c) Peace
 (d) Self reliance
62. Which of the following statements about Open Network for Digital Commerce (ONDC) is/are correct?
 1. It was launched in 2021 by the Government of India.
 2. Its aim is to democratise E-commerce in India
 3. India has surpassed China in 2024 in E-retail penetration.
 (a) 1, 2 and 3 (b) 1 and 2 only
 (c) 2 and 3 only (d) 3 only
63. "Million Minds Augmenting National Aspirations and Knowledge" (MANAK), a scheme under the flagship programme, Innovation in Science Pursuit for Inspired Research (INSPIRE), caters to:
 (a) The college students studying in the undergraduate programme in the age group of 19-25 years.
 (b) The research scholars in recognised research laboratories of national importance.
 (c) The college teachers of the country.
 (d) The school children studying in classes 6-10 in the age group of 10-15 years.
64. Who among the following were awarded the Major Dhyan Chand Khel Ratna Award 2024?
 1. Shri Gukesh D
 2. Shri Harmanpreet Singh
 3. Shri Praveen Kumar
 4. Ms. Manu Bhaker
 Select the answer using the code given below:
 (a) 1, 2, 3 and 4
 (b) 1 and 4 only
 (c) 1, 2 and 4 only
 (d) 2 and 3 only
65. Consider the following statements about a prominent film personality of India:
 He was born in Hyderabad. He emerged in the 1970s with a series of films that challenged mainstream Bollywood. He became widely known for Bharat Ek Khoj, a landmark 53-episode television series. He directed a 2023 biopic about Sheikh Mujibur Rahman.
 Identify the personality from the following:
 (a) Govind Nihalani (b) Girish Karnad
 (c) Shyam Benegal (d) Mani Ratnam

66. "The Order of Mubarak Al-Kabeer" is the highest national award of:
 (a) Egypt (b) Kuwait
 (c) Bahrain (d) United Arab Emirates
67. Bald eagle has recently been officially declared as the national bird of which one among the following countries?
 (a) China (b) England
 (c) USA (d) Ireland
68. Surya Kiran is a joint military exercise between India and:
 (a) Bangladesh (b) Bhutan
 (c) Singapore (d) Nepal
69. Which of the following statements is/are correct?
 1. Moidam-The Mound-Burial System of the Abom dynasty was inscribed in the UNESCO World Heritage list.
 2. The Government of India conferred the status of classical language to Pali, Assamese, Bengali and Maithili.
 3. Project PARI is an initiative of Ministry of Education.
 Select the answer using the code given below:
 (a) 2 only (b) 1 only
 (c) 2 and 3 only (d) 1, 2 and 3
70. Which one of the following PSLVs, launched by ISRO, is not correctly matched with their Missions?

PSLV	Mission
(a) PSLV C60	SPADEX
(b) PSLV C59	Proba-3
(c) PSLV C58	XPoSat
(d) PSLV C57	DS-SAR
71. Which of the following Constitution Amendment Acts introduced GST (Goods and Service Tax) in course of inter-state trade or commerce?
 (a) Constitution (One Hundred and First Amendment) Act
 (b) Constitution (One Hundred and Second Amendment) Act
 (c) Constitution (One Hundred and Fourth Amendment) Act.
 (d) Constitution (One Hundred and Sixth Amendment) Act.
72. Which one among the following UN agencies has received the Nobel Prize more than once?
 (a) ILO (b) WFP
 (c) UNICEF (d) UNHCR
73. Consider the following statements about Central Vigilance Commission (CVC)
 1. Central Vigilance Commissioner is appointed by the President of India.
2. The Committee to recommend the appointment of Central Vigilance Commissioner has the Minister of Home Affairs as one of the members.
3. In certain circumstances the Leader of the single largest group in opposition in Lok Sabha can be on the Committee to recommend the appointment of Central Vigilance Commissioner.
- How many of the above statements is/are correct?
 (a) Nil (b) 1
 (c) 2 (d) 3
74. International Day of Democracy, as decided via a UN General Assembly resolution, is observed on:
 (a) 20 January (b) 1 July
 (c) 15 September (d) 9 December
75. Write of the following statements about the NITI Aayog is/are correct?
 1. Prime Minister of India is the Chairperson of its Governing Council.
 2. Lieutenant Governor of Ladakh is a member of its Governing Council.
 Select the answer using the code given below:
 (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2
76. Which of the following statements about National Commission for Women are correct?
 1. It is a statutory body.
 2. It has the mandate to review the constitutional and legal safeguards for women.
 3. It has mandate mandate to government to advice on all policies matters affecting women.
 Select the answer using the code given below:
 (a) 1 and 2 only (b) 2 and 3 only
 (c) 1 and 3 only (d) 1, 2 and 3
77. Which, amongst the following, is the latest language to be included in the Eighth Schedule of the Constitution of India?
 (a) Maithili (b) Nepali
 (c) Konkani (d) Manipuri
78. Which one among the following states has the highest number of seats in the Council of States?
 (a) Andhra Pradesh (b) Bihar
 (c) Madhya Pradesh (d) Tamil Nadu
79. Which of the following statements about the Indus Waters Treaty is/are correct?
 1. The term 'Eastern Rivers' means the Sutlej, the Beas and the Ravi taken together.
 2. The term 'Western Rivers' means the Indus, the Jhelum and the Chenab taken together.

Select the answer using the code given below:

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

80. Which of the following statements is/are correct as per the Constitution of India?

1. The Constitution (Eighty-sixth Amendment) Act has added the Right to Education to the chapter of Directive Principle of State Policy.
2. Right to Work and Right to Education are both, Fundamental Rights and Directive Principles of State policy.

Select the answer using the code given below:

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

81. As defined in Article 12 of the Constitution of India, 'State' includes:

1. Parliament of India
2. State Government
3. State Legislatures
4. Local authorities in India

Select the answer using the code given below:

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

82. Which of the following descriptions with regard to Parliament Privilege for Members of the Parliament of India is/are correct?

1. The Speaker is empowered to refer suo moto any question of privilege for investigation.
2. A question of privilege is accorded priority over other items in the List of Business.
3. The privilege extends to freedom from preventive arrest or detention.

Select the answer using the code given below:

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

83. Which one among the following statements about an adjournment motion in the Parliament of India is *not* correct?

- (a) Its objective is to draw attention of the House to any recent matter of urgent public importance.
- (b) Adjournment motion is an extraordinary procedure.
- (c) This motion can be invoked on any matter of urgent importance that may even be within the jurisdiction of a State Government.
- (d) The Chair has absolute discretion to refuse consent.

84. The Kyoto Protocol specifically relates to which one among the following issues?

- (a) Emission reduction
- (b) Ozone layer depletion
- (c) Chlorofluorocarbons
- (d) Biodiversity management

85. Who among the following was responsible for demarcating the border between India and Pakistan during the partition in 1947?

- (a) Cyril Radcliffe
- (b) Mortimer Durand
- (c) Henry McMahon
- (d) Arthur Belfour

86. Which one among the following statements about Dr. Muthulakshmi Reddy, a freedom fighter, is *not* correct?

- (a) She was the first girl student to be admitted into a men's college.
- (b) She was the first woman legislator in British India.
- (c) She was a medical professional.
- (d) She was honoured with Bharat Ratna in 1956.

87. "Since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed." This observation can be found in the Constitution of which one of the following Organs of the United Nations?

- (a) World Health Organisation
- (b) United Nations Educational, Scientific and Cultural Organisation
- (c) International Atomic Energy Agency
- (d) United Nations Economic and Social Council

88. Which one among the following countries does *not* share in territorial boundary with Ukraine?

- (a) Poland
- (b) Romania
- (c) Lithuania
- (d) Belarus

89. Which of the following Statements is/are correct?

1. First Law Commission recommended Indian Penal Code, 1860
2. Indian Penal Code, 1860 has been completely replaced by the Bharatiya Nyaya Sanhita, 2023.

Select the answer using the code given below:

- (a) 1 only (b) 3 only
(c) Both 1 and 2 (d) Neither 1 nor 2

90. Consider the following statements with regard to the setting up of the Backward Class Commission in India:

1. The First Backward Class Commission, set up by the Government of India, is popularly known as Kaka Kalelkar Commission.
2. The Third Backward Class Commission, set up by the Government of India, is popularly known as Mandal Commission.

