

## Practice Questions

1. Which among the following statements with regard to Grameen Bharat Mahotsav, 2025 is/are correct?

1. It aims at promoting economic stability and financial security among rural population.
2. It focuses on financial inclusion and supporting sustainable agricultural practices.

Select the answer using the code given below:

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

2. Which of the statements given below is/are correct?

1. The National Green Hydrogen Mission (NGHM) was approved by the Union Cabinet, Government of India, in the year 2023.
2. The Ministry of Environment, Forest and Climate Change, Government of India, has launched the Green Hydrogen Certification Scheme of India.

Select the answer using the code given below:

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

3. Which among the following States is not a part of the Purvodaya development initiative of the Government of India?

- (a) Bihar
- (b) Chhattisgarh
- (c) Jharkhand
- (d) West Bengal

4. Which of the following statements about the relationship between price elasticity of demand and type of firm is/are correct?

1. Perfectly elastic demand is associated with a competitive firm.
2. Perfectly inelastic demand is associated with a monopolistically competitive firm.

Select the answer using the code given below :

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

5. 'Collaboration for the Intelligent Age' was the theme of a meeting convened in 2025 under the aegis of

- the World Economic Forum
- the G7
- the G20
- the World Trade Organization

6. Which of the following statements with regard to the 'National Manufacturing Mission' is/are correct?

- It covers small, medium and large industries.
- It will support cleantech manufacturing.
- It will facilitate promotion of employment opportunities in labour-intensive sectors.

Select the answer using the code given below:

- 1 only
- 2 only
- 1 and 2 only
- 1, 2 and 3

7. India and Poland have agreed to implement the India-Poland Strategic Partnership' in terms of a Five-Year Action Plan. Identify the current Five-Year Action Plan.

- Action Plan 2023-27
- Action Plan 2022-26
- Action Plan 2024-28

(d) Action Plan 2025-29

8. 'Rashtriya Vigyan Puraskar, 2024' under the category of Vigyan Ratna Award' was given to

- Prof. Govindarajan Padmanabhan
- Dr. Anandharamakrishnan C
- Prof. Umesh Varshney
- Prof. Jayant Bhalchandra Udgaonkar

9. The Ghatampur Thermal Power Project is located at

- Bihar
- Uttar Pradesh
- Madhya Pradesh
- Gujarat

10. Who among the following classical poets is the author of the book Kiratarjuniyam?

- Thiruvalluvar
- Bharavi
- Valmiki
- Panini

11. The comparative advantage theory (CAT) is a trade theory that describes the basis of two nations engaging in trade. Which one among the following statements regarding the theory is not correct?

- David Ricardo was the author of the CAT.

(b) The CAT is explained in the book titled *On the Principles of Political Economy and Taxation* that was first published in 1817.

(c) According to the CAT, the nation which does not have absolute advantage in any goods cannot benefit from trade.

(d) The two nations that engage in trade can gain from specializing in the commodity in which they have a comparative advantage.

12. Consider the following statements about **Nandini Sahakar Scheme** :

1. This scheme is aimed at assisting women cooperatives to take up business modelbased activities under the purview of the National Cooperative Development Corporation (NCDC).
2. There is no minimum or maximum limit on financial assistance.

Which of the statements given aboveis/are correct?

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

13. Which among the following statements regarding India's services export is/are not correct?

1. India's share in global services export has more than doubled, reaching around 4.3 percent in 2023 from 1.9 percent in 2005.
2. Travel and Transport services represent areas where India holds a relatively larger share in global export, at 10.2 percent and 8.5 percent respectively in 2023.

Select the answer using the code given below:

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

14. Which one among the following items of expenditure received the highest allocations in the Union Budget, 2025-26?

- (a) Centrally sponsored schemes
- (b) Pensions
- (c) Interest payments
- (d) Defence

15. Krishnadevaraya, a king of Vijayanagara, composed a work on statecraft known as *Amuktamalyada* in

- (a) Telugu
- (b) Kannada
- (c) Tamil

(d) Sanskrit

16. Which one among the following schemes focuses on developing modern infrastructure and optimizing supply chain from farm to retail in Indian agriculture sector?

(a) Pradhan Mantri Kisan Sampada Yojana (PMKSY)  
(b) Rashtriya Krishi Vikas Yojana (RKVY)  
(c) Pradhan Mantri Kisan Maandhan Yojana (PMKMY)  
(d) Paramparagat Krishi Vikas Yojana (PKVY)

17. Which among the following regarding the nature of goods and income elasticity are correctly matched?

	Nature of Goods	Income Elasticity
1.	Necessity	Between 0 and 1
2.	Luxury	More than 1
3.	Inferior	More than 0

Select the answer using the code given below:

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

18. Which one among the following statements is not correct?

(a) The Financial Stability and Development Council (FSDC) was set up in 2010.  
(b) The National Logistics Policy (NLP) was launched in 2022.  
(c) The Rural Infrastructure Development Fund (RIDF) was instituted in NABARD during 1995–96.  
(d) The G20 was formed in 2001 as a forum of Finance Ministers and Central Bank Governors.

19. Which one among the following financial institutions reports the monthly Purchasing Managers' Index (PMI) for services in India?

(a) HSBC  
(b) RBI  
(c) HDFC  
(d) IDBI

20. Which one among the following is not identified as one of the 'Engines of Development' in the Union Budget, 2025-26?

(a) Textiles  
(b) Agriculture  
(c) Investment  
(d) Export

21. Consider the following statements about the powers and duties of the Comptroller and Auditor General of India:

1. He audits and reports on all expenditures from the Consolidated Fund of India.

2. He controls the issue and receipt of money from the Consolidated Fund of India.

3. He audits and reports on the expenditure of all bodies substantially financed from the Union or State revenues.

Which of the statements given above are correct?

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

22. From amongst the following, identify the correct option that captures the changes made in Article 74(1) of the Constitution of India through the 42nd Amendment Act, 1976:

(a) Executive powers of the Union shall be vested with the President of India.  
 (b) The Prime Minister has the duty to brief the President about decisions of the Council of Ministers.  
 (c) The President shall exercise his/her functions on the advice of the Council of Ministers, headed by the Prime Minister.  
 (d) The President shall have the right to summon or prorogue the Houses of the Parliament.

23. Consider the following statements regarding the Government of India Act, 1919 :

1. It divided the subjects of administration in two categories - central and provincial.  
 2. The central subjects were divided into 'reserved' and 'transferred' subjects.  
 3. Provincial Governments were granted the power to make their own budgets and levy taxes.

Which of the statements given above are correct?

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

24. Based on the year of their establishment, arrange the following regional organizations in correct chronological order

1. The Shanghai Cooperation Organization  
 2. The South Asian Association for Regional Cooperation  
 3. The Asia-Pacific Economic Cooperation  
 4. The Association of Southeast Asian Nations

Select the answer using the code given below:

(a) 3-2-1-4  
 (b) 4-2-3-1  
 (c) 3-1-2-4  
 (d) 4-3-2-1

25. Who among the following was the founder of "Sikkim Praja Mandal"?

(a) Kazi Lhendup Dorji Khangsarpa  
 (b) Angami Zapu Phizo  
 (c) Laldenga  
 (d) Nar Bahadur Bhandari

26. The United Nations Carbon Offset Platform is an e-commerce platform to compensate greenhouse gas emissions by purchasing carbon credits. Who among the following can buy these carbon credits?

1. A company
2. An organization
3. A citizen

Select the answer using the code given below:

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

27. Which one of the following statements is not correct?

(a) The Supreme Court of India is a Court of Record.  
 (b) High Courts in India are Courts of Record.

(c) Subordinate Courts in India are Courts of Record.  
 (d) All Courts in India are not Courts of Record.

28. Which Hindustani classical Raag is sung as an invitation to rain?

(a) Raag Yaman  
 (b) Raag Bahar  
 (c) Raag Malhar  
 (d) Raag Bhairavi

29. Who among the following travellers reported the use of seed drill on the Karnataka coast which is considered to be the earliest reference of the presence of the device in India?

(a) Duarte Barbosa  
 (b) Abdur Razzaq  
 (c) Afanasy Nikitin  
 (d) Niccolo Conti

30. With reference to ancient South India, the terms 'Vichitrachitta', 'Chitrakarapuli' and 'Chaityakari' refer to

(a) markets  
 (b) temples  
 (c) titles  
 (d) centres of colour making

31. Consider the following statements about international events :

1. The First Gulf War was related to the Iraq invasion of Kuwait.
2. Mikhail Gorbachev was the President of the Soviet Union at the time of its disintegration.
3. Boris Yeltsin was the first elected President of Russia.

How many of the statements given above are correct?

- (a) Nil
- (b) 1
- (c) 2
- (d) 3

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

	List-I (Act of the British Parliament)	List-II (Key Provision)
A.	The Pitt's India Act, 1784	1. Enlargement of the Governor-General's Legislative Council
B.	The Charter Act, 1813	2. Discrimination against Indians removed in matters of employment and higher service

C.	The Charter Act, 1833	3. Board set up by the Crown to control affairs of India
D.	The Charter Act, 1853	4. Termination of monopoly of East India Company over Indian trade

Code:

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

33. Which of the following statements about the Bhoojan Movement are correct?

1. It was aimed at attaining a nonviolent society.
2. It included schemes such as Sampattidan and Shramdan.
3. It began in a village in Andhra Pradesh in 1951.

Select the answer using the code given below:

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

34. Which one among the following statements about the Department of Defence (DoD) is not correct?

(a) It is headed by the Defence Secretary.  
 (b) It deals with defence policy and planning.  
 (c) It facilitates the restructuring of military commands for optimal utilization of resources.  
 (d) It is responsible for defence cooperation with foreign countries.

35. Krishnadevaraya, a king of Vijayanagara, composed a work on statecraft known as Amuktamalyada in  
 (a) Telugu  
 (b) Kannada  
 (c) Tamil  
 (d) Sanskrit

36. Consider the following statements:  
 1. WTO was set up as the successor to GATT.  
 2. IAEA teams inspect nuclear facilities all over the world.  
 3. Amnesty International is an NGO.  
 How many of the statements given above are correct?  
 (a) Nil  
 (b) 1  
 (c) 2  
 (d) 3

37. Which of the following are the main features of Saracenic architecture?

1. Arch  
 2. Vault and dome  
 3. Lintel and beam  
 4. Application of lime cement

Select the answer using the code given below:

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

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

List-I (Author)	List-II (Book)
A. John M. Keynes	1. Poor Economics
B. Paul Samuelson	2. The General Theory of Employment, Interest and Money
C. Amartya Sen	3. Collective Choice and Social Welfare
D. Abhijit V. Banerjee and Esther Duflo	4. Foundations of Economic Analysis

Code:

(a) A-1 B-3 C-4 D-2

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

39. With reference to the history of India, the Katapayadi system, the Parahita system and the Driggnita system are associated with

- (a) astronomy
- (b) surgery
- (c) chemistry
- (d) music and dance

40. The indentured system in tea gardens of Assam was abolished in

- (a) 1926
- (b) 1934
- (c) 1938
- (d) 1946

41. With reference to the history of Orissa, consider the following statements :

1. Anantavarman Chodaganga consolidated Orissa into a powerful kingdom and was patron of Sanskrit and Telugu literature.
2. Anantavarman Chodaganga built the great temple of the Sun God at Konark in Puri district.
3. Narasimha I effectively checked the external invasion

and maintained prosperity in the kingdom.

How many statements given above are correct?

- (a) 1
- (b) 2
- (c) 3
- (d) None

42. With reference to the ancient architectural development in the hills of North Indian States, consider the following statements:

1. The temple Garbhagriha and Shikhara were made in a Rekhaprasada or Latina style.
2. The Pandrethan Temple in Kashmir is built on a plinth in the middle of a tank.
3. The Jageshwar Temple is located in Garhwal region.
4. The Lakshana Devi Mandir shows the influence of the post-Gupta tradition.

How many statements given above are correct?

- (a) 1
- (b) 2
- (c) 3
- (d) 4

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

	<b>List-I (Name of the Committee)</b>	<b>List-II (Key Recommendation)</b>
A.	Balwantrai Mehta Committee	1. Constitutional status for Panchayati Raj
B.	Ashok Mehta Committee	2. Creation of post of District Development Commissioner
C.	G. V. K. Rao Committee	3. Creation of Zilla Parishad and Mandal Panchayat
D.	L. M. Singhvi Committee	4. Creation of Zilla Parishad, Panchayat Samiti and Gram Panchayat

Code:

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

44. Which one of the following Harappan sites has yielded evidence of a wash basin in the toilet of a house?

- (a) Banawali
- (b) Rakhigarhi
- (c) Dholavira
- (d) Lothal

45. Who among the following British Commanders suffered defeat in the

famous Battle of Chinhhat during the 1857 Revolt?

- (a) Henry Lawrence
- (b) Captain Hearsey
- (c) Francois Sisten
- (d) Charles Ball

46. Which of the following types of mass movements are categorized as rapid movements?

- 1. Creep
- 2. Mudflow
- 3. Solifluction
- 4. Slump

Select the answer using the code given below:

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

47. Consider the following statements :

- 1. The first meeting of the All India Depressed Classes Conference was held at Poona in 1926 under the presidency of M. C. Rajah.
- 2. The All India Depressed Classes Association was formed at Nagpur in 1928 with Dr. Bhimrao Ambedkar as its first elected President.
- 3. The All India Depressed Classes Congress was

founded by Dr. B. S. Munje at a conference in Bombay in 1936.

Which of the statements given above are correct?

- 1 and 2 only
- 2 and 3 only
- 1, 2 and 3
- None

48. With reference to the Indo-Roman trade, who among the following referred to the drain of Roman gold into India?

1. Strabo
2. Pliny
3. Ptolemy
4. Dio Chrysostom

Select the answer using the code given below:

- 1 and 2
- 2 and 3
- 2 and 4
- 1 and 3

49. Which one of the following is the main method by which potholes are created in bedrocks by the flowing stream?

- Abrasion
- Attrition
- Corrosion
- Solifluction

50. Consider the following pairs :

	<b>Literary Work</b>	<b>Author</b>
1.	Rigarthadipika	Madhava Yogi
2.	Kataka	Venkata Madhava
3.	Damayanti-Katha	Trivikrama Bhatta
4.	Yashastilaka Champu	Somadeva

How many pairs given above are correctly matched?

- 1
- 2
- 3
- 4

51. Which of the following statements is/are correct?

- The time at 180° longitude is exactly 12 hours from the 0° longitude, irrespective of whether one travels westward or eastward from the Prime Meridian.
- A person moving eastward on Tuesday will count the day as Wednesday once the International Date Line is crossed.

Select the answer using the code given below:

- 1 only
- 2 only



(c) Both 1 and 2  
 (d) Neither 1 nor 2

52. Which of the following statements with reference to stratovolcanoes is/are correct?

1. Stratovolcanoes are tall, steep cones built of layers of felsic lava and volcanic ash.
2. They can erupt explosively as felsic lavas from stratovolcanoes hold large amounts of gas under high pressure.

Select the answer using the code given below:

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

53. Consider the following pairs:

	King	Dynasty
1.	Lakshmikarna	Pala
2.	Bhima I	Chalukyas of Gujarat
3.	Jayapala	Shahiya dynasty
4.	Lalitaditya Muktapida	Utpala dynasty of Kashmir

How many pairs given above are correctly matched?

(a) 1

(b) 2  
 (c) 3  
 (d) 4

54. Which one of the following ancient towns is known for the evidence of a ploughed field from its early Harappan levels, with two sets of furrows at right angles to each other, suggesting two different crops grown together?

(a) Dholavira  
 (b) Rakhigarhi  
 (c) Kunal  
 (d) Kalibangan

55. Which of the following ocean trenches are not located in the Pacific Ocean?

1. Bonin Trench
2. Cayman Trench
3. Kermadec Trench
4. South Sandwich Trench

Select the answer using the code given below:

(a) 1 and 2  
 (b) 1 and 3  
 (c) 2 and 3  
 (d) 2 and 4

56. Consider the following statements with reference to salt weathering:

1. Salts in rocks expand due to thermal action, hydration and crystallization.
2. Salts like calcium, sodium, magnesium and barium have a tendency to expand.
3. Salt weathering is a typical example of chemical weathering.

Which of the statements given above is/are correct?

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

57. Transport of  $\text{Na}^+$  and  $\text{Ca}^{2+}$  across the plasma membrane is an example of

- (a) antiport
- (b) symport
- (c) uniport
- (d) aquaporins

58. Consider the following pairs with reference to National Waterways (NW) in India and the associated rivers:

	<b>NW No.</b>	<b>River</b>
1.	NW-1	Ganga
2.	NW-10	Amba
3.	NW-100	Tapi

Which of the pairs given above is/are correctly matched?

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

59. Which one of the following has launched the environmental project Shaheed-e-Azam Sardar Bhagat Singh Hariawal Lehar?

- (a) Uttar Pradesh
- (b) Madhya Pradesh
- (c) Punjab
- (d) Delhi

60. The cities of Hiroshima and Nagasaki are situated on which of the following islands?

- (a) Kyushu and Shikoku respectively
- (b) Kyushu and Honshu respectively
- (c) Honshu and Kyushu respectively
- (d) Honshu and Shikoku respectively

61. Which of the following are included in Bharatmala Pariyojana?

1. Road connectivity to border areas
2. Development of coastal roads
3. Connectivity for non-major ports
4. Integration with Sagarmala

Select the answer using the code given below.

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

62. Which one of the following is an application of Artificial Intelligence?  
 (a) Database management system  
 (b) Operating system  
 (c) Natural language processing  
 (d) Register

63. Which one of the following statements regarding allosteric enzymes is correct?  
 (a) Like other enzymes, allosteric enzymes also obey MichaelisMenten kinetics.  
 (b) The velocity versus substrate concentration graph is a hyperbolic graph, like any other enzyme.  
 (c) They are always one-subunit enzymes.  
 (d) Each subunit of allosteric enzyme also contains a regulatory site in addition to the active site.

64. Which one of the following statements with reference to Jal Jeevan Mission is not correct?  
 (a) It was established in the year 2016.  
 (b) It aims to improve quality of life in rural areas.

(c) It is to provide functional tap water connections to every rural household.  
 (d) It is a centrally sponsored scheme.

65. Which of the following are components of Geographic Information System (GIS)?  
 1. Data  
 2. Hardware  
 3. Software  
 4. People

Select the answer using the code given below:

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

66. Consider the following statements about the Intergovernmental Panel on Climate Change (IPCC) :  
 1. It is an international body for assessing the science related to climate change.  
 2. It was set up in the year 1988 by the World Meteorological Organization (WMO).

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

67. Which one of the following principles of physics is primarily used in sonography, a medical diagnostic process?

(a) Resonance  
(b) Superposition of waves  
(c) Doppler effect  
(d) Standing wave

68. Plants adapted to grow in deserts and other dry habitats are called

(a) xerophytes  
(b) mesophytes  
(c) hydrophytes  
(d) halophytes

69. The Ramsar Convention is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation of

(a) fish  
(b) wildlife  
(c) wetland  
(d) art and culture

70. When sunlight (white light) falls on a triangular glass prism, a band of colours called a spectrum is obtained. Which one among the following represents this effect appropriately?

(a) Reflection  
(b) Diffraction  
(c) Refraction  
(d) Dispersion

71. Consider the following statements with reference to neap tides :

1. Normally, there is a seven-day interval between two neap tides.
2. At this time, the Sun and the Moon are at right angles to each other.
3. The Moon's attraction is diminished by the counteracting force of the Sun's gravitational pull.

Which of the statements given above is/are correct?

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

72. Consider the following statements

1. The circulation of nitrogen from the inorganic compounds in the soil to form protein in plants and animals and back again is known as the nitrogen cycle.
2. The preparation of ammonia by Haber process is an endothermic reaction.

3. Urea is synthetically made by the action of ammonia and carbon dioxide under high temperature and high pressure.

Which of the statements given above is/are not correct?

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

73. Out of different types of tissues found in plants, which one of the following is a complex tissue?

- (a) Parenchyma
- (b) Sclerenchyma
- (c) Xylem
- (d) Collenchyma

74. The seasonal variations in the amount of solar energy that any place on the Earth receives are influenced by

- (a) the speed of rotation of the Earth
- (b) pollution
- (c) cloudiness
- (d) the inclination of the Earth about its axis

75. India's key climate targets include

- 1. reduction of 33%-35% in greenhouse gas emissions intensity by 2030

- 2. increase in non-fossil fuel energy capacity to 500 GW
- 3. achieving net-zero emissions by 2070

Select the answer using the code given below:

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

76. 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 serves 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 nor 2

77. 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

78. Which of the following statements with reference to the Constitution of India is/are correct?

1. It is obligatory on the part of every foreigner who is in India to observe Fundamental Duties given in the Constitution of India.
2. Some Fundamental Rights, given in the Constitution of India, are available to foreign nationals who are in India.

Select the answer using the code given below:

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

79. Which of the following statements about the Directive Principles of State Policy (DPSPs) under the Constitution of India is/are correct?

1. DPSPs strive to minimise inequalities of income amongst individuals and groups.

2. They strive to minimise inequalities of status amongst individuals and groups.

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 one of the following elements is higher in concentration in a human body?

- (a) Hydrogen
- (b) Carbon
- (c) Nitrogen
- (d) Oxygen

81. Which of the following statements is/are correct about the National Human Rights Commission, India (NHRC)?

1. It is a constitutional body.
2. Chairperson of NHRC has to be a former Chief Justice of India.
3. There shall be at least one woman member of NHRC.

Select the answer using the code given below:

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



(c) 1 and 3 only  
(d) 2 only

82. Which of the following statements with reference to mantle is/are correct?

1. Moho's discontinuity is at the uppermost part of the mantle.
2. The lower portion of the mantle is called the asthenosphere.

Select the answer using the code given below:

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

83. Which one of the following rivers marks the western boundary of the Ganga Plains?

(a) Chambal  
(b) Ghaggar  
(c) Luni  
(d) Yamuna

84. In India, non-government organisations can raise funds from the public through :

(a) Reserve Bank of India  
(b) Ministry of Home Affairs  
(c) Self-Help Groups  
(d) Social Stock Exchange

85. Which one among the following is not included among the mahajanapadas in the early Buddhist literature?

(a) Vajji  
(b) Kalinga  
(c) Gandhara  
(d) Avanti

86. Which of the following statements about the Central Administrative Tribunal (CAT) is/are correct?

1. Its orders can be challenged before a High Court.
2. It has the same power like a High Court in respect of contempt of itself.

Select the answer using the code given below:

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

87. In the Revolt of 1857, the Kol tribals of Chotanagpur were led by :

(a) Gonoo  
(b) Birjis  
(c) Shah Mal  
(d) Maulvi Ahmadullah Shah

88. Which one of the following is the habitat for the Great Indian Bustard?

(a) Freshwater ecosystem  
 (b) Arid ecosystem  
 (c) Coastal ecosystem  
 (d) Himalayan ecosystem

89. Consider the following :

1. Respect the National Song of India
2. Renounce practices derogatory to the dignity of women
3. Abjure violence
4. Render military service when called upon to do so

Which of the above is/are Fundamental Duties under the Constitution of India?

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

90. Which one among the following Articles of the Constitution of India, directs the State to organise village panchayats?

(a) Article 40  
 (b) Article 44  
 (c) Article 243D  
 (d) Article 329

91. The Dhammapada is a part of:

(a) Majjhima Nikaya  
 (b) Vinaya Pitaka

(c) Khuddaka Nikaya  
 (d) Jatakas

92. Which of the following statements with reference to the Indian Tectonic Plate is/are correct?

1. The subduction zone along the Himalayas, forms its northern boundary.
2. The eastern margin is a spreading site, lying to the west of Australia in the form of an oceanic ridge in Southwest Pacific Ocean.

