

1. Which among the following is not a language listed in the Eighth Schedule of the Constitution of India?
(a) Manipuri
(b) Gondi
(c) Nepali
(d) Dogri
2. Who among the following was India's first Woman Chief Minister?
(a) Sarojini Naidu
(b) Sucheta Kripalani
(c) Vijaya Lakshmi Pandit
(d) Hansa Mehta
3. Who among the following is the founder of the Congress Socialist Party?
(a) Acharya Narendra Dev
(b) Jawaharlal Nehru
(c) Motilal Nehru
(d) Asoka Mehta
4. Which of the following pairs of Institute and their location is/are correctly matched?
1. Indian Institute of Advance: Shimla Study
2. Indian Institute of Public Administration: New Delhi
3. Sushma Swaraj Institute of Foreign Service: Nainital

Select the answer using the code given below:
(a) 1 and 2
(b) 2 and 3
(c) 1 only
(d) 2 only
5. When a stone tied to a string is whirled in a circle, the work done on it by the string:
(a) is positive.
(b) is negative.
(c) is zero.
(d) depends on the mass of the stone.
6. Which one among the following is the correct scheme followed for classification of animals?
(a) Class → Phylum → Order → Genus → Family → Species
(b) Phylum → Class → Family → Genus → Order → Species
(c) Order → Class → Phylum → Family → Species → Genus
(d) Phylum → Class → Order → Family → Genus → Species
7. Which one of the following organelles can be seen in a prokaryotic cell?
(a) Mitochondria
(b) Definitive nucleus
(c) Ribosomes
(d) Golgi bodies
8. Chronologically arrange the formation of the following political associations, beginning from the earliest:
1. Poona Sarvajanik Sabha
2. Indian Association
3. Madras Mahajan Sabha
4. Bombay Presidency Association
Select the answer using the code given below:
(a) 1, 2, 3, 4
(b) 4, 3, 2, 1
(c) 1, 2, 4, 3
(d) 3, 4, 1, 2
9. Which one of the following is not a nitrogen

- fertilizer?
(a) NH_4SO_4
(b) NH_4NO_3
(c) N_2
(d) $(\text{NH}_2)_2\text{CO}$
10. Which of the following represent disaccharides?
(a) Starch and glycogen
(b) Glucose and galactose
(c) Maltose and lactose
(d) Ribose and xylose
11. Consider the following statements about Ajanta Cave paintings:
1. The paintings depict yakshas, gandharvas and apsaras.
2. The artists have used the technique of providing "multiple perspectives".
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
12. Which of the following books portrays three images of the Mother Goddess: "Mother as she was", "Mother as she is" and "Mother as she will be"?
(a) Durgeshnandini
(b) Kapalkundala
(c) Anandamath
(d) Devi Chaudhurani
13. "Neel Darpan", a play that depicted the atrocities on the indigo planters, was translated into English by:
(a) Dinabandhu Mitra
(b) Michael Madhusudan Dutta
(c) James Long
(d) James C. Scott
14. The practice of reducing the size of a product while maintaining its sticker price is called :
(a) Shrinkflation
(b) Reflation
(c) Disinflation
(d) Deflation
15. Consider the following statements about Ellora:
1. This art-historical site is associated exclusively with Buddhism.
2. The Kailasa temple at Ellora has been built of dressed stone and kiln fired bricks.
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
16. Which of the following statements about Tim Tim Tare (TTT) is/are correct?
1. TTT is a pioneering initiative that aims at imparting essential life skills to adolescent students across India.
2. TTT is a pioneering initiative that aims at imparting vocational and technical skills to students across 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

17. With reference to the women achievers in modern India, consider the following statements:
1. Pandita Ramabai published a book "A Comparison Between Women and Men" where she protested against the colonial view that men enjoyed all the rights, opportunities and benefits of change.
 2. Tarabai Shinde worked in the field of medicine to reduce child mortality in rural India.
 3. Sarojini Naidu led a delegation to London to demand for female franchise.
- How many of the statements given above is/are correct?
- (a) 1
(b) 2
(c) 3
(d) None
18. The Kalaram temple, known for temple entry movements in the early twentieth century, is located in which state of India?
- (a) Maharashtra
(b) Kerala
(c) Tamil Nadu
(d) Gujarat
19. Consider the following statements about innovation and research and development in India:
1. India's rank in Global Innovation Index reported by World Intellectual Property Organization (WIPO) has improved significantly between 2015 and 2024.
 2. Funding of research and development is sourced primarily from private sector entities and is sectorally concentrated in pharmaceuticals and information technology.
- 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
20. Which one of the following gas smells like a rotten egg?
- (a) Ammonia
(b) Hydrogen sulphide
(c) Acetylene
(d) Sulphur dioxide
21. Consider the following statements with reference to Mid-latitude deciduous forests:
1. Mid-latitude deciduous forests consist largely of trees that drop their leaves during the summer season.
 2. Mid-latitude deciduous forests are native to eastern North America and Western Europe.
 3. In Asia, the Mid-latitude deciduous forests occur as a belt between the boreal forest to the north and steppe lands to the south.
 4. Beech, Hickory and Walnut are common examples of trees found in Mid-latitude deciduous forests.
- Which of the statements given above are correct?
- (a) 1, 2 and 3
(b) 1, 2 and 4
(c) 1, 3 and 4
(d) 2, 3 and 4
22. Match List-I with List-II and select the answer using the code given below the Lists:

List-I (Island/Nation)	List-II (Tectonic Plate)
A. Comoros	1. North American Plate
B. Baffin Island	2. African Plate
C. Sri Lanka	3. Eurasian Plate
D. Andaman Islands	4. Indo-Australian Plate

Codes: A B C D

(a) 3 4 1 2

(b) 3 1 4 2

(c) 2 4 1 3

(d) 2 1 4 3

23. Arrange the following major elements present in the Earth's crust, in ascending order, in weight percentage:

1. Aluminium
2. Calcium
3. Silicon
4. Oxygen

Select the answer using the code given below:

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

24. Indore city in Madhya Pradesh is situated in which one of the following regions?

- (a) Bundelkhand
(b) Mahakoshal
(c) Malwa Plateau
(d) Nimar Region

25. The pattern of planetary winds largely depends upon which of the following factors?

1. Latitudinal variation of atmospheric heating
2. The distribution of continents and oceans
3. The rotation of earth Which of the above is/are correct?

How many 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

26. Which of the following statements with reference to Water Vapour in the atmosphere is/are correct?

1. It has a role to play in the stability and instability in the air.
2. It acts like a blanket allowing the earth to neither become too cold nor too hot.

Select the answer using the code given below:

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

27. Arrange the following permanent gases present in the atmosphere in ascending order:

1. Helium
2. Hydrogen
3. Neon
4. Xenon

Select the answer using the code given below:

- (a) 3, 1, 2, 4

- (b) 3, 1, 4, 2
(c) 2, 4, 1, 3
(d) 2, 4, 3, 1
28. Identify the climate type based on the given below characteristics:
1. The annual precipitation is low and is around 15 cm.
2. The development of pronounced winter anticyclones and their weakening in summer sets in monsoon-like reversal of wind in this region.
3. Polewards, summer temperatures are low.
Select the answer from the options given below:
(a) Subtropical steppe
(b) Humid sub-tropical climate
(c) Cold climate with dry winters
(d) Tundra climate
29. Consider the following statements with reference to location of Major Ports in India:
1. Deendayal Port is situated at the head of Gulf of Khambhat.
2. Cochin Port is situated at the head of Vembanad Kayal.
3. Mormugao Port is situated at the entrance of the Zuari estuary.
4. Paradip Port is situated in the Godavari delta.
Which of the statements given above are correct?
(a) 1 and 2
(b) 1 and 3
(c) 2 and 3
(d) 3 and 4
30. Which of the following surveys are being conducted by the Ministry of Statistics and Programme Implementation, Government of India?
1. Survey on Social Consumption – Health
2. Comprehensive Modular Survey - Telecom and ICT skills
3. Periodic Labour Force Survey
4. Annual Survey on Unincorporated Enterprises
Select the answer using the code given below:
(a) 1, 2, 3 and 4
(b) 1, 2 and 3 only
(c) 3 and 4 only
(d) 1 and 2 only
31. Justice Amitava Roy Committee, which was recently in news, was constituted for which of the following?
(a) Jail reforms
(b) Higher education
(c) Political participation of women
(d) Police reforms
32. Which of the following are the possible outcomes of the La Nina event?
1. Wet and humid conditions in the Horn of Africa.
2. Above-average hurricane season for the Atlantic Ocean.
3. Drought conditions in southern South Americaa.
4. No spring season for India.
Select the correct answer using the code given below:
(a) 1 and 2 only
(b) 3 and 4 only
(c) 2, 3 and 4 only