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

91. Which instrument is used to measure the blood pressure manually?

- (a) Sphygmomanometer
- (b) Centrifuge
- (c) Electrophoresis
- (d) Thermal cyclor

92. Myopia is also known as:

- (a) Far-sightedness
- (b) Near-sightedness
- (c) Cataract
- (d) Presbyopia

93. Why does the Rough Endoplasmic Reticulum look 'rough' under a microscope?
 (a) Due to the presence of ribosomes on its surface
 (b) Due to the absence of ribosomes on its surface.
 (c) Due to the presence of lysosomes on its surface
 (d) Due to the presence of mitochondria on its surface
94. Which one among the following is not a plant hormone?
 (a) Gibberellins (b) Absciscic acid
 (c) Auxins (d) Thyroxine
95. The normal systolic pressure in human beings is:
 (a) 80 mm of Hg (b) 100 mm of Hg
 (c) 120 mm of Hg (d) 140 mm of Hg
96. Sponges belong to which one among the following phylum?
 (a) Porifera (b) Platyhelminthes
 (c) Cnidarin (d) Annelida
97. Lactose is made up of:
 (a) Glucose only
 (b) Glucose and Fructose
 (c) Glucose and Sucrose
 (d) Glucose and Galactose
98. The enzymes which catalyse the same reaction but have different amino acid composition are commonly referred as:
 (a) Isoenzymes (b) Isotopes
 (c) Isomers (d) Coenzymes
99. How many carbon atoms are present in a Pyruvate molecule?
 (a) 2 (b) 3
 (c) 4 (d) 5
100. The human eye has a point that lacks photoreceptor cells. This is identified as:
 (a) Fovea (b) Blind spot
 (c) Dark spot (d) Orbit
101. Isobars of elements have same:
 (a) Atomic numbers
 (b) Number of electrons
 (c) Mass numbers
 (d) Number of neutrons
102. Which one of the following could *not* be explained by Rutherford's nuclear model?
 (a) Stability of the atom
 (b) Presence of nucleus in the centre of an atom
 (c) Comparison of Sizes of atom and nucleus
 (d) Nucleus is positively charged
103. If atomic number of an element is 11, the correct name, symbol and valency are:
 (a) Lithium, Li, 1 (b) Magnesium, Mg, 2
 (c) Boron, B, 3 (d) Sodium, Na, 1
104. Which one of the following gas is used in making soft drinks?
 (a) NH_3 (b) PH_3
 (c) COCl_2 (d) CO_2
105. Which one of the following is considered as a compound?
 (a) Silicon (b) Tin
 (c) Sugar Solution (d) Calcium carbonate
106. Rutherford's α -particle scattering experiment on gold foil is responsible for the discovery of:
 (a) Neutron (b) Electron
 (c) Proton (d) Atomic nucleus
107. Which one of the following is a metalloid?
 (a) Germanium (b) Coke
 (c) Iodine (d) Sugar
108. Which one of the following is not explained by the Dalton's atomic theory?
 (a) Law of conservation of mass
 (b) Law of constant composition
 (c) Presence of different kind of sub-atomic particles in an atom
 (d) Law of multiple proportion
109. Which one of the following contains all Lewis acids?
 (a) Al_3 , Co^{3+} , BF_3 (b) BCl_3 , NH_3 , OH^-
 (c) Mg^{2+} , H_2O , F^- (d) BF_3 , NH_3 , H_2O
110. Number of electron present in the species H_2^+ , He, H_2 and O_2^+ respectively are:
 (a) 1, 2, 2, 15 (b) 1, 2, 1, 14
 (c) 2, 2, 2, 16 (d) 0, 2, 1, 14
111. Consider the following statements with respect to performance of the merchandise export of India in FY—2024:
 1. Share of Capital goods such as machinery, equipment and other durable goods decreased substantially.
 2. Share of consumer goods and intermediate goods increased.
 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
112. Which one among the following statements about Project Nexus is correct?
 (a) It is an international agreement to enable labour movement between countries.
 (b) It is an international initiative to enable instant cross-border retail payments.
 (c) It is an international initiative to transfer technology between countries.
 (d) It is an international agreement to create database on financial inclusion.
113. While calculating the consumer price index, 'housing' as an item is classified as:
 (a) Core consumer durable
 (b) Core Consumer non-durable
 (c) Core capital goods
 (d) Core service

114. Which one among the following established the first Global Capability Centre in India?

- (a) Honeywell (b) Citibank
(c) Texas Instruments (d) SAP Labs India

115. Which of the following pairs is/are not correctly matched?

1.	Global Value Chains (GVC)	International Product Sharing
2.	World Integrated trade Solutions	Database on GVC related Trade
3.	Current Account Deficit (CAD)	Foreign Direct Investment

Select the answer using the code given below:

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

116. How can currency depreciation stimulate an increase in net exports?

1. By reducing export costs
2. By reducing import prices

Select the answer using the code given below:

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

117. Core inflation is:

- (a) CPI headline inflation minus all non-food items

(b) WPI inflation minus all food and non-food items

(c) CPI headline inflation minus food and energy items

(d) WPI inflation minus food and energy items

118. In alignment with the guidelines of NEP 2020, 'Poshan bhi Padhai bhi' (PBPB) was launched under which one among the following programmes?

- (a) Integrated Teacher Training Programme
(b) Vidya Pravesh
(c) Early Childhood Care and Education
(d) Samagra Shiksha Abhiyan

119. Which one among the following defines flexi workers in India?

- (a) Formal contract staff employed through organised contract
(b) Informal sector employees working in urban areas
(c) Agriculture labour migrating to urban areas
(d) Regular salaried workers working in registered companies

120. Which one among the following is an integrated teacher training programme?

- (a) Vidya Pravesh (b) NISHTHA
(c) Vidyanjali (d) DIKSHA

Answer Key

Q. No	Answer Key	Topic's Name	Chapter's Name
1	(b)	Jainism	Ancient history
2	(c)	Indus valley civilisation	Ancient history
3	(c)	Ancient literature	Ancient history
4	(d)	Mauryan era	Ancient history
5	(d)	Buddhism and jainism	Ancient history
6	(c)	Temple architecture	Ancient history
7	(a)	Vedic period	Ancient history
8	(b)	Art and culture	Ancient history
9	(d)	Architecture	Art and culture
10	(c)	Medieval India	General Knowledge
11	(d)	Literature	Medieval India
12	(c)	European Era	General Knowledge
13	(c)	Literature	Ancient history
14	(b)	Vedic period	Ancient history
15	(a)	Buddhism and jainism	Ancient history
16	(c)	Literature	General Knowledge
17	(b)	Literature	Medieval India
18	(d)	Medieval India	General Knowledge
19	(b)	Famous personalities	General Knowledge
20	(a)	Mauryan era	Ancient history
21	(d)	Ray optics	Physics
22	(a)	Moving charges and magnetism	Physics
23	(b)	Motion in 1-D	Physics
24	(a)	Work, energy and power	Physics

25	(b)	Gravitation	Physics
26	(a)	Mechanical properties of fluids	Physics
27	(c)	Mechanical properties of fluids	Physics
28	(c)	Current electricity	Physics
29	(c)	Ray optics	Physics
30	(a)	Gravitation	Physics
31	(c)	Waves	World geography
32	(d)	Minerals	World geography
33	(c)	Geomorphology	World geography
34	(b)	Climatology	World geography
35	(b)	Climatology	World geography
36	(d)	Climatology	World geography
37	(c)	Oceanography	World geography
38	(c)	Biogeography	World geography
39	(b)	Vegetation	Indian geography
40	(c)	World geography	General knowledge
41	(c)	World geography	General knowledge
42	(d)	World geography	General knowledge
43	(a)	World geography	General knowledge
44	(c)	World geography	General knowledge
45	(a)	World geography	General knowledge
46	(d)	Indian geography	General knowledge
47	(b)	Soils	Indian geography
48	(a)	Indian geography	General knowledge
49	(b)	River system	Indian geography
50	(b)	Minerals	Indian Geography
51	(a)	Computer	General knowledge
52	(d)	Computer	General knowledge
53	(c)	Computer	General knowledge
54	(b)	Computer	General knowledge
55	(a)	Computer	General knowledge
56	(d)	Current affairs	General knowledge
57	(c)	Government schemes	Current affairs
58	(c)	Government schemes	Current affairs
59	(c)	Government schemes	Current affairs
60	(d)	Government initiatives	Current affairs
61	(b)	Government initiatives	Current affairs
62	(b)	Government initiatives	Current affairs
63	(d)	Government schemes	Current affairs
64	(a)	Awards	Current affairs
65	(c)	Famous personalities	General knowledge
66	(b)	awards	Current affairs
67	(c)	World affairs	Current affairs
68	(d)	Military exercises	Current affairs
69	(b)	Places in news	Current affairs
70	(d)	Defence	Current affairs
71	(a)	Amendments	Indian polity
72	(d)	International organisations	Current affairs
73	(d)	Constitutional and non constitutional bodies	Indian polity
74	(c)	Important days	Current affairs