Select the answer using the code given below:

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

93. Which one of the following statements is correct for carbon chains.

- (a) Vegetable oils generally have long unsaturated carbon chains.
- (b) Vegetable oils generally have long saturated carbon chains.
- (c) Animal fats generally have long unsaturated carbon chains.
- (d) Vegetable oils generally have short saturated carbon chains.

94. Which one of the following is a programme launched for the holistic

development of the adolescent population?

- (a) Rashtriya Kishor Swasthya Karyakram
- (b) SABLA
- (c) Manodarpan
- (d) The Ayushman Bharat School Health & Wellness Programme

95. Which of the following states is/are not a part of the Narmada basin?

- 1. Chhattisgarh
- 2. Gujarat
- 3. Maharashtra
- 4. Rajasthan

Select the answer using the code given below:

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

96. Arrange the following in chronological order, beginning from the earliest :

- 1. Shudraka
- 2. Varahamihira
- 3. Panini
- 4. Patanjali the Grammarian

Select the answer using the code given below:

- (a) 4-1-2-3

- (b) 3-4-1-2
- (c) 2-3-4-1
- (d) 3-1-2-4

97. Which of the following statements with reference to ocean crust is/are correct ?

- 1. The ocean crust rocks are much younger than the continental rocks.
- 2. The ocean crust rocks equidistant on either side of the crest of mid-oceanic ridges show similarities in terms of magnetic properties.

Select the answer using the code given below:

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

98. Which one of the following statements about SIMBEX-2024 (Singapore India Maritime Bilateral Exercise) is not correct?

- (a) SIMBEX began as 'Exercise Lion King' in the year 1994.
- (b) The recent exercise, held in October-2024, is its 31st edition.
- (c) INS Shivalik was the site for its opening ceremony.
- (d) Its Harbour Phase was held in the Bay of Bengal and the Sea Phase at Visakhapatnam.



99. At which one of the following places was India's first analog space mission launched recently?

- Bangalore
- Hyderabad
- Leh
- Amritsar

100. Which of the following is/are Kharif crop/crops in India?

1. Cotton
2. Gram
3. Mustard
4. Rapeseed

Select the answer using the code given below:

- 1 only
- 1 and 2
- 3 and 4
- 4 only

101. Which one among the following statements about the 21st Edition of ASEAN-India Summit is not correct?

- It was held in Lao PDR.
- The Chair's theme for this summit was 'Enhancing Creativity and Resilience'.
- India announced the year 2025 as the ASEAN-India Year of Tourism.
- India invited ASEAN leaders to join 'Plant a tree for Mother' campaign.

102. Which one of the following Maharatnas stepped into its 50th year of inception?

- Coal India Limited
- Power Finance Corporation Limited
- Indian Oil Corporation Limited
- Bharat Heavy Electricals Limited

103. Why are the food cans coated with tin instead of zinc?

- Tin is cheaper than zinc
- Tin has lower melting point than zinc
- Tin is less reactive than zinc
- Tin is more reactive than zinc

104. Who among the following has been selected for the Nobel Prize in Literature for the year 2025?

- Jon Fosse
- Han Kang
- Louise Glück
- László Krasznahorkai

105. The Indian Army's VAJRA PRAHAR is a joint military exercise conducted between the armies of India and :

- Russia
- Ukraine
- China
- USA

106. Consider the following statements with reference to INS Tushil :

1. It is developed in collaboration with Russia.
2. The ship's name Tushil means Abheda Kavach.

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

107. Which one among the following statements about graphite is correct?

- (a) Graphite is harder than diamond
- (b) Graphite contains a higher percentage of carbon than diamond
- (c) Graphite is a better conductor of electricity than diamond
- (d) Graphite and diamond both have equal interatomic distances

108. Which one among the following statements is/are correct about CBD?

1. 16th Conference of Parties (CoP-16) to the UN Convention on Biological Diversity (UNCBD) concluded in Cali, Colombia and 17th meeting of the Conference of the Parties (CoP-17) to the Convention on Biological Diversity,

scheduled for October 2026, in Yerevan, Armenia.

2. It entered into force in 1993, and operates under the aegis of United Nations Environment Programme (UNEP).

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

109. Consider the following malicious computer programs:

1. Virus
2. Trojan Horse
3. Worm

Which of the above replicate automatically?

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

110. AGNI - 4 is a:

- (a) Short-Range Ballistic Missile
- (b) Intermediate-Range Ballistic Missile
- (c) Long-Range Ballistic Missile
- (d) Very Long-Range Ballistic Missile

111. Which of the following statements with regard to the International Space Station (ISS) is/are correct?

1. It is orbiting around the Earth at a speed of approximately 1,00,000 km per hour.
2. It revolves the complete Earth orbit every 90 minutes.
3. Astronauts stationed at the ISS witness a sunrise (or sunset) approximately every 45 minutes.

Select the answer using the code given below :

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

112. The internationally accepted ingredients of the offence of "aircraft hijacking" are found in which one among the following International Conventions on Aviation Security?

- (a) Hague Convention of 1970
- (b) Montreal Convention 1987
- (c) Tokyo Convention 1963
- (d) Chicago Convention 1944

113. In the definition of Public Servant under Section 2(28) of the Bharatiya Nyaya Sanhita, 2023, which one of the following is not included as a public servant?

- (a) Assessor
- (b) Juryman
- (c) Member of Panchayat
- (d) Liquidator

114. Which one of the following is the 14th Central Public Sector Enterprise to obtain the status of Maharatna?

- (a) SAIL
- (b) GAIL
- (c) HAL
- (d) DMRC

115. Who among the following Rigvedic Gods was considered to be the guardian of roads, herdsmen, and straying cattle?

- (a) Vayu
- (b) Rudra
- (c) Varuna
- (d) Pushan

116. Which of the following statements about Open Network for Digital Commerce (ONDC) is/are correct ?

1. It was launched in 2022 by the Government of India.
2. Its aim is to democratize e-commerce in India.
3. India has surpassed China in 2024 in e-retail penetration.

Select the answer using the code given below :

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

117. 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

118. Which of the following statements about Surya Kiran a joint military exercise is/are correct ?

1. Surya Kiran is a joint military exercise between India and Singapore.
2. The core objective of Exercise SURYAKIRAN-XIX is to rehearse Sub-Conventional Operations under Chapter VII of the United Nations Charter.

Select the answer using the code given below:

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

119. 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) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

120. Which among the following is a malicious software?

- (a) Hacking
- (b) LaTeX
- (c) Trojan Horse
- (d) Firewall

121. 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

122. 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.

123. 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.

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

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

125. Who among the following was responsible for demarcating the borders between the then British India and Afghanistan in 1893?

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

126. Which of the following statements is/are correct?

1. Moidam-The Mound-Burial system of the Ahom 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

127. Which one of the following PSLVs, launched by ISRO, is not correctly matched with their Missions?

	<b>PSLV</b>	<b>Mission</b>
1.	PSLV C60	SPADEX
2.	PSLV C59	Proba-3
3.	PSLV C58	XPoSat
4.	PSLV C57	DS-SAR

(a) 1  
(b) 2  
(c) 3  
(d) 4

128. 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 recognized 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.

129. 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

130. Which one among the following countries does not share its territorial boundary with Ukraine?

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

## Keys and Answers

Sl.no	Ans	
1.	C	<p><b>Grameen Bharat Mahotsav: Promoting Rural Welfare</b></p> <p>The Grameen Bharat Mahotsav, 2025, is an initiative designed to uplift the rural populace.</p> <p><b>Statement 1 Analysis: Economic Stability and Financial Security</b></p> <ul style="list-style-type: none"> <li>This statement suggests the Mahotsav aims to foster economic stability and enhance financial security among the rural population. Government initiatives focused on rural development typically prioritize strengthening the economic base of villages. This often involves creating avenues for better income generation, improving access to financial services, and providing safety nets. Promoting economic stability ensures consistent livelihoods, while financial security helps rural households manage risks and plan for the future, making this objective highly relevant for such a program.</li> </ul> <p><b>Statement 2 Analysis: Financial Inclusion and Sustainable Agriculture</b></p> <ul style="list-style-type: none"> <li>This statement highlights a focus on financial inclusion and support for sustainable agricultural practices. Financial inclusion means ensuring that individuals and businesses have access to useful and affordable financial products and services – transactions, payments, savings, credit, and insurance – delivered in a responsible and sustainable way. For rural areas, this is crucial for economic participation. Additionally, supporting sustainable agriculture is vital for the long-term environmental health and economic viability of farming communities. It encourages practices that conserve resources and are resilient to climate change.</li> <li>Considering the typical goals of nationwide rural development festivals and schemes, both statements accurately reflect key areas of focus:</li> <li>Enhancing the overall economic well-being and reducing financial vulnerability of rural citizens (Statement 1).</li> <li>Expanding access to essential financial services and promoting environmentally sound farming methods (Statement 2).</li> </ul> <p>Therefore, the Grameen Bharat Mahotsav, 2025, likely encompasses both these critical objectives to achieve comprehensive rural development.</p>

2.	A	<p><b>Ans: 2 - (a)</b></p> <ul style="list-style-type: none"> <li><b>Statement 1 is accurate:</b> The Union Cabinet officially approved the National Green Hydrogen Mission on January 4, 2023. This mission aims to make India a global hub for the production, utilization, and export of Green Hydrogen.</li> <li><b>Statement 2 is incorrect:</b> While the Ministry of Environment, Forest and Climate Change (MoEFCC) plays a crucial role in environmental regulations, the Green Hydrogen Certification Scheme, along with other initiatives related to renewable energy and hydrogen, falls under the purview of the Ministry of New and Renewable Energy (MNRE). The MNRE is responsible for promoting renewable energy sources and developing policies for them, including green hydrogen.</li> </ul> <p>Hence, Option (a) 1 only is the answer.</p>
3.	A	<ul style="list-style-type: none"> <li>The Purvodaya initiative, launched by the Ministry of Steel, Government of India, is a significant program aimed at accelerating the development of the steel sector and fostering economic growth across India's eastern region. The initiative focuses on creating an integrated manufacturing ecosystem, leveraging the potential of the Eastern Economic Corridor.</li> </ul> <p><b>OBJECTIVES -</b></p> <ol style="list-style-type: none"> <li>To drive steel production and capacity enhancement in the eastern states.</li> <li>To boost infrastructure development, including logistics and connectivity.</li> <li>To promote industrial growth and create employment opportunities in the region.</li> <li>To enhance the competitiveness of the steel sector through policy support and investment.</li> </ol> <p><b>States Covered Under Purvodaya</b></p> <ul style="list-style-type: none"> <li>The Purvodaya initiative primarily targets the eastern states of India, which are rich in mineral resources and possess significant potential for the steel industry. The key states typically associated with this initiative include: <ol style="list-style-type: none"> <li>Odisha</li> <li>West Bengal</li> <li>Jharkhand</li> </ol> </li> </ul>

		<ul style="list-style-type: none"> <li>Additionally, states like Bihar and Chhattisgarh are often considered part of the broader eastern or central-eastern economic development landscape, potentially aligning with related government programs.</li> </ul>
4.	A	<p><b>Ans: 4 - (a)</b></p> <ul style="list-style-type: none"> <li><b>Perfectly Elastic Demand:</b> This occurs when the quantity demanded changes infinitely with any change in price. Graphically, it's represented by a horizontal demand curve. Mathematically, the price elasticity of demand (<math>EP</math>) is infinite (<math>\infty</math>).</li> <li><b>Competitive Firm:</b> In a perfectly competitive market, individual firms are price takers. They must accept the market price determined by overall supply and demand. An individual firm can sell as much as it wants at this price, but if it raises its price even slightly, its sales drop to zero because buyers can purchase identical products from numerous other sellers.</li> <li>Therefore, the demand curve faced by an individual firm in a perfectly competitive market is perfectly elastic (horizontal) at the prevailing market price. Statement 1 is correct.</li> <li><b>Perfectly Inelastic Demand:</b> This is the opposite extreme of perfectly elastic demand. It means that the quantity demanded remains constant regardless of price changes. Graphically, it's a vertical demand curve. Mathematically, the price elasticity of demand (<math>EP</math>) is zero (0).</li> <li><b>Monopolistically Competitive Firm:</b> These firms operate in a market structure characterized by many firms selling differentiated products. Because the products are differentiated (e.g., through branding, quality, location), each firm faces a downward-sloping demand curve. This means they have some control over their price. However, due to the availability of close substitutes from competitors, this demand curve is typically relatively elastic (meaning consumers are sensitive to price changes).</li> <li>Conclusion for Statement 2: Perfectly inelastic demand (<math>EP</math>) is not characteristic of monopolistically competitive firms. Their demand is downward-sloping and relatively elastic, not vertical. Therefore, Statement 2 is incorrect.</li> <li>Based on the analysis of both statements, only Statement 1 is correct. Statement 2 is incorrect because monopolistically competitive firms face relatively elastic, downward-sloping demand curves, not perfectly inelastic ones.</li> </ul>

5.	<b>A</b>	<p>Ans: 5 - (a)</p> <p>The meeting theme "Collaboration for the Intelligent Age" was convened under the aegis of the World Economic Forum. This theme highlights the critical need for global cooperation to navigate the complexities and opportunities presented by rapid technological advancements and the rise of artificial intelligence and other smart technologies.</p> <p><b>World Economic Forum (WEF) :</b></p> <ul style="list-style-type: none"> <li>• The World Economic Forum (WEF) is an international non-governmental organization based in Geneva, Switzerland. It was founded in 1971 by Klaus Schwab. The WEF is known for its annual meeting in Davos, Switzerland, which brings together business leaders, international political leaders, economists, celebrities, and journalists to discuss pressing global issues. Its mission is to improve the state of the world by engaging business, political, academic, and other leaders of society to shape global, regional, and industry agendas.</li> </ul> <p>The theme "Collaboration for the Intelligent Age" focuses on several key areas:</p> <ul style="list-style-type: none"> <li>• Addressing the ethical considerations of AI and intelligent technologies.</li> <li>• Fostering partnerships between public and private sectors to drive innovation.</li> <li>• Ensuring equitable access to the benefits of technological progress.</li> <li>• Developing strategies for workforce adaptation in an increasingly automated world.</li> <li>• Promoting international dialogue on managing the societal impact of advanced technologies.</li> <li>• The WEF, with its multi-stakeholder approach, is ideally positioned to facilitate such discussions and foster the necessary collaboration among diverse global actors.</li> </ul>
6.	<b>D</b>	<p>Ans: (d)</p> <p><b>National Manufacturing Mission:</b></p> <ul style="list-style-type: none"> <li>• The first statement suggests that the "National Manufacturing Mission" covers small, medium, and large industries. Generally, national manufacturing initiatives aim to bolster the entire manufacturing ecosystem. This typically includes supporting businesses of all sizes – from</li> </ul>

		<p>small and medium enterprises (SMEs), which are often crucial for innovation and employment, to large corporations that drive large-scale production and exports. Therefore, it is reasonable to expect that such a mission would encompass the full spectrum of industrial players.</p> <ul style="list-style-type: none"> <li>The second statement highlights support for "cleantech manufacturing". In today's global economic landscape, sustainability and environmental responsibility are increasingly integrated into industrial policies. Manufacturing missions often prioritize advanced technologies and environmentally friendly practices. Supporting "cleantech manufacturing" aligns with goals like reducing carbon footprints, promoting green energy, and developing sustainable industrial processes. This makes the statement highly plausible.</li> <li>The third statement focuses on the "promotion of employment opportunities in labour-intensive sectors". A key objective for most national manufacturing strategies is job creation. "Labour-intensive sectors", which rely heavily on human workforce rather than automation, are often targeted to absorb a significant portion of the available manpower, contributing to economic growth and social stability. Facilitating employment in these sectors is a common and important goal for manufacturing missions.</li> </ul> <p>Based on the typical objectives and scope of national manufacturing initiatives, all three statements appear to be correct aspects of such a mission:</p> <ol style="list-style-type: none"> <li>It aims to cover industries of all sizes (small, medium, and large).</li> <li>It incorporates support for sustainable practices like cleantech manufacturing.</li> <li>It focuses on creating jobs, particularly in labour-intensive areas.</li> </ol> <ul style="list-style-type: none"> <li>Therefore, the statements 1, 2, and 3 are all correct with regard to the National Manufacturing Mission.</li> </ul>
7.	C	<p>Ans: (c)</p> <p><b>Action Plan (2024-2028) for the Implementation of the India-Poland Strategic Partnership</b></p> <ul style="list-style-type: none"> <li>Building on the consensus reached by the Prime Ministers of India and Poland during talks held on August 22, 2024, in Warsaw and recognising the momentum in bilateral cooperation created by the establishment of the</li> </ul>

		<p>Strategic Partnership, the two sides agreed to formulate and execute a five-year Action Plan that will guide bilateral collaboration in the years 2024-2028 across the areas such as ...</p> <ol style="list-style-type: none"> <li>1. Political Dialogue and Security Cooperation</li> <li>2. Trade and investment</li> <li>3. Climate, Energy, Mining, Science and Technology</li> <li>4. Transport and Connectivity</li> <li>5. Terrorism</li> <li>6. Cyber Security</li> <li>7. Health</li> <li>8. People-to-People Ties and Cultural Cooperation</li> </ol>
8.	<b>A</b>	<p>Ans: (a)</p> <ul style="list-style-type: none"> <li>• The Rashtriya Vigyan Puraskar is India's highest honor in the field of science and technology, presented annually to scientists, researchers, and innovators for their exceptional contributions. The award aims to recognize outstanding achievements and foster a spirit of scientific inquiry and innovation in the country.</li> <li>• Prof. Govindarajan Padmanabhan was awarded the Vigyan Ratna Award for the 2024 Rashtriya Vigyan Puraskar. This award recognizes his significant contributions to the field of biological sciences, particularly in molecular biology and biotechnology. He is a renowned scientist and a professor at the Indian Institute of Science, Bangalore.</li> </ul> <p>Therefore , option (a) is the correct answer .</p>
9.	<b>B</b>	<p>Ans : (b)</p> <ul style="list-style-type: none"> <li>• The Ghatampur Thermal Power Project is an important power generation facility located in India. Knowing the precise location of major infrastructure projects like this is often crucial for understanding regional development and energy resources.</li> <li>• The project is situated in the state of Uttar Pradesh. The specific location is within the Hamirpur district of Uttar Pradesh.</li> <li>• This project represents a significant investment in enhancing the thermal power generation capacity within Uttar Pradesh, aiming to meet the growing energy demands of the region.</li> </ul>
10.	<b>B</b>	Ans: (b)

		<b>Author of Kiratarjuniyam: Bharavi</b> <ul style="list-style-type: none"> <li>The epic poem Kiratarjuniyam is attributed to the classical Sanskrit poet Bharavi. This work is renowned for its poetic excellence, dramatic narrative, and linguistic sophistication. It comprises fifteen cantos and details the story of the Pandava prince Arjuna's quest for the divine Pasupatastra weapon, bestowed upon him by Lord Shiva after a fierce battle, during which Shiva tests Arjuna's might and devotion by appearing as a <b>Kirata (tribal hunter)</b>.</li> <li>Bharavi is considered one of the great poets in the Sanskrit tradition, likely active around the 6th century CE. His style is noted for its robustness and elaborate descriptions.</li> </ul>
11.	C	<p><b>Answer : 11 - (c)</b></p> <p><b>Statement 1: David Ricardo's Authorship</b></p> <ul style="list-style-type: none"> <li>This statement correctly identifies David Ricardo as the economist who formally developed the Comparative Advantage Theory (CAT). He introduced this concept as an advancement over the theory of absolute advantage.</li> </ul> <p><b>Statement 2: Ricardo's Book and Publication</b></p> <ul style="list-style-type: none"> <li>This statement accurately points to David Ricardo's influential book, "On the Principles of Political Economy and Taxation", first published in 1817, as the place where the theory was explained.</li> </ul> <p><b>Statement 4: Gains from Specialization</b></p> <ul style="list-style-type: none"> <li>This statement correctly describes a central outcome of the CAT: mutual gains from trade are realized when nations engage in specialization. Countries benefit by focusing production on goods where they possess a comparative advantage, meaning they have a lower opportunity cost compared to other nations.</li> </ul> <p><b>Statement 3: Trade Benefits Without Absolute Advantage</b></p> <ul style="list-style-type: none"> <li>This statement suggests that a nation which does not have an absolute advantage in any goods cannot benefit from trade.</li> <li>This is where the Comparative Advantage Theory offers a different perspective. The theory demonstrates that trade can be mutually beneficial even if one country is less efficient in producing all goods (i.e., it lacks an absolute advantage in everything).</li> </ul>

		<ul style="list-style-type: none"> <li>The key principle is comparative advantage, which is based on relative efficiency or lower opportunity costs. A country should specialize in the production of goods where its relative disadvantage is smallest. For instance, even if Country A is less efficient than Country B in producing both textiles and wheat, but it is proportionally *less* inefficient in wheat production (meaning wheat has a lower opportunity cost for Country A), Country A benefits by specializing in wheat and trading with Country B.</li> </ul> <p>Therefore, the assertion that a nation lacking absolute advantage cannot benefit from trade is incorrect according to the principles of CAT</p>
12.	A	<p>Ans : (a)</p> <p><b>Statement 1: Assistance for Women Cooperatives</b></p> <ul style="list-style-type: none"> <li>The first statement mentions that the Nandini Sahakar Scheme aims to assist women cooperatives in undertaking business model based activities, with oversight from the National Cooperative Development Corporation (NCDC). This aligns with the common objectives of such developmental schemes designed to empower specific groups through cooperative business ventures, often supported by national-level corporations like NCDC.</li> </ul> <p>Therefore, Statement 1 is considered correct.</p> <p><b>Statement 2: Financial Assistance Limits</b></p> <ul style="list-style-type: none"> <li>The second statement claims there is no minimum or maximum limit on the financial assistance provided under the scheme. Generally, government and institutional schemes that offer financial aid usually define specific limits. These limits help in managing the budget, ensuring the widest possible reach, and maintaining fairness in distribution. A complete absence of any financial ceiling is highly unusual for such programs.</li> <li>Based on typical operational frameworks for financial assistance schemes, the assertion of having no minimum or maximum limit is likely incorrect. Schemes usually specify ranges or caps for the funding provided.</li> </ul> <p>Therefore, Statement 2 is considered incorrect.</p>
13.	C	<p>Ans : (c)</p> <p><b>India's Global Services Export Share</b></p>

		<ul style="list-style-type: none"> <li>The first statement claims that India's share in global services export has increased significantly, rising from approximately 1.9 % in 2005 to around 4.3 % in 2023. This indicates a substantial growth over the period.</li> <li>India has indeed witnessed considerable expansion in its services sector, particularly in areas like Information Technology (IT) and business process outsourcing (BPO). Official reports and international trade statistics generally corroborate a steady rise in India's contribution to the global services market.</li> <li>While India has a growing tourism sector and significant maritime trade, its global market share in specific service categories like "Travel" and "Transport" is generally not as high as its overall services export share. India's primary strengths lie in IT,</li> <li>telecommunications, business, and financial services. Market data typically shows India's share in global travel and transport exports to be considerably lower than the percentages stated. For instance, India's overall services export share was around 4.3% in 2023, making shares of 10.2% and 8.5% in these specific segments seem disproportionately high compared to its total global standing.</li> </ul>
14.	C	<p><b>Ans : 14 - (c)</b></p> <p><b>Centrally sponsored schemes:</b> These are schemes implemented by states but sponsored partially or fully by the Central government. They cover areas like health, education, and social welfare. While important, their allocation varies yearly.</p> <ul style="list-style-type: none"> <li>Pensions: This includes payments to retired government employees. It represents a substantial commitment but is generally not the single largest expenditure item.</li> <li>Interest payments: This is the cost incurred by the government on its borrowings. Servicing the national debt is a mandatory and often the largest single component of government expenditure, as it must be paid regardless of other spending priorities.</li> <li>Defence: Allocations for defence ensure national security. This is a major expenditure head, but typically, the cost of servicing existing debt (interest payments) exceeds defence spending. Based on typical budget structures and the confirmed allocation for the Union Budget 2025-26, Interest payments received the highest allocation among the listed items. This reflects the government's commitment to managing its debt obligations.</li> </ul>