(d) 1, 2 and 3 only

33. With reference to I-STEM, consider the following statements:

1. It is a dynamic and interactive national portal initiated by the Ministry of Science and Technology, Government of India.
2. The main objective is to provide support to needy researchers in different ways and strengthen the R&D ecosystem of the country.

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

34. With reference to Plastic, consider the following statements:

1. Plastic is a synthetic organic polymer made from petroleum.
2. Puneet Sagar Abhiyan launched only to clean sea shores of plastic material.

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

35. In which place India is planning to establish its First Dark Sky Reserve?

- (a) Manali
- (b) Hanle
- (c) Spiti Valley
- (d) Jaisalmer

36. Consider the following statements regarding

India-ASEAN Relations:

1. Delhi Dialogue is a mechanism hosted by India annually with ASEAN.
2. India is a part of ASEAN's ADMM Plus, which is an annual meeting of Defence Ministers.

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

37. With reference to United Nations Framework Convention on Climate Change (UNFCCC), consider the following statements:

1. India has hosted the COP of all three Rio conventions on climate change.
 2. It is the parent treaty of the 2015 Paris Agreement and the 1997 Kyoto Protocol.
- 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

38. Consider the following statements

1. Tax buoyancy refers to changes in tax revenue in response to changes in tax rate.

2. There is a strong connection between the government's tax revenue earnings and economic growth.

Which of the following statements is/are correct?

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

39.

Consider the following statements:

1. Slow moving continental plates may lead to frequent volcanic activities.
2. Volcanoes occur along both convergent (subduction) and divergent (rift) plate boundaries
3. The Ring of Fire is a string of volcanoes and sites of seismic activity around the edges of the Pacific Ocean.

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

40. Which of the following are the potential benefits offered by 5G technology?

1. Low latency & greater download speeds.
2. Connecting multiple devices and exchanging data in real-time.
3. Improving road safety by allowing vehicles to communicate between themselves
4. Creating efficient sensor networks to track patients
5. Increased energy savings

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 1, 2 and 5 only
- (c) 4 and 5 only
- (d) 1, 2, 3, 4 and 5

41. Consider the following statements in relation to United Nations Security Council (UNSC) reforms:

1. The L69 Group advocates for a rotational permanent membership system for developing nations.
2. The C-10 Group, based on the Ezulwini Consensus, demands that Africa be given two permanent UNSC seats with veto power.
3. The G4 countries aim to secure permanent UNSC membership for themselves but do not support veto power reforms.

How many of the above statements is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

42. Consider the following statements:

1. China is the world's top milk producer followed by India.
2. More than half of India's total milk production comes from indigenous buffaloes.

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

43. Consider the following statements about Lebanon:

1. It is bordered by Syria to the north and east by Israel.
2. It is bordered by the Mediterranean Sea to the west.

Which of the above statements is/are correct?

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

44. Seraikala, Khera, Deosa are

- (a) Megalithic Sites
- (b) Neolithic Sites
- (c) Lower Paleolithic Site
- (d) Upper Paleolithic Sites

45. Tara, Chunda, and Manjusri are

- (a) Rainwater harvesting structure of ancient India
- (b) deities in Vajrayana Buddhism
- (c) deities in Svetambara Jainism
- (d) Varieties of Wheat cultivated by Indus Valley People

46. Consider the following statements regarding Anti-Tank Guided Missiles (ATGM):

1. It is a guided missile primarily designed to hit and destroy heavily armored military vehicles.
2. HELINA is Anti-tank Guided Missile (ATGM) system mounted on the Advanced Light Helicopter (ALH).

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

47. With reference to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), consider the following statements:

1. It is legally binding on the member states.
2. India is a signatory to this convention.

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

48. With reference to Financial Inclusion Index, consider the following statements:

1. It is published annually by the State Bank of India (SBI).
2. It is responsive to ease of access, availability and usage of services, and quality of services.
3. It has been constructed without any base year and reflects cumulative efforts of all stakeholders over the years towards financial inclusion.

Which of the statements given above is/are correct?

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

49. Consider the following statements regarding the International Atomic Energy Agency:

1. It is also known as the world's "Atoms for Peace and Development"

2. It is an autonomous and independently established organisation.
3. It reports to both the UN General Assembly and the Security Council.
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
50. Which of the following are the key provisions of the Energy Conservation (Amendment) Bill, 2022?
1. Mandating the use of non-fossil sources.
2. Establishment of Carbon Markets
3. Bringing large residential buildings within the fold of the Energy Conservation regime.
4. Increasing the members of the governing council of the Bureau of Energy Efficiency (BEE).
Select the correct 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
51. With reference to the Ancient India:
1. from Cotton route refers to the maritime route in the Indian Ocean for export of textiles India
2. India regularly exported large quantities of cotton cloth from Tagara in current Maharashtra state Which among the above is / are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
52. Ocean Thermal Energy Conversion plant (OTEC) technology can be used for which of the following?
1. Air-conditioning systems.
2. Chilled-soil agriculture.
3. Seawater desalination.
4. Hydrogen extraction
Select the correct answer using the code given below:
(a) 1 and 2 only
(b) 2, 3 and 4 only
(c) 3 and 4 only
(d) 1, 2, 3 and 4
53. In the context of indus valley civilization, which of the following statement is correct about faience?
(a) Faience were an artificially produced material and were used to make beads, bangles, earrings, and tiny vessels
(b) Faience is a naturally found mineral used in making vessels.
(c) Faience was a kind of stone tool used in pot making.
(d) Faience were stone weights found in Lothal
54. Iqta in Medieval India meant
(a) Land assigned to religious personnel for spiritual purpose.
(b) Land revenue from different territorial units assigned to army officers.
(c) Charity for educational and cultural activities.
(d) The right of the zamindars.

55. Which of the following is not one of Pattison's four traditions of geography?
(a) Man-land tradition
(b) Area studies tradition
(c) Spatial tradition
(d) Cultural diffusion
56. Consider the following statements regarding the early years of the East India Company establishment in India:
1. The colonial rule was first established in The Bengal.
2. In the beginning, the earliest attempts were made to reorder rural society and establish a new regime of land rights and a new revenue system.
3. The Permanent Settlement had come into operation in 1793. The East India Company had fixed the revenue that each zamindar had to pay.
Which of the following statement(s) is/are correct?
(a) 1 only
(b) 2 only
(c) 1 and 3 only
(d) All of the above
57. After the Santhal Uprising subsided, what was/were the measure/measures taken by the colonial government?
1. The territories called 'Santhal Paraganas' were created.
2. It became illegal for a Santhal to transfer land to a non-Santhal.
Choose from following options:
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
58. Which of the following statements regarding Pala Dynasty is / are correct?
1. Pala rulers patronized Jainism and played an important role in establishing Jainism in different regions.
2. The first Bengali literary work Charyapada is attributed to the Pala Dynasty.
3. During the Pala Era, Vikramsila and Nalanda were established as two significant centres of learning.
Select the correct answer using the codes given below:
(a) 1 and 2 only
(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3
59. Consider the following statement:
1. Traces of ash have been found around Kurnool caves.
2. An inscribed stone was found in Rosetta, a town on the north coast of Egypt.
3. Tools made from limestone were found in caves of France.
Select the correct answer using the codes given below:
(a) 1 only
(b) 1 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