75	(c)	Constitutional and non constitutional bodies	Indian polity
76	(d)	Constitutional and non constitutional bodies	Indian polity
77	(a)	Schedules of indian constitution	Indian polity
78	(d)	Parliament	Indian polity
79	(c)	World affairs	Current affairs
80	(d)	Amendments	Indian polity
81	(c)	Fundamental rights	Indian polity
82	(c)	Parliament	Indian polity
83	(c)	Parliament	Indian polity
84	(a)	Important protocols	General knowledge
85	(a)	Physiographic divisions of india	Indian geography
86	(d)	Famous personalities	Modern history
87	(b)	Important organisation	Static GK
88	(c)	Places in news	World geography
89	(c)	Government initiatives	Current affairs
90	(a)	Important commission	Indian polity
91	(a)	Human health	Biology
92	(b)	Structure of eye	Biology
93	(a)	Cell organelles	Biology
94	(d)	Plant hormones	Biology
95	(c)	Human health	Biology
96	(a)	Animal phylum	Biology
97	(d)	Biomolecules	Biology
98	(a)	Biomolecules	Biology
99	(b)	Respiration	Biology
100	(b)	Structure of Eye	Biology
101	(c)	Structure of Atom	Chemistry
102	(a)	Structure of the Atom	Chemistry
103	(d)	Periodic Classification of Elements	Chemistry
104	(d)	Metal and Non metals	Chemistry
105	(d)	Matter in our surroundings	Chemistry
106	(d)	Structure of the Atom	Chemistry
107	(a)	Metal and Non metals	Chemistry
108	(c)	Structure of the Atom	Chemistry
109	(a)	Acid Base and Salts	Chemistry
110	(a)	Metal and Non metals	Chemistry
111	(d)	Current Affairs	Economy
112	(b)	Current Affairs	Economy
113	(d)	Inflation	Economy
114	(c)	Organisation	Economy
115	(c)	National income calculation method	Economy
116	(a)	Import and Export	Economy
117	(c)	Inflation	Economy
118	(c)	Government Schemes and Initiatives	Current Affairs
119	(a)	Important terms in news	Economy
120	(b)	Government Schemes and Initiatives	Current Affairs

CDS

Combined Defence Services

EXAM

I

2025

Solutions General Knowledge

ANSWERS WITH EXPLANATIONS

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

Explanation: In Jainism, the "Three Jewels" (Triratna) are the three core principles that lead to liberation (moksha). They are:

Samyag-darshana – Right Faith (or Right Perception)

Samyag-jnana – Right Knowledge

Samyag-charitra – Right Conduct

These three together are considered essential for the spiritual progress of a soul in Jain philosophy.

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

Explanation: Animals like the cow, camel, horse and lion were not depicted on Harappan seals. Among the animals shown, the bull was the most frequently represented. Notably, the horse was unfamiliar to the Harappan people. The Harappan civilisation also reflected the importance of animal domestication, which played a significant role in their daily life and economic activities.

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

Explanation: The Ashtadhyayi, composed by Panini, is the earliest text among the options given. It is a foundational work on Sanskrit grammar and is believed to have been written around the 5th to 4th century BCE. In comparison, Manusmriti, Sushruta Samhita and Natyashastra were composed later. The Ashtadhyayi's systematic and scientific approach to language set the standard for Sanskrit grammar and greatly influenced linguistic studies in India and beyond.

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

Explanation: Kalsi in Uttarakhand is the only place in North India where Ashoka's Major Rock Edicts have been discovered. These edicts are inscribed in the Prakrit language using the Brahmi script. The other statements are incorrect: the Major Rock Edict found in Kerala is not in Sanskrit, Minor Rock Edicts in Bihar are not limited to Pataliputra, and while Dhauli does have edicts related to the Kalinga War, it is a Minor Rock Edict, not a Major one.

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

Explanation: The statement that Ajivikas formed an alliance with Jains against Buddhists is not correct. The Ajivikas were a distinct sect that emerged around the same time as Buddhism and Jainism, founded by Makkhali Gosala. While they shared some similarities with Jainism, such as asceticism, they maintained their independent identity and did not form any known alliance with the Jains. The other statements correctly reflect aspects of Ajivika belief and practice, such as non-discrimination, asceticism and having a structured organisation.

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

Explanation: All three statements are correct. Konark horse sculpture (c. 1250) does indeed show a ring-stirrup, which is a notable feature of early stirrup design.

Khajuraho sculptures (10th century) depict a wooden stirrup, reflecting the early use of stirrups in India.

Iron stirrups were introduced and used by Delhi Sultanate armies from the 13th century onwards, marking a significant advancement in cavalry warfare. Thus, all three statements are correct.

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

Explanation: In the Rig Veda Samhita, the terms 'ishukrit' and 'isukara' are associated with the maker of arrows. The word 'ishu' refers to an arrow in Vedic Sanskrit, and 'krit' and 'kara' both denote someone who makes or creates something. These terms specifically refer to the artisans or craftsmen who made arrows, which were crucial in Vedic warfare. The other options, like swords, vajra and maces are not associated with these terms in the Rig Veda.

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

Explanation: In ancient India, Sharnga, Kodanda and Karmuka all refer to types of bows used as weapons of war. Sharnga is associated with the bow of Lord Krishna, Kodanda is the bow used by Lord Rama, and Karmuka is another term for a bow mentioned

in various texts. However, Kunta does not refer to a bow; it is a term that refers to a spear or a weapon in certain contexts.

9. Option (d) is correct.

Explanation: The term manjaniq refers to a siege weapon used in ancient and medieval warfare, specifically a mangonel. It was a type of catapult or trebuchet designed to hurl large stones, rocks or other projectiles at enemy fortifications or troops. This device was effective for breaking walls or causing damage during sieges. The other options do not accurately describe the military device referred to as manjaniq.

10. Option (c) is correct.

Explanation: In medieval India, the process of indigo extraction greatly improved with the use of gypsum and lime mortars to make the inner surfaces of indigo vats waterproof. This development ensured better retention of water and chemicals in the vats, which enhanced the efficiency and quality of the indigo dyeing process. The other options, such as the use of mechanical crushing tools or fertilisers, did not have the same significant impact on the indigo extraction process as the waterproofing of vats.

11. Option (d) is correct.

Explanation: In the Ain-i-Akbari, Jyotisha (astronomy/astrology) is listed as one of the important Indian sciences that scholars were instructed to learn during Akbar's reign. Akbar emphasised the study of various sciences, including Jyotisha, along with subjects like Ganita (mathematics), Vyakarana (grammar) and Ayurveda (medicine). Astronomy and astrology were highly valued, particularly for their role in timekeeping, religious rituals and understanding celestial phenomena.

12. Option (c) is correct.

Explanation: All three statements are correct regarding European arms used in warfare in India.

Flint-lock muskets were a significant advancement over earlier matchlocks and could function relatively well in wet weather, unlike matchlocks that relied on a burning wick. The addition of bayonets made muskets highly effective in close combat, serving as both a firearm and a spear.

Wrought-iron cannon barrels were lighter and more manoeuvrable than earlier bronze ones, improving battlefield mobility.

Hence, all three statements are correct.

13. Option (c) is correct.

Explanation: Katyayana, the ancient Sanskrit grammarian, is believed to have lived between Panini and Patanjali. He composed the Vartikas (critical and explanatory notes) on Panini's Ashtadhyayi, thereby refining and elaborating upon Panini's grammatical rules. Later, Patanjali built upon both Panini's and Katyayana's works in his Mahabhashya. Thus, chronologically, Katyayana fits between the two, contributing significantly to the evolution of Sanskrit grammar.

14. Option (b) is correct.

Explanation: In the Rig Veda, Sinivali is invoked as a goddess associated with fertility and childbirth. She is often described as broad-hipped and fair-armed, symbolising motherhood and the power to bestow children. Here's why the other options are incorrect: Ushas is the goddess of dawn, Aditi is considered the mother of the gods and a symbol of infinity, and Raka is associated with the full moon, not speech. Hence, the correct statement is about Sinivali.

15. Option (a) is correct.

Explanation: Hariti was originally a yakshi in Buddhist mythology, known for abducting and eating children. However, after an encounter with the Buddha, who taught her compassion by hiding her child, she was transformed into a benevolent motherly figure and became a protector of children and women. She is often depicted with a child in her arms, symbolising fertility, protection and maternal care. This transformation is a key story in Buddhist folklore.