15.	A	<p>Ans : 15 - (a)</p> <ul style="list-style-type: none"> <li>• Krishnadevaraya was a prominent ruler of the Vijayanagara Empire, who reigned from 1509 to 1529 CE. He is widely celebrated not only for his military and administrative skills but also as a celebrated scholar and an accomplished poet.</li> </ul> <p><b>Amuktamalyada: A Literary Work</b></p> <ul style="list-style-type: none"> <li>• Among Krishnadevaraya's notable literary contributions is a significant work titled "Amuktamalyada". This work is a classical poem that delves into topics of statecraft and governance. It beautifully narrates the story concerning the marriage of Vishnu Chitta and Godadevi (also known as Andal), who is revered as a prominent Vaishnavite saint and poetess.</li> </ul> <p><b>Language of the Work</b></p> <ul style="list-style-type: none"> <li>• The famous work "Amuktamalyada", which deals with statecraft, was composed by Krishnadevaraya in the Telugu language.</li> <li>• Krishnadevaraya's reign marked a golden age for Telugu literature, and "Amuktamalyada" is considered a key text from that era. His contribution greatly enhanced the richness and scope of Telugu literary tradition.</li> </ul>
16.	A	<p>Ans : 16 - (a)</p> <ul style="list-style-type: none"> <li>• <b>Pradhan Mantri Kisan Sampada Yojana (PMKSY):</b> This scheme, formerly known as the National Mission for Food Processing, is specifically designed to create robust infrastructure across the food processing value chain. Its core objectives include the modernization of food processing infrastructure, improvement of supply chain management from farm to retail, reduction of wastage, and boosting the processing of agricultural and marine products. PMKSY supports various sub-projects like Mega Food Parks, Integrated Cold Chain and Value Addition Infrastructure, Food Safety and Quality Assurance Infrastructure, etc., all contributing to developing modern infrastructure and optimizing the supply chain.</li> <li>• <b>Rashtriya Krishi Vikas Yojana (RKVY):</b> This is a flagship scheme aimed at ensuring that agricultural growth is more broad-based, inclusive, and has an emphasis on reducing yield disparities. While it supports various agricultural activities and infrastructure development, it is a broader scheme and not specifically focused on the "farm-to-retail" supply chain optimization and modern infrastructure in the same targeted way as PMKSY.</li> </ul>

		<ul style="list-style-type: none"> <li><b>Pradhan Mantri Kisan Maandhan Yojana (PMKMY):</b> This scheme is a social security measure that provides a pension for small and marginal farmers upon attaining the age of 60 years. It focuses on the financial security of farmers and is unrelated to infrastructure development or supply chain optimization.</li> <li><b>Paramparagat Krishi Vikas Yojana (PKVY):</b> This scheme promotes organic farming through cluster development and the use of traditional inputs. Its focus is on sustainable agriculture and improving soil health, rather than building modern infrastructure or optimizing the overall farm-to-retail supply chain.</li> </ul> <p><b>Conclusion on Infrastructure and Supply Chain Focus:</b></p> <ul style="list-style-type: none"> <li>Comparing the objectives of each scheme, the Pradhan Mantri Kisan Sampada Yojana (PMKSY) is the most appropriate answer as it directly addresses the development of modern infrastructure and the optimization of the supply chain from the farm gate to the retail level in the Indian agricultural sector. It aims to bridge the gap between production and market by enhancing processing and storage capabilities.</li> </ul>
17.	C	<p>Ans : (c)</p> <ul style="list-style-type: none"> <li>Income Elasticity of Demand (IED), often denoted as <math>E_y</math>, measures how the quantity demanded of a good responds to a change in consumers' income, assuming other factors remain constant.</li> </ul> <p>It's calculated as: <math>E_y = \frac{\% \text{ Change in Quantity Demanded}}{\% \text{ Change in Income}}</math></p> <p>The sign and value of help classify goods into different categories.</p> <p><b>Classifying Goods Based on Income Elasticity:</b></p> <ul style="list-style-type: none"> <li><b>Necessity Goods:</b> These are goods that consumers need, but their consumption increases less than proportionally as income rises. For example, basic food items or utilities. The income elasticity for necessities is positive but less than 1.</li> <li>Mathematical Representation: <math>0 &lt; E_y &lt; 1</math></li> <li><b>Luxury Goods:</b> These are goods that consumers desire but are not essential. As income increases, the consumption of luxury goods rises more than proportionally. Examples include designer clothing, expensive cars, or international holidays. The income elasticity for luxuries is greater than 1.</li> </ul>

		<ul style="list-style-type: none"> <li>Mathematical Representation: <math>Ey &gt; 1</math></li> <li><b>Inferior Goods:</b> These are goods for which the demand decreases as consumers' income increases. This usually happens because consumers switch to better quality or more preferred goods as they become richer. Examples include generic brand products or public transport for some commuters. The income elasticity for inferior goods is negative.</li> <li>Mathematical Representation: <math>Ey &lt; 0</math></li> </ul> <p>So, 3. Inferior goods is not correctly stated, Option (c) is correct.</p>
18.	D	<p>Ans: (d)</p> <ul style="list-style-type: none"> <li>This statement is correct the Financial Stability and Development Council (FSDC) was established in 2010. The FSDC was indeed set up in December 2010 by the Government of India to enhance and strengthen the mechanism for maintaining financial stability.</li> <li>The statement is correct that the <b>National Logistics Policy (NLP)</b> was launched in 2022. The government introduced the National Logistics Policy in September 2022 with the aim of improving logistics efficiency and reducing costs across various sectors.</li> <li>This statement is correct that the Rural Infrastructure Development Fund (RIDF) was instituted in NABARD during 1995-96. RIDF was established by the Government of India in 1995-96 and is administered by the National Bank for Agriculture and Rural Development (NABARD) to support rural infrastructure projects.</li> <li>The statement posits that the G20 was formed in 2001 as a forum of Finance Ministers and Central Bank Governors is incorrect. The G20 was actually established in 1999, bringing together the finance ministers and central bank governors of 19 countries plus the European Union. It was later elevated to the summit-level in 2008.</li> </ul> <p>Statement (d) is incorrect because the G20 was formed in 1999, not 2001.</p> <p>Therefore, Option (d) is the answer: The G20 was formed in 2001 as a forum of Finance Ministers and Central Bank Governors.</p>
19.	A	<p>Ans: (a)</p> <ul style="list-style-type: none"> <li>The Purchasing Managers' Index (PMI) serves as a crucial economic indicator, offering insights into the business conditions prevalent in both the</li> </ul>

		manufacturing and services sectors. This index is generated through surveys administered to purchasing managers across a diverse range of industries.
		<ul style="list-style-type: none"> <li>The Services PMI specifically focuses on evaluating the performance of the services sector, a vital component of India's overall economy. It tracks key metrics such as business activity levels, the inflow of new orders, employment trends within the sector, and prevailing price levels.</li> <li>Within India, the responsibility for reporting the monthly Purchasing Managers' Index (PMI) for the services sector lies with HSBC. This global banking and financial services giant partners with S&amp;P Global (previously known as IHS Markit) to gather, compile, and subsequently publish this important economic data. The HSBC Services PMI is closely monitored by economists, government policymakers, and various businesses as a measure of the services economy's vitality and forward momentum.</li> </ul>
20.	A	<p><b>Ans : 20 - (a)</b></p> <ul style="list-style-type: none"> <li>The Union Budget serves as a roadmap for the country's economic trajectory, often highlighting key sectors designated as "Engines of Development". These are the sectors expected to drive significant growth and progress in the economy for the fiscal year. Key Development Engines in Budget 2025-26 Based on the announcements and focus areas within the Union Budget 2025-26, the following sectors were identified as crucial drivers, or "Engines of Development":</li> <li>Agriculture: This sector continues to be recognized for its foundational role in the economy and its potential for growth and employment.</li> <li>Investment: Promoting and facilitating investment, both domestic and foreign, is seen as vital for capital formation and expansion across various industries.</li> <li>Export: Enhancing the country's export capabilities is highlighted as a means to boost economic activity, earn foreign exchange, and integrate further into the global market.</li> </ul>
21.	C	<p><b>Ans: 21 - (c)</b></p> <ul style="list-style-type: none"> <li><b>Statement 1 is correct: "He audits and reports on all expenditures from the Consolidated Fund of India."</b></li> <li>The Comptroller and Auditor General (CAG) of India is mandated by the Constitution of India (specifically Article 149) and the CAG's (Duties,</li> </ul>

		<p>Powers and Conditions of Service) Act, 1971, to audit all expenditures from the Consolidated Fund of India.</p> <ul style="list-style-type: none"> <li><b>Statement 2 is incorrect:</b> "He doesn't control the issue and receipt of money from the Consolidated Fund of India."</li> <li>The Consolidated Fund of India is where all government revenues are deposited, and all government expenditures are made.</li> <li>The CAG's role includes ensuring that public money is spent legally, efficiently, and according to the budget approved by Parliament. Therefore, this statement accurately describes a key duty of the CAG.</li> <li>The CAG's primary function is auditing and reporting on government accounts, not controlling the day-to-day flow of funds.</li> <li>The control over the issue and receipt of money from the Consolidated Fund rests with the executive branch of the government (like the Department of Expenditure under the Ministry of Finance) and the Reserve Bank of India. The CAG audits these transactions retrospectively to ensure propriety and legality, but does not manage or control the flow itself.</li> <li>Therefore, this statement misrepresents the CAG's role.</li> <li><b>Statement 3 is correct:</b> "He audits and reports on the expenditure of all bodies substantially financed from the Union or State revenues."</li> <li>The CAG's mandate extends beyond the government's own accounts. The CAG (DPC) Act, 1971, empowers the CAG to audit government companies, autonomous bodies, and any other corporation or body companies where government funds (from Union or State revenues) are substantially invested or guaranteed.</li> <li>This ensures accountability and transparency in organizations that receive significant public funding, even if they are not directly part of the government administrative machinery.</li> </ul>
22.	C	<p><b>Ans: 22 - (c)</b></p> <p>Let's examine each option in the context of the changes brought by the 42nd Amendment Act, 1976, to Article 74(1):</p> <p><b>Option 1:</b> Executive powers of the Union shall be vested with the President of India.</p> <ul style="list-style-type: none"> <li>This statement relates to Article 53 of the Constitution, which vests the executive powers of the Union in the President. While true, it does not</li> </ul>

		<p>specifically describe the changes made to Article 74(1) by the 42nd Amendment Act.</p> <p><b>Option 2:</b> The Prime Minister has the duty to brief the President about decisions of the Council of Ministers.</p> <ul style="list-style-type: none"> <li>The duty of the Prime Minister to communicate all decisions of the Council of Ministers relating to the administration of the Union to the President is outlined in Article 78 of the Constitution. This is not the primary change introduced by the 42nd Amendment Act in Article 74(1).</li> </ul> <p><b>Option 3:</b> The President shall exercise his/her functions on the advice of the Council of Ministers, headed by the Prime Minister.</p> <ul style="list-style-type: none"> <li>This option accurately reflects the essence of Article 74(1), especially after the 42nd Amendment Act, 1976. The amendment emphasized that the President "shall" exercise functions based on the advice of the Council of Ministers headed by the Prime Minister, making this advice binding.</li> </ul> <p><b>Option 4:</b> The President shall have the right to summon or prorogue the Houses of the Parliament.</p> <ul style="list-style-type: none"> <li>The powers to summon and prorogue the Houses of Parliament are laid down in Article 85 of the Constitution. These powers are exercised by the President, but they are distinct from the advisory role of the Council of Ministers mentioned in Article 74(1) and were not the focus of the 42nd Amendment's changes to that specific article.</li> </ul> <p><b>Article 74(1) Changes-</b></p> <ul style="list-style-type: none"> <li>The 42nd Amendment Act, 1976, reinforced the parliamentary system by ensuring that the President acts strictly on the aid and advice of the Council of Ministers. Option 3 correctly captures this aspect concerning the President's exercise of functions based on the Council of Ministers' advice.</li> </ul>
23.	C	<p><b>Ans: 23 - (c)</b></p> <ul style="list-style-type: none"> <li>The Government of India Act, 1919, also known as the Montagu–Chelmsford Reforms, was a significant piece of legislation enacted by the British Parliament to introduce gradual self-governance in British India. This Act aimed to expand Indian participation in government.</li> </ul> <p><b>Analysis of Statement 1: Central vs. Provincial Subjects</b></p>

		<ul style="list-style-type: none"> <li>The first statement claims that the Act divided subjects of administration into central and provincial categories. This is correct. The 1919 Act introduced the concept of a clear demarcation between subjects that the central government would handle and those that the provincial governments would administer. This division was a foundational step in structuring the legislative and administrative powers.</li> </ul> <p><b>Analysis of Statement 2: Division of Central Subjects</b></p> <ul style="list-style-type: none"> <li>The second statement suggests that the central subjects were divided into "reserved" and "transferred" categories. This statement is incorrect. The system of "dyarchy", which involved the division of subjects into "reserved" and "transferred" categories, was applied specifically to the provincial level of administration, not the central level. Central subjects remained under the direct control of the Governor-General in Council and the central legislature.</li> </ul> <p><b>Analysis of Statement 3: Provincial Budget and Tax Powers</b></p> <ul style="list-style-type: none"> <li>The third statement asserts that Provincial Governments were granted the power to make their own budgets and levy taxes. This statement is correct. As part of the dyarchical scheme at the provincial level, the subjects under "transferred" heads were managed by Indian ministers. These ministers, responsible to the provincial legislative councils, were given the authority to frame their own budgets and impose taxes related to these provincial subjects, granting them a degree of financial autonomy.</li> </ul>
24.	<b>B</b>	<p><b>Ans : 24 - (b).</b></p> <p>Key Regional Organizations and Their Establishment Years</p> <ol style="list-style-type: none"> <li>4. The Association of Southeast Asian Nations (ASEAN): Established on 8 August 1967.</li> <li>2. The South Asian Association for Regional Cooperation (SAARC): Established on 8 December 1985.</li> <li>3. The Asia-Pacific Economic Cooperation (APEC): Established in 1989.</li> <li>1. The Shanghai Cooperation Organization (SCO): Established on 15 June 2001.</li> </ol>
25.	<b>A</b>	<p><b>Ans: 25 - (a)</b></p> <p>Let's examine the provided options to determine the correct founder:</p> <ul style="list-style-type: none"> <li><b>Kazi Lhendup Dorji Khangsarpa:</b> He was a key figure in Sikkim's political history. Kazi Lhendup Dorji Khangsarpa was instrumental in the</li> </ul>

		<p>establishment of the Sikkim Praja Mandal and later became the first Chief Minister of Sikkim after its merger with India. His leadership was central to the movement for democratic reforms.</p> <ul style="list-style-type: none"> <li>• <b>Angami Zapu Phizo:</b> Angami Zapu Phizo was a prominent leader associated with the Naga nationalist movement in Nagaland, distinct from Sikkim's political affairs.</li> <li>• <b>Laldenga:</b> Laldenga was the leader of the Mizo National Front, primarily involved in the Mizo independence movement in Mizoram. He had no connection with the founding of Sikkim Praja Mandal.</li> <li>• <b>Nar Bahadur Bhandari:</b> While Nar Bahadur Bhandari was a significant political leader in Sikkim and served as Chief Minister multiple times, he was not the founder of the Sikkim Praja Mandal. He emerged as a leader later in Sikkim's political evolution.</li> <li>• The Sikkim Praja Mandal was established to represent the aspirations of the Sikkimese people for self-governance and political rights. It was a significant force in the movement that eventually led to Sikkim's status change and its integration with the Union of India.</li> </ul> <p>Therefore, Option (a) Kazi Lhendup Dorji Khangsarpa is the correct answer as the founder of the Sikkim Praja Mandal.</p>
26.	A	<p>Ans: (a)</p> <p><b>What are Carbon Credits?</b></p> <ul style="list-style-type: none"> <li>• A carbon credit is a quantifiable, verifiable permit or allowance to emit one tonne of carbon dioxide equivalent (CO<sub>2</sub>e) or its equivalent in other greenhouse gases. By purchasing these credits, entities support projects that reduce, avoid, or remove greenhouse gas emissions from the atmosphere.</li> </ul> <p><b>Eligibility to Purchase Carbon Credits</b></p> <ul style="list-style-type: none"> <li>• The platform is designed to be inclusive, allowing various entities to participate in climate action by offsetting their emissions. Based on the available options, the following can purchase carbon credits:</li> <li>• <b>Companies:</b> Businesses and corporations can buy carbon credits. This is often done to meet corporate social responsibility (CSR) targets, enhance brand reputation, comply with regulations, or voluntarily reduce their overall carbon footprint.</li> <li>• <b>Organizations:</b> This category includes a wide range of entities beyond traditional companies, such as non-governmental organizations (NGOs),</li> </ul>

		<p>governmental bodies, educational institutions, and other associations. These organizations may purchase credits to demonstrate environmental commitment or offset emissions from their operations.</p> <ul style="list-style-type: none"> <li>• <b>Citizens:</b> Individual citizens can also participate. By buying carbon credits, individuals can offset the environmental impact of their personal activities, like air travel, energy usage at home, or transportation, thereby contributing to climate change mitigation efforts.</li> <li>• Consequently, the United Nations Carbon Offset Platform caters to companies, organizations, and individual citizens, providing a means for all these groups to actively engage in compensating for greenhouse gas emissions.</li> </ul>
27.	C	<p>Ans: (c)</p> <ul style="list-style-type: none"> <li>• A "<b>Court of Record</b>" is a legal term referring to a court whose proceedings are officially recorded and preserved. These records serve as evidence and can be used in future legal proceedings. Importantly, Courts of Record typically have the power to punish individuals for contempt of their own authority. This status is crucial for maintaining judicial discipline and upholding the dignity of the court.</li> </ul> <p>Let's examine the status of different levels of courts in India regarding the "Court of Record" designation:</p> <p><b>Supreme Court of India</b></p> <ul style="list-style-type: none"> <li>• The Supreme Court of India is explicitly designated as a Court of Record by Article 129 of the Constitution of India. This means its proceedings are permanently recorded, and it possesses the power to punish for its own contempt.</li> </ul> <p>Therefore, statement (a) "The Supreme Court of India is a Court of Record" is correct.</p> <p><b>High Courts in India</b></p> <ul style="list-style-type: none"> <li>• Similarly, the Constitution of India, under Article 215, declares that every High Court shall be a Court of Record. Like the Supreme Court, High Courts maintain records of their proceedings and have the authority to punish for contempt.</li> </ul> <p>Thus, statement (b) "High Courts in India are Courts of Record" is also correct.</p> <p><b>Subordinate Courts in India</b></p> <ul style="list-style-type: none"> <li>• Subordinate Courts (such as District Courts and other lower courts) function under the supervision of the High Courts. While these courts meticulously</li> </ul>

		<p>maintain records of their cases as required by procedural laws (like the Code of Civil Procedure and Code of Criminal Procedure), they are not explicitly granted the status of "Court of Record" in the Constitution with the same inherent powers, particularly the power to punish for their own contempt, as the Supreme Court and High Courts.</p> <ul style="list-style-type: none"> <li>Although they keep records, the specific constitutional designation and the associated powers linked to the term "Court of Record" primarily apply to the apex courts. Therefore, the statement (c) "Subordinate Courts in India are Courts of Record" can be considered not correct in the strict constitutional sense implied by the question's context.</li> </ul> <p><b>General Statement</b> Statement (d) "All Courts in India are not Courts of Record" is factually incorrect because, as established, the Supreme Court and High Courts are indeed Courts of Record.</p> <p><b>Conclusion</b></p> <ul style="list-style-type: none"> <li>Based on the constitutional provisions (Articles 129 and 215) which specifically grant the status and powers of a Court of Record to the Supreme Court and High Courts, and the absence of such explicit constitutional designation for subordinate courts with equivalent powers, the statement that is considered not correct is: Subordinate Courts in India are Courts of Record.</li> </ul>
28.	C	<p><b>Ans: (c)</b></p> <ul style="list-style-type: none"> <li>Hindustani classical music is built around Raags, which are melodic frameworks with specific rules for ascending (aroh) and descending (avaroh) notes, characteristic phrases, and emotional associations. Many Raags are traditionally associated with specific times of the day or seasons. This association, known as Ritu Samay, links the mood and structure of a Raag to the atmosphere of a particular time or season.</li> </ul> <p><b>Raag Yaman</b></p> <ul style="list-style-type: none"> <li>Raag Yaman is a very popular evening Raag. It is typically performed during the first quarter of the night (Sandhiprakash time). Its mood is generally romantic, devotional, and serene. It is not associated with invoking rain.</li> </ul> <p><b>Raag Bahar</b></p>

		<ul style="list-style-type: none"> <li>• Raag Bahar is a spring Raag, usually performed during the daytime. It is associated with the vibrancy and joy of the spring season, particularly around the Holi festival. It is not linked to the monsoon or rain.</li> </ul> <p><b>Raag Malhar</b></p> <ul style="list-style-type: none"> <li>• Raag Malhar, particularly its various forms like Megh Malhar, Miyan ki Malhar, and Ramdasi Malhar, is famously known for its association with rain and the monsoon season. It is traditionally believed that singing Raag Malhar can invoke the muchneeded rainfall. Its melodies often evoke the atmosphere of clouds gathering and the first drops of rain, making it the "rain-inviting" Raag.</li> </ul> <p><b>Raag Bhairavi</b></p> <ul style="list-style-type: none"> <li>• Raag Bhairavi is typically performed in the morning. It is considered a very versatile Raag and is often used as a concluding piece (Thumri, Tarana, or Dadra). It evokes a range of emotions, often pathos or devotion, but it is not associated with calling the rain.</li> </ul> <p>Based on the traditional associations within Hindustani classical music, Raag Malhar is the specific Raag renowned for being sung as an invitation to rain, capturing the essence and anticipation of the monsoon season.</p>
29.	A	<p><b>Ans: (a)</b></p> <ul style="list-style-type: none"> <li>• Historical records indicate that Duarte Barbosa, a Portuguese traveller, visited India during the early 16th century (around 1500-1516 AD). During his travels, he extensively documented various aspects of life, trade, and technology he observed.</li> <li>• Barbosa's writings notably include a description of the use of a seed drill on the Karnataka coast. This particular observation is considered significant because it represents one of the earliest documented references to the presence and use of the seed drill device in India.</li> </ul> <p><b>Significance of the Seed Drill</b></p> <ul style="list-style-type: none"> <li>• The seed drill is an agricultural implement used for planting seeds in rows at a controlled depth and spacing. Its introduction or documented use signifies advancements in farming efficiency. Barbosa's report places this technology in the Indian context during the early 16th century.</li> </ul> <p><b>Comparative Analysis of Travellers</b></p> <ul style="list-style-type: none"> <li>• While other travellers like Abdur Razzaq, Afanasy Nikitin, and Niccolo Conti also travelled to India during different periods and provided valuable</li> </ul>