60. Which of the following pairs are correctly matched?
1. Mrichchakatika - Shudraka
 2. Buddhacharita - Vasubandhu
 3. Mudrarakshasha - Vishakhadatt
 4. Harshacharita - Banabhatta
- Select the correct answer using the codes given below:
- (a) 1 only
(b) 1, 3 and 4 only
(c) 1 and 4 only
(d) 1, 2 and 3 only
61. Consider the following statements:
- (i) In the late 1920's emerged two powerful left parties, the Communist Party of India & the Congress Socialist Party.
 - (ii) The Kirti Kisan Party of Hindustan was founded in Chennai.
 - (iii) Mahatma Gandhi attended Brussels Congress of the oppressed nationalities and visited Soviet Union.
- (a) (i) & (iii) are correct
(b) None is correct
(c) (i) & (ii) are correct
(d) All the above statements are correct
62. The correct statement/s with regard to Ordinance making power of President is/are
1. The President cannot promulgate an ordinance to amend tax laws.
 2. The President cannot promulgate an ordinance to amend the constitution.
- (a) 1 only
- (b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
63. Which one of the following was a very significant aspect of the Champaran Satyagraha?
- (a) Active all-India participation of lawyers, students and women in the National Movement
(b) Active involvement of Dalit and Tribal communities of India in the National Movement
(c) Joining of peasant unrest to India's National Movement.
(d) Drastic decrease in the cultivation of plantation crops and commercial crops
64. Which of the following statements are true about Centre – State relations
1. In respect to matters enumerated in the concurrent list, the executive power rests with the states.
 2. In respect to matters enumerated in the concurrent list, the legislative power rests with the centre.
- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
65. Who wrote - "So far as Bengal is concerned, Vivekananda may be regarded as the spiritual father of Modern Nationalist Movement"

- (a) Keshab Chandra
- (b) Subash Chandra Bose
- (c) Mahatma Gandhi
- (d) Raja Ram Mohan Roy

66. Consider the following :

1. Mountbatten supported the congress stand that the princely states must not be given the option of independence.
2. Viceroy Wavell offered a set of proposals to the congress for securing its cooperation the "August Offer".
3. Disillusioned with the August offer the congress decided to launch Individual Satyagraha.

- (a) All the above are true
- (b) Only 1 & 3 are true
- (c) Only 2 is true
- (d) None of the above

67. Which of the following statements is/ are applicable Jain doctrine?

1. The surest way of annihilating Karma is to practice penance.
2. Every object, even the smallest particle has a soul.
3. Karma is the bane of the soul and it must be ended.

Select the correct answer using the codes given below:

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

68. Which of the following writs can be issued against administrative authorities?

- (a) Prohibition, Certiorari & Mandamus.
- (b) Certiorari & Mandamus.
- (c) Prohibition & Mandamus.
- (d) Prohibition & Certiorari.

69. Match the following:

Column A	Column B
1. GOLD	A. Rajasthan
2. TIN	B. Afghanistan
3. COPPER	C. Karnataka
4. PRECIOUS STONE	D. Gujarat

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

70. One consistent features found in the history of southern India was the growth of the small regional kingdoms rather than large empires because of

- (a) The absence of minerals like iron.
- (b) Too many divisions in the social structures.
- (c) The absence of vast areas of fertile land.
- (d) The scarcity of manpower.

71. With reference to the guilds (Shreni) of ancient India that played a very important role in the Country's economy, which of the following statements is/are correct?

1. Every guild was registered with the central authority of the State and the king was the chief administrative authority on them.

2. The wages, rules of work, standards and prices were fixed by the guild.

3. The guild had judicial power over its own members.

Select the correct answer using the codes given below:

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

72. Consider the following statements regarding the administration of Cholas:

1. The Cholas maintained a regular standing army consisting of elephants, cavalry, infantry, and navy.

2. The naval achievements of the Tamils reached their climax under the Cholas.

3. Cholas had a well - developed naval fleet and had undertaken naval expeditions to foreign shores.

Which of the statements given above is / are correct?

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

73. The emoluments, allowances, privileges and so on of Governor can be altered by:

- (a) A Constitutional Amendment Bill passed by simple majority of Parliament.
- (b) A Constitutional Amendment Bill passed

by special majority of Parliament.

(c) A Constitutional Amendment Bill passed by special majority of the Parliament and ratified by half of the state legislatures.

(d) By a normal legislative process that does not require Constitutional Amendment.

74. Which of the following statements are true about Centre – State relations:

1. During the proclamation of emergency (Article 352) the center can give direction to a state on any matter.

2. During the proclamation of emergency (Article 352) President can modify the constitutional distribution of revenues between the Centre & the states.

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

75. Which of the following situation/s will be proper to impose Presidents rule in a state (Article 356).

- 1. Where after general elections to the assembly, no party secures a majority.
- 2. Serious maladministration in the state.
- 3. Stringent financial exigencies of the state.

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

76. The 'Council of Ministers' does not consist of:

- | | |
|--|---|
| <p>1. Deputy Ministers
2. Parliamentary Secretaries
3. Deputy Chairman - Planning Commission</p> <p>(a) 1 only
(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3</p> <p>77. Jersey is the breed of milch-cow from which one of the following countries?</p> <p>(a) Channel Island
(b) Scotland
(c) Netherlands
(d) Denmark</p> <p>78. Mackinder has divided the world into main divisions for his heartland theory</p> <p>1. Outer crescent
2. Pivot area or heartland
3. Periphery area
4. Inner crescent</p> <p>Which of the following divisions are correct?</p> <p>(a) 1, 2 and 4
(b) 2 only
(c) 2 and 3 only
(d) 1, 3, and 4 only</p> <p>79. With reference to Helium, consider the following statements:</p> <p>1. It is the lightest element on the Earth.
2. It is the only element that cannot be solidified by sufficient cooling at normal atmospheric pressure.</p> <p>Which of the statements given above is/are</p> | <p>correct?</p> <p>(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2</p> <p>80. Which of the following is the correct sequence of natural vegetation that one sees while flying from Trivandrum to Calcutta?</p> <p>(a) Tropical evergreen, wet deciduous, deciduous, dry savana
(b) Wet deciduous, dry savana, deciduous, tropical evergreen
(c) Deciduous, dry savana, wet deciduous, tropical evergreen
(d) Tropical evergreen, deciduous, dry savana, wet deciduous</p> <p>81. Consider the following international events:</p> <p>1. Signing of the Simla Agreement
2. Agra Summit between India and Pakistan
3. Signing of the SAARC Charter at the First SAARC Summit
4. India's first nuclear test</p> <p>Which one of the following is the correct chronological order of the above events?</p> <p>(a) 1, 3, 4, 2
(b) 4, 1, 3, 2
(c) 1, 4, 3, 2
(d) 4, 1, 2, 3</p> <p>82. Which one of the following feature is correct about the "First Past the Post System" of election?</p> <p>(a) A candidate who wins may not get the majority of votes
(b) More than one representative may be elected from one constituency</p> |
|--|---|

(c) Voters vote for the party, not the candidate

(d) Every party gets seats in the legislature in proportion to percentage of votes that it gets

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

1. Provision for the reservation of seats for women in the Lok Sabha and the Rajya Sabha has been made vide 106th Amendment of the Constitution.

2. There are provisions for the reservation of seats for women in the Legislative Assemblies and Legislative Councils of the States.