16. Option (c) is correct.

Explanation: Apabhramsha refers to the group of languages that emerged during the transition from Prakrits to modern Indian languages. It began to appear in recognisable literary forms by the 6th century CE, especially in poetry and religious literature. Apabhramsha languages evolved as mixtures of regional vernaculars influenced by Prakrits and Sanskrit, forming the linguistic bridge between classical and modern Indo-Aryan languages. Hence, both statements are correct.

17. Option (b) is correct.

Explanation: Jonaraja, a court poet and historian in the time of Sultan Zainul Abidin of Kashmir, composed the "Zatnavilas", a historical work detailing the rulers of Kashmir. He is also well known for continuing Kalhana's Rajatarangini, documenting the later dynasties. His works

are valuable sources of Kashmir's medieval history. Therefore, Jonaraja's contribution is significant in preserving the historical narrative of Kashmir, particularly during Zainul Abidin's enlightened rule.

18. Option (d) is correct.

Explanation: Amir Khusrau composed "Nuh Siphir" (meaning "Nine Skies") in 1318 CE, during the reign of Alauddin Khilji's successor. In this poetic work, he lavishly praises India, describing its pleasant climate, rich languages (including Sanskrit) and its excellence in arts, music and even animals. The work reflects Khusrau's deep admiration for Indian culture and stands as a testament to the fusion of Indo-Persian traditions in medieval India. Thus, the correct answer is Nuh Siphir.

19. Option (b) is correct.

Explanation: Rameshwar Bhattacharya, a Bengali poet of the early 18th century, is known for composing "Shivansankirtan", a devotional work centred around Lord Shiva. The other works mentioned—Dharmamangal, Mansimha and Vidyasundar—were written by other poets and belong to different periods or traditions within Bengali literature.

20. Option (a) is correct.

Explanation: The correct answer is the Brahmaputra Valley, Assam. Ashoka's empire, which spanned most of the Indian subcontinent, did not extend into the Brahmaputra Valley. While his influence reached various regions of present-day Pakistan, North Bengal and parts of Kashmir, there is no evidence of Ashoka's rule over Assam. The lack of Ashokan inscriptions in this area suggests that it was outside the direct control or influence of the Mauryan Empire during his reign.

21. Option (d) is correct.

Explanation: Convex mirror always forms virtual and erect image of small size. Plane mirror always forms virtual and erect image of equal size.

22. Option (a) is correct.

Explanation: As per right hand thumb rule, when we hold a current carrying conductor in our right hand direction such that direction of thumb represents the direction of current, then the direction of magnetic field will be given by direction of curling of fingers.

23. Option (b) is correct.

Explanation: Given, $u = 5 \text{ ms}^{-1}$, $v = 7 \text{ ms}^{-1}$
 $t = 3 \text{ s}$, $s = ?$

$$a = \frac{v - u}{t} = \frac{7 - 5}{3} = \frac{2}{3} \text{ ms}^{-2}$$

Now, $s = ut + \frac{1}{2}at^2$

$$\Rightarrow s = 5 \times 3 + \frac{1}{2} \times \frac{2}{3} \times 9$$

$$\Rightarrow s = 15 + 3 = 18 \text{ m}$$

24. Option (a) is correct.

Explanation: Given, $m = 50 \text{ kg}$, $h = 8 \text{ m}$, $t = 10 \text{ s}$,
 $g = 10 \text{ ms}^{-2}$

$$\text{Power, } P = \frac{mgh}{t} = \frac{50 \times 8 \times 10}{10} = 400 \text{ W}$$

25. Option (b) is correct.

Explanation: Law of gravitation is not linked to laws of motion.

26. Option (a) is correct.

Explanation: A body floats in a liquid only if buoyant force is equal to weight of object submerged.

27. Option (c) is correct.

Explanation: Buoyant force, $U = \rho Vg$
 $\Rightarrow U = 1000 \times 2 \times 10^{-4} \times 10 = 2 \text{ N}$

28. Option (c) is correct.

$$\text{Explanation: } R = \frac{V^2}{P} = \frac{220^2}{60} \Omega$$

Now voltage is 110 voltages,

$$\text{Power, } P = \frac{V^2}{R} = \frac{110^2}{\frac{220^2}{60}} = \frac{60}{4} = 15 \text{ W}$$

29. Option (c) is correct.

Explanation: A simple microscope uses a single converging lens (convex lens) to magnify objects.

30. Option (a) is correct.

Explanation: Force with which earth attracts any object is termed as weight of that object.

31. Option (c) is correct.

Explanation: Both statements about Secondary waves (S-waves) are correct. S-waves are transverse seismic body waves that move particles in a direction perpendicular to the wave's motion, creating a wave pattern similar to crests and troughs, much like shaking a rope up and down. This particle motion can occur in various planes, including the vertical plane, as stated. Hence, both the formation of crests and troughs and the perpendicular vibration in the vertical plane accurately describe S-wave behaviour.

32. Option (d) is correct.

Explanation: The mineral described is Olivine. It is typically recognised by its distinctive greenish colour and commonly occurs as crystals in basaltic and other mafic igneous rocks. Olivine is rich in magnesium, iron and silica, with a chemical composition often expressed as $(\text{Mg}, \text{Fe}) \text{SiO}_3$. These characteristics—its colour, occurrence in basalt and elemental composition—clearly identify it as olivine, a significant rock-forming mineral in Earth's upper mantle and volcanic rocks.

33. Option (c) is correct.

Explanation: Both statements regarding salt weathering are correct. Salt crystallisation is considered the most effective process in salt weathering, as the growth of salt crystals within rock pores exerts pressure that leads to disintegration. This process is especially impactful in arid and coastal regions. Additionally, salt crystal growth is more effective in sedimentary rocks than in igneous rocks because sedimentary rocks are generally more porous and allow easier penetration and accumulation of salts, making them more susceptible to weathering.

34. Option (b) is correct.

Explanation: The correct answer is 2 only. Surface inversion of temperature refers to a situation where a layer of cooler air is trapped beneath warmer air, leading to atmospheric stability rather than instability. This inversion prevents vertical mixing of air and is generally associated with stable conditions. The inversion commonly occurs during the night due to radiational cooling of the ground, and it typically lasts for a few hours until sunrise. Once the Sun rises, the ground heats up, and the inversion dissipates, allowing the normal temperature gradient to resume.

35. Option (b) is correct.

Explanation: The correct answer is Cumulus. Look like cotton wool – Cumulus clouds are often described as resembling cotton wool due to their puffy, white appearance. They typically have a rounded shape with a flat base. Exist in patches and have a flat base – Cumulus clouds appear in distinct patches and are characterised by their flat base, which forms at the level where the air is saturated with moisture.

Formed at a height of 4–7 km – Cumulus clouds can form at varying heights, often ranging from 1 to 7 km depending on the weather conditions, though the typical range for well-developed cumulus clouds is around 2–5 km.

36. Option (d) is correct.

Explanation: The correct answer is Tropical wet and dry climate.

Temperature is high throughout the year – This characteristic is typical of tropical climates, where the temperature remains high year-round due to the region's proximity to the equator.

Rainfall is variable with a short wet season and a longer dry season – This is a key feature of the tropical wet and dry climate (also known as the savannah climate). In this climate, rainfall is concentrated during a brief wet season, while the rest of the year remains dry.

Climate of Sudan and Paraguay is an example of this climate type – Both Sudan and Paraguay experience tropical wet and dry climates, where they have a distinct wet and dry period, typical of the savannah climate.

37. Option (c) is correct.

Explanation: The correct ascending order of salts in seawater, based on their concentration, is Calcium Carbonate (CaCO_3), Calcium Sulphate (CaSO_4) and Magnesium Chloride (MgCl_2). Calcium Carbonate is the least abundant due to its lower solubility and the lower concentrations of its constituent ions. Calcium Sulphate is intermediate in abundance, while Magnesium Chloride is the most abundant salt, as both magnesium and chloride ions are found in high concentrations in seawater.

38. Option (c) is correct.

Explanation: The correct answer is Both 1 and 2. Humus is a dark-coloured, amorphous substance formed from the decomposition of dead plant and animal materials. It is colloidal in nature, meaning it has fine particles that help it retain water and nutrients. This colloidal property makes humus an excellent reservoir of nutrients, slowly releasing them into the soil and providing essential elements for plant growth. Thus, both statements are accurate.

39. Option (b) is correct.

Explanation: The Nilgiris Biosphere Reserve is spread over three states in India: Tamil Nadu, Karnataka and Kerala. It is a UNESCO-designated biosphere reserve and is known for its rich biodiversity, including numerous species of plants, animals and birds. The Nilgiris Biosphere Reserve is part of the Western Ghats and is a vital conservation area for several endangered species.