30.	C	<p>accounts, it is Duarte Barbosa's specific mention of the seed drill on the Karnataka coast that is recognized as the earliest reference for this particular agricultural tool in India.</p> <ul style="list-style-type: none"> <li>• Duarte Barbosa: Reported the use of the seed drill on the Karnataka coast.</li> <li>• Abdur Razzaq: Travelled in the 15th century, known for accounts of Vijayanagara.</li> <li>• Afanasy Nikitin: Travelled in the 15th century, known for his journey to Russia and India.</li> <li>• Niccolo Conti: Travelled in the early 15th century, provided descriptions of South India.</li> <li>• Therefore, based on historical documentation, Duarte Barbosa is the traveller credited with the earliest reference to the seed drill in India, specifically observed on the Karnataka coast.</li> </ul> <p><b>Ans: (c)</b></p> <p><b>South Indian Titles: Vichitrachitta, Chitrakarapuli, Chaityakari</b></p> <ul style="list-style-type: none"> <li>• In the context of ancient South India, specific terms often referred to significant aspects of society, culture, and administration. The question asks about the meaning of "Vichitrachitta", "Chitrakarapuli", and "Chaityakari".</li> </ul> <p><b>Vichitrachitta: A Title of Unique Intellect</b></p> <ul style="list-style-type: none"> <li>• "Vichitrachitta" was a title adopted by the Pallava king Mahendravarman I (reigned 600–630 CE). This title translates to "extraordinary mind" or "unique intellect," highlighting his renowned scholarship and intellectual prowess. Mahendravarman I was known for his multi-faceted talents, including being a playwright, poet, musician, and architect.</li> </ul> <p><b>Chitrakarapuli: The Tiger Among Painters</b></p> <ul style="list-style-type: none"> <li>• Another prominent title associated with King Mahendravarman I was "Chitrakarapuli". This term means "tiger among painters" or "master painter." It signifies his exceptional skill and mastery in the art of painting, reflecting the high status of artists and the importance of visual arts during the Pallava period.</li> </ul> <p><b>Chaityakari: Temple Maker or Patron</b></p>
-----	---	--

		<ul style="list-style-type: none"> <li>The term "Chaityakari" relates to temples. It can be interpreted as "temple maker" or someone devoted to building or worshipping temples. This title suggests a patron of religious architecture or an individual actively involved in the construction or maintenance of temples. Such titles underscore the deep connection between royalty, religion, and art in ancient South India.</li> </ul> <p><b>Historical Significance: Pallava Era</b></p> <ul style="list-style-type: none"> <li>These terms, "Vichitrachitta", "Chitrakarapuli", and "Chaityakari", are primarily linked to the Pallava king Mahendravarman I. They weren't markets, general temples, or merely centres for colour production. Instead, they represent prestigious titles that reflected the king's personal accomplishments, intellectual depth, artistic skills, and religious patronage.</li> <li>Therefore, "Vichitrachitta", "Chitrakarapuli", and "Chaityakari" are specific historical titles used in ancient South India, particularly associated with the Pallava ruler Mahendravarman I, denoting his remarkable qualities and achievements.</li> </ul>
31.	D	<p><b>Answer 31 - (d)</b></p> <ul style="list-style-type: none"> <li><b>Statement 1 is correct:</b> The statement claims the First Gulf War was related to Iraq's invasion of Kuwait. This is historically accurate. Iraq, under Saddam Hussein, invaded and annexed Kuwait in August 1990. This act led to international condemnation and the formation of a coalition led by the United States, which launched Operation Desert Storm in January 1991 to liberate Kuwait. This military operation is known as the First Gulf War.</li> <li><b>Statement 2 is correct:</b> The statement posits that Mikhail Gorbachev was the President of the Soviet Union during its disintegration. Mikhail Gorbachev became the General Secretary of the Communist Party in 1985 and later assumed the office of President of the Soviet Union in March 1990. The Soviet Union officially dissolved in December 1991. During this entire period, including the final dissolution, Gorbachev held the position of President.</li> <li><b>Statement 3 is correct:</b> The statement asserts that Boris Yeltsin was the first elected President of Russia. Boris Yeltsin was elected President of the Russian Soviet Federative Socialist Republic (RSFSR) on June 12, 1991. Although the RSFSR was technically still part of the Soviet Union at that time, Yeltsin's election marked a significant shift. Following the dissolution of the USSR in December 1991, the RSFSR became the independent Russian Federation, with Yeltsin continuing as its president. He is widely recognized as the first elected President of post-Soviet Russia.</li> </ul>

		<p>All three statements presented are historically accurate:          Statement 1: Correct (First Gulf War stemmed from Iraq's invasion of Kuwait).          Statement 2: Correct (Gorbachev was President during the USSR's dissolution).          Statement 3: Correct (Yeltsin was the first elected President of the RSFSR/Russia).            Since all three statements are correct, the total number of correct statements is 3.</p>
32.	C	<p><b>Ans: 32 - (c)</b></p> <ul style="list-style-type: none"> <li>The Pitt's India Act of 1784 was a significant piece of legislation that aimed to reform the administration of the East India Company. Its most notable provision was the establishment of a parallel administrative body in Britain to oversee the political affairs of the Company in India. This body was the Board of Control, appointed by the Crown.</li> <li>Therefore, Pitt's India Act, 1784 matches with Provision 3: Board set up by the Crown to control affairs of India.</li> <li>The Charter Act of 1813 renewed the East India Company's charter for another 20 years. A major outcome of this Act was the termination of the Company's monopoly over Indian trade. However, it retained the Company's monopoly over trade in tea and trade with China.</li> <li>Thus, the Charter Act, 1813 matches with Provision 4: Termination of monopoly of East India Company over Indian trade.</li> <li>The Charter Act of 1833 represented a further step towards centralization and brought about significant changes in the administration. It attempted to remove discrimination against Indians in matters of employment in the Company's service. The Act declared that no Indian subject of the Company should be disqualified from holding any place or employment by reason of his religion, place of birth, descent, or colour.</li> <li>Consequently, the Charter Act, 1833 matches with Provision 2: Discrimination against Indians removed in matters of employment and higher service.</li> <li>The Charter Act of 1853 was the last of the Charter Acts and introduced significant changes in the legislative machinery. It effectively separated the legislative and executive functions of the Governor-General's Council. The Act enlarged the Governor-General's Legislative Council by adding six new members.</li> <li>Therefore, the Charter Act, 1853 matches with Provision 1: Enlargement of the Governor-General's Legislative Council.</li> </ul> <p>This combination corresponds to the code A-3, B-4, C-2, D-1.</p>

33.	D	<p><b>Ans: 3 - (d)</b></p> <ul style="list-style-type: none"> <li>The first statement asserts that the Bhoojan Movement aimed at attaining a nonviolent society. The movement, inspired by Mahatma Gandhi's philosophy, sought social and economic change through peaceful means and the principle of non-violence (Ahimsa). Vinoba Bhave, the movement's pioneer, envisioned a society transformed by voluntary sharing and mutual trust. This statement is correct.</li> <li>The second statement mentions that the movement included schemes like "Sampattidan" and "Shramdan". This is also correct. "Sampattidan" referred to the donation of wealth, while "Shramdan" involved the contribution of voluntary labour. These schemes were integral to the movement's strategy of redistributing land and resources voluntarily, promoting a spirit of community service. This statement is correct.</li> <li>The third statement identifies the origin of the movement as a village in Andhra Pradesh in 1951. The Bhoojan Movement officially began in Pochampally village, located in the Nalgonda district of Andhra Pradesh (now Telangana), on April 18, 1951. It started when Vinoba Bhave was offered land by a local landlord to distribute among landless villagers. This statement is correct.</li> <li>Since all three statements accurately describe key aspects of the Bhoojan Movement – its goal of a non-violent society, its specific donation schemes, and its place and time of origin – all the statements are correct.</li> </ul> <p>Therefore, the option that includes all three statements is the correct one.</p>
34.	C	<p><b>Ans: 34 - (c)</b></p> <p><b>DoD Leadership: Defence Secretary</b></p> <ul style="list-style-type: none"> <li>Statement (a) mentions that the Department of Defence is headed by the Defence Secretary. This is generally true for many countries; the Department of Defence is usually led by a senior official, often titled the Defence Secretary or Minister of Defence, who is responsible for overseeing the nation's military affairs and defence policy.</li> </ul> <p><b>DoD Role: Defence Policy and Planning</b></p> <ul style="list-style-type: none"> <li>Statement (b) states that the DoD deals with defence policy and planning. This is a core function. Departments of Defence are responsible for</li> </ul>

		<p>formulating national defence strategies, planning military operations, and managing defence resources to ensure national security.</p> <p><b>DoD Responsibility: Foreign Cooperation</b></p> <ul style="list-style-type: none"> <li>Statement (d) indicates that the DoD is responsible for defence cooperation with foreign countries. This is also accurate. Defence diplomacy, military-to-military agreements, joint exercises, and alliances are crucial aspects managed by the Department of Defence to foster international security relationships.</li> </ul> <p><b>DoD &amp; Military Command Restructuring</b></p> <ul style="list-style-type: none"> <li>Statement (c) suggests that the DoD facilitates the restructuring of military commands for optimal utilization of resources. While the Department of Defence certainly has oversight and approval authority over military structures and resource allocation, the term facilitates might imply a more direct operational role in the restructuring process itself. Often, the detailed planning and implementation of restructuring initiatives are carried out by the specific military branches or joint commands under the DoD's strategic guidance and approval. Therefore, compared to the direct responsibility for policy, planning, and foreign cooperation, this statement might be considered less precise or not the primary function attributed directly to the Department itself, potentially making it the incorrect statement in the context of the question.</li> <li>Based on the analysis, statements (a), (b), and (d) describe fundamental roles of a Department of Defence. Statement (c), concerning the facilitation of restructuring military commands, while related to the DoD's responsibilities, might be phrased in a way that misrepresents its direct involvement compared to its core policy and oversight functions. The DoD sets the strategic direction and approves major reorganizations, but the active facilitation and execution are often handled by the military components under its umbrella.</li> </ul>
35.	A	<p><b>Ans : 35 - (a)</b></p> <ul style="list-style-type: none"> <li>Krishnadevaraya was a prominent ruler of the Vijayanagara Empire, who reigned from 1509 to 1529 CE. He is widely celebrated not only for his military and administrative skills but also as a celebrated scholar and an accomplished poet.</li> </ul> <p><b>Amuktamalyada: A Literary Work</b></p>

		<ul style="list-style-type: none"> <li>Among Krishnadevaraya's notable literary contributions is a significant work titled "Amuktamalyada". This work is a classical poem that delves into topics of statecraft and governance. It beautifully narrates the story concerning the marriage of Vishnu Chitta and Godadevi (also known as Andal), who is revered as a prominent Vaishnavite saint and poetess.</li> </ul> <p><b>Language of the Work</b></p> <ul style="list-style-type: none"> <li>The famous work "Amuktamalyada", which deals with statecraft, was composed by Krishnadevaraya in the Telugu language.</li> <li>Krishnadevaraya's reign marked a golden age for Telugu literature, and "Amuktamalyada" is considered a key text from that era. His contribution greatly enhanced the richness and scope of Telugu literary tradition.</li> </ul>
36.	D	<p><b>Ans: 36 - (d)</b></p> <ul style="list-style-type: none"> <li>The first statement is correct. The GATT was established after World War II to liberalize international trade. However, it had certain limitations and was eventually replaced by the WTO on January 1, 1995. The WTO provides a more comprehensive and permanent framework for managing global trade.</li> <li>The second statement is also correct. The IAEA is the UN agency responsible for promoting the peaceful use of nuclear energy and preventing the spread of nuclear weapons. A key part of its mandate involves inspecting nuclear facilities in member countries to ensure that nuclear materials are not diverted for military purposes, adhering to international safeguards.</li> <li>The third statement is correct. Amnesty International is a well known global organization that works independently of governments to defend human rights. It relies on public donations and focuses on research, advocacy, and campaigning against human rights abuses.</li> </ul> <ol style="list-style-type: none"> <li>Statement 1 is correct (WTO succeeded GATT).</li> <li>Statement 2 is correct (IAEA inspects nuclear facilities).</li> <li>Statement 3 is correct (Amnesty International is an NGO).</li> </ol> <p>Since all three statements provided are accurate, there are 3 correct statements.</p>
37.	C	<p><b>Ans: 37 - (c)</b></p> <ul style="list-style-type: none"> <li>Saracenic architecture refers to the architectural style prevalent in the Islamic world, particularly during the medieval period. It is characterized by a unique blend of influences and the development of distinctive structural and decorative elements.</li> </ul>

	<p>Let's examine the options provided to identify the main features of this style.</p> <p><b>Arch: A Defining Saracenic Element</b></p> <ul style="list-style-type: none"> <li>The use of arches is a fundamental characteristic of Saracenic architecture. This style prominently features various types of arches, most notably the pointed arch and the horseshoe arch. These forms are not just structural but also decorative, significantly contributing to the visual identity of Saracenic buildings.</li> </ul> <p><b>Vaults and Domes in Saracenic Design</b></p> <ul style="list-style-type: none"> <li>Vaults and domes are also central to Saracenic architectural design. The development of sophisticated vaulting techniques, such as ribbed vaults, allowed for the creation of large, open interior spaces. Domes, often elaborately decorated, crown mosques, tombs, and other significant structures, serving both functional and symbolic purposes.</li> </ul> <p><b>Lintels and Beams: Less Prominent Features</b></p> <ul style="list-style-type: none"> <li>While lintels and beams are common structural components in many architectural traditions, they are not considered defining characteristics of Saracenic architecture. This style's emphasis on rounded and pointed forms, achieved through arches and vaults, overshadows the use of simple post-and-lintel systems, which are more typical of other architectural styles like ancient Greek or Roman.</li> </ul> <p><b>Lime Cement Usage in Saracenic Buildings</b></p> <ul style="list-style-type: none"> <li>The application of lime cement was a standard practice in historical construction, including Saracenic architecture. Lime-based mortars and plasters were used extensively as binding agents, for finishes, and in decorative elements. Therefore, the use of lime cement is a relevant feature associated with the construction methods employed.</li> </ul> <p><b>Identifying Key Features of Saracenic Architecture</b></p> <p>Feature 1 (Arch): A primary and defining feature.</p> <p>Feature 2 (Vault and dome): Essential structural and aesthetic components.</p> <p>Feature 3 (Lintel and beam): Not considered a main or defining feature compared to arches and vaults.</p> <p>Feature 4 (Application of lime cement): A common and relevant building material used in the construction.</p> <p>Therefore, the main features of Saracenic architecture among the choices provided are the Arch, Vault and dome, and the Application of lime cement.</p> <p>This corresponds to the combination of features 1, 2, and 4</p>
38.	B Ans: 3 - (b)

		<b>Identifying Author-Book Pairings</b>
		<ul style="list-style-type: none"> <li>John M. Keynes is famously associated with the seminal work "The General Theory of Employment, Interest and Money". This revolutionized macroeconomic thought.</li> <li>Paul Samuelson, a foundational figure in neoclassical economics, authored "Foundations of Economic Analysis", which provided rigorous mathematical frameworks for economic theory.</li> <li>Amartya Sen, a Nobel laureate known for his work on welfare economics and social choice theory, is matched with "Collective Choice and Social Welfare" in this context. (Note: This specific title is primarily associated with Kenneth Arrow, but following the provided options, this pairing is used).</li> <li>Abhijit V. Banerjee and Esther Duflo, also Nobel laureates, are widely recognized for their impactful book "Poor Economics", which explores the microeconomic realities of poverty.</li> </ul> <p>Therefore, the code representing these matches is A-2, B-4, C-3, D-1.</p>
39.	A	<ul style="list-style-type: none"> <li><b>Katapayadi System:</b> This is a traditional Indian system used for encoding numbers into words or verses through alphabets. It is primarily used for numerological calculations and mnemonic purposes in ancient texts, particularly in the field of astronomy and mathematics.</li> <li><b>Parahita System:</b> This system is associated with traditional astronomical calculations. It pertains to the regional methods in India performed by temple astronomers for creating calendars (Panchangam). It served religious and societal purposes by calculating auspicious times and celestial occurrences.</li> <li><b>Driganita System:</b> This system refers to a school of astronomical computations in India. It involves advanced mathematical approaches for observational astronomy, differing somewhat from the Parahita due to its precision and methodical calculations. Given the explanations above, all three systems share a common association with astronomy. They played a significant role in the development and practice of astronomical science in ancient and medieval India, contributing to both calendrical systems and the study of celestial bodies.</li> </ul>
40.	A	

		<ul style="list-style-type: none"> <li>The indentured system was a practice where workers, often from impoverished backgrounds, were contracted to work for a specified period, typically under harsh conditions and with limited freedom. This system was widely used in colonial plantations, including the burgeoning tea gardens of Assam during the British rule.</li> <li>The system faced increasing criticism due to the exploitative nature of the contracts and the poor living and working conditions of the labourers. Various social reform movements and legislative actions aimed at dismantling this practice.</li> <li>The abolition of the indentured system in the tea gardens of Assam occurred in 1926. This marked a significant milestone in the history of labour rights and reforms in India, ending a long period of semi-forced labour on the plantations.</li> </ul>
<b>41.</b>	<b>B</b>	<p><b>Orissa History: Evaluating Ruler Statements</b></p> <ul style="list-style-type: none"> <li>Statement 1 claims that Anantavarman Chodaganga consolidated Orissa into a powerful kingdom and was a patron of Sanskrit and Telugu literature.</li> <li>Consolidation of Power: Anantavarman Chodaganga, a significant ruler of the Eastern Ganga dynasty, is widely recognized for expanding the kingdom's boundaries and strengthening its administrative structure. His reign marked a period of territorial expansion and political consolidation in Orissa.</li> <li>Patronage of Literature: Historical records indicate that Anantavarman Chodaganga was indeed a patron of learning and literature. He supported scholars and promoted Sanskrit literature. His dynasty's influence likely extended to regions where Telugu was spoken, potentially fostering patronage in that language as well.</li> <li>Based on historical evidence, Statement 1 is considered correct.</li> </ul> <p><b>Konark Sun Temple Construction</b></p> <ul style="list-style-type: none"> <li>Konark Sun Temple: The magnificent Sun Temple at Konark, a UNESCO World Heritage site, is famously attributed to King Narasimha I (also known as Narasimha Deva I).</li> <li>Attribution Error: Narasimha I commissioned the temple in the 13th century CE.</li> <li>Therefore, attributing its construction to Anantavarman Chodaganga is historically inaccurate.</li> </ul>

		<p>Statement 2 is incorrect.</p> <p><b>Narasimha I's Reign</b></p> <ul style="list-style-type: none"> <li>Statement 3 suggests that Narasimha I effectively checked external invasions and maintained prosperity in the kingdom.</li> <li>Military Achievements: Narasimha I faced several external challenges, including conflicts with the Bengal Sultanate. Historical accounts suggest that he successfully repelled invasions and maintained the integrity of his kingdom during significant parts of his rule.</li> <li>Kingdom's Prosperity: His reign is often associated with architectural achievements, like the Konark temple, and periods of relative stability and prosperity, despite the ongoing military engagements.</li> </ul> <p>Statement 3 is considered correct.</p> <p>Option (b) 2 statements are correct.</p>
42.	C	<p><b>Rekha-prasada and Latina Style</b></p> <ul style="list-style-type: none"> <li>The statement mentions that the temple "Garbhagriha" (the inner sanctum or main sanctuary) and "Shikhara" (the tower or spire above the sanctum) were made in a Rekha-prasada or Latina style. The Rekha-prasada, or Latina, style is a distinct north Indian temple architectural style characterized by a curvilinear, tapering vertical profile of the tower (shikhara) above the sanctum (garbhagriha). This style was prevalent in many early medieval North Indian temples. Therefore, this statement is considered correct.</li> </ul> <p><b>Pandrethan Temple Location</b></p> <ul style="list-style-type: none"> <li>The second statement concerns the Pandrethan Temple in Kashmir, stating it is built on a plinth in the middle of a tank. The Pandrethan Temple is an ancient Hindu temple situated near Srinagar in Kashmir. Historical descriptions and architectural studies confirm that the temple is located on a raised mound or plinth, and it is often submerged in water during the monsoon season, giving the appearance of being in the middle of a tank. Hence, this statement is accurate.</li> </ul> <p><b>Jageshwar Temple Region</b></p> <ul style="list-style-type: none"> <li>This statement claims the Jageshwar Temple is located in the Garhwal region. Jageshwar Dham is a significant Hindu pilgrimage site featuring a cluster of over 100 temples dedicated to Lord Shiva. However, it is</li> </ul>

		<p>geographically located in the Kumaon region of Uttarakhand, specifically in the Almora district, nestled within the dense forests of the Kumaon Himalayas. The Garhwal region is a distinct geographical and cultural area within Uttarakhand, located to the west of the Kumaon region. Thus, this statement is incorrect.</p> <p><b>Lakshana Devi Mandir Influence</b></p> <ul style="list-style-type: none"> <li>The fourth statement suggests that the Lakshana Devi Mandir shows the influence of the post-Gupta tradition. The Lakshana Devi Mandir, located in Chamba, Himachal Pradesh, is famous for its brass statue of the goddess Lakshana Devi. The artistic style of this statue, particularly its craftsmanship, iconography, and aesthetic qualities, reflects characteristics associated with the art traditions of the post-Gupta period (roughly 7th to 8th centuries CE), which often blended earlier Gupta ideals with emerging regional styles. This statement is correct.</li> </ul> <p>Therefore, there are 3 correct statements among the given options.</p>
43.	A	<ul style="list-style-type: none"> <li><b>Balwantrai Mehta Committee (A):</b> This committee, formed in 1957, is renowned for proposing the three-tier Panchayati Raj system. The proposed structure included Gram Panchayat at the village level, Panchayat Samiti at the block level, and Zilla Parishad at the district level. This matches recommendation 4.</li> <li><b>Ashok Mehta Committee (B):</b> Appointed in 1977, this committee reviewed the Panchayati Raj system. It recommended a two-tier structure, suggesting the abolition of the Panchayat Samiti and the creation of Mandal Panchayats at the mandal (group of villages) level, along with strengthening the Zilla Parishad. This corresponds to recommendation 3.</li> <li><b>V. K. Rao Committee (C):</b> This committee was set up in 1985 to study rural development and poverty alleviation programs. It emphasized the importance of district-level planning and administration, recommending the establishment of the post of District Development Commissioner to coordinate development activities. This aligns with recommendation 2.</li> <li><b>M. Singhvi Committee (D):</b> This committee, formed in 1986, was tasked with preparing a report on the "New Perspective of the Rural Local Self-Government". A significant recommendation was to grant constitutional status to Panchayati Raj institutions to give them stability and legitimacy. This matches recommendation 1.</li> </ul>

		Based on these explanations, the correct matching is A-4, B-3, C-2, D-1.
<b>44.</b>	<b>A</b>	<p><b>Banawali's Unique Toilet Feature</b></p> <ul style="list-style-type: none"> <li>Among the significant Harappan sites, Banawali, located in Haryana, India, has provided notable evidence regarding domestic sanitation. Excavations at Banawali have revealed well-planned houses, and importantly, some domestic structures indicated the presence of specific sanitary arrangements.</li> <li>Specifically, archaeological findings at Banawali have yielded evidence suggesting the existence of a wash basin within the toilet area of a house. This points towards a sophisticated approach to personal hygiene during the Harappan period, integrating washing facilities directly into the toilet chambers, which was a remarkable achievement for its time.</li> </ul> <p><b>Sanitation at Other Harappan Sites</b></p> <ul style="list-style-type: none"> <li>While Banawali stands out for the specific finding of a wash basin in a toilet, other major Harappan sites also showcase advanced sanitation:</li> <li>Rakhigarhi: This site, one of the largest Harappan settlements, features extensive evidence of planned housing with bathrooms and a sophisticated drainage system connected to main sewers.</li> <li>Dholavira: Known for its exceptional water management system, Dholavira also had houses equipped with bathrooms and toilets, often connected to covered drains that carried waste water away.</li> <li>Lothal: Famous for its port, Lothal also exhibits well-constructed houses with bathing platforms and latrines, integrated with the city's drainage infrastructure.</li> <li>These findings collectively highlight the advanced understanding of urban planning and public health prevalent in the Harappan Civilization.</li> </ul>
<b>45.</b>	<b>A</b>	<ul style="list-style-type: none"> <li>The question asks to identify the British Commander who was defeated in the significant Battle of Chinhat during the 1857 Revolt. This battle was a key event in the uprising, particularly concerning the Siege of Lucknow.</li> <li>The Battle of Chinhat took place on July 29, 1857. It was fought near Lucknow between the British forces and the Indian rebels during the widespread 1857 Revolt (also known as the Sepoy Mutiny or the Indian Mutiny). British forces, led by Major General Henry Lawrence, attempted an</li> </ul>