3. There are provisions for the reservation of seats for women in Panchayats.
Select the answer using the code given below:

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

84. The "Durand Line" is a border demarcation that separates which of the following countries?

- (a) Afghanistan and Iran
- (b) Afghanistan and Pakistan
- (c) India and Pakistan
- (d) Afghanistan and China

85. Consider the following social movements :

1. Chipko Movement

2. Bardoli Satyagraha

3. Satyashodhak Samaj

Which one of the following is the correct chronological order (starting with the earliest) of the launch of the above social movements?

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

86. Which one of the following is not a property of "Graphene" ?

- (a) It is the thinnest material known so far.
- (b) It is almost completely transparent.
- (c) It is highly conducting.
- (d) It is a wide band-gap semiconductor.

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

List-I (State)	List-II (Constitution of India)
A. Article 371	1. Nagaland
B. Article 371-A	2. Gujarat
C. Article 371-B	3. Assam
D. Article 371-I	4. Goa

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

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

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

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

88. Which of the following can be considered a part of the ancient Indian Smriti Literature?

1. Puranas
2. Ramayana
3. Kalpa-Sutra
4. Vedas

Select the answer using the code given below:

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

89. Which one among the following pairs of Subjects and Lists under the Seventh Schedule of the Constitution of India is not correctly matched?

- (a) Forest : Concurrent List
(b) Taxes on land and building: State List
(c) Insurance : Union List
(d) Census : Concurrent List

90. Maitree is a joint military exercise between india and :

- (a) Bangladesh
(b) Thailand
(c) Malaysia
(d) Sri Lanka

91. Which one of the following statements about "Motions" in the Parliament of India is correct?

- (a) A Motion of No-Confidence can be

admissible against an individual minister in the Council of Ministers.

(b) A No-Confidence Motion must set out grounds on which it is based.

(c) Rajya Sabha is not empowered to entertain a motion of No-Confidence.

(d) A Censure Motion need not be based on specific grounds or charges.

92. Which one of the following statements about the Tashkent Agreement is correct?

(a) It was an agreement between India and the Soviet Union.

(b) It was an agreement between India and Pakistan.

(c) It was an agreement that led to the formation of Bangladesh.

(d) It was an agreement between India and Mongolia.

93. Why do plastics not degrade easily?

- (a) They have strong ionic bonds.
(b) They have strong covalent bonds.
(c) They have strong metallic bonds.
(d) They have very high melting points (> 500°C).

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

List-I (Journal/Newspaper /Pamphlet)	List-II (Founder/Editor/ Author)
A. Kudi Arasu	1. Aurobindo Ghosh
B. Kisan Bulletin	2. Pherozeshah Mehta
C. Bombay Chronicle	3. Indulal Yagnik

D. BhawaniMandir	4. E.V. Ramaswami Naicker
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- (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

95. In a simple astronomical telescope, the objective and the eyepiece used respectively, are:

- (a) a convergent lens and a divergent lens.
- (b) a divergent lens and a divergent lens.
- (c) a divergent lens and a convergent lens.
- (d) a convergent lens and a convergent lens.

96. Consider the following statements:

1. Erok Sim is a festival mainly celebrated by the Santhal community.
 2. Sangken is a Buddhist festival celebrated in Arunachal Pradesh.
- Which of the statements given above is/are correct ?

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

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

1. C. Rajagopalachari was the first recipient of the Bharat Ratna.
 2. Pandit Deen Dayal Upadhyaya initiated the concept of "Integral Humanism".
- 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 of the following statements with reference to the Preamble to the Constitution of India are correct?

The word secular comes before the word socialist.

The word justice comes before the word equality.

The word fraternity comes after the word liberty.

Select the answer using the code given below:

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

99. Part IV-A of the Constitution of India deals with which one of the following areas?

- (a) Appointment of Members to Public Service Commissions
- (b) Fundamental Duties
- (c) Functions of Public Service Commissions
- (d) Provisions for the functioning of the State Governments

100. Which one of the following is an example of airborne disease?

- (a) Tuberculosis
- (b) Malaria
- (c) Dengue

(d) Cholera

101. Which of the following criteria are specified for granting Special Category Status to States in India?

1. Hilly and difficult terrain
2. Economic and infrastructural backwardness
3. Strategic coastal zone
4. Sizeable share of tribal population

Select the answer using the code given below:

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

102. What are the four human blood types in ABO blood group typing?

- (a) AO, BO, A and B
- (b) A, B, AB and O
- (c) A, AB, BO and O
- (d) AB, AO, B and O

103. Which of the following statements about the Ghadar Movement is/are correct?

1. The Ghadar Movement began in 1913 in San Francisco.
2. The movement was founded by Sohan Singh Bhakna.
3. The Ghadar Movement took its name from the weekly Ghadar brought out in several Indian languages.

Select the answer using the code given below:

- (a) 1 only
- (b) 2 only

(c) 2 and 3 only

(d) 1, 2 and 3

104. Which one of the following periods has provided the evidence of a ploughed field at Kalibangan in Rajasthan?

- (a) Early Harappan
- (b) Mature Harappan
- (c) Late Harappan
- (d) Chalcolithic

105. Tooth enamel of humans is made up of:

- (a) Calcium phosphate
- (b) Sodium hydrogen carbonate
- (c) Sodium hydroxide
- (d) Lactic acid

106. Consider the following statements about the Bengal countryside at the time of the Permanent Settlement :

1. The zamindars' troops were disbanded.
2. Within the villages, the power of jotedars was more effective than that of zamindars.
3. The East India Company made a rule that the property of women would not be taken over.
4. Adhiyars were sharecroppers on the land owned by bargadars.

Which of the statements given above are correct?

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

107. The inner lining of the human small intestine has numerous finger-like projections called:

- (a) Sphincter
- (b) Villi
- (c) Enzymes
- (d) Plaques

108. Consider the following events:

1. Muslim League Resolution for Pakistan
2. Gandhi-Irwin Pact
3. Dandi March
4. Second Round Table Conference

Which one of the following is the correct chronological order of the given events (earliest to latest)?

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

109. In which one of the following states are the Guntupalle Buddhist Caves located?

- (a) Andhra Pradesh
- (b) Karnataka
- (c) Tamil Nadu
- (d) Kerala

110. A solution with a pH value less than 7 is a/an:

- (a) Neutral solution
- (b) Basic solution
- (c) Acidic solution
- (d) Hypotonic solution

111. With reference to the history of India, the

word "kopeki" is associated with:

- (a) Clothes
- (b) Coins
- (c) Land measurement
- (d) A type of sport in south India

112. Consider the following pairs :

	Historical place	Well-known for
I.	Girnar	Sudarshana Lake
II.	Cholistan	Terracotta model of Plough
III.	Mant	Headless standing figure of Kanishka
IV.	Sannati	Asokan Pillar Edict in Odisha

How many pairs given above is/are correctly matched ?

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

113. The popular poem "Khoob ladi mardani wohto Jhansi wali rani thi" (Like a man she fought, she was the Rani of Jhansi) was written by:

- (a) Mahadevi Varma
- (b) Subhadra Kumari Chauhan
- (c) Amrita Pritam
- (d) Balamani Amma

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

1. Cerebrum controls reflexes like sneezing

and vomiting.

2. Hypothalamus regulates hunger, thirst, and sleep cycles.

- (a) 1 only
- (b) 2 only
- (c) Both 1 & 2 are correct
- (d) Neither 1 nor 2 is correct

115. With reference to the "Amara-Nayaka system", which one of the following statements is not correct?

- (a) It was a major political innovation of the Vijayanagara Empire.
- (b) They were military commanders, who were given territories to govern and collect taxes and other dues from peasants, craftspersons and traders in the area.
- (c) They retained part of the revenue for personal use and to maintain a stipulated contingent of horses and elephants.
- (d) They were not allowed to use their share of revenue for the maintenance of Temples.

116. With reference to the Revolt of 1857, consider the following statements :

1. Shah Mal mobilised the people of Baraut region of Uttar Pradesh and captured the bungalow of an Englishman and converted it into a "hall of justice".
2. Gonoo was a Kol leader of the Singhbhum region of Chotanagpur.