40. Option (c) is correct.

Explanation: The Danube River flows through several major cities in Europe, including: Belgrade (Serbia)

Budapest (Hungary)

Vienna (Austria)

However, Prague, the capital of the Czech Republic, is not situated on the Danube River. Instead, Prague is located on the Vltava River.

41. Option (c) is correct.

Explanation: Easter Island (also known as Rapa Nui) is geographically part of the Polynesian group of islands in the Pacific Ocean. It shares cultural and linguistic traits with other Polynesian islands.

Though located in the southeastern Pacific Ocean, Easter Island is a special territory of Chile, a South American country, and has been under Chilean administration since 1888.

42. Option (d) is correct.

Explanation: The Virunga Mountains, located along the borders of Rwanda, Uganda, and the Democratic Republic of Congo, are renowned as one of the last remaining habitats of the endangered mountain gorillas. Conservation efforts in this region, including protected areas like Volcanoes National Park in Rwanda and Bwindi Impenetrable Forest in Uganda, are crucial for their survival. The other options, while prominent in Africa, are not primary habitats of mountain gorillas.

43. Option (a) is correct.

Explanation: Statement 1 is correct: The country of Jordan was indeed created through the British Mandate system after World War I. It was initially known as Transjordan, established in 1921, and gained full independence in 1946. The mandate was part of British administration in the former Ottoman territories.

Statement 2 is incorrect: Jordan is not a landlocked country. It has a coastline along the Gulf of Aqaba in the south, giving it access to the Red Sea.

44. Option (c) is correct.

Explanation: Macau is situated on the western side of the Pearl River Estuary in southern China. The Pearl River Estuary is a key geographical feature that opens into the South China Sea and is bordered by several important cities, including Hong Kong and Macau. While Hong Kong is also close, Macau is more directly on the western side of the estuary. Bangkok is located in Thailand along the Chao Phraya River. Singapore is an island city-state at the southern tip of the Malay Peninsula.

45. Option (a) is correct.

Explanation: The Coral Sea separates the Great Barrier Reef from the South Pacific. The Great Barrier Reef is located in the Coral Sea, which is

itself a marginal sea of the South Pacific Ocean. Therefore, the Coral Sea lies between the reef and the broader South Pacific. This statement is correct.

The Great Dividing Range extends from Melbourne to Perth in Australia. The Great Dividing Range is a series of mountain ranges that runs along the eastern and southeastern coast of Australia. Melbourne is located within this range's vicinity. However, Perth is situated on the western coast of Australia, far from the Great Dividing Range.

46. Option (d) is correct.

Explanation: The correct sequence of the mountain ranges as one moves from North to South is: 2, 1, 3, 4.

Let's examine their relative positions from north to south:

Kunlun Range – Located farthest to the north, mostly in China, north of the Karakoram.

Karakoram Range – Lies south of Kunlun, forming part of the boundary between India and China, and includes peaks like K2.

Ladakh Range – Lies south of Karakoram, in the northernmost part of India.

Zaskar Range – Lies south of Ladakh, part of the greater Himalayan region.

47. Option (b) is correct.

Explanation: Saline soils in India typically occur in arid and semi-arid regions as well as waterlogged and swampy areas due to the accumulation of soluble salts. These soils are not rich in nitrogen; in fact, they are generally poor in nitrogen and organic matter. The presence of excessive salts hampers nutrient uptake by plants, making them less fertile. Hence, while Statement 2 is correct, Statement 1 is incorrect.

48. Option (a) is correct.

Explanation: The Salal Power Project is situated on the Chenab River in the union territory of Jammu and Kashmir, India. It is one of the major hydroelectric projects in the region and plays an important role in generating electricity and supporting irrigation. The project harnesses the fast-flowing waters of the Chenab River, which originates in the Himalayas and flows through India and Pakistan.

49. Option (b) is correct.

Explanation: The Gomal River does not originate in the Himalayas. Instead, it originates from the eastern slopes of the Katawaz Range in Afghanistan, which is part of the Sulaiman mountain system, not the Himalayas. In contrast, the Gilgit, Hunza and Zaskar rivers are Himalayan tributaries of the Indus. The Gomal

flows through arid regions of Afghanistan and Pakistan before joining the Indus River, making it distinct in origin and terrain.

50. Option (b) is correct.

Explanation: According to the Annual Report 2023–24 of the Ministry of Mines, Government of India, the major bauxite-producing states in India are Odisha and Jharkhand. Based on multiple sources, Odisha consistently ranks as the top bauxite producer in India, often accounting for over half of the total output. Jharkhand is also listed as a significant bauxite producer. While other states like Madhya Pradesh, Gujarat and Chhattisgarh also produce bauxite, they are not mentioned prominently in most reports. Therefore, “Odisha and Jharkhand” is the most accurate answer based on the query.

51. Option (a) is correct.

Explanation: The correct answer is Preventing unauthorised access to computer via the internet. A firewall is a security system designed to monitor and control incoming and outgoing network traffic based on predetermined security rules. Its primary purpose is to prevent unauthorised access to or from a private network, ensuring that only authorised users or applications can access the system over the internet. Firewalls help protect computers and networks from potential threats such as hacking attempts, malicious software and unauthorised data access.

52. Option (d) is correct.

Explanation: A linker is not an application software; it is a system software. A linker is responsible for combining various pieces of code and data into a single executable program. It helps in the creation of programs by linking object files generated by a compiler. On the other hand, Spreadsheet (e.g., Microsoft Excel), AutoCAD and MS PowerPoint are all examples of application software, which are designed to perform specific tasks for users, such as data organisation, drawing and creating presentations.

53. Option (c) is correct.

Explanation: A Trojan Horse is a type of malicious software (malware) that misleads users of its true intent. It often appears to be legitimate software or files but can cause harm to the system by giving unauthorised access to attackers, stealing data or executing harmful actions on the system.

In contrast:

Hacking is an activity that involves gaining unauthorised access to computer systems or

networks, but it is not a type of software.

Password Cracking is the process of attempting to guess or decode passwords, but it is not software in itself, though it can be aided by certain programs.

Firewall is a security measure used to protect networks from unauthorised access, not malicious software.

54. Option (b) is correct.

Explanation: Multimedia refers to the integration of various forms of media, such as text, graphics, video, audio and images, into a single interactive presentation. It is used in various applications like websites, presentations, educational software and entertainment. It allows users to engage with content in a dynamic and interactive way.

In contrast: JPEG and PNG are image file formats. AVA does not refer to a standard multimedia term.

55. Option (a) is correct.

Explanation: The correct answer is Replicates human decision making. Artificial Intelligence (AI) is designed to mimic or replicate human decision-making processes, allowing machines to perform tasks that typically require human intelligence, such as problem-solving, learning, reasoning and decision-making. AI can process data, recognise patterns and make decisions without human intervention.

Storing relevant information is a characteristic of databases or storage systems, not specifically AI. Storing similar data for a specific purpose refers to data organisation and management, which is not exclusive to AI. Allowing user interaction with media is typically related to user interfaces and media technology, not AI.

56. Option (d) is correct.

Explanation: The organisation that has recently initiated programs like Bharati Vidya Parivajana, Brihattar Bharat and Nari Samvad Prajaplya is the Indira Gandhi National Centre for the Arts (IGNCA). These initiatives aim to promote cultural awareness, national integration and women's empowerment through various artistic and educational activities.

57. Option (c) is correct.

Explanation: The educational institution established under the Union Ministry of Culture that promotes the preservation, protection and promotion of Lord Buddha's teachings and values of love, compassion, and non-violence is the Nava Nalanda Mahavihara, Nalanda. This institution aims to develop good moral values and practices based on Buddhist teachings, contributing to the promotion of Buddhist culture and values.

58. Option (c) is correct.

Explanation: The Government has set up a dedicated fund: Nirbhaya Fund, which can be utilised for projects specifically designed to improve the safety and security of women. It is a non-lapsable corpus fund, being administered by Department of Economic Affairs (DEA), Ministry of Finance. As per the guidelines, the responsibility of Ministry of Women and Child Development (MWCD) are: (i) nodal Ministry to appraise/recommend proposals and schemes to be funded under Nirbhaya Fund and (ii) to review and monitor the progress of sanctioned schemes/projects in conjunction with the line Ministries/Departments.