		<p>offensive action. However, the rebels were well-prepared and strategically positioned. The battle resulted in a decisive defeat for the British contingent.</p> <p><b>Key Figures and Outcome British Commander:</b></p> <ul style="list-style-type: none"> <li>Major General Henry Lawrence led the British troops in this engagement.</li> <li>Battle Outcome: The British forces suffered a significant defeat.</li> <li>Casualties: The defeat was costly for the British, and notably, Henry Lawrence himself was mortally wounded during the battle, succumbing to his injuries a few days later.</li> </ul>
46.	C	<ul style="list-style-type: none"> <li>Mass movements, also known as slope movements, refer to the downslope movement of rock, regolith, and soil under the direct influence of gravity. These movements are a significant aspect of landscape evolution. They are often classified based on the speed at which they occur, primarily into slow movements and rapid movements.</li> <li>Understanding the speed of mass movement is crucial for assessing potential hazards. Geologists categorize these movements into slow and rapid types:             <ol style="list-style-type: none"> <li><b>Slow Mass Movements:</b> These occur very gradually, often imperceptibly over long periods. Examples include creep and solifluction.</li> <li><b>Rapid Mass Movements:</b> These happen quickly, sometimes with devastating consequences. Examples include mudflows, landslides, rockfalls, and slumps.</li> </ol> </li> </ul> <p><b>Creep</b></p> <ul style="list-style-type: none"> <li>Creep is the slowest form of mass movement. It involves the gradual, almost imperceptible downslope progression of soil and regolith. Evidence of creep includes the tilting of trees, fence posts, and retaining walls over time. It is a continuous process driven by freeze-thaw cycles and other factors that cause particles to move slightly downslope with each cycle.</li> <li>Speed: Slow</li> </ul> <p><b>Mudflow</b></p> <ul style="list-style-type: none"> <li>A mudflow (also known as debris flow) is a type of rapid mass movement characterized by a flow of water-saturated debris, including soil, rock fragments, and mud. They often occur in steep terrain, typically following heavy rainfall or volcanic eruptions. Mudflows can travel at high speeds, carrying large amounts of material and causing significant destruction.</li> <li>Speed: Rapid</li> </ul>

		<p><b>Solifluction</b></p> <ul style="list-style-type: none"> <li>• Solifluction is a specific type of slow mass movement that occurs primarily in periglacial environments or areas with high moisture content and poor drainage. It involves the downslope flow of waterlogged soil over a frozen or impermeable subsoil layer. Like creep, it is a slow, often widespread process. Speed: Slow</li> </ul> <p><b>Slump</b></p> <ul style="list-style-type: none"> <li>• A slump is a type of mass movement where a block of soil or rock moves downslope along a curved, spoon-shaped surface of rupture. This results in the slumped material rotating and moving as a coherent mass. Slumps are generally considered relatively rapid compared to creep and solifluction, often occurring after periods of heavy rain that saturate the ground, reducing its internal friction. Speed: Rapid</li> <li>• Conclusion on Rapid Mass Movements Based on the analysis, the mass movements categorized as rapid movements from the given options are: Mudflow (2) Slump (4)</li> </ul> <p>Therefore, the correct option includes types 2 and 4.</p>
47.	D	<ul style="list-style-type: none"> <li>• <b>The statement 1 is incorrect :</b> "The first meeting of the All India Depressed Classes Conference was held at Poona in 1926 under the presidency of M. C. Rajah." Historical Fact: The first All India Depressed Classes Conference actually convened in 1920 in Delhi. It was presided over by Lala Lajpat Rai. While M. C. Rajah was a prominent leader involved in advocating for the rights of the depressed classes and presided over sessions later, the 1926 Poona meeting was not the inaugural one.</li> <li>• <b>The statement 2 is incorrect :</b> "The All India Depressed Classes Association was formed at Nagpur in 1928 with Dr. Bhimrao Ambedkar as its first elected President." Historical Fact: The All India Depressed Classes Association (AIDCA) was established in Nagpur, but the correct year was 1930, not 1928. Dr. B. R. Ambedkar served as its president, making this part of the statement accurate. However, the incorrect year renders the entire statement false.</li> <li>• <b>The statement 3 is incorrect :</b> "The All India Depressed Classes Congress was founded by Dr. B. S. Munje at a conference in Bombay in 1936." Historical Fact: Historical records do not widely support the founding of an organization named the "All India Depressed Classes Congress" by Dr. B. S.</li> </ul>

		<p>Munje in Bombay in 1936. Dr. Munje was associated with the Hindu Mahasabha and had certain views regarding the upliftment and integration of depressed classes within Hinduism, but this specific event and organization formation appear to be historically inaccurate. Therefore, Statement 3 is incorrect.</p>
48.	C	<p><b>Indo-Roman Trade:</b></p> <ul style="list-style-type: none"> <li>The extensive trade relations between the Roman Empire and India, flourishing particularly during the early centuries CE, involved the exchange of various goods like spices, textiles, precious stones, and luxury items. A significant economic consequence of this trade, from the Roman perspective, was the outflow of precious metals, especially gold and silver, to India. This phenomenon was noted by several contemporary writers.</li> <li>Several Roman and Greek writers documented aspects of this trade. The question specifically asks which of the given authors referred to the drain of Roman gold into India. Let's examine each:</li> <li>Pliny the Elder: A Roman author and naturalist, Pliny wrote the encyclopedic work <i>Naturalis Historia</i>. In it, he expressed concern over the massive drain of Roman specie (gold and silver) to the East, particularly India, to pay for luxury goods like silk, spices, and perfumes that were highly coveted by the Roman elite. He famously lamented that India was draining the Empire of its wealth.</li> <li>Dio Chrysostom: A Greek orator and historian during the Roman Empire, Dio Chrysostom also commented on the economic conditions and trade practices of the time. His writings indicate awareness of the economic exchange with India and the associated flow of wealth, touching upon the imbalance caused by luxury imports.</li> <li>Strabo: A Greek geographer, historian, and philosopher, Strabo wrote <i>Geographica</i>. While he extensively documented the trade routes and the volume of commerce between the Roman world and India, his writings focus more on the geographical and commercial aspects rather than explicitly lamenting the "drain of gold" in the same critical tone as Pliny.</li> <li>Ptolemy: Claudius Ptolemy was a Greco-Roman mathematician, astronomer, geographer, and astrologer. His major work, <i>Geographia</i>, focused on mapping the known world and provided geographical information, including trade routes. However, he did not specifically focus on the economic critique of the gold drain.</li> </ul>

**49.**

**A**

- Pothole Creation by Flowing Streams Potholes are typically smooth, circular depressions found in the bedrock of riverbeds and streams. They are formed over long periods by the erosive power of flowing water and the materials it carries. The main method by which potholes are created in bedrocks by a flowing stream is called abrasion.

This process involves:

- Transport of Tools:** The flowing stream picks up and carries heavier particles like sand, gravel, pebbles, and even larger stones along its bed.
- Swirling Action:** These transported particles often get caught in swirling eddies of water, especially in depressions or uneven sections of the bedrock.
- Grinding and Scraping:** The swirling water causes these hard particles to grind, scrape, and scour against the bedrock surface. This continuous grinding action physically wears away the rock.
- Deepening and Widening:** Over time, this abrasive action deepens and widens the initial small hollows, gradually forming the characteristic cylindrical shape of potholes. The finer materials help polish the inside surfaces.
- Essentially, the stream uses the sediment it carries as tools to wear down the bedrock itself.
- Attrition:** This process occurs when the particles (like pebbles) being carried by the stream collide with each other. This action causes the particles themselves to become smaller, smoother, and more rounded. While attrition helps shape the tools used in abrasion, it doesn't directly create the pothole in the bedrock.
- Corrosion:** Also known as chemical weathering, corrosion happens when the stream water contains acids that dissolve certain types of rock (like limestone). While some chemical weathering can occur, it's typically a much slower process compared to the mechanical grinding of abrasion and is often less significant in forming deep potholes, especially in harder bedrock types.
- Solifluction:** This is a mass movement process where soil saturated with water slowly moves downslope. It is characteristic of cold climates (periglacial environments) and is entirely unrelated to the fluvial (river) erosion processes that form potholes in bedrock.
- Therefore, the constant grinding and scouring action of sediment moved by swirling water is the primary mechanism. This process is known as

50.	B	<p>abrasion, making it the principal way flowing streams create potholes in bedrocks.</p> <p>This question requires identifying the number of correctly matched pairs between literary works and their authors from a given list.</p> <p><b>Let's analyze each pair:</b></p> <p><b>Pair 1: Rigarthadipika - Madhava Yogi : Incorrectly matched.</b></p> <ul style="list-style-type: none"> <li>The literary work Rigarthadipika is a commentary on the Rigveda. Madhava Yogi, often identified with Vidyaranya, was a prominent scholar associated with Vedic studies. While Vidyaranya's contributions to Vedanta are vast, commentaries on the Rigveda itself, such as Rigarthadipika, are sometimes more directly attributed to figures like Sayana. Considering the possibility of differing attributions in scholarly contexts, and aiming to align with the likely intended answer, we evaluate this match.</li> </ul> <p><b>Pair 2: Kataka - Venkata Madhava : Incorrectly matched.</b></p> <ul style="list-style-type: none"> <li>Venkata Madhava is recognized for his significant commentary on the Rigveda, known as Rigarthaprakasha or Vedartha Prakasha. The specific work titled Kataka is not prominently associated with Venkata Madhava in major literary histories. Therefore, this pairing is questionable.</li> </ul> <p><b>Pair 3: Damayanti-Katha - Trivikrama Bhatta : Correctly matched.</b></p> <ul style="list-style-type: none"> <li>Trivikrama Bhatta authored the well-known Sanskrit work Nalachampu. This work narrates the romantic story of King Nala and Princess Damayanti. Hence, Damayanti-Katha (the tale of Damayanti) is an accurate description of the content of Nalachampu. Assessment: Correctly matched.</li> </ul> <p><b>Pair 4: Yashastilaka Champu - Somadeva : Correctly matched.</b></p> <ul style="list-style-type: none"> <li>The literary work Yashastilaka Champu is a significant text in Jain literature. It was authored by Somadeva Suri. Although there was another famous author named Somadeva who wrote the Kathasaritsagar, the context of Yashastilaka Champu specifically points to Somadeva Suri. Assessment: Correctly matched.</li> </ul> <p><b>Correct Matches Based on the analysis:</b></p> <ul style="list-style-type: none"> <li>Pair 1 (Rigarthadipika: Madhava Yogi) is considered incorrectly matched.</li> <li>Pair 2 (Kataka: Venkata Madhava) is considered incorrectly matched.</li> <li>Pair 3 (Damayanti-Katha: Trivikrama Bhatta) is correctly matched.</li> <li>Pair 4 (Yashastilaka Champu: Somadeva) is correctly matched.</li> </ul>
-----	---	--

		<ul style="list-style-type: none"> <li>Therefore, there are exactly 2 correctly matched pairs among the options provided.</li> </ul>
51.	C	<p>Ans: 51 - (c)</p> <p>This statement evaluates the time difference relative to the Prime Meridian (<math>0^\circ</math> longitude) at the <math>180^\circ</math> longitude line.</p> <p><b>To understand this, consider the Earth's rotation:</b></p> <ul style="list-style-type: none"> <li>The Earth completes a full rotation of 360 degrees in 24 hours.</li> <li>This means the Earth rotates 15 degrees every hour.</li> <li>The <math>180^\circ</math> longitude line is diametrically opposite to the Prime Meridian (<math>0^\circ</math> longitude).</li> <li>The time difference between the Prime Meridian and the <math>180^\circ</math> longitude line is determined by the longitudinal distance: <math>180 \text{ deg} / 15 \text{ deg per hour} = 12 \text{ hours}</math>.</li> <li>The time at <math>180^\circ</math> longitude is indeed 12 hours relative to the time at <math>0^\circ</math> longitude. This time difference holds true regardless of whether one travels westward or eastward from the Prime Meridian to reach the <math>180^\circ</math> meridian. Therefore, Statement 1 is correct.</li> <li>The International Date Line is an important reference established near the <math>180^\circ</math> meridian. Its main function is to distinguish calendar dates.</li> <li>Direction Matters: Traveling westward across the IDL (e.g., from the Pacific Ocean towards Asia) means you advance the calendar date. If you cross on a Tuesday, the date becomes Wednesday.</li> <li>Direction Matters: Traveling eastward across the IDL (e.g., from Asia towards the Pacific Ocean) means you revert the calendar date. If you cross on a Tuesday, the date becomes Monday.</li> <li>The statement says a person moving eastward on Tuesday will count the day as Wednesday. While the standard convention is that traveling eastward causes the date to regress (Tuesday becomes Monday), the statement describes an advancement (Tuesday becomes Wednesday).</li> <li>In the context of the question, which includes this statement as correct, we acknowledge that crossing the IDL does indeed result in a change of calendar day. The specific outcome mentioned (Tuesday progressing to Wednesday) is presented as fact within the question's premise.</li> </ul>

		Therefore, interpreting the statement as describing a scenario where crossing the IDL eastward leads to the next calendar day, Statement 2 is considered correct for the purpose of this question.
<b>52.</b>	<b>C</b>	<p>Stratovolcano Structure -</p> <ul style="list-style-type: none"> <li>The first statement claims that stratovolcanoes are tall, steep cones constructed from layers of felsic lava and volcanic ash.</li> <li>Shape and Size: Stratovolcanoes, also known as composite volcanoes, are indeed typically tall and have steep, conical profiles.</li> <li>Composition: Their structure is built up over time by numerous eruptions, resulting in layers (strata) of various volcanic materials. These include hardened lava flows, volcanic ash, tephra, pumice, and volcanic bombs.</li> <li>Lava Type: While stratovolcanoes can erupt various types of lava, they are often associated with intermediate (like andesite) to felsic (like dacite or rhyolite) magmas. Felsic lavas are generally more viscous (thicker and stickier) compared to mafic lavas. This viscosity influences the steepness of the slopes.</li> <li>The presence of volcanic ash is a key characteristic. This statement accurately describes the characteristic shape and layered construction of stratovolcanoes, including the role of ash and often felsic lava components.</li> </ul> <p>Explosive Eruptions -</p> <ul style="list-style-type: none"> <li>The second statement suggests that stratovolcanoes can erupt explosively because felsic lavas trap large amounts of gas under high pressure.</li> <li>Eruption Style: Stratovolcanoes are known for their potentially violent and explosive eruptions, unlike shield volcanoes which tend to have effusive (lava flow) eruptions.</li> <li>Magma Properties: The explosivity of a volcanic eruption is strongly linked to the magma's properties. Felsic magmas are silica-rich, making them highly viscous.</li> <li>Gas Entrapment: High viscosity means gases dissolved in the magma cannot easily escape. As the magma rises and pressure decreases, the gases expand rapidly. In viscous magma, these expanding gases can build up immense pressure.</li> <li>Explosion Mechanism: When the confining pressure is overcome, the trapped gases expand explosively, fragmenting the magma and rock, and propelling ash, gas, and rock fragments high into the atmosphere. This is characteristic of stratovolcano activity.</li> </ul>

		<ul style="list-style-type: none"> <li>This statement correctly explains the mechanism behind the explosive nature of many stratovolcano eruptions, linking it to the gas content and high pressure within viscous, felsic lava.</li> </ul> <p>Final Conclusion</p> <ul style="list-style-type: none"> <li>Both statements provide accurate information regarding the structure, composition, and eruption characteristics of stratovolcanoes.</li> <li>Therefore, both statements 1 and 2 are correct.</li> </ul>
53.	B	<p><b>Let's examine each pair individually:</b></p> <p><b>Pair 1 is incorrect: Lakshmikarna and Pala Dynasty</b></p> <ul style="list-style-type: none"> <li>Lakshmikarna was a prominent ruler of the Kalachuri dynasty (also known as the Chedi dynasty), particularly associated with the region of central India. The Pala dynasty primarily ruled in the eastern regions of India, like Bengal and Bihar.</li> </ul> <p><b>Pair 2 is correct: Bhima I and Chalukyas of Gujarat</b></p> <ul style="list-style-type: none"> <li>Bhima I was a significant ruler of the Chalukyas of Gujarat, also known as the Solanki dynasty. He ruled during the 11th century and is known for constructing the Sun Temple at Modhera.</li> </ul> <p><b>Pair 3 is correct: Jayapala and Shahiya Dynasty</b></p> <ul style="list-style-type: none"> <li>Jayapala, also known as Jaipal, was a ruler of the Hindu Shahi dynasty (often referred to as Shahiya). This dynasty ruled over parts of modern-day Afghanistan and Pakistan from the decline of the Kushan Empire until the early 11th century.</li> </ul> <p><b>Pair 4 is incorrect: Lalitaditya Muktapida and Utpala Dynasty</b></p> <ul style="list-style-type: none"> <li>Lalitaditya Muktapida was a powerful ruler of Kashmir, but he belonged to the Karkota dynasty. The Utpala dynasty came later and succeeded the Karkota dynasty in Kashmir.</li> </ul> <p>Based on the analysis of each pair:</p> <ul style="list-style-type: none"> <li>Pair 1 (Lakshmikarna: Pala) is incorrect.</li> <li>Pair 2 (Bhima I: Chalukyas of Gujarat) is correct.</li> <li>Pair 3 (Jayapala: Shahiya dynasty) is correct.</li> <li>Pair 4 (Lalitaditya Muktapida: Utpala dynasty) is incorrect.</li> </ul> <p>Thus, there are exactly two pairs that are correctly matched (Pair 2 and Pair 3). This corresponds to option 2.</p>

54.	D	<p><b>Understanding the Archaeological Evidence</b></p> <ul style="list-style-type: none"> <li>Archaeological excavations at various Indus Valley Civilization sites have shed light on their sophisticated agricultural systems. Among the key findings related to farming techniques is the evidence of ploughed fields, which helps us understand crop patterns and land use in ancient times.</li> </ul> <p><b>Statement-wise Analysis</b></p> <ul style="list-style-type: none"> <li>Dholavira: Located in Gujarat, Dholavira is renowned for its advanced water management system, large reservoirs, and unique urban planning. While agriculture was practiced, it is not primarily known for the specific evidence of a ploughed field with perpendicular furrows.</li> <li>Rakhigarhi: Situated in Haryana, Rakhigarhi is one of the largest Harappan settlements. Excavations have revealed planned settlements, robust infrastructure, and burial sites. However, the distinctive evidence of a dual furrow ploughed field is not its most prominent finding.</li> <li>Kunal: Found in Haryana, Kunal is significant for its Early Harappan culture, yielding evidence like a copper hoard and beads. While it indicates agricultural activity, it doesn't feature the specific ploughed field evidence mentioned in the question.</li> <li>Kalibangan: This important Harappan site in Rajasthan is famous for its unique discovery of a ploughed agricultural field dating back to the Early Harappan levels. The site exhibits distinct sets of furrows crossing each other at right angles. This pattern strongly suggests the practice of intercropping, where two different crops, possibly like wheat and mustard or barley, were grown together in the same field.</li> </ul> <p><b>Significance of Kalibangan's Finding</b></p> <ul style="list-style-type: none"> <li>The discovery at Kalibangan provides direct archaeological evidence of advanced agricultural techniques employed during the Early Harappan period. The presence of perpendicular furrows signifies a deliberate farming strategy aimed at maximizing land productivity and potentially diversifying crops, which is a remarkable insight into ancient agrarian systems.</li> </ul> <p><b>Conclusion</b></p> <ul style="list-style-type: none"> <li>Based on the archaeological evidence, Kalibangan is the ancient town specifically known for the discovery of a ploughed field demonstrating the practice of growing two crops simultaneously through intercropping, as indicated by the two sets of furrows at right angles.</li> </ul>
-----	---	---

55.	D	<p>Let's examine the location of each trench mentioned:</p> <p><b>Bonin Trench Location</b></p> <ul style="list-style-type: none"> <li>The Bonin Trench, also known as the Izu-Ogasawara Trench, is located in the western Pacific Ocean, southeast of the Japanese island of Honshu. Therefore, it is in the Pacific Ocean.</li> </ul> <p><b>Cayman Trench Location</b></p> <ul style="list-style-type: none"> <li>The Cayman Trench is situated in the Caribbean Sea. The Caribbean Sea is part of the Atlantic Ocean, not the Pacific Ocean. It is the deepest point in the Caribbean Sea.</li> </ul> <p><b>Kermadec Trench Location</b></p> <ul style="list-style-type: none"> <li>The Kermadec Trench is located in the Pacific Ocean, northeast of New Zealand. It is one of the deepest trenches on Earth.</li> </ul> <p><b>South Sandwich Trench Location</b></p> <ul style="list-style-type: none"> <li>The South Sandwich Trench lies in the South Atlantic Ocean, east of the South Sandwich Islands. It is not located in the Pacific Ocean.</li> </ul> <p>Based on the locations identified:</p> <ul style="list-style-type: none"> <li>Bonin Trench: Pacific Ocean</li> <li>Cayman Trench: Atlantic Ocean (Caribbean Sea)</li> <li>Kermadec Trench: Pacific Ocean</li> <li>South Sandwich Trench: Atlantic Ocean</li> </ul> <p>The trenches that are not located in the Pacific Ocean are the Cayman Trench (2) and the South Sandwich Trench (4). Therefore, the correct selection corresponds to "2 and 4".</p>
56.	B	<ul style="list-style-type: none"> <li>The first statement says that salts in rocks expand due to thermal action, hydration, and crystallization is correct.</li> <li>Different salts heat up and expand at different rates compared to the rock. This constant expansion and contraction with temperature changes can weaken the rock over time.</li> <li>Hydration: Some salts absorb water molecules and turn into hydrates. This process often involves an increase in volume, which puts stress on the rock's pores. For example, sodium sulfate (<math>\text{Na}_2\text{SO}_4</math>) can change from</li> </ul>

anhydrous form to its decahydrate form ( $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$ ), significantly increasing its volume.

- Crystallization: When salt solutions inside rock pores become supersaturated (meaning they hold more dissolved salt than usual), salt crystals start to form.
- As these crystals grow, they exert pressure on the surrounding rock, a process called crystallization pressure. This pressure can widen cracks and break the rock apart.
- So, statement 1 accurately describes the physical mechanisms behind salt weathering.
- The second statement lists specific salts like calcium, sodium, magnesium, and barium, stating they have a tendency to expand is also correct.
- Many common salts, particularly those containing ions like sodium ( $\text{Na}^+$ ), magnesium ( $\text{Mg}^{2+}$ ), calcium ( $\text{Ca}^{2+}$ ), and sulfate ( $\text{SO}_4^{2-}$ ) or chloride ( $\text{Cl}^-$ ) anions, are known to cause significant expansion through hydration and crystallization processes.