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

117. Matangini Hazra and Lakshman Naik sacrificed their lives in:

- (a) Bardoli Satyagraha
- (b) Non-Cooperation Movement
- (c) Civil Disobedience Movement
- (d) Quit India Movement

118. Which one among the following pairs of type of firm and feature is not correctly matched?

- (a) Oligopoly firm : Interdependence in decision-making
- (b) Monopolistic firm: Firm is a price setter
- (c) Monopoly firm : Produces an efficient level of output
- (d) Perfectly competitive firm : Produces socially optimum output

119. The Sanikatta Salt Works, known for Salt Satyagraha, is located in:

- (a) Gujarat
- (b) Tamil Nadu
- (c) Kerala
- (d) Karnataka

120. Consider the following statements about the Indian Institute of Entrepreneurship (IIE):

1. The IIE was established in 1999 in Guwahati.
 2. The main aim of the institute is to provide training, research and consulting activities for small and microenterprises.
- 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
121. Which one among the following statements about the Districts as Export Hubs (DEH) in India is not correct?
- (a) DEH was launched in August 2019.
(b) The aim of DEH is to boost exports of only selected districts of the country.
(c) India's Foreign Trade Policy 2023 reiterated the role of DEH.
(d) DEH aims to promote exports by providing financial inclusion and facilitating logistical and infrastructural support.
122. Which one of the following platforms marks a transformative step in India's immunization efforts by digitizing vaccination records for pregnant women and children up to 16 years?
- (a) U-WIN
(b) PM-ABHIM
(c) eSanjeevani
(d) FDSI
123. Which language uses the symbolic representation of machine codes needed to program a particular processor or processor family?
- (a) Machine Language
(b) Assembly Language
(c) High-Level Language
(d) All of the above
124. Amsterdam-St. Paul Plateau is located in which one of the following oceanic regions?
- (a) Arctic Ocean
(b) North Atlantic Ocean
(c) Southern Indian Ocean
(d) South Pacific Ocean
125. Which of the following statements with reference to Richter scale is/are correct?
1. It is the intensity scale of an earthquake.
2. Richter indicates the amount of energy released during the earthquake.
Select the answer using the code given below:
- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
126. Which one of the following pairs of City and Lake is not correctly matched?
- (a) Buffalo : Erie
(b) Detroit : Superior
(c) Milwaukee : Michigan
(d) Toronto : Ontario
127. Which of the following statements with reference to lines of latitudes is/are correct?
1. The distance between two successive latitudes changes slightly from the equator to the poles.
2. If parallels of latitude are drawn at an interval of one degree, the total number of parallels thus drawn, including the equator,

will be 179.

Select the answer using the code given below:

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

128. Consider the following statements about Union Government's Expenditure on revenue account and effective capital expenditure:

1. Effective capital expenditure as percentage of GDP has increased from 2020-21 to 2023-24.
2. Expenditure on revenue account as percentage of GDP has increased from 2020-21 to 2023-24.

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

129. Which of the following statements with reference to Glacial trough is/are correct?

1. Alpine glaciers strip valleys of their soil, regolith and sediment to form glacial troughs.
2. When the sea level is below the floor of a glacial trough, the seawater enters as the ice front recedes, creating a fiord.

Select the answer using the code given below:

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

130. Which among the following Classes of Towns in India holds the highest percentage of Urban Population as per the Census 2011?

- (a) Class II
- (b) Class III
- (c) Class IV
- (d) Class VI

131. Social Mobilisation and Institution Development (SM&ID) is one of the major components of:

- (a) Deen Dayal Antyodaya Yojana
- (b) National Urban Digital Mission
- (c) Atal Mission for Rejuvenation and Urban Transformation
- (d) Rashtriya Gram Swaraj Abhiyan

132. Which of the following statements about India's military arsenal is/are correct?

1. HAMMER is a weapon system built for the Rafale fighter aircraft.
2. SCALP cruise missile is also known as Storm Shadow.
3. BrahMos missiles are built under a joint venture between India and Russia.

Select the answer using the code given below:

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

133. Robert Prevost became the Catholic Pope after the death of Pope Francis. Which of the following statements is/are correct about him?

1. He will now be known as Leo XV.
2. He became the 271st Catholic Pope.
3. He is a dual citizen of the United States of America and Peru.

Select the answer using the code given below:

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

134. The book 'The Art of War' was written by:

- (a) Niccolo Machiavelli
- (b) Thomas Hobbes
- (c) Thucydides
- (d) J.S. Mill

135. Which one of the following military operations was not undertaken by India?

- (a) Operation Ablaze
- (b) Operation Spider's Web
- (c) Operation Trident
- (d) Operation Bandar

136. Recently, ICAR (Indian Council of Agricultural Research) has developed the world's first genome-edited rice varieties. Which of the following statements is/are correct with respect to the developed products?

1. The genome-edited varieties – DRR Rice 100 (Kamla) and Pusa DST Rice 1 have been developed by ICAR-IARI, New Delhi.
2. DRR Rice 100 (Kamla), based on Samba Mahsuri, has a shorter duration of maturity.
Select the answer using the code given below:

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

137. Which of the following statements about 'Alcatraz', which was recently in news, is/are correct?

1. It was once a defence fort on Alcatraz island of America.
2. It was once a prison on Alcatraz island of America.
3. It was once occupied by a group of native American students, known as 'Indians of all tribes'.

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

138. Which one of the following statements about 'Nilgiri', 'Surat' and 'Vaghsheer' is correct?

- (a) These are Tiger Reserves in the state of India.
- (b) These are combatants commissioned by

the Indian Navy.

(c) These are Biodiversity parks maintained by the Indian Army.

(d) These are fighter aircraft maintained by the Indian Air Force.

139. Which one among the following is not an atmospheric natural disaster?

(a) Drought

(b) Hailstorm

(c) Frost

(d) Avalanche

140. The Golden Quadrilateral Highway does not pass through which of the following cities?

1. Bhubaneshwar

2. Jaipur

3. Lucknow

4. Indore

Select the answer using the code given below:

(a) 1 and 2

(b) 1 and 3

(c) 2 and 3

(d) 3 and 4

141. Which of the following statements are correct about "Arnala", an Anti-Submarine Warfare Shallow Water Craft?

1. It is indigenously designed in India.

2. It is named after the historic Arnala fort located in Maharashtra.

3. It has been built under a Public-Private Partnership (PPP) of GRSE with M/s L&T Shipyard.

Select the answer using the code given below:

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

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

1. The Government of India has discontinued the Pradhan Mantri Fasal Bima Yojana.

2. The Government of India has approved the continuation of Restructured Weather Based Crop Insurance Scheme.

Select the answer using the code given below:

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

143. Which of the following statements with reference to National Institute of Disaster Management (NIDM) is/are correct?

1. It was constituted in the year 2006.

2. Under the Disaster Management Act, 2005, the Institute has been entrusted to assist in national level policy formulation with reference to Disaster Management.

Select the answer using the code given below:

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

144. Which one of the following is a good statistic

to evaluate where an economy stands in the financial cycle?

- (a) Tax/GDP Ratio
- (b) Fiscal Deficit/GDP Ratio
- (c) Household Consumption/GDP Ratio
- (d) Credit/GDP Ratio

145.

Which of the statements about the dams on the Chenab river is/are correct?

1. Salal dam, Aalal dam and Baglihar dams are on the Chenab river.
2. Baglihar dam has a greater height than Salal dam.
3. Salal dam is operated by Jammu and Kashmir Power Development Corporation and Baglihar dam is operated by NHPC Limited.

Select the answer using the code given below:

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

146. Consider the following statements with reference to the Cotton textile industry in India:

1. Cotton textile industry has, over time, spread to other parts of the country, beyond Gujarat and Maharashtra.
2. Raw cotton is not a weight-losing raw material.