59. Option (c) is correct.

Explanation: The Paramparagat Krishi Vikas Yojana (PKVY) was launched in 2015–16 by the Ministry of Agriculture and Farmers' Welfare to promote organic farming through traditional knowledge and sustainable practices. The scheme encourages cluster-based organic farming, ensures certification and helps farmers realise the economic benefits of organic produce. It aims to reduce the use of chemical fertilisers and pesticides, thereby promoting eco-friendly and climate-resilient agriculture.

60. Option (d) is correct.

Explanation: The Union Government established a separate Ministry of Cooperation on 6th July 2021 to realise the vision of "Sahkar se Samriddhi" (Prosperity through Cooperation). This ministry aims to strengthen the cooperative movement in India by providing a dedicated administrative, legal and policy framework. It focuses on streamlining processes for cooperatives, enhancing their reach to the grassroots level and promoting economic development through cooperative societies.

61. Option (b) is correct.

Explanation: The Ministry of Defence, Government of India, has declared 2025 as the "Year of Reforms". This initiative focuses on modernising the Indian Armed Forces by enhancing joint operations among the Army, Navy and Air Force, integrating advanced technologies and improving overall combat readiness. The reforms aim to transform the military into a technologically advanced, combat-ready force capable of multi-domain integrated operations, thereby strengthening India's defence preparedness and sovereignty in the 21st century.

62. Option (b) is correct.

Explanation: Statement 1 is correct: The Open Network for Digital Commerce (ONDC) was

launched by the Government of India in 2021. It was incorporated on December 31, 2021, as a Section 8 non-profit company under the Department for Promotion of Industry and Internal Trade (DPIIT).

Statement 2 is correct: ONDC aims to democratise e-commerce in India by creating an open network that allows sellers of all sizes, including small and local businesses, to participate in digital commerce. This initiative seeks to level the playing field and reduce the dominance of major e-commerce platforms.

Statement 3 is incorrect: As of the latest available data, India has not surpassed China in e-retail penetration. India's e-retail penetration remains modest at around 4.3%, while China continues to lead globally in this metric.

63. Option (d) is correct.

Explanation: The "Million Minds Augmenting National Aspirations and Knowledge" (MANAK) scheme, under the flagship Innovation in Science Pursuit for Inspired Research (INSPIRE) program by the Department of Science and Technology, Government of India, is designed to foster creativity and innovation among school children studying in classes 6 to 10, aged 10 to 15 years. The scheme encourages students to develop original ideas and innovations rooted in science and societal applications, aiming to nurture a culture of scientific thinking and problem-solving from an early age.

64. Option (a) is correct.

Explanation: The correct answer is: 1, 2, 3 and 4. In 2024, the Major Dhyan Chand Khel Ratna Award, India's highest sporting honour, was conferred upon four distinguished athletes:

D Gukesh: Recognised for becoming the youngest-ever world chess champion at the age of 18 years.

Harmanpreet Singh: Honoured for leading the Indian men's hockey team to a bronze medal at the Paris Olympics.

Praveen Kumar: Awarded for clinching a gold medal in the men's high jump at the Paralympics with a record-breaking jump of 2.08 meters.

Manu Bhaker: Celebrated for winning two bronze medals in shooting at the Paris Olympics, becoming the first Indian to achieve this feat in a single edition of the Games. These accolades were presented by President Droupadi Murmu at a ceremony held at Rashtrapati Bhavan on January 17, 2025.

65. Option (c) is correct.

Explanation: The correct answer is: Shyam Benegal.

Shyam Benegal is a prominent Indian film director and screenwriter known for his contributions to parallel cinema. He was born in Hyderabad. He rose to prominence in the 1970s with films like *Ankur*, *Nishant* and *Manthan*, which challenged the conventions of mainstream Bollywood. He is also well-known for directing *Bharat Ek Khoj*, a 50-episode television series based on Jawaharlal Nehru's *Discovery of India*.

66. Option (b) is correct.

Explanation: The Order of Mubarak Al-Kabeer is the highest national honour awarded by the State of Kuwait. It is named after Sheikh Mubarak Al-Kabeer, the ruler of Kuwait, and is conferred on heads of state and other dignitaries in recognition of their significant contributions to strengthening relations with Kuwait. Kuwait conferred its highest honour—The Order of Mubarak Al-Kabeer — on Prime Minister Narendra Modi for his role in strengthening the good relations between the two countries.

67. Option (c) is correct.

Explanation: On December 24, 2024, President Joe Biden signed a bill officially designating the bald eagle as the national bird of the United States. Although the bald eagle had long been a symbol of American values—featured on the Great Seal, currency and various federal emblems—it had never been formally recognised as the national bird until this legislation was enacted. This move rectified a historical oversight, ensuring that the bald eagle, a species native to North America and emblematic of freedom and strength, holds its rightful place among the nation's official symbols.

68. Option (d) is correct.

Explanation: Surya Kiran is a bilateral joint military exercise conducted annually between the Indian Army and the Nepalese Army. The 18th edition of this exercise was held from December 31, 2024, to January 13, 2025, in Saljhandi, Nepal. The primary objectives of Surya Kiran include enhancing interoperability in counterterrorism operations, jungle warfare and conducting humanitarian assistance and disaster relief missions under the United Nations Charter. This exercise underscores the strong military cooperation and shared cultural ties between India and Nepal.

69. Option (b) is correct.

Explanation: The Moidams, also known as the Mound-Burial System of the Ahom Dynasty, has been inscribed on the UNESCO World

Heritage List. The announcement was made on July 26, 2024, during the 46th session of the World Heritage Committee in New Delhi, India. This makes it the 43rd World Heritage site from India. Hence, Statement 1 is correct.

Union Cabinet chaired by Prime Minister Shri Narendra Modi conferred the status of Classical Language to Bengali along with Marathi, Pali, Assamese and Prakrit languages on October 03, 2024. Hence, Statement 2 is not correct.

Project PARI (Public Art of India) was launched by the Ministry of Culture, Government of India. It is an initiative aimed at enhancing and celebrating public art in India. Specifically, the project is being executed by the Lalit Kala Akademi and National Gallery of Modern Art. Hence, Statement 3 is not correct.

70. Option (d) is correct.

Explanation: The PSLV-C57, a Polar Satellite Launch Vehicle, successfully launched the Aditya-L1 mission on September 2, 2023, from Sriharikota. This mission aims to study the Sun from the Lagrange point 1 (L1), a point in space where Aditya-L1 will be placed in a halo orbit to observe the Sun continuously. The PSLV-C57 is a versatile rocket developed by ISRO and is known for its reliability.

71. Option (a) is correct.

Explanation: The Constitution (One Hundred and First Amendment) Act, 2016 introduced Goods and Services Tax (GST) in India, which aimed at simplifying the indirect tax structure and improving the ease of doing business by implementing a single tax system across the country for both intra-state and inter-state trade or commerce.

102nd Amendment Act, 2018: Constitutional Status was granted to National Commission for Backward Classes (NCBC)

104th Amendment Act, 2020: Extended the deadline for the cessation of seats for SCs and STs in the Lok Sabha and state assemblies from seventy years to eighty. Removed the reserved seats for the Anglo-Indian community in the Lok Sabha and state assemblies.

106th Amendment Act, 2023: This was the women's reservation bill which reserves one-third of all seats for women in Lok Sabha, State legislative assemblies, and the Legislative Assembly of the National Capital Territory of Delhi, including those reserved for SCs and STs.

72. Option (d) is correct.

Explanation: The United Nations High Commissioner for Refugees (UNHCR) is the UN agency that has received the Nobel Peace

Prize more than once. It was awarded the prestigious honour in 1954 for its exceptional efforts in assisting refugees after World War II. Later, in 1981, UNHCR was again recognised with the Nobel Peace Prize for its continued and invaluable work in supporting refugees globally. In contrast, other UN agencies such as the International Labour Organization (ILO), World Food Programme (WFP), and UNICEF have each received the Nobel Peace Prize only once.

73. Option (d) is correct.

Explanation: The correct answer is 3.

As per the CVC Act, the Central Vigilance Commissioner (CVC) and the members are appointed by the President of India.

The committee for recommending the appointment of the CVC consists of the Prime Minister, the Minister of Home Affairs, and the Leader of the Opposition in the Lok Sabha, as per the provisions of the CVC Act, 2003.

The Leader of the Opposition in the Lok Sabha is included in the committee for the appointment, and in the absence of the official Leader of Opposition, the leader of the largest opposition group can be part of the committee.

Thus, all three statements are correct.

74. Option (c) is correct.

Explanation: The International Day of Democracy is observed on 15th September each year, as declared by the United Nations General Assembly. The day aims to promote and strengthen democracy globally by highlighting the importance of democratic values, participation and respect for human rights. It encourages people to reflect on the challenges to democracy and to enhance efforts in ensuring more inclusive, accountable and transparent governance systems worldwide.