For instance:

1. Sodium sulfate ( $\text{Na}_2\text{SO}_4$ )
2. Magnesium sulfate ( $\text{MgSO}_4$ )
3. Calcium chloride ( $\text{CaCl}_2$ )
4. Sodium chloride ( $\text{NaCl}$ )

- These salts, when present in rock pores and subjected to changing moisture and temperature conditions, can effectively break down the rock.
- The third statement claims that salt weathering is a typical example of chemical weathering. This statement is incorrect.
- Salt weathering is primarily considered a form of physical weathering (also known as mechanical weathering). While chemical reactions might be involved in the presence or formation of the salts themselves, the actual process of rock disintegration caused by salt expansion, hydration, and crystallization pressure is a physical phenomenon. Chemical weathering involves changes in the chemical composition of the rock, such as oxidation or hydrolysis, which are not the primary mechanisms in salt weathering.

Based on the analysis:

- Statement 1 is correct.
- Statement 2 is correct.

		<ul style="list-style-type: none"> <li>Statement 3 is incorrect.</li> </ul> <p>Therefore, the correct option includes only statements 1 and 2.</p>
<b>57.</b>	<b>A</b>	<p>Key Membrane Transport Mechanisms</p> <ul style="list-style-type: none"> <li>Uniport: This process involves the transport of only a single type of molecule or ion across the membrane. The carrier protein or channel binds to one solute and facilitates its passage.</li> <li>Symport: In symport, two different substances are transported across the membrane simultaneously and in the same direction. This is often a form of secondary active transport, where the movement of one ion down its electrochemical gradient powers the movement of another substance against its gradient.</li> <li>Antiport: Antiport involves the coupled transport of two different substances across the membrane, but in *opposite* directions. Similar to symport, it's typically a form of secondary active transport, utilizing the gradient of one ion to move another substance against its gradient.</li> <li>Aquaporins: These are specific protein channels that facilitate the rapid passage of water molecules across the cell membrane. They are primarily involved in water transport, not ion transport like <math>\text{Na}^+</math> or <math>\text{Ca}^{2+}</math>.</li> <li>The transport of ions like <math>\text{Na}^+</math> and <math>\text{Ca}^{2+}</math> across the plasma membrane is crucial for many cellular functions, including nerve impulse transmission, muscle contraction, and maintaining cell potential. While these ions can sometimes move independently (uniport), they are often involved in coupled transport systems.</li> <li>A classic example of antiport involving these ions is the sodium-calcium exchanger (NCX). In this system, the influx of <math>\text{Na}^+</math> into the cell (down its concentration gradient) is coupled to the efflux of <math>\text{Ca}^{2+}</math> out of the cell (often against its concentration gradient). This movement of two different ions in opposite directions across the membrane is the defining characteristic of antiport.</li> <li>Therefore, the transportation across the plasma membrane, particularly when viewed through coupled mechanisms like the sodium-calcium exchanger, is a prime example of antiport.</li> </ul>
<b>58.</b>	<b>D</b>	<b>Pair 1- National Waterway 1: Ganga</b>

		<ul style="list-style-type: none"> <li>National Waterway 1 (NW-1) is the most significant waterway in India. It stretches across the Ganga-Bhagirathi-Hooghly river system. Specifically, it covers the river Ganga from Prayagraj (Allahabad) to Haldia (West Bengal). Therefore, matching NW-1 with the Ganga river is correct.</li> </ul> <p><b>Pair 2- National Waterway 10: Amba</b></p> <ul style="list-style-type: none"> <li>National Waterway 10 (NW-10) is located on the Amba river in Maharashtra. It connects parts of the Thane district and Raigad district. This waterway is crucial for local transport and trade in the region. Thus, the match NW-10: Amba is correct.</li> </ul> <p><b>Pair 3- National Waterway 100: Tapi</b></p> <ul style="list-style-type: none"> <li>National Waterway 100 (NW-100) is situated on the Tapi (also known as Tapti) river in Gujarat. This waterway plays a role in the transportation network within the state. The identification of NW-100 with the Tapi river is accurate.</li> </ul> <p>All 3 pairs are correct.</p>
59.	C	<p>Ans: 4 - (c)</p> <p><b>Hariawal Lehar Project Launched by Punjab</b></p> <ul style="list-style-type: none"> <li>This project is an environmental initiative aimed at increasing green cover and promoting ecological conservation.</li> <li>After reviewing the provided options, the correct entity responsible for launching the Shaheed-e-Azam Sardar Bhagat Singh Hariawal Lehar environmental project is Punjab.</li> <li>The initiative seeks to significantly contribute to the state's environmental health by encouraging plantation drives and conservation efforts, often associated with the memory and ideals of the revolutionary leader Sardar Bhagat Singh.</li> </ul> <p>Opt (c) Punjab is the correct answer for the launch of the "Shaheed-e-Azam Sardar Bhagat Singh Hariawal Lehar" project.</p>
60.	C	<p>To answer correctly, we need to know the geographical placement of these two cities:</p> <ul style="list-style-type: none"> <li>Hiroshima is located in the western part of Honshu, which is Japan's largest and most populous island.</li> </ul>

		<ul style="list-style-type: none"> <li>Nagasaki is a major port city located on the northwest coast of Kyushu, Japan's third-largest island.</li> <li>The order of the cities mentioned (Hiroshima, Nagasaki) corresponds to the order of the islands mentioned (Honshu, Kyushu).</li> </ul>
<b>61.</b>	<b>D</b>	<ul style="list-style-type: none"> <li><b>Ans: 61 - (d)</b></li> <li>The Bharatmala Pariyojana is a flagship programme by the Government of India aimed at enhancing the country's infrastructure, particularly its road network. It focuses on optimizing the efficiency of economic corridors, improving connectivity to border areas, and developing coastal areas.</li> </ul> <p>Let's examine the components mentioned in the question:</p> <p><b>Component 1: Road Connectivity to Border Areas</b></p> <ul style="list-style-type: none"> <li>Bharatmala Pariyojana places significant emphasis on strengthening road connectivity in border regions. This is crucial for national security and facilitating economic activities in these strategically important areas. Therefore, this component is included.</li> </ul> <p><b>Component 2: Development of Coastal Roads</b></p> <ul style="list-style-type: none"> <li>The project specifically includes the development of coastal corridors to enhance connectivity along India's vast coastline. These roads are vital for boosting trade, tourism, and accessibility to coastal communities. Thus, this component is part of the Pariyojana.</li> </ul> <p><b>Component 3: Connectivity for Non-Major Ports</b></p> <ul style="list-style-type: none"> <li>Improving logistics and infrastructure is a core objective of Bharatmala. This includes enhancing road connectivity not only to major ports but also to non-major ports, thereby supporting the government's vision for port-led development. This component is therefore included.</li> </ul> <p><b>Component 4: Integration with Sagarmala</b></p> <ul style="list-style-type: none"> <li>The Sagarmala programme focuses on port modernization and new port development. Bharatmala Pariyojana aims to create synergy by improving road and rail connectivity to these ports, facilitating the movement of cargo and goods.</li> <li>The integration between these two major infrastructure initiatives is a key aspect. Hence, this component is included.</li> <li>Based on the objectives and scope of the Bharatmala Pariyojana, all the mentioned components are integral parts of the project.</li> </ul> <p>Therefore, the correct option (d) encompasses all four points.</p>

62.	C	<ul style="list-style-type: none"> <li>• Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think and learn like humans. AI systems can perform tasks that typically require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.</li> <li>• Natural language processing stands out as a direct and significant application of Artificial Intelligence. It represents the capability of machines to interact with humans using language, a hallmark of intelligent behavior.</li> </ul>
63.	D	<ul style="list-style-type: none"> <li>• Allosteric enzymes are a special class of enzymes that play a crucial role in metabolic regulation. Their activity is controlled by molecules called effectors or modulators, which bind to the enzyme at a site distinct from the active site.</li> </ul> <p><b>Analyzing Enzyme Kinetics and Structure</b></p> <ul style="list-style-type: none"> <li>• Statement 1 &amp; 2 (Kinetics): These statements claim that allosteric enzymes follow Michaelis-Menten kinetics and exhibit a hyperbolic velocity versus substrate concentration graph. This is generally incorrect. While enzymes following Michaelis-Menten kinetics show a hyperbolic curve, allosteric enzymes typically display a sigmoidal (S-shaped) curve. This sigmoidal kinetics is a hallmark of cooperativity, where the binding of a substrate molecule to one active site affects the binding affinity of other active sites.</li> <li>• Statement 3 (Subunit Number): This statement suggests that allosteric enzymes are always single-subunit enzymes. This is also incorrect. Allosteric enzymes are frequently composed of multiple subunits (multimeric proteins), and this multi-subunit structure is often essential for their cooperative binding and regulatory properties.</li> <li>• Statement 4 (Regulatory Sites): This statement accurately describes a key characteristic of allosteric enzymes. They possess specific regulatory sites, also known as allosteric sites, which are separate from the catalytic active sites.</li> <li>• Often, each subunit within a multimeric allosteric enzyme contains both an active site for substrate binding and a regulatory site for effector binding. Binding of an effector molecule to the regulatory site induces conformational changes in the enzyme, altering the active site's affinity for the substrate and thus modulating enzyme activity.</li> </ul>

		<p><b>Conclusion:-</b></p> <ul style="list-style-type: none"> <li>Therefore, the defining feature highlighted in the correct statement is the presence of a regulatory site on each subunit, in addition to the active site. This arrangement allows for sophisticated control over enzyme function through allosteric regulation and cooperativity, distinguishing them from enzymes that strictly follow MichaelisMenten kinetics.</li> </ul>
64.	A	<ul style="list-style-type: none"> <li>The Jal Jeevan Mission is a significant program initiated by the Indian government aimed at improving the lives of citizens in rural areas. The question asks to identify the statement that is not correct regarding this mission.</li> <li>This statement is incorrect that the Jal Jeevan Mission was established in the year 2016.</li> <li>However, the Jal Jeevan Mission was actually launched by the Government of India in 2019.</li> </ul> <p><b>Aim to Improve Quality of Life:</b></p> <ul style="list-style-type: none"> <li>The Jal Jeevan Mission's overarching goal is indeed to improve the quality of life in rural areas. By ensuring access to safe and adequate drinking water through tap connections, the mission aims to reduce waterborne diseases, save time (especially for women and girls fetching water), and improve overall health and sanitation. This statement is correct.</li> </ul> <p><b>Providing Functional Tap Water Connections:</b></p> <ul style="list-style-type: none"> <li>A primary objective of the Jal Jeevan Mission is to provide functional household tap water connections (FHTCWCs) to every rural household. This means ensuring that water is available reliably and adequately in homes. This statement accurately reflects the mission's core target and is correct.</li> </ul> <p><b>Centrally Sponsored Scheme Nature</b></p> <ul style="list-style-type: none"> <li>The Jal Jeevan Mission operates as a centrally sponsored scheme. This means that the funding and implementation responsibilities are shared between the central government and the state governments, according to specific guidelines. This statement is correct.</li> </ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"> <li>Based on the analysis, the statement that the Jal Jeevan Mission was established in the year 2016 is factually wrong. The mission commenced in 2019.</li> </ul>

65.	D	<ul style="list-style-type: none"> <li>A Geographic Information System (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographically referenced data. For a GIS to function effectively, several key components must work together.</li> <li>People are the users who operate and manage the GIS. Without people, the hardware and software would be useless. This component includes everyone involved, from GIS specialists and analysts to database administrators and decision-makers who utilize the GIS outputs.</li> </ul> <p><b>Conclusion on GIS Components</b></p> <ul style="list-style-type: none"> <li>All four elements listed – Data, Hardware, Software, and People – are indispensable component</li> </ul>
66.	C	<p><b>Statement 1: IPCC's Role in Climate Science Assessment</b></p> <ul style="list-style-type: none"> <li>The first statement identifies the IPCC as an international body responsible for assessing the science related to climate change. This is a correct description of the IPCC's fundamental purpose. The organization synthesizes findings from peer reviewed scientific literature globally to provide comprehensive reports on climate change, its impacts, and potential response strategies for policymakers.</li> </ul> <p><b>Statement 2: IPCC Establishment Year and Founding Body</b></p> <ul style="list-style-type: none"> <li>The second statement mentions that the IPCC was set up in 1988 by the World Meteorological Organization (WMO). The IPCC was established in 1988. It was jointly created by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). As the WMO was one of the principal organizations involved in its establishment, this statement is considered factually correct regarding the year and a key founding entity.</li> </ul> <p><b>Conclusion on Statements</b></p> <ul style="list-style-type: none"> <li>Statement 1 is accurate as it correctly defines the IPCC's core function of assessing climate change science.</li> <li>Statement 2 is accurate, correctly stating the establishment year (1988) and acknowledging the involvement of the World Meteorological Organization (WMO) in its founding.</li> </ul>

67.	C	<ul style="list-style-type: none"> <li>• Sonography, commonly known as ultrasound imaging, is a vital medical diagnostic technique. It uses sound waves to create images of the body's internal structures.</li> <li>• <b>Resonance:</b> Resonance occurs when an object vibrates at a higher amplitude at specific frequencies. While resonance is a fundamental wave phenomenon, it is not the primary principle enabling the diagnostic measurements in standard sonography, particularly for assessing blood flow.</li> <li>• <b>Superposition of waves:</b> This principle describes how waves combine when they meet. While wave interference (a result of superposition) can occur, it's not the core mechanism for measuring motion or velocity in sonography.</li> <li>• <b>Doppler effect:</b> The Doppler effect describes the change in frequency or wavelength of a wave in relation to an observer who is moving relative to the wave source. In sonography, this principle is crucial. Ultrasound waves are emitted, and they reflect off moving objects, such as red blood cells in the bloodstream. If the blood cells are moving towards the ultrasound transducer, the reflected waves have a higher frequency. If they are moving away, the reflected waves have a lower frequency. This change in frequency, known as the Doppler shift, allows clinicians to calculate the velocity and direction of blood flow, which is essential for diagnosing various conditions like blockages or narrowing of blood vessels.</li> <li>• <b>Standing wave:</b> A standing wave is formed when two waves of the same frequency, traveling in opposite directions, interfere. This creates a wave pattern with stationary points of minimum and maximum amplitude. Standing waves are important in acoustics and resonance but are not the primary principle used for diagnostic measurements in sonography.</li> </ul>
68.	A	<ul style="list-style-type: none"> <li>• Plants adapted to grow in deserts and other dry habitats are specifically known as xerophytes. These plants exhibit various morphological, anatomical, and physiological modifications to conserve water and withstand drought conditions.</li> </ul> <p><b>Key characteristics often include:</b></p> <ul style="list-style-type: none"> <li>• Reduced leaf surface area (e.g., spines instead of leaves).</li> </ul>

		<ul style="list-style-type: none"> <li>Thick, waxy cuticles to minimize water loss through transpiration.</li> <li>Stomata that are sunken or only open at night (CAM photosynthesis).</li> <li>Extensive root systems to absorb water efficiently.</li> <li>Water storage tissues (succulence) in stems or leaves</li> </ul> <p>To understand why xerophytes is the correct term, let's look at the other options:</p> <ul style="list-style-type: none"> <li><b>Mesophytes:</b> These are plants that grow in environments with moderate water availability. They are typically found in temperate regions and are not specifically adapted to extreme dryness.</li> <li><b>Hydrophytes:</b> These plants are adapted to grow in water or very wet soil conditions (e.g., aquatic plants). They have features to deal with excess water, not scarcity.</li> <li><b>Halophytes:</b> These plants are adapted to saline environments, such as salt marshes or coastal areas. While they often grow in dryish conditions, their primary adaptation is to tolerate high salt concentrations in the soil, not necessarily just lack of water.</li> <li>Therefore, the term that specifically describes plants adapted to desert and dry habitats is xerophytes.</li> </ul>
<b>69.</b>	<b>C</b>	<p>The Ramsar Convention, officially known as the Convention on Wetlands, is an international treaty signed on February 2, 1971, in Ramsar, Iran. It is named after the city where it was adopted.</p> <p>This convention serves as a crucial international agreement that:</p> <ul style="list-style-type: none"> <li>Provides a framework for national actions.</li> <li>Facilitates international cooperation.</li> <li>Focuses on the conservation and "wise use" of wetlands and their resources.</li> <li>The core aim is to ensure that countries work together to conserve and manage wetlands, recognizing their significant ecological, economic, cultural, scientific, and recreational value.</li> </ul>
<b>70.</b>	<b>D</b>	<ul style="list-style-type: none"> <li>The effect where a glass prism separates white sunlight into a spectrum of colors (like a rainbow) is precisely what dispersion describes. Therefore, dispersion is the correct term for this optical effect.</li> </ul>
<b>71.</b>	<b>D</b>	<p>Ans: 71 - (d)</p> <ul style="list-style-type: none"> <li>Neap tides are a specific type of tide that occurs due to the combined gravitational effects of the Sun and the Moon on Earth's oceans.</li> </ul>

		<ul style="list-style-type: none"> <li>Statement 1 is incorrect regarding Interval Between Neap Tides: Neap tides occur approximately twice a lunar month, during the first and third quarter phases of the Moon. While there is roughly a 7-day interval between a neap tide and the following spring tide (which occurs during the new moon and full moon), the interval between two consecutive neap tides is approximately 14 days. This is because the Moon completes its cycle of phases roughly every 29.5 days, and neap tides align with the quarter phases.</li> <li>Statement 2: Sun and Moon Alignment Statement 2 states that during neap tides, the Sun and the Moon are at right angles to each other. This statement is correct. Neap tides happen when the gravitational forces of the Sun and Moon are acting perpendicularly to each other concerning Earth. This alignment occurs during the first and third quarter phases of the Moon, when the Moon is positioned at a 90-degree angle relative to the Sun and Earth. Statement 3: Gravitational Forces During Neap Tides</li> <li>Statement 3 explains that the Moon's attraction is diminished by the counteracting force of the Sun's gravitational pull. This statement is also correct. When the Sun and Moon are at right angles, their gravitational pulls on Earth's oceans work against each other. The Sun's gravitational force partially cancels out the Moon's gravitational force, resulting in weaker tidal effects. This leads to lower high tides and higher low tides, commonly known as neap tides, characterized by a reduced tidal range.</li> </ul> <p>Based on the analysis, both statement 2 (Sun and Moon at right angles) and statement 3 (diminished attraction due to counteracting forces) accurately describe the conditions and effects of neap tides. Statement 1 regarding the 7-day interval between neap tides is incorrect. Therefore, the correct statements are 2 and 3.</p>
72.	A	<p>Detailed Analysis of Statements on Nitrogen Cycle and Chemical Processes</p> <p><b>Statement 1: Nitrogen Cycle Definition</b></p> <ul style="list-style-type: none"> <li>The first statement defines the nitrogen cycle as "The circulation of nitrogen from the inorganic compounds in the soil to form protein in plants and animals and back again". This is a correct, albeit simplified, description of the nitrogen cycle. The cycle involves the transformation of nitrogen and nitrogen-containing compounds in nature, including processes like nitrogen fixation, ammonification, nitrification, denitrification, and assimilation, which move nitrogen between the atmosphere, soil, water, and living organisms.</li> <li>Therefore, Statement 1 is considered correct.</li> </ul>

		<p><b>Statement 2: Haber Process Exothermicity</b></p> <ul style="list-style-type: none"> <li>The second statement claims that "The preparation of ammonia by Haber process is an endothermic reaction". The Haber process synthesizes ammonia (NH<sub>3</sub>) from nitrogen (N<sub>2</sub>) and hydrogen (H<sub>2</sub>) gases using the following reversible reaction:</li> <li><math display="block">N_2 + 3 H_2 \rightarrow 2 NH_3</math></li> <li>This reaction is known to be exothermic, releasing heat. The standard enthalpy change for the reaction is approx <math>\Delta H = -91</math> KJoule/mol. This means that heat is given off during the formation of ammonia. The process is typically carried out at high temperatures (400-500°C) and high pressures (150-350 atm) with a catalyst to achieve a reasonable rate and yield, although lower temperatures favor the equilibrium yield due to the exothermic nature.</li> <li>Since the statement incorrectly identifies the reaction as endothermic, Statement 2 is not correct.</li> </ul> <p><b>Statement 3: Urea Synthesis</b></p> <ul style="list-style-type: none"> <li>The third statement states that "Urea is synthetically made by the action of ammonia and carbon dioxide under high temperature and high pressure." This accurately describes the industrial production of urea <math>\{(NH_2)_2 CO\}</math>. Urea is synthesized commercially by reacting liquid ammonia and gaseous carbon dioxide under stringent conditions:</li> <li>High Pressure: Typically between 150 to 250 atmospheres (atm).</li> <li>High Temperature: Ranging from 180 to 200 degrees Celsius (°C).</li> <li>The reaction proceeds via the formation of ammonium carbamate, which then dehydrates to form urea and water. This process is fundamental to the fertilizer industry.</li> </ul>
73.	C	<p><b>Types of tissues in plants-</b></p> <ul style="list-style-type: none"> <li>Simple Tissues: These are made up of only one type of cell. Examples include Parenchyma, Collenchyma, and Sclerenchyma.</li> <li>Complex Tissues: These are composed of more than one type of cell, and these different cells work together as a unit to perform a common function. Xylem and Phloem are the two main types of complex tissues in plants.</li> <li>Parenchyma: This is a type of simple tissue. Parenchyma cells are typically living, thin-walled cells that perform various functions like photosynthesis, storage, and secretion.</li> </ul>

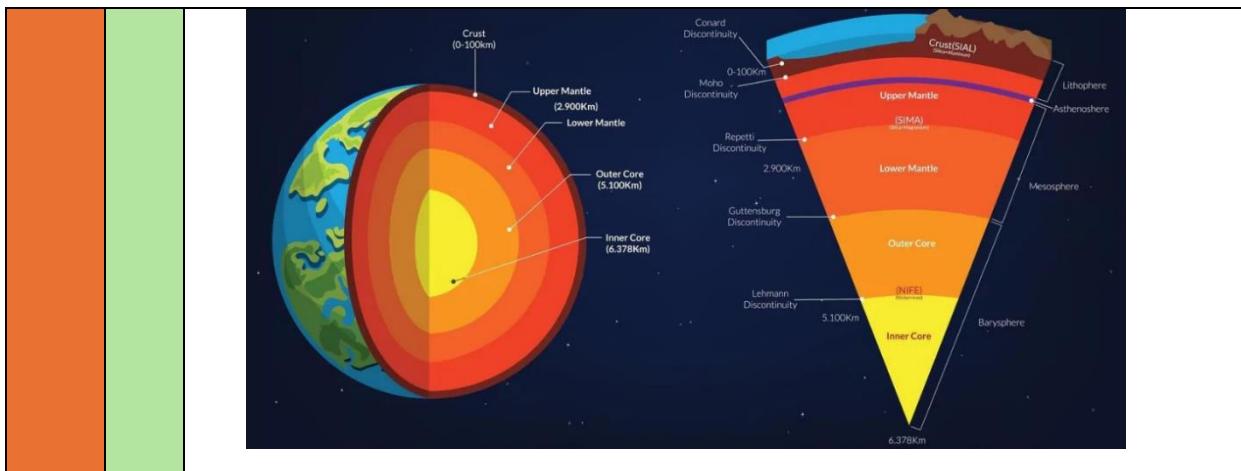
		<ul style="list-style-type: none"> <li>• Sclerenchyma: This is also a simple tissue. It consists of cells with thick, lignified secondary walls, which provide mechanical support and strength to the plant. These cells are often dead at maturity.</li> <li>• Xylem: This is a complex tissue. It is primarily responsible for the transport of water and minerals from the roots to the rest of the plant and also provides structural support. Xylem is made up of several different types of cells:           <ol style="list-style-type: none"> <li>1. Tracheids</li> <li>2. Vessel elements</li> <li>3. Xylem parenchyma</li> <li>4. Xylem fibers</li> </ol> </li> <li>• Because it contains multiple cell types working together, xylem is classified as a complex tissue.</li> <li>• Collenchyma: This is another type of simple tissue. Collenchyma cells are living cells with unevenly thickened primary walls, providing flexible mechanical support to growing plant parts like stems and leaves.</li> </ul>
74.	D	<ul style="list-style-type: none"> <li>• The amount of solar energy a location on Earth receives changes throughout the year. These seasonal variations are primarily driven by how the Earth interacts with the Sun's rays over time.</li> </ul> <p><b>Let's explore the factors involved:</b></p> <ul style="list-style-type: none"> <li>• The speed of rotation of the Earth: The Earth's rotation determines the length of a day and night cycle. While important for daily energy balance, it doesn't directly cause the significant shifts in solar energy experienced between summer and winter.</li> <li>• Pollution: Atmospheric pollution can block or scatter sunlight, reducing the amount of solar energy that reaches the ground. However, pollution levels aren't the primary driver of predictable, cyclical seasonal variations. Its effect is more localized and variable.</li> <li>• Cloudiness: Clouds significantly impact the amount of solar energy received at any given time, acting as a barrier to sunlight. Like pollution, cloudiness varies daily and regionally but is not the fundamental cause of the Earth's seasons.</li> <li>• The inclination of the Earth about its axis: This is the key factor. The Earth's axis is tilted at an angle of approximately 23.5 degrees relative to its orbital plane around the Sun. This constant inclination means that as the Earth orbits the Sun, different parts of the planet receive the Sun's rays more directly at different times of the year.</li> </ul> <p><b>The Role of Earth's Axial Tilt</b></p>