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

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

	List-I (Organization)	List-II (Year of Formation)
A.	European Union	1. 1994
B.	Asia-Pacific Economic Cooperation (APEC)	2. 1967
C.	Association of Southeast Asian Nations (ASEAN)	3. 1989
D.	Free Trade Area of the Americas (FTAA)	4. 1993

Code : A B C D

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

148. Which among the following are the purposes of deploying a Firewall?

1. Examine each packet arriving from

Internet

2. Prevent unauthorised access
3. Block suspicious activity
4. Interconnect telephones

Select the answer using the code given below:

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

149. Which one of the following is not a logical

operator?

- (a) NOT
- (b) OR
- (c) AND
- (d) DIVISION

150. An X-ray can be deflected:

- (a) by a magnetic field
- (b) by an electric field
- (c) by both electric and magnetic field
- (d) neither by electric field nor by magnetic field

Answers and Explanations

Q.no	Ans	
1.	B	The Eighth Schedule of the Constitution of India serves to list the official languages recognised by the Republic. This constitutional provision helps in promoting and safeguarding these languages. Currently, there are 22 languages officially recognised under this schedule. Manipuri: Also known as Meitei, this language is officially recognised and included in the Eighth Schedule. It was added through the 71st Constitutional Amendment Act in 1992. Gondi: This is a Dravidian language spoken by the Gond community. Despite its significance, Gondi is not listed among the 22 languages in the Eighth Schedule of the Indian Constitution. Nepali: Recognized as an official language of India, Nepali is included in the Eighth Schedule. It was also added alongside Manipuri and Konkani in 1992. Dogri: This Indo-Aryan language, primarily spoken in the Jammu region, is also part of the Eighth Schedule. It was officially included through the 92nd Constitutional Amendment Act in 2003.
2.	B	Sucheta Kripalani: A key figure in the independence movement and a veteran politician. She served as the first Woman Chief Minister of Uttar Pradesh, taking office in 1963. This makes her the first woman to hold the position of Chief Minister in India. Sarojini Naidu was the first woman Governor. Vijaya Lakshmi Pandit held cabinet positions and UN leadership roles. Hansa Mehta was a key figure in constitutional assembly and social reform. Sucheta Kripalani holds the specific distinction of being India's first Woman Chief Minister, serving in Uttar Pradesh from 1963 to 1967. Therefore, Sucheta Kripalani is the correct answer.
3.	A	The Congress Socialist Party was established in 1934 within the Indian National Congress. Its main goal was to make the Congress party more focused on socialist principles and to mobilize workers and peasants. The party aimed to achieve complete independence for India and establish a socialist society. Acharya Narendra Dev was a prominent leader of the socialist movement in India and a key figure in the Indian National Congress. He served as the president of the CSP multiple times and is widely recognized as one of its principal founders and ideologues. His leadership was crucial in establishing the party's direction and principles.

4.	A	The Indian Institute of Advanced Study is famously located in Shimla, Himachal Pradesh. It functions in the historic Viceregal Lodge, dating back to the British era. The Indian Institute of Public Administration is headquartered in New Delhi. It serves as a leading institution for training and research in public Administration. The Sushma Swaraj Institute of Foreign Service is part of the broader Foreign Service Institute (FSI) established by the Ministry of External Affairs. The FSI, including the SSIF, is located in New Delhi, not Nainital.
5.	C	Because the force applied by the string (tension) is always perpendicular to the direction of the stone's movement (displacement) at every point on the circular path, the work done by the string on the stone is zero. The kinetic energy of the stone remains constant (assuming the speed doesn't change), but no energy is transferred <i>by the string</i> in the form of work. Therefore, the correct option is that the work done is zero.
6.	D	The standard taxonomic hierarchy, moving from the broadest category to the most specific, includes several levels. When classifying animals, the correct sequence among the options provided follows this established biological order: Phylum: A major category in the classification of animals, ranking below Kingdom. Examples include Chordata (animals with a backbone) or Arthropoda (insects, spiders, crustaceans). Class: A rank below Phylum. Examples include Mammalia (mammals), Aves (birds), Reptilia (reptiles). Order: A rank below Class. Examples include Primates (monkeys, apes, humans), Carnivora (dogs, cats, bears). Family: A rank below Order. Examples include Hominidae (great apes and humans), Felidae (cats). Genus: A rank below Family, typically consisting of closely related species. Example: Homo (humans). Species: The most specific rank, representing a group of organisms that can interbreed and produce fertile offspring. Example: sapiens (humans).

		Therefore, the correct scheme followed for the classification of animals is: (d) Phylum → Class → Order → Family → Genus → Species
7.	C	Prokaryotic cells are characterized by their simplicity. Unlike eukaryotic cells, they lack a membrane-bound nucleus and other membrane-bound organelles. Their genetic material is usually found in a region of the cytoplasm called the nucleoid. Ribosomes are responsible for synthesizing proteins. They are vital components found in both prokaryotic and eukaryotic cells. While there are slight differences in size (prokaryotic ribosomes are 70S, while eukaryotic ones are 80S), ribosomes are present in prokaryotes.
8.	A	Poona Sarvajanik Sabha Formation The Poona Sarvajanik Sabha was established in 1867. It was an association aimed at serving as a bridge between the British government and the people of India, representing public interests and grievances. Indian Association Formation The Indian Association was founded in Calcutta in 1876. It played a significant role in the political awakening of Bengal and advocated for greater Indian representation in governance. Madras Mahajan Sabha Formation The Madras Mahajan Sabha was established in 1884. It was one of the foremost organizations in the Madras Presidency (now Chennai region) dedicated to advocating for the rights and welfare of the Indian population under British rule. Bombay Presidency Association Formation The Bombay Presidency Association was founded in 1885. Similar to the others, it aimed to stimulate the interest of the people of the Bombay Presidency in the political questions affecting them. The chronological order, starting from the earliest formation, is: Poona Sarvajanik Sabha (1867) Indian Association (1876) Madras Mahajan Sabha (1884) Bombay Presidency Association (1885) This sequence corresponds to the numbers 1, 2, 3, 4.

9.	C	(NH₄)₂SO₄ This compound is known as ammonium sulfate. It is a common fertilizer because it contains nitrogen in the ammonium ion (NH₄⁺) form, which plants can absorb. It also provides sulfur. NH₄NO₃ This is ammonium nitrate. It's a widely used fertilizer containing nitrogen in both ammonium (NH₄⁺) and nitrate (NO₃⁻) forms, both readily available for plant uptake. N₂ This represents elemental nitrogen gas. While nitrogen makes up about 78% of the Earth's atmosphere, the molecule is very stable and unreactive. Most plants cannot directly utilize atmospheric nitrogen gas (N₂) for growth. Nitrogen fertilizers must contain nitrogen in a chemically fixed form (like ammonia or nitrate) that plants can absorb and metabolize. Therefore, itself is not considered a nitrogen fertilizer. (NH₂)₂CO This is the chemical formula for urea. Urea is the most common nitrogen fertilizer globally. When applied to the soil, it is converted by soil microbes into ammonia and then nitrate, which plants can readily absorb.
10.	C	Carbohydrates are essential molecules in biology, often categorized based on their size and structure. They can be classified into three main groups: monosaccharides, disaccharides, and polysaccharides. Monosaccharides: These are the simplest forms of sugar, acting as the basic building blocks for larger carbohydrates. Examples include glucose, fructose, and galactose. Disaccharides: These are formed when two monosaccharide units are chemically bonded together. They represent an intermediate size in carbohydrate classification. Polysaccharides: These are complex carbohydrates made up of long chains of monosaccharide units linked together. Examples include starch, glycogen, and cellulose. Maltose (malt sugar) is a disaccharide formed by linking two glucose units (Glucose + Glucose). Lactose (milk sugar) is a disaccharide formed by linking glucose and galactose (Glucose + Galactose). Since both maltose and lactose are composed of two monosaccharide units, they are correctly identified as disaccharides. Therefore, this option is correct.