75. Option (c) is correct.

Explanation: The correct answer is Both 1 and 2. The Prime Minister of India serves as the Chairperson of the Governing Council of NITI Aayog, leading discussions on national development and cooperative federalism.

The Lieutenant Governor of Ladakh is included in the Governing Council of NITI Aayog, representing the Union Territory in discussions on development and governance.

76. Option (d) is correct.

Explanation: The correct answer is 1, 2 and 3.

The National Commission for Women (NCW) is a statutory body established under the National Commission for Women Act, 1990. One of the primary functions of NCW is to review

and recommend measures for safeguarding women's rights, including the review of legal and constitutional safeguards. NCW advises the Government on policies related to women and gender equality.

77. Option (a) is correct.

Explanation: The latest language to be included in the Eighth Schedule of the Constitution of India is Maithili. Maithili was included in the Eighth Schedule of the Constitution of India through the 92nd Constitutional Amendment Act, 2003. This addition recognised Maithili, along with Bodo and Santhali, as one of the official languages of India.

78. Option (d) is correct.

Explanation: Tamil Nadu has 18 seats in the Council of States (Rajya Sabha), which is the highest among the options given.

Bihar has 16 seats.

Andhra Pradesh and Madhya Pradesh each have 11 seats.

79. Option (c) is correct.

Explanation: The Indus Waters Treaty, signed between India and Pakistan in 1960 and brokered by the World Bank, classifies the rivers of the Indus basin into two groups:

Eastern Rivers: These include the Sutlej, Beas and Ravi—allocated to India for exclusive use.

Western Rivers: These include the Indus, Jhelum and Chenab—primarily allocated to Pakistan, although India can use them for limited domestic, agricultural and hydroelectric purposes under specific conditions.

So, both statements are correct.

80. Option (d) is correct.

Explanation: Statement 1: Incorrect

The 86th Constitutional Amendment Act (2002) did not add the Right to Education to the Directive Principles of State Policy (DPSP).

Instead, it added Article 21A in the Fundamental Rights section, making free and compulsory education for children aged 6–14 a Fundamental Right. So, this statement is factually wrong.

Statement 2: Incorrect

Right to Education is indeed a Fundamental Right (Article 21A) and is also supported under DPSP (Article 45). But Right to Work is only a Directive Principle (Article 41) and not a Fundamental Right.

Therefore, the claim that both are Fundamental Rights and DPSPs is incorrect.

81. Option (c) is correct.

Explanation: Article 12 of the Constitution of India defines the term 'State' for the purpose

of Part III (Fundamental Rights). According to Article 12, 'State' includes:

The Government and Parliament of India

The Government and the Legislature of each State

All local authorities (like municipalities, panchayats, etc.)

Other authorities within the territory of India or under the control of the Government of India

Thus, all the given components—Parliament of India, State Governments, State Legislatures, and Local Authorities—are covered under the definition of 'State' in Article 12.

82. Option (c) is correct.

Explanation: The correct answer is: 1 and 2 only
Statement 1 is correct: The Speaker is empowered to refer suo moto any question of privilege for investigation. The Speaker of the Lok Sabha (or Chairman in Rajya Sabha) can refer a matter of privilege suo moto to the Committee of Privileges for examination and report.

Statement 2 is correct: A question of privilege is accorded priority over other items in the List of Business. Questions involving breach of privilege are treated as matters of urgent public importance and are generally given precedence over regular business.

Statement 3 is not correct: The privilege extends to freedom from preventive arrest or detention. Parliamentary privilege does not grant freedom from arrest in preventive detention cases. Members are protected from arrest in civil cases during the session and 40 days before and after it, but not in criminal or preventive detention cases.

83. Option (c) is correct.

Explanation: An adjournment motion is a parliamentary procedure to draw attention to a recent matter of urgent public importance and demands discussion by suspending normal business. However, it cannot be used to discuss matters that fall under the jurisdiction of a State Government, as it is meant to hold the Union Government accountable. The motion is indeed extraordinary, and the Speaker (Chair) has discretionary power to grant or refuse consent. Thus, the third statement is not correct.

84. Option (a) is correct.

Explanation: The Kyoto Protocol specifically relates to emission reduction. It is an international treaty adopted in 1997 under the United Nations Framework Convention on Climate Change (UNFCCC). The protocol legally binds developed countries to reduce

greenhouse gas (GHG) emissions, based on the premise that global warming exists and human-made CO emissions have caused it. It was a significant step toward addressing climate change by setting emission reduction targets for industrialised nations.

85. Option (a) is correct.

Explanation: The correct answer is Cyril Radcliffe. Sir Cyril Radcliffe was the British lawyer appointed as the chairman of the Boundary Commissions set up to demarcate the borders between India and Pakistan during the partition in 1947. Despite having no prior knowledge of Indian conditions, he was tasked with drawing the boundary lines for both Punjab and Bengal, which were to be divided between the two nations. The lines he drew are known as the Radcliffe Line.

86. Option (d) is correct.

Explanation: Dr. Muthulakshmi Reddy was indeed a notable freedom fighter, medical professional and social reformer, and she made significant contributions to women's rights and healthcare in India. However, she was not honoured with the Bharat Ratna in 1956. In fact, the Bharat Ratna, India's highest civilian award, was not awarded to her. Muthulakshmi Reddy was awarded the Padma Bhushan by the President of India in 1956. Her two outstanding monumental gifts for humanity remain the Avvai Home (for children) and the Cancer Institute. She was the first girl student to be admitted into a men's college (in the 1910s). She was the first woman legislator in British India (serving in the Madras Legislative Council). She was a medical professional and worked extensively in the field of healthcare for women.

87. Option (b) is correct.

Explanation: The quote "Since wars begin in the minds of men, it is also in the minds of men that the defences of peace must be constructed" is from the Constitution of the United Nations Educational, Scientific and Cultural Organisation (UNESCO). This profound statement reflects UNESCO's mission to build peace through education, science, culture and communication, emphasising that lasting peace must be founded on intellectual and moral solidarity among people, not merely on political or economic arrangements.

88. Option (c) is correct.

Explanation: Lithuania does not share a territorial boundary with Ukraine. Ukraine shares its borders with Poland, Romania, Belarus, Hungary, Slovakia, Moldova and

Russia, but not Lithuania. While Lithuania is a neighbouring country in the broader Eastern European region, it does not directly border Ukraine.

89. Option (c) is correct.

Explanation: The correct answer is "Both 1 and 2." The First Law Commission, established in 1834 under Lord Macaulay, recommended the Indian Penal Code (IPC) of 1860, which laid the foundation for the criminal justice system in India. As for the second statement, the Indian Penal Code, 1860, has been replaced by the Bharatiya Nyaya Sanhita, 2023, marking a significant overhaul of the colonial-era legal framework. This change is part of broader reforms in the criminal justice system to align with contemporary needs.

90. Option (a) is correct.

Explanation: The correct answer is 1 only. The First Backward Class Commission, set up on 29th January 1953, is indeed popularly known as the Kaka Kalelkar Commission, which investigated the conditions of socially and educationally backward classes in India. Hence, Statement 1 is correct.

The Second Backward Class Commission, set up on 1st January 1979, is popularly known as the Mandal Commission, which made recommendations for reservation for backward classes in government jobs. Hence, Statement 2 is not correct.

91. Option (a) is correct.

Explanation: A sphygmomanometer is the standard instrument used to measure blood pressure manually. It consists of an inflatable cuff to restrict blood flow, and a mercury or aneroid manometer to measure the pressure.

92. Option (b) is correct.

Explanation: Myopia is a vision condition in which close objects appear clearly, but distant objects appear blurry. This occurs when the eyeball is too long or the cornea is too curved, causing light to focus in front of the retina. Far-sightedness (Hyperopia) is the opposite. Cataract is clouding of the eye's lens. Presbyopia is age-related difficulty in seeing nearby objects.

93. Option (a) is correct.

Explanation: The Rough Endoplasmic Reticulum (RER) appears "rough" because its surface is studded with ribosomes, which are involved in protein synthesis. If ribosomes are absent, it becomes Smooth ER, which helps in lipid synthesis. Lysosomes are organelles for digestion, not related to ER surface. Mitochondria are separate organelles known as the "powerhouses" of the cell.

94. Option (d) is correct.

Explanation: Gibberellins, Abscissic acid and Auxins are all plant hormones involved in growth, dormancy and development. Thyroxine is a hormone in animals, particularly secreted by the thyroid gland in humans, and regulates metabolism.