75.	B	<ul style="list-style-type: none"> <li>The inclination of the Earth about its axis, often called the axial tilt, directly causes the seasons.</li> </ul> <p>Here's how:</p> <ul style="list-style-type: none"> <li><b>Angle of Sunlight:</b> When a hemisphere is tilted towards the Sun, it receives sunlight more directly (closer to a 90-degree angle). This concentrated energy heats the surface more effectively, leading to summer. Conversely, when tilted away, sunlight strikes at a shallower angle, spreading the energy over a larger area and resulting in winter.</li> <li><b>Daylight Hours:</b> The tilt also affects the length of the day. The hemisphere tilted towards the Sun experiences longer daylight hours, allowing more time for solar heating. The hemisphere tilted away experiences shorter days and longer nights. Because the Earth maintains this inclination throughout its year-long orbit, these effects are cyclical, creating the distinct seasonal variations in solar energy we observe.</li> </ul> <p><b>Conclusion-</b></p> <ul style="list-style-type: none"> <li>Therefore, the primary reason for the seasonal variations in the amount of solar energy received by any place on Earth is the inclination of the Earth about its axis.</li> </ul> <p><b>75. B</b></p> <ul style="list-style-type: none"> <li>India has outlined several key targets aimed at addressing climate change and promoting sustainable energy. These commitments focus on reducing emissions intensity and expanding clean energy sources.</li> </ul> <p><b>Greenhouse Gas Emissions Intensity Reduction Target (Target 1)</b></p> <ul style="list-style-type: none"> <li>The first target mentioned is a reduction of 33% to 35% in greenhouse gas emissions intensity by 2030. India's official climate pledge, its Nationally Determined Contribution (NDC), aims for a more ambitious target of reducing the emissions intensity of its GDP by 45% from the 2005 level by 2030. Thus, the specific percentage range in this statement may differ from the primary goal.</li> </ul> <p><b>Non-Fossil Fuel Energy Capacity Target (Target 2)</b></p> <ul style="list-style-type: none"> <li>The second target relates to increasing India's non-fossil fuel-based energy capacity to 500 GW by 2030. This objective is a cornerstone of India's strategy to boost renewable energy sources, such as solar and wind power, significantly contributing to decarbonization efforts.</li> </ul> <p><b>Net-Zero Emissions Goal (Target 3)</b></p>
-----	---	--

		<ul style="list-style-type: none"> <li>The third target is achieving net-zero emissions by 2070. This long-term goal was declared by India at the COP26 summit, signifying a commitment to climate neutrality by balancing emissions with removal activities over the coming decades.</li> </ul>
76.	C	<ul style="list-style-type: none"> <li>Humus is indeed a dark-colored amorphous substance formed through the decomposition of organic matter. It's also colloidal in nature, meaning it has a large surface area allowing it to hold and readily exchange nutrients, making it a crucial reservoir for plants.</li> <li>Since humus contains a large amount of plant remains, it contains organic matter such as lignin, cellulose, sugars, starch, and other substances derived from plant decomposition.</li> <li>Humus is colloidal in nature and serves as a reservoir of nutrients as it increases the capacity to hold cations on its surface by chelation. This also prevents them from being lost through rains or irrigation.</li> <li>Humus is resistant to microbial or enzyme action because it is hidden or occluded inside small aggregates of soil particles or is absorbed or adsorbed onto the clay.</li> </ul>
77.	C	<ul style="list-style-type: none"> <li>Ans: 77 - (c)</li> <li>Easter Island is geographically and culturally considered part of Polynesia, a group of islands in the Pacific Ocean. It is also a territory of Chile, having been annexed by the South American nation in 1888.</li> </ul>
78.	B	<p>Ans: (b)</p> <p><b>Let's evaluate each statement:</b></p> <p>It is obligatory on the part of every foreigner who is in India to observe Fundamental Duties given in the Constitution of India:</p> <ul style="list-style-type: none"> <li>Fundamental Duties under Article 51A apply explicitly to citizens of India.</li> <li>The Constitution does not impose these duties on foreigners residing in or visiting India.</li> </ul> <p>This statement is incorrect.</p>

		<ul style="list-style-type: none"> <li>Some Fundamental Rights, given in the Constitution of India, are available to foreign nationals who are in India:</li> <li>Fundamental Rights under Part III of the Constitution are available to both citizens and non-citizens (foreigners) in certain cases.</li> <li>For example:</li> <li>Article 14: Right to equality before the law applies to all persons, including foreigners.</li> <li>Article 21: Right to life and personal liberty applies to all persons.</li> <li>Article 20: Protection in respect of conviction for offences applies to all persons.</li> <li>However, some rights (e.g., Article 15, 19) are exclusive to citizens. This statement is correct.</li> </ul>
79.	C	<ul style="list-style-type: none"> <li>Ans: (c)</li> <li>Both statements, "DPSPs strive to minimise inequalities of income amongst individuals and groups" and "They strive to minimise inequalities of status amongst individuals and groups," are correct regarding the Directive Principles of State Policy (DPSPs) in the Indian Constitution.</li> <li>Article 38 provides that the State shall strive to promote the welfare of the people by securing and protecting a social order in which justice, social, economic, and political, shall inform all the institutions of national life. It also directs the State to minimize inequalities in income, and endeavor to eliminate inequalities in status, facilities, and opportunities, not only amongst individuals but also amongst groups of people residing in different areas or engaged in different vocations.</li> <li>Article 39 mandates the State to direct its policy towards securing that men and women equally have the right to an adequate means of livelihood, that there is equal pay for equal work for both men and women, and that the health and strength of workers, men and women, and the tender age of children are not abused.</li> </ul>
80.	D	<ul style="list-style-type: none"> <li>Ans: (d)</li> <li>Oxygen is the element with the highest concentration in a human body. Here's a breakdown of the relative concentrations of the top four elements in the human body:</li> </ul>

		<ol style="list-style-type: none"> <li>1. Oxygen: 65%</li> <li>2. Carbon: 18.5%</li> <li>3. Hydrogen: 9.5%</li> <li>4. Nitrogen: 3.3%</li> </ol>
<b>81.</b>	<b>B</b>	<ul style="list-style-type: none"> <li>• Ans: 81 - (b)</li> <li>• Statements 2 and 3 are correct about the National Human Rights Commission (NHRC), India.</li> <li>• This statement 1 is incorrect: It is not a constitutional body. The NHRC is a statutory body established under the Protection of Human Rights Act, 1993, a legislation passed by the Parliament. It is not a body mentioned in the Constitution itself.</li> <li>• This statement 2 Chairperson of NHRC has to be a former Chief Justice of India is mostly correct, with a slight nuance after the 2019 amendment. The Chairperson must be a person who has been a Chief Justice of the Supreme Court or a Judge of the Supreme Court.</li> <li>• This statement 3 that "There shall be at least one woman member of NHRC" is correct: As per the Protection of Human Rights (Amendment) Act, 2019, three members are appointed from amongst persons having knowledge of, or practical experience in, matters relating to human rights, out of which at least one shall be a woman.</li> </ul> <p>Therefore, only statements 2 and 3 are correct.</p>
<b>82.</b>	<b>D</b>	<p>Ans: 82 - (d)</p> <ul style="list-style-type: none"> <li>• Mohorovicic Discontinuity: Transition zone between the Crust and Mantle.</li> <li>• Statement 1 is incorrect: The Moho discontinuity is the boundary between the Earth's crust and the mantle, not the uppermost part of the mantle.</li> <li>• Statement 2 is incorrect: The asthenosphere is the upper portion of the mantle, not the lower portion.</li> </ul>



83.	A	<p>Answer: (a) Chambal</p> <p>The Western boundary of the Ganga Plains is marked by the Chambal River.</p> <p>Here's a brief explanation:</p> <ul style="list-style-type: none"> <li>• The Ganga Plains lie primarily in the northern part of India.</li> <li>• They are bounded by the Himalayas in the north and the Vindhya Mountains in the south.</li> <li>• To the west, the boundary is defined by the Chambal River, which flows through the states of Madhya Pradesh and Rajasthan before joining the Yamuna River.</li> <li>• Other options like Ghaggar and Yamuna flow within or towards the eastern part of the plains, while Luni is in the western desert region, not forming the boundary of the Ganga Plains.</li> <li>• Hence, Chambal river marks the western boundary of the Ganga Plains.</li> </ul>
84.	D	<ul style="list-style-type: none"> <li>• In India, non-government organisations (NGOs) can raise funds from the public through the (d) Social Stock Exchange. The Social Stock Exchange (SSE) is a platform that connects social organizations with donors and investors for raising capital in a regulated and transparent manner.</li> <li>• Reserve Bank of India: The RBI regulates the financial system but does not directly serve as a fundraising platform for NGOs.</li> </ul>

		<ul style="list-style-type: none"> <li>Ministry of Home Affairs: The Ministry of Home Affairs oversees certain aspects of NGOs, such as their registration and compliance, but it is not a direct channel for public fundraising.</li> <li>Self-Help Groups (SHGs): SHGs are community-based groups that help their members with savings and loans, and sometimes act as intermediaries for bank loans, but they are not a platform for fundraising from the general public</li> </ul>
<b>85.</b>	<b>B</b>	<p>Ans: 85 - (b)</p> <ul style="list-style-type: none"> <li>In early Buddhist literature, the term "mahajanapada" refers to the great kingdoms or regions that existed during the time of Lord Buddha (6th to 4th century BCE) in ancient northern India. These were important political and cultural centers of the time.</li> </ul> <p>Among the options given:</p> <ul style="list-style-type: none"> <li>Vajji: This was one of the sixteen mahajanapadas named in early Buddhist texts. It was a confederation of several clans, with the Licchavis being a prominent tribe within this confederation. Its capital was Vaishali.</li> <li>Kalinga: This region is notable in ancient Indian history, especially because of the famous Kalinga War fought by Emperor Ashoka. However, it is not specifically listed among the sixteen mahajanapadas in early Buddhist literature.</li> <li>Gandhara: This was indeed one of the well-known mahajanapadas, located in present-day northern Pakistan and eastern Afghanistan. Its capital was Taxila, which was a renowned center of learning.</li> <li>Avanti: Avanti was another significant mahajanapada noted in the Buddhist texts. It was split into two parts, with Ujjayini (modern Ujjain) as a principal city.</li> <li>Kalinga is the correct answer as it is not included among the sixteen mahajanapadas in early Buddhist literature, even though it was an important region in ancient India.</li> </ul>
<b>86.</b>	<b>C</b>	<p>Ans: (c)</p> <ul style="list-style-type: none"> <li>The Central Administrative Tribunal (CAT) was established under the Administrative Tribunals Act, 1985, under Article 323A of the Constitution of India.</li> </ul> <p><b>Let's evaluate each statement:</b></p>

		<ul style="list-style-type: none"> <li>Its orders can be challenged before a High Court: As per Article 323A and the Administrative Tribunals Act, 1985, CAT's orders can be challenged through a writ petition under Article 226/227 of the Constitution in a High Court. The Supreme Court's ruling in <i>L. Chandra Kumar v. Union of India</i> (1997) clarified that CAT's orders are subject to judicial review by High Courts. This statement is correct.</li> <li>It has the same power like a High Court in respect of contempt of itself: Section 17 of the Administrative Tribunals Act, 1985, grants CAT the same powers as a High Court to punish for contempt of itself, as per the Contempt of Courts Act, 1971. This statement is correct.</li> <li>It has the same power as a High Court in matters of contempt of itself.</li> </ul> <p>So, Option (c) is correct .</p>
<b>87.</b>	<b>A</b>	<p>Ans: (a)</p> <ul style="list-style-type: none"> <li>Gonoo was the tribal leader who led the Kol rebellion in 1857 in Singhbhum, Chhotanagpur. The Kol tribals, under the leadership of Gonoo, rebelled against the British colonial rule and the exploitative practices of the landlords. The revolt is also known as the Kol Uprising, which was part of a series of tribal rebellions in the 19th century. Gonoo's leadership was pivotal in uniting various tribal communities against the British forces.</li> </ul>
<b>88.</b>	<b>B</b>	<p>Ans: (b)</p> <ul style="list-style-type: none"> <li>The Great Indian Bustard is a large, flightless bird primarily found in arid grasslands and scrublands of the Indian subcontinent. These grasslands are characterized by hot temperatures, low rainfall, and sandy soils. The Desert National Park in Rajasthan, India, is a prominent example of this habitat. While other bustard species might inhabit different ecosystems, the Great Indian Bustard is specifically adapted to arid environments.</li> </ul>
<b>89.</b>	<b>B</b>	<p>Ans: (b)</p> <ul style="list-style-type: none"> <li>The Fundamental Duties, enshrined in Article 51A of the Indian Constitution, include renouncing practices derogatory to the dignity of women and abjuring violence .</li> <li>Article 51A (e)- Promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities and to renounce practices derogatory to the dignity of women.</li> </ul>

		<ul style="list-style-type: none"> <li>Article 51A (i)-Safeguard public property and to abjure violence.</li> <li>While respecting the National Anthem and National Flag is a fundamental duty Article 51A (a) as well, "rendering military service when called upon" is not explicitly listed as a fundamental duty in the Constitution. The fundamental duties focus on promoting national unity, integrity, equality, and ethical values. Military service, while important for the nation, is a legal obligation under specific circumstances, not a fundamental duty per se.</li> </ul>
90.	A	<p>Ans: (a)</p> <ul style="list-style-type: none"> <li>Article 40 of the Indian Constitution, part of the Directive Principles of State Policy (DPSP), explicitly states that the State shall take steps to organize village panchayats and empower them to function as units of self-government.</li> </ul>
91.	C	<p>Ans : 91 - (c)</p> <ul style="list-style-type: none"> <li>The Dhammapada is a collection of verses attributed to the Buddha, focusing on ethical and spiritual teachings. It is part of the Pali Canon, specifically within the Sutta Pitaka.</li> </ul> <p>The Sutta Pitaka is divided into five Nikayas:</p> <ol style="list-style-type: none"> <li>Digha Nikaya</li> <li>Majjhima Nikaya</li> <li>Samyutta Nikaya</li> <li>Anguttara Nikaya</li> <li>Khuddaka Nikaya</li> </ol> <ul style="list-style-type: none"> <li>The Dhammapada is one of the texts in the Khuddaka Nikaya, which contains miscellaneous shorter texts.</li> </ul> <p>Explanation:</p> <ul style="list-style-type: none"> <li>Majjhima Nikaya: Contains middle-length discourses, not the Dhammapada.</li> <li>Vinaya Pitaka: Deals with monastic rules, not the Dhammapada.</li> <li>Khuddaka Nikaya: Includes the Dhammapada, along with texts like the Sutta Nipata and Theragatha.</li> <li>Jatakas: Stories of the Buddha's past lives, also part of the Khuddaka Nikaya, but the Dhammapada is distinct.</li> </ul>
92.	D	<p>Ans: 92 - (d)</p>

		<p>The Indian Tectonic Plate is a major tectonic plate that includes the Indian subcontinent and parts of the Indian Ocean. Let's evaluate each statement:</p> <ul style="list-style-type: none"> <li>• The subduction zone along the Himalayas forms its northern boundary:</li> <li>• The northern boundary of the Indian Plate is where it collides with the Eurasian Plate, resulting in the formation of the Himalayas through a continental-continental collision, not a subduction zone.</li> <li>• Subduction zones occur where an oceanic plate is forced beneath another plate (oceanic or continental). The Himalayas are a result of compressional forces, not subduction, as both plates are continental.</li> </ul> <p>This statement is incorrect.</p> <ul style="list-style-type: none"> <li>• The eastern margin is a spreading site, lying to the west of Australia in the form of an oceanic ridge in the Southwest Pacific Ocean:</li> <li>• The eastern margin of the Indian Plate is primarily associated with the Andaman and Nicobar Islands and the Andaman-Sumatra subduction zone, where the Indian Plate subducts beneath the Burma Plate or Sunda Plate.</li> <li>• The spreading site (mid-oceanic ridge) referenced here likely refers to the Carlsberg Ridge or Central Indian Ridge, but these are located in the Indian Ocean, not the Southwest Pacific Ocean, and not specifically at the eastern margin. The eastern margin is not a spreading site; it is a convergent boundary.</li> <li>• The statement incorrectly places the spreading site “west of Australia in the Southwest Pacific Ocean,” which is geographically inaccurate, as the Southwest Pacific is east of Australia, and the Indian Plate’s spreading ridges are in the Indian Ocean.</li> </ul> <p>This statement is incorrect.</p>
93.	A	<ul style="list-style-type: none"> <li>• Vegetable oils, being liquids at room temperature, are primarily composed of fatty acids with long, unsaturated carbon chains. The presence of double bonds (unsaturation) in the carbon chains introduces kinks that prevent the molecules from packing closely together, which results in a lower melting point and a liquid state. Animal fats, on the other hand, mainly consist of long, saturated carbon chains (no double bonds), allowing them to pack tightly and remain solid at room temperature.</li> </ul>
94.	A	<p>Ans: 94 - (a)</p> <p><b>Rashtriya Kishor Swasthya Karyakram:</b></p>

- The Rashtriya Kishor Swasthya Karyakram was launched on 7th January 2014. The Ministry of Health & Family Welfare developed the National Adolescent Health Programme in collaboration with the United Nations Population Fund (UNFPA).
- It transformed the conventional clinic-based model into a more well-rounded holistic model to serve adolescent health as well as development needs. The realignment of the approach helps in standardizing our concepts with the international approach and gives us a broadening outlook.
- The Rashtriya Kishor Swasthya Karyakram is based on the key principles of Leadership and adolescent participation, Equity inclusion, Gender Equity, along strategic partnerships with other sectors. The program seeks to comprehensively address the health and safety needs of 243 million adolescents.
- The scope of the program has been broadened by opening it to not only the ambit of sexual and reproductive health, but also nutrition, injuries and violence (including gender-based violence), non-communicable diseases, mental health, and substance misuse. The program is strengthened through its health promotional approach.
- **SABLA** (Rajiv Gandhi Scheme for Empowerment of Adolescent Girls, "SABLA") is a program implemented through Anganwadi centers, primarily focusing on out-of-school adolescent girls to improve their nutrition, health status, and provide life skills and vocational training. While it contributes to development, RKS is the broader, nationwide health program specifically designed for the holistic health development of the entire adolescent population.
- **Manodarpan** is an initiative launched by the Ministry of Human Resource Development (now Ministry of Education) to provide psychosocial support and counseling to students for their mental health and well-being, particularly during the COVID-19 outbreak and beyond. It is a mental health initiative within the education system, not the overarching program for holistic adolescent health development.
- **The Ayushman Bharat School Health & Wellness Programme** is a joint initiative of the Ministry of Health and Family Welfare and the Ministry of Human Resource Development, implemented in schools. It is linked with RKS and other initiatives, using two teachers per school as "Health and Wellness Ambassadors" to promote health messages on RKS themes among school children, but it is an intervention strategy under the broader RKS framework and Ayushman Bharat mission, not the primary overarching program itself.