11.	C	Statement 1 is correct: The paintings depict yakshas, gandharvas and apsaras. The narrative panels in the Ajanta caves, often illustrating Jataka tales (stories of the Buddha's previous lives), Buddhist deities, and scenes from contemporary life, frequently include figures like yakshas (nature spirits), gandharvas (celestial musicians), and apsaras (celestial dancers/nymphs). These figures add richness and divinity to the compositions. Statement 2 is also correct: The artists have used the technique of providing "multiple perspectives". Ajanta artists were masters of their craft and employed sophisticated techniques. The "multiple perspectives" technique refers to how they depicted figures and scenes. They often showed figures from different angles within the same composition or used foreshortening and dynamic lines to suggest movement and volume. This creates a lively and engaging visual narrative, departing from simple, static representations
12.	C	The novel Anandamath, penned by the renowned author Bankim Chandra Chatterjee, is celebrated for its deep exploration of Indian spirituality and nationalism. Within its narrative, the book notably presents a profound and symbolic representation of the Mother Goddess, depicted across three distinct phases or aspects: "Mother as she was": This image likely refers to the primordial, perhaps nascent or historical, aspect of the divine feminine – representing potential, origins, or the past. "Mother as she is": This portrayal captures the current, active, and powerful manifestation of the Mother Goddess, embodying her present influence and strength. "Mother as she will be": This aspect looks towards the future, symbolizing her enduring legacy, evolution, and the continued promise she holds. These symbolic portrayals are intricately woven into the fabric of Anandamath, reflecting the spiritual and patriotic sentiments central to the novel, especially associated with the iconic song "Vande Mataram" which originated from it.
13.	B	"Neel Darpan", a significant Bengali play, vividly portrays the harsh realities and suffering faced by indigo farmers under the oppressive indigo cultivation system in British India. It was written by Dinabandhu Mitra. Role of Michael Madhusudan Dutta Michael Madhusudan Dutta was responsible for translating "Neel Darpan" into English. Dutta was a prominent figure in Bengali literature, known for his contributions to poetry and drama. Key Figures Involved Author: Dinabandhu Mitra wrote the original Bengali play "Neel Darpan".

		Translator (as per answer): Michael Madhusudan Dutta is identified as the English translator. Other Associated Figure: Reverend James Long played a role in bringing the play's content to English audiences and faced consequences for its publication, although the direct translation is attributed to Dutta in this context. The translation aimed to expose the atrocities committed against the indigo planters to a wider, English-speaking audience, highlighting the social injustice prevalent during that era.
14.	A	Shrinkflation is the term used to describe this specific practice. It's a blend of the words "shrink" and "inflation." Companies might reduce the net quantity (weight, volume, or number of items) of a product, such as a candy bar, a box of cereal, or a bottle of soda, while keeping the price consistent. Consumers might not notice the change immediately, as the packaging often looks similar, leading to a perceived increase in the price per unit.
15.	D	Statement 1 claims that Ellora is associated exclusively with Buddhism. The Ellora Caves complex, a UNESCO World Heritage site, is renowned for its remarkable rock-cut architecture representing three major Indian religions: Buddhism, Hinduism, and Jainism. The Buddhist caves predominantly date from the 7th century CE. The Hindu caves, numbering the most, were developed between the 6th and 8th centuries CE. The Jain caves, representing the later phase of construction, were added in the 9th century CE. Conclusion: Since Ellora features significant contributions from Hinduism and Jainism alongside Buddhism, the statement that it is associated exclusively with Buddhism is incorrect. Statement 2 asserts that the Kailasa temple at Ellora was built using dressed stone and kiln-fired bricks. The Kailasa temple (Cave 16) is one of the most spectacular structures at Ellora. It is a prime example of a monolithic rock-cut temple. This means the entire temple structure was carved downwards, out of a single, massive piece of solid rock. It was not constructed by assembling stones or bricks. The construction involved excavating the rock face to reveal the temple structure, adorned with intricate sculptures and carvings. Conclusion: The description of the Kailasa temple being built of "dressed stone and kiln-fired bricks" contradicts its nature as a monolithic, rock-cut excavation. Therefore, this statement is incorrect.

		Since both statements are incorrect, the option "Neither 1 nor 2" is the correct choice.
16.	B	Statement 1 claims: "TTT is a pioneering initiative that aims at imparting essential life skills to adolescent students across India." Focus: This statement highlights the impartation of essential life skills. Target Audience: It specifies adolescent students across India. Nature of Initiative: It describes TTT as a pioneering initiative. Based on the typical goals of such programs, equipping young people with life skills (like communication, decision-making, problem-solving, etc.) is a common objective. This statement aligns with the known purpose of initiatives like TTT. Statement 2 claims: "TTT is a pioneering initiative that aims at imparting vocational and technical skills to students across India." Focus: This statement emphasizes vocational and technical skills. Target Audience: It mentions students across India. While vocational and technical skills are important, the primary focus of the Tim Tim Tare initiative is generally understood to be broader life skills rather than specific job-oriented technical training. Therefore, this statement appears to misrepresent the core objective of TTT. Statement 2 inaccurately describes TTT's focus, confusing life skills with vocational/technical training. Therefore, only the first statement is correct.
17.	A	The statement mentions Pandita Ramabai publishing "A Comparison Between Women and Men" to protest colonial views on women's rights and opportunities. Pandita Ramabai Sarasvati (often referred to as Pandita Ramabai) was a renowned social reformer and scholar. She authored the Marathi book Stri-Purush Tulana (A Comparison Between Women and Men) in 1882. This work critically examined the Puranic and scriptural basis for the subjugation of women in India and advocated for their rights and equality. While the statement specifically mentions protesting "colonial views", Ramabai's work fundamentally challenged existing patriarchal structures and societal norms, which inherently contested prevailing notions about women's roles, including those potentially reinforced or ignored by colonial perspectives. Thus, the essence of the statement holds true. Therefore, Statement 1 is considered correct.

		Statement 2 claims Tarabai Shinde worked in medicine to reduce child mortality in rural India. Tarabai Shinde is primarily recognized as a radical feminist writer and social reformer. Her most famous work is <i>Stri Purush Tulana</i> (A Comparison Between Women and Men), which critically analyzed gender inequality and advocated for women's rights. Historical records do not indicate that Tarabai Shinde worked primarily in the field of medicine or focused on initiatives to reduce child mortality. Therefore, Statement 2 is incorrect. Statement 3 asserts that Sarojini Naidu led a delegation to London to demand female franchise. Sarojini Naidu was a pivotal leader in the Indian independence movement and a champion for women's rights. She was an advocate for women's suffrage (the right to vote). Naidu attended the Second Round Table Conference in London in 1931 as part of the Indian delegation. During her time in London and through her broader advocacy, she certainly pushed for women's rights, including political rights like suffrage. However, historical accounts typically describe her role as a key advocate and leader within the independence movement and women's organizations, rather than formally "leading a specific delegation solely to demand female franchise" during that particular visit. While she strongly voiced these demands, the specific phrasing might not perfectly align with historical records of delegation leadership for that precise purpose. Therefore, Statement 3 is considered incorrect based on the specific phrasing
18.	A	The Kalaram temple in Nashik, Maharashtra, was a focal point for significant social reform movements in the early 20th century. The temple entry satyagraha, which began in 1930, was a major struggle aimed at asserting the right of Dalits (formerly known as untouchables) to enter Hindu temples and worship freely. This movement challenged the prevailing caste-based discrimination and social hierarchies prevalent in India at that time.
19.	A	The Global Innovation Index (GII) is a comprehensive annual report that ranks world economies according to their innovation capabilities. WIPO publishes this index, evaluating metrics like institutions, human capital & research, infrastructure, market sophistication, business sophistication, knowledge & technology outputs, and creative outputs. Data shows a clear upward trend for India's GII ranking over the specified period. For instance, India ranked 81st in 2015 and has shown substantial progress, reaching 40th position in 2023. This consistent