95. Option (c) is correct.

Explanation: Blood pressure is expressed as systolic/diastolic pressure (e.g., 120/80 mm Hg). The systolic pressure (first number) is the pressure when the heart contracts. The diastolic pressure (second number) is the pressure when the heart relaxes. 120 mm Hg is considered the normal systolic pressure in healthy adults.

96. Option (a) is correct.

Explanation: Sponges are simple, multicellular aquatic animals that lack true tissues and organs. They belong to the phylum Porifera. They have pores (ostia) all over their body through which water enters. Platyhelminthes are flatworms. Cnidaria includes jellyfish and corals. Annelida includes segmented worms like earthworms.

97. Option (d) is correct.

Explanation: Lactose, also called milk sugar, is a disaccharide made up of two monosaccharides: Glucose and Galactose. It's broken down by the enzyme lactase in the small intestine. Glucose and Fructose form sucrose. Glucose is a monosaccharide.

98. Option (a) is correct.

Explanation: Isoenzymes or isozymes are different forms of an enzyme that catalyse the same chemical reaction but differ in their amino acid sequence and sometimes in kinetic properties. Isotopes are atoms of the same element with different neutrons. Isomers are compounds with the same molecular formula but different structure. Coenzymes are organic molecules (often vitamins) that help enzymes.

99. Option (b) is correct.

Explanation: Pyruvate ($C_3H_4O_3$) is a three-carbon molecule formed at the end of glycolysis from one molecule of glucose ($C_6H_{12}O_6$). One glucose molecule splits into two pyruvate molecules, each with three carbon atoms.

100. Option (b) is correct.

Explanation: The blind spot is the point on the retina where the optic nerve exits the eye. This region has no rods or cones (photoreceptor cells), hence no vision is possible at that spot. Fovea is the central point of sharpest vision with a high density of cones.

101. Option (c) is correct.

Explanation: Isobars are those species which have similar mass number but different atomic numbers. The mass of an atom is same because they have similar number of nucleons. (sum of proton and neutron)

	Ar	Ca
e^-	18	20
p	18	20
n	22	20
$(n + p)$	= 40	= 40

102. Option (a) is correct.

Explanation: Rutherford Model cannot explain the stability of an atom, because e^- in an orbit will emit radiation, the energy carried by radiation comes from the electronic motion due to which orbit will shrink and by the time e^- collide with the nucleus.

103. Option (d) is correct.

Explanation:

Atomic No	Correct name	Symbol	Valency
3	Lithium	Li	1
12	Magnesium	Mg	2
5	Boron	B	3
11	Sodium	Na	1

104. Option (d) is correct.

Explanation: The gas used in making of soft drinks is CO_2 . Here CO_2 gas is present at low temperature and high pressure.

105. Option (d) is correct.

Explanation: Silicon and tin are elements while sugar solution is the mixture of sugar and water. Here calcium carbonate is a compound because it is made up of elements Calcium (Ca), Carbon (C), and Oxygen (O), and has the formula CaCO_3 .

106. Option (d) is correct.

Explanation: Rutherford α -scattering experiment on gold foil is responsible for the discovery of atomic nucleus. It stated that all the mass of an atom remain concentrate at the centre called nucleus.

107. Option (a) is correct.

Explanation:

	Element	Nature
(a)	Germanium	Metalloid
(b)	Coke	Non-metal
(c)	Iodine	Non-metal
(d)	Sugar	Compound

108. Option (c) is correct.

Explanation: According to Dalton's atomic theory, atom is indivisible and cannot be divided into further particles. So, the presence of different kind of sub atomic particles in an atom is not explained by Dalton's atomic theory.

109. Option (a) is correct.

Explanation: Lewis acids are those species which are e^- deficient in nature and it accepts an electron pair to complete its octet.

AlCl_3 and BF_3 are deficient species while Co^{3+} is a cation which do not have complete octet.

So AlCl_3 , BF_3 and Co^{3+} are Lewis acid.

110. Option (a) is correct.

Explanation:

Species	No. of e
H_2^+	1
He	2
H_2	2
O_2^+	15

111. Option (d) is correct.

Explanation: The correct answer is Neither 1 nor 2.

Share of capital goods decreased substantially: This statement is incorrect. In FY 2023–24, the share of capital goods in India's merchandise exports increased from 16.3% in FY 2022–23 to 18.9%, indicating a rise rather than a decrease.

Share of consumer goods and intermediate goods increased: This statement is incorrect. The share of consumer goods in merchandise exports declined slightly from 48.9% in FY 2022–23 to 47.5% in FY 2023–24. Similarly, the share of intermediate goods decreased from 30.2% to 28.4% during the same period.

112. Option (b) is correct.

Explanation: Project Nexus is an international initiative aimed at facilitating instant cross-border retail payments. The project focuses on enhancing the speed and efficiency of payments between countries, helping to reduce transaction costs and increase financial inclusion. It is part of a broader effort to modernise payment systems and improve financial connectivity across borders.

113. Option (d) is correct.

Explanation: While calculating the consumer price index (CPI), 'housing' is classified as Core service. Housing is categorised under "core services" because it includes services related to shelter, such as rent, home ownership costs

and other housing-related expenses. These are essential services that reflect the cost of living and significantly contribute to the overall inflation measurement in CPI.

114. Option (c) is correct.

Explanation: In 1985, Texas Instruments (TI) established India's first Global Capability Center (GCC) in Bengaluru. This pioneering move marked the beginning of India's journey as a hub for global business operations. TI's centre in Bengaluru played a crucial role in supporting and driving the company's global operations, contributing to the development of advanced technologies and products. The success of TI's GCC in India set a precedent for other multinational corporations to establish similar centres in the country, leading to India's emergence as a prominent destination for Global Capability Centers.

115. Option (c) is correct.

Explanation: Global Value Chains (GVC) are indeed related to product sharing, where products are broken down into stages and produced in different countries, so Pair 1 is correctly matched.

World Integrated Trade Solutions (WITS) provides data on trade, tariffs and trade policies, and also includes databases related to GVCs. Therefore, Pair 2 is correctly matched.

Current Account Deficit (CAD) is typically related to a country's trade balance, and it reflects the difference between a country's savings and its investment. It is not directly linked to Foreign Direct Investment (FDI), so Pair 3 is not correctly matched.

116. Option (a) is correct.

Explanation: When a country's currency depreciates, it makes its goods and services cheaper for foreign buyers, which can increase exports. Foreign buyers can buy more of the country's goods at a lower price, stimulating an increase in net exports.

A depreciation of the currency makes imports more expensive, not cheaper. As a result, people may reduce their imports, which could contribute to an increase in net exports, but it is not directly related to a reduction in import prices.

117. Option (c) is correct.

Explanation: The correct answer is CPI headline inflation minus food and energy items. Core inflation is a measure of inflation that excludes certain items that are subject to volatile price movements, typically food and energy items. This is because food and energy prices can fluctuate significantly in the short term due to

factors like weather events or oil price changes. By excluding these volatile items, core inflation provides a clearer picture of the underlying, long-term inflation trend.

118. Option (c) is correct.

Explanation: The correct answer is Early Childhood Care and Education. Poshan bhi Padhai bhi (PBPB) was launched as part of the Early Childhood Care and Education (ECCE) under the National Education Policy (NEP) 2020. This initiative aims to address the dual needs of nutritional support and education for children in the foundational years, ensuring that they receive adequate nourishment while also engaging in age-appropriate learning experiences. It focuses on promoting the holistic development of children during their early years.

119. Option (a) is correct.

Explanation: Flexi workers generally refer to individuals whose employment terms are more flexible than those of permanent, regular employees. This often includes those hired on contracts for a specific period or task through established agencies or contracts.

While informal sector employees might have flexible work patterns, the term "flexi workers" in a more formal context often implies some level of structured contractual arrangement, even if it's not a permanent position.

Agricultural labourers migrating to urban areas describe a specific type of migration and employment, not the general definition of flexi workers.

Regular salaried workers in registered companies typically have permanent or fixed-term employment with less flexibility compared to contract staff.

120. Option (b) is correct.

Explanation: NISHTHA stands for National Initiative for School Heads' and Teachers' Holistic Advancement. It is an integrated teacher training programme launched by the Ministry of Education under the Samagra Shiksha scheme. The goal of NISHTHA is to build the capacities of teachers and school principals at the elementary level to improve the quality of school education.

Vidya Praveesh: A school preparation module for Grade 1 students.

Vidyanjali: A school volunteer program for strengthening community and private sector involvement in government schools.

DIKSHA: A digital platform for providing e-content and professional development for teachers.