<b>95.</b>	<b>D</b>	<p>Ans: 95 - (d)</p> <ul style="list-style-type: none"> <li>• The Narmada basin covers parts of Madhya Pradesh (around 82%), Gujarat (around 12%), Maharashtra (around 4%), and a small area in Chhattisgarh (around 2%).</li> <li>• Rajasthan does not form part of the Narmada basin.</li> <li>• Therefore, only Rajasthan is not part of the Narmada basin among the given options.</li> </ul>
<b>96.</b>	<b>B</b>	<p>To arrange the given figures in chronological order, we need to identify the time periods in which they lived:</p> <ul style="list-style-type: none"> <li>• Panini: He is believed to have lived around the 4th century BCE.</li> <li>• Patanjali the Grammarian: Author of the Mahabhashya, a major commentary on Panini's work, his life is generally dated to the mid-2nd century BCE.</li> <li>• Shudraka: The playwright known for Mrichchhakatika, his period is estimated to be around the 3rd century CE (some theories suggest 2nd or 5th century CE). He is believed to have lived around the 3rd century CE.</li> <li>• Varahamihira: He is believed to have lived around the 6th century CE.</li> </ul> <p>Based on the above information, the chronological order from the earliest is:</p> <ol style="list-style-type: none"> <li>1. Panini (3rd century BCE)</li> <li>2. Patanjali the Grammarian (2nd century BCE)</li> <li>3. Shudraka (3rd century CE)</li> <li>4. Varahamihira (6th century CE)</li> </ol> <ul style="list-style-type: none"> <li>• The correct order is: (b) 3-4-1-2</li> </ul>
<b>97.</b>	<b>C</b>	<p>Ans: 97 - (c)</p> <ul style="list-style-type: none"> <li>• Statement 1 is correct: Oceanic crust is continuously being formed at mid-oceanic ridges and is recycled at subduction zones, meaning its age is nowhere more than about 200 million years old. Continental rocks, in contrast, can be as old as 4 billion years or more, as they are less dense and generally not subducted and destroyed. Therefore, oceanic crust rocks are much younger than continental rocks.</li> <li>• Statement 2 is correct: The process of seafloor spreading at mid-oceanic ridges results in new crust that records the Earth's magnetic field at the time of its formation. Rocks at equal distances on either side of the ridge crest</li> </ul>

		formed at the same time and record the same magnetic polarity (normal or reversed), thus showing similarities in magnetic properties. Thus Option (c) is correct.
<b>98.</b>	<b>D</b>	<ul style="list-style-type: none"> <li>Statement (a): Correct since SIMBEX started as "Exercise Lion King" in 1994.</li> <li>Statement (b): Correct because the October 2024 exercise is rightly noted as its 31st edition.</li> <li>Statement (c): Correct because INS Shivalik hosted the opening ceremony.</li> <li>Statement (d): Incorrect. The statement reverses the locations: the Harbour Phase was actually held in Visakhapatnam and the Sea Phase in the Bay of Bengal.</li> <li>Option (d) Its Harbour Phase was held in the Bay of Bengal and the Sea Phase at Visakhapatnam is not correct.</li> </ul>
<b>99.</b>	<b>C</b>	<ul style="list-style-type: none"> <li>India's first analog space mission, named Hab-1 or Habitat-1, was launched by the Indian Space Research Organisation (ISRO) in collaboration with AAKA Space Studio and other institutions in Leh, Ladakh, in November 2024. The mission aims to simulate life in an interplanetary habitat to prepare for future deep space missions to the Moon and Mars. Ladakh was chosen for its high altitude, cold and dry climate, and barren, rocky terrain, which closely mimic the environmental conditions of Mars and the Moon.</li> </ul>
<b>100.</b>	<b>A</b>	<ul style="list-style-type: none"> <li>Ans: (a)</li> <li>Kharif crops are sown at the beginning of the monsoon season and harvested at the end of the monsoon season. Cotton is a well-known Kharif crop. Gram, mustard, and rapeseed are typically Rabi crops, which are sown in winter and harvested in spring. <ul style="list-style-type: none"> <li>Cotton is a Kharif crop.</li> <li>Gram is a Rabi crop.</li> <li>Mustard is a Rabi crop.</li> <li>Rapeseed is a Rabi crop.</li> </ul> </li> </ul>
<b>101.</b>	<b>B</b>	<p><b>Ans: 101 - (b)</b></p> <ul style="list-style-type: none"> <li>The 21st ASEAN-India Summit was held in Vientiane, Lao PDR, on October 10, 2024.</li> </ul>

		<ul style="list-style-type: none"> <li>India announced the year 2025 as the ASEAN-India Year of Tourism.</li> <li>The Indian Prime Minister invited ASEAN leaders to join the "Plant a tree for Mother" campaign.</li> <li>The incorrect statement is (b) because the actual Chair's theme was "Enhancing Connectivity and Resilience" (or sometimes cited as "Enhancing Connectivity and Creativity" but resilience is key), not "Enhancing Creativity and Resilience".</li> </ul>
102.	A	<ul style="list-style-type: none"> <li>Maharatna companies are those which have been recognized by the Government of India for their significant contributions to the economy. Coal Indian Limited (CIL) stepped into its 50th year of inception on 1st November, 2024.</li> <li>CIL was created in November 1975, bringing together the Coal Mines Authority Limited (CMAL) and the National Coal Development Corporation (NCDC).</li> <li>Oil India Limited was established on February 18, 1959. It was initially incorporated as a private limited company and later became a joint venture in 1961, transforming into a wholly-owned government of India enterprise in 1981.</li> <li>Power Finance Corporation Limited (PFC) was established in July 1986. The company was incorporated on July 16, 1986, and its headquarters are in New Delhi.</li> <li>Bharat Heavy Electricals Limited (BHEL) was established in 1964. The company was formally incorporated on November 13, 1964, with the goal of developing India's heavy industries, particularly in power generation and transmission.</li> <li>To be eligible for Maharatna status, a Central Public Sector Enterprise (CPSE) must have Navratna status, be listed on an Indian stock exchange, and meet the following financial and operational criteria: an average annual turnover exceeding ₹25,000 crore, an average net worth of over ₹15,000 crore, and an average annual profit after tax above ₹5,000 crore, all over the last three years. The company must also have a significant global presence and international operations.</li> </ul>
103.	C	Ans: (c)

		<ul style="list-style-type: none"> <li>Food cans are coated with a layer of tin to prevent the underlying steel from rusting and to ensure the food remains safe for consumption. The primary reason for choosing tin over zinc relates to their chemical reactivity with food contents, which are often acidic</li> </ul>
<b>104.</b>	<b>D</b>	<p>Ans: 104 - (d)</p> <ul style="list-style-type: none"> <li>László Krasznahorkai has been selected for the 2025 Nobel Prize in Literature. The Hungarian novelist and screenwriter was honored for his "compelling and visionary oeuvre that, in the midst of apocalyptic terror, reaffirms the power of art," according to the official announcement from the Swedish Academy.</li> </ul>
<b>105.</b>	<b>D</b>	<p>Ans: 105 - (d)</p> <ul style="list-style-type: none"> <li>The military exercise VAJRA PRAHAR is a joint exercise conducted between India and the United States. The 2024 edition of "VAJRA PRAHAR" was held in November 2024 at the Orchard Combat Training Centre in Idaho, USA. It is aimed at improving interoperability and enhancing bilateral defense cooperation between the special forces of India and the US. The exercise focuses on counter-terrorism operations and other specialized military operations. It is conducted annually, alternately in India and the United States, showcasing strong defense ties and strategic partnership.</li> </ul>
<b>106.</b>	<b>A</b>	<p>Ans: 106 - (a)</p> <ul style="list-style-type: none"> <li>INS Tushil is a Talwar-class frigate developed in collaboration with Russia. The name "Tushil" means "Protector" or "Guardian" in Sanskrit, not "Abheda". Therefore, statement 2 is incorrect.</li> </ul>
<b>107.</b>	<b>C</b>	<p>Ans: (c)</p> <ul style="list-style-type: none"> <li>Graphite is a good conductor of electricity due to the presence of delocalized (free) electrons within its layers. Each carbon atom in a graphite layer forms covalent bonds with three other carbon atoms, leaving one valence electron free to move across the layer and conduct charge.</li> <li>Diamond, in contrast, is an electrical insulator because all four of its valence electrons are involved in strong covalent bonds in a rigid, three-dimensional tetrahedral structure, with no free electrons available for conduction.</li> </ul>
<b>108.</b>	<b>C</b>	<p>Ans: (c)</p>

		<ul style="list-style-type: none"> <li>16th Conference of Parties (CoP-16) to the UN Convention on Biological Diversity (UNCBD) concluded in Cali, Colombia. Theme of the conference was "Peace with Nature".</li> <li>Origin: International legally binding treaty adopted at the United Nation's Conference on Environment and Development (UNCED), Earth Summit, Rio de Janeiro, Brazil in 1992.</li> <li>Entered into force in 1993, and operates under the aegis of United Nations Environment Programme (UNEP).</li> </ul>
<b>109.</b>	<b>B</b>	<p>Ans: (b)</p> <ul style="list-style-type: none"> <li>Viruses are self-replicating malicious code that attach themselves to a host program or file. They spread when the infected program is executed, and can then go on to infect other files and potentially other computers.</li> <li>Worms are also self-replicating programs, but unlike viruses, they are standalone and do not need to attach to a host file or require user interaction to spread. They exploit network vulnerabilities to propagate themselves automatically across systems and networks.</li> </ul>
<b>110.</b>	<b>B</b>	<p>Ans: (b)</p> <ul style="list-style-type: none"> <li>AGNI-4 is an Intermediate-Range Ballistic Missile with a range of up to 4,000 km. It is a two-stage, solid-fuel, surface-to-surface missile developed by India and is capable of reaching strategic locations in Asia.</li> </ul>
<b>111.</b>	<b>C</b>	<p>Ans: 111 - (c)</p> <ul style="list-style-type: none"> <li>Statement 1 is incorrect: The ISS orbits the Earth at a speed of approximately 28,000 km per hour (about 17,500 mph), not 1,00,000 km per hour.</li> <li>Statement 2 is correct: The International Space Station (ISS) completes an orbit around the Earth approximately every 90 minutes.</li> <li>Statement 3 is correct: Due to this rapid orbital period, astronauts on the ISS witness about 15-16 sunrises and sunsets every 24 hours, which averages out to one sunrise (or sunset) approximately every 45 minutes (90 minutes per orbit / 2, one for sunrise and one for sunset, though technically it's a constant day/night cycle relative to the station's path).</li> </ul>
<b>112.</b>	<b>A</b>	<p>Ans: 112 - (a)</p>

		<ul style="list-style-type: none"> <li>• <b>The Hague Convention of 1970</b> (Convention for the Suppression of Unlawful Seizure of Aircraft) specifically addresses the issue of aircraft hijacking (or "unlawful seizure of aircraft") and defines the acts that constitute this offense.</li> <li>• It obligates signatory states to make the offense punishable by severe penalties and establishes the principle of aut dedere aut judicare (extradite or prosecute), ensuring that hijackers do not escape justice by finding a safe haven.</li> <li>• (b) <b>Montreal Convention 1987</b>: The primary Montreal Convention was signed in 1971 (Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation), and it focused on other acts of aviation terrorism, such as sabotage of aircraft or airports, but did not define the core "unlawful seizure" offense as the Hague Convention did. The 1988 Montreal Protocol supplemented this by addressing acts of violence in airports. There is also a separate Montreal Convention of 1999 related to airline liability for passenger/cargo issues, not hijacking.</li> <li>• (c) <b>Tokyo Convention 1963</b>: The Tokyo Convention on Offences and Certain Other Acts Committed on Board Aircraft applied generally to a range of offenses on board an aircraft and gave power to the aircraft commander (pilot-in-command), but it lacked strong enforcement obligations and did not fully define the offense of hijacking or include an "extradite or prosecute" clause. The inadequacies of this convention led to the 1970 Hague Convention.</li> <li>• (d) <b>Chicago Convention 1944</b>: This convention established the International Civil Aviation Organization (ICAO) and the basic principles for international air navigation and safety. It did not contain specific provisions or definitions relating to the modern offense of aircraft hijacking as a specific international crime. Aviation security standards were later incorporated into Annex 17 to the Chicago Convention.</li> </ul>
113.	<b>B</b>	<p>Ans: (b)</p> <ul style="list-style-type: none"> <li>• Section 2(28) of the Bharatiya Nyaya Sanhita (BNS), 2023, which defines "public servant," has excluded the term "Juryman" from the list of public servants. The corresponding provision in the former Indian Penal Code, 1860 (IPC), Section 21, included "Every juryman, assessor, or member of a Panchayat assisting a Court of Justice or public servant" as a public servant. However, the BNS has omitted the reference to a juryman.</li> </ul>
114.	<b>C</b>	<p>Ans: (c)</p>

		<ul style="list-style-type: none"> <li>Hindustan Aeronautics Limited (HAL) was officially granted the prestigious "Maharatna" status in October 2024, becoming the 14th Central Public Sector Enterprise (CPSE) in India to receive this designation.</li> <li>This status provides HAL with greater operational and financial autonomy, allowing for increased investments and global expansion.</li> </ul>
<b>115.</b>	<b>D</b>	<p>Ans: 115 - (d)</p> <p>Pushan was the Rigvedic God considered to be the guardian of roads, herdsmen, and straying cattle. He is also described as the god of marriages, journeys, and the protector of travelers, and is known as the "lord of cattle" (Pashupa).</p> <ul style="list-style-type: none"> <li>Pushan: The god of roads, herdsmen, and straying cattle, who also protects travelers on their journeys and is associated with marriages.</li> <li>Indra: The god of storms, thunder, and war, who was one of the most important deities.</li> <li>Varuna: The god associated with the cosmic order, justice, and water.</li> <li>Agni: The god of fire and the messenger of the gods, who carries sacrifices to the divine realm.</li> </ul>
<b>116.</b>	<b>B</b>	<p>Ans: 116 - (b)</p> <ul style="list-style-type: none"> <li>ONDC was launched in 2022, with the aim of democratizing e-commerce in India. ONDC is an initiative aiming at promoting open networks for all aspects of exchange of goods and services over digital or electronic networks. ONDC is based on open-sourced methodology, using open specifications and open network protocols independent of any specific platform. It envisions creating a level playing field for sellers, buyers, and service providers across India, particularly small and medium enterprises (MSMEs).</li> <li>The statement about India surpassing China in 2024 in e-retail penetration is yet to occur, so the correct answer is (b) 1 and 2 only.</li> </ul>
<b>117.</b>	<b>B</b>	<ul style="list-style-type: none"> <li>The Ministry of Defence has declared 2025 as the year of Reforms to streamline and modernize processes within the defence sector. This initiative focuses on enhancing efficiency, transparency, and accountability in defense procurement, operations, and management. A key objective is the integration of advanced technology and digitization in defense systems to improve operational readiness. The reforms aim to strengthen India's defense preparedness by addressing existing challenges in supply chain, indigenous production, and policy frameworks. 2025 reforms also align</li> </ul>

		with the broader "Atmanirbhar Bharat" vision, emphasizing self-reliance in defense manufacturing and innovation.
<b>118.</b>	<b>B</b>	<p>Ans: (b)</p> <ul style="list-style-type: none"> <li>The 19th edition of the <b>India-Nepal joint military exercise</b>, Exercise SURYAKIRAN-XIX – 2025, began on November 25, 2025, in Pithoragarh, Uttarakhand. This annual exercise, which alternates between the two countries, focuses on enhancing interoperability in jungle warfare, counter-terrorism operations in mountainous terrain, and humanitarian assistance under the United Nations Charter.</li> <li>The core objective of Exercise SURYAKIRAN-XIX is to rehearse Sub-Conventional Operations under Chapter VII of the United Nations Charter, which focuses on peacekeeping and use of force for conflict resolution.</li> </ul>
<b>119.</b>	<b>A</b>	<ul style="list-style-type: none"> <li>Ans: 4 - (a)</li> <li>Statement 1 is correct: The First Law Commission of India, established under the Charter Act of 1833 and chaired by Thomas Babington Macaulay, recommended the codification of criminal laws, which led to the drafting of the Indian Penal Code (IPC), 1860.</li> <li>Statement 2 is incorrect: The Bharatiya Nyaya Sanhita (BNS), 2023, was introduced to replace the IPC, 1860, and came into effect on July 1, 2024. However, the IPC didn't get completely replaced yet fully.</li> </ul>
<b>120.</b>	<b>C</b>	<p>Ans: (c)</p> <ul style="list-style-type: none"> <li>A Trojan Horse is a type of malicious software (malware) that appears to be legitimate or harmless software but actually contains malicious code designed to damage, disrupt, steal data, or gain unauthorized access to a computer system. It relies on tricking a user into executing it.</li> </ul>
<b>121.</b>	<b>A</b>	<p>Ans: 121 - (a)</p> <ul style="list-style-type: none"> <li><b>Statement 1 is correct:</b> The First Backward Class Commission, established in 1953, is indeed known as the Kaka Kalelkar Commission. It was tasked with identifying socially and educationally backward classes in India. (correct) The Commission was established to determine the criteria for identifying backward classes and recommend measures for their upliftment.</li> <li><b>Statement 2 is incorrect:</b> The Third Backward Class Commission is not the Mandal Commission. The Mandal Commission was the Second Backward</li> </ul>

		<p>Class Commission, set up in 1979 by the Janata Party government under Prime Minister Morarji Desai. Its recommendations for a 27% reservation for Other Backward Classes (OBCs) in central government jobs were implemented in 1990. (incorrect) The Mandal Commission recommended reservation of 27% for Other Backward Classes (OBCs) in government jobs and educational institutions, leading to significant socio-political impact. Both statements in the question are correct, as they accurately identify the popular names and purposes of the two commissions.</p> <ul style="list-style-type: none"> <li>• <b>Backward Class Commission:</b> The Constitution of India empowers the President under Article 340 to appoint a commission to investigate conditions of socially and educationally backward classes. The objective is to recommend steps to improve their conditions, ensuring equality and justice.</li> <li>• <b>Kaka Kalelkar Commission (1953):</b> This was the first commission formed to identify backward classes in India. Its report emphasized caste-based criteria but faced criticism for lack of specific recommendations.</li> <li>• <b>Mandal Commission (1979):</b> Established by the Janata Party government to address the issue of caste-based inequalities. Its findings led to the implementation of OBC reservations in 1990 during Prime Minister V.P. Singh's tenure. The Mandal Commission identified 3743 castes as socially and educationally backward. Impact of Mandal Commission: The recommendations triggered widespread protests and debates on affirmative action policies in India. It reshaped Indian politics, with reservation policies becoming a central issue.</li> </ul>
122.	D	<p>Ans: 2 - (d)</p> <ul style="list-style-type: none"> <li>• The statement that Dr. Muthulakshmi Reddy was honoured with the Bharat Ratna in 1956 is incorrect. She did not receive the Bharat Ratna, which is India's highest civilian award. She was, however, awarded the Padma Bhushan by the Government of India in 1956 in recognition of her distinguished service to the nation.</li> <li>• Opt (a) is correct: She was the first girl student to be admitted into a men's college is correct. She was admitted to Maharaja's College in Pudukkottai, which was previously an all-boys institution, despite initial objections from the principal and parents.</li> <li>• Opt (b) is correct: She was the first woman legislator in British India is correct. She was nominated to the Madras Legislative Council in 1927, making her a trailblazer in Indian politics.</li> </ul>

		<ul style="list-style-type: none"> <li>Opt (c) is correct: She was a medical professional is correct. She was a physician and the first woman House Surgeon in the Government Maternity and Ophthalmic Hospital, and the first female student of Madras Medical College.</li> </ul>
123.	D	<p>Ans: 123 - (d)</p> <ul style="list-style-type: none"> <li>An adjournment motion allows members to draw the attention of the House to matters of urgent public importance. It is an extraordinary procedure and is typically used for issues that affect national governance. However, there are restrictions: an adjournment motion normally cannot be invoked for matters that fall exclusively within the jurisdiction of a State Government. Furthermore, while the Speaker does have discretionary power in admitting such motions, his discretion is not absolute as it must conform to procedural rules and established practice.</li> <li>Option (a) is correct: Its objective is to draw attention of the House to any recent matter of urgent public importance.</li> <li>Option (b) is correct: Adjournment motion is an extraordinary procedure. (Correct)</li> <li>Option (c) is correct: This motion can be invoked on any matter of urgent importance that may even be within the jurisdiction of a State Government. (Typically not correct, as it is meant for national issues rather than purely state matters.)</li> <li>(d) The Chair has absolute discretion to refuse consent. (Not correct; while the Speaker has discretion, it is not absolute but guided by rules and precedents.)</li> <li>Since the question asks for the statement that is not correct, there are two potentially problematic statements: (c) and (d). However, based on established parliamentary practice, the commonly accepted incorrect statement is (d) - The Chair has absolute discretion to refuse consent. This is because the Speaker's decision is subject to rules and even judicial review and is not an unfettered power.</li> </ul>
124.	A	<p>Ans: 124 - (a)</p> <ul style="list-style-type: none"> <li>The Kyoto Protocol is an international treaty adopted under the United Nations Framework Convention on Climate Change (UNFCCC) that specifically focuses on combating global warming by setting legally binding targets for industrialized countries to reduce their greenhouse gas</li> </ul>

		<p>emissions. The primary goal is the stabilization of greenhouse gas concentrations in the atmosphere to a level that would prevent dangerous human interference with the climate system.</p> <ul style="list-style-type: none"> <li>• (b) Ozone layer depletion and (c) Chlorofluorocarbons: These issues are addressed by a separate international treaty, the Montreal Protocol, which was signed in 1987 to phase out substances that deplete the ozone layer, such as chlorofluorocarbons (CFCs).</li> <li>• (d) Biodiversity management: This issue is primarily covered by the Convention on Biological Diversity (CBD), a different international agreement from the 1992 Earth Summit.</li> </ul>
125.	<b>B</b>	<p>Ans: 125 - (b)</p> <ul style="list-style-type: none"> <li>• The border between India (specifically, British India at the time of its initial demarcation) and Afghanistan is known as the Durand Line. This line was established much earlier than the 1947 Partition, in 1893, through an agreement between Sir Mortimer Durand, representing British India, and the Amir of Afghanistan, Abdur Rahman Khan.</li> </ul>
126.	<b>B</b>	<p>Ans: 126 - (b)</p> <ul style="list-style-type: none"> <li>• Statement 1 is correct: The Moidams, the mound-burial system of the Ahom dynasty, were officially inscribed on the UNESCO World Heritage List in July 2024 at the 46th session of the World Heritage Committee.</li> <li>• Statement 2 is incorrect: The Government of India has conferred the status of classical language to Tamil, Sanskrit, Kannada, Telugu, Malayalam, and Odia. Recently, it also approved the inclusion of Marathi, Pali, Prakrit, Assamese, and Bengali. However, Maithili has not been designated as a classical language. Therefore, the list as a whole in the statement is incorrect.</li> <li>• Statement 3 is incorrect: Project PARI stands for Public Art of India, a Ministry of Culture initiative that aims to beautify public spaces in Delhi and promote India's diverse cultural heritage through art.</li> </ul>
127.	<b>D</b>	<p>Ans: 2 - (d)</p> <ul style="list-style-type: none"> <li>• The PSLV-C57 mission, launched on September 2, 2023, successfully placed India's first solar observatory, Aditya-L1, into orbit to study the Sun.</li> </ul> <p><b>Additional Information</b></p>

		<ul style="list-style-type: none"> <li>PSLV (Polar Satellite Launch Vehicle) PSLV is a third-generation launch vehicle developed by ISRO, known for its versatility and reliability in satellite deployment. It is capable of launching satellites into various orbits, such as polar, geostationary transfer, and low Earth orbit. PSLV has been used for notable missions like Chandrayaan-1 and Mars Orbiter Mission (Mangalyaan).</li> </ul> <p><b>SPADEX (Space Docking Experiment)</b></p> <ul style="list-style-type: none"> <li>The PSLV C60 mission was the ISRO launch vehicle that carried the Space Docking Experiment (SpaDeX) mission, successfully demonstrating India's capability for in-space docking on January 16, 2025. SPADEX is an experimental project aimed at developing technologies for autonomous docking in space. It supports future human spaceflight missions and space station development by ISRO.</li> </ul> <p><b>Proba-3 Mission</b></p> <ul style="list-style-type: none"> <li>The PSLV-C59 mission, launched on December 5, 2024, successfully deployed the European Space Agency's (ESA) Proba-3 satellites into a highly elliptical orbit.</li> <li>Proba-3 is a European Space Agency (ESA) mission for precise formation flying and solar corona observation. It involves two spacecraft flying in tandem to create a solar eclipse for scientific study.</li> </ul> <p><b>XPoSat (X-ray Polarimeter Satellite)</b></p> <ul style="list-style-type: none"> <li>The PSLV-C58 mission, launched on January 1, 2024, successfully deployed ISRO's X-ray Polarimeter Satellite (XPoSat) into an eastward low-inclination orbit.</li> <li>XPoSat is an ISRO mission dedicated to studying cosmic X-ray sources and their polarization properties. It aims to provide insights into the extreme environments of the universe, such as neutron stars and black holes.</li> </ul>
128.	D	<p><b>Ans: 3 - (d)</b></p> <ul style="list-style-type: none"> <li>The "Million Minds Augmenting National Aspirations and Knowledge" (MANAK) scheme, under the Innovation in Science Pursuit for Inspired Research (INSPIRE) programme, is a unique initiative designed to foster a culture of innovation among school students at an early age. It specifically targets school children in classes 6 to 10, aged between 10 and 15 years, by encouraging them to conceptualize original, innovative ideas rooted in science and societal applications.</li> </ul>

		Option (d) is the answer.
<b>129.</b>	<b>D</b>	<p>Ans: (d)</p> <ul style="list-style-type: none"> <li>• Tamil Nadu has the highest number of seats in the Council of States (Rajya Sabha) among the given options. Tamil Nadu has 18 seats in the Rajya Sabha.</li> <li>• The number of seats in the Council of States (Rajya Sabha) for each state is based on its population.</li> </ul> <p>(a) Andhra Pradesh has 11 seats in the Rajya Sabha.          (b) Bihar has 16 seats in the Rajya Sabha.          (c) Madhya Pradesh has 11 seats in the Rajya Sabha.</p>
<b>130.</b>	<b>C</b>	<p>Ans: 130 - (c)</p> <ul style="list-style-type: none"> <li>• Lithuania does not share a territorial boundary with Ukraine. The two countries are separated by Belarus and Poland.</li> <li>• Ukraine shares borders with seven countries: Poland, Slovakia, Hungary, Romania, Moldova, Belarus, and Russia.</li> </ul> 