		improvement indicates significant advancement in India's innovation landscape. Therefore, Statement 1 appears to be correct. Statement 2 states that funding comes primarily from the private sector and is sectorally concentrated in pharmaceuticals and information technology. Funding Sources: While private sector investment in R&D has been growing in India, government funding remains a critical component. Public sector institutions, government grants, and research councils play a substantial role, especially in basic research and strategic areas. Thus, stating that funding is primarily from the private sector might not be accurate. Both public and private funding contribute significantly to India's overall R&D expenditure. Sectoral Concentration: Pharmaceuticals and Information Technology (IT) are indeed major sectors driving R&D and innovation in India. However, R&D activities are also significant in other domains such as automotive, biotechnology, chemicals, aerospace, and defense. Attributing the concentration primarily to only these two sectors might overlook the contributions and potential in other vital fields. Based on this analysis, Statement 2 seems incorrect as it potentially oversimplifies the funding sources and sectoral focus.
20.	B	The gas associated with the smell of rotten eggs is Hydrogen sulphide. The chemical formula for this gas is H_2S
21.	D	Deciduous Forest Leaf Shedding Seasonality Statement 1 is incorrect : Deciduous trees, which are the hallmark of these forests, shed their leaves primarily during the autumn (fall) season. This natural process occurs in response to decreasing temperatures and shorter daylight hours, allowing the trees to conserve water and energy through the winter. During the summer, these trees are characterized by their full canopy of leaves, actively engaged in photosynthesis. Mid-latitude Forest Geographical Distribution Statement 2 is correct : Eastern North America and Western Europe are widely recognized as major geographical areas where Mid-latitude deciduous forests are native and extensively distributed. These regions exhibit the distinct seasonal climate patterns that support such ecosystems. Asian Forest Zonation Patterns Statement 3 is correct: This description accurately reflects the typical geographical

zonation observed in large continental areas like Asia. Midlatitude deciduous forests often form a transitional zone, situated between the colder, needle-leaved boreal forests (taiga) to the north and the drier, grassland steppe regions to the south.

Common Deciduous Tree Examples

Statement 4 is correct: Beech (Fagus genus), Hickory (Carya genus), and Walnut (Juglans genus) are indeed prominent examples of broadleaf deciduous tree species commonly found in Mid-latitude deciduous forests within their native habitats.

22.

D

A. Comoros: Located in the Indian Ocean, east of mainland Africa, the Comoros islands are geologically part of the African Plate. Thus, A matches with 2.

B. Baffin Island: This large Canadian Arctic island is a significant landmass on the continent of North America. It is situated upon the North American Plate. Therefore, B matches with 1.

C. Sri Lanka: Lying south of India, Sri Lanka is geologically stable and sits on the Indian Plate, which is a part of the larger Indo-Australian Plate. Hence, C matches with 4.

D. Andaman Islands: Situated in the Bay of Bengal, the Andaman Islands represent a complex tectonic area. Following the provided options and classifications, they are associated with the Eurasian Plate, reflecting the broader tectonic interactions in the region. Thus, D matches with 3.

Consolidating the matches:

Comoros (A) → African Plate (2)

Baffin Island (B) → North American Plate (1)

Sri Lanka (C) → Indo-Australian Plate (4)

Andaman Islands (D) → Eurasian Plate (3)

23.

C

Element Name	Symbol	Approximate Weight Percentage (%)
Oxygen	O	46.6
Silicon	Si	27.7
Aluminium	Al	8.1

		<table> <tr> <td>Calcium</td><td>Ca</td><td>3.6</td></tr> </table> The question assigns numbers to these elements: 1. Aluminium 2. Calcium 3. Silicon 4. Oxygen Translating the ascending order of elements (Calcium, Aluminium, Silicon, Oxygen) into their corresponding numbers gives us the sequence: 2, 1, 3, 4.	Calcium	Ca	3.6
Calcium	Ca	3.6			
24.	C	While Madhya Pradesh comprises several distinct regions, Indore is not primarily associated with: Bundelkhand: Located in the northeast part of Madhya Pradesh. Mahakoshal: Situated in the eastern part of Madhya Pradesh, known for cities like Jabalpur. Nimar Region: Found in the southwestern part of Madhya Pradesh, along the Narmada River. Therefore, the most accurate regional classification for Indore's location is the Malwa Plateau.			
25.	D	The uneven heating of the Earth's surface due to its spherical shape and axial tilt (Factor 1), the differing thermal capacities and geographical presence of land and water bodies (Factor 2), and the effect of the planet's rotation (Factor 3) all play crucial roles in determining the complex patterns of planetary winds. Therefore, all three factors listed are correct influences on the pattern of planetary winds.			
26.	C	Statement 1 is correct: Water vapour plays a significant role in determining the stability and instability in the air. Density Changes: Water vapour is lighter (less dense) than dry air at the same temperature and pressure. Therefore, the amount of water vapour affects the overall density of air parcels. Latent Heat Release: When air containing water vapour rises and cools, the vapour can condense into liquid water droplets or ice crystals. This process, called condensation (or deposition), releases latent heat into the surrounding air. This released heat warms the air parcel, making it less dense and potentially causing it to rise further, leading to instability and cloud formation. Conversely, dry air lacks this heat source during cooling. Adiabatic Processes: The rate at which air cools as it rises (the adiabatic lapse rate) is			

different for moist and dry air. Saturated (moist) air cools more slowly than dry air because of the release of latent heat during condensation. This difference influences atmospheric stability.

Statement 2 is also correct : Water vapour acts like a blanket, helping to regulate the Earth's temperature. This is often referred to as the greenhouse effect.

Absorption of Radiation: Water vapour is a potent greenhouse gas. It absorbs long-wave infrared radiation emitted by the Earth's surface.

Re-emission of Radiation: After absorbing this energy, water vapour molecules re-emit it in all directions, including back towards the Earth's surface.

Temperature Moderation: This trapping and re-emitting of heat prevents excessive cooling of the Earth's surface, especially at night or during winter. It helps maintain a relatively stable and habitable temperature range, ensuring the planet neither becomes too cold nor too hot overall.

Therefore, Statement 1 & 2 both correct

27.

C

The question implies a ascending sequence is correct.

Let's identify the gases corresponding to this sequence:

Hydrogen (H₂): 0.000055% ppm

Xenon (Xe): 0.0000087% or about 0.09 parts per million (ppm)

Helium (He): 0.000524% or about 5.24 ppm

Neon (Ne): 0.001818% or about 18.18 ppm

Therefore, the correct arrangement from least to most abundant is Hydrogen, Xenon, Helium, and Neon.

The correct answer sequence is 2, 4, 1, 3.

Permanent Gases of the Atmosphere

Constituent	Formula	Percentage by Volume
Nitrogen	N ₂	78.08
Oxygen	O ₂	20.95
Argon	Ar	0.93
Carbon dioxide	CO ₂	0.036
Neon	Ne	0.002
Helium	He	0.0005
Krypto	Kr	0.001
Xenon	Xe	0.00009
Hydrogen	H ₂	0.00005

28.

C

Characteristic 1: Low Annual Precipitation

The annual precipitation is stated to be low, around 15 cm. This is a defining feature of arid or semi-arid climates, or climates found in very cold regions where precipitation is

limited.

Subtropical steppe climates are semi-arid and receive low rainfall, but often slightly more than 15 cm.

Humid sub-tropical climate is characterized by high rainfall, ruling it out immediately.

Cold climate with dry winters typically receives low precipitation, often concentrated in specific seasons or as snow, fitting the low amount described. Tundra climate also experiences low precipitation, often less than 25 cm, due to cold air holding little moisture.

Based on precipitation alone, options 1, 3, and 4 are plausible, while option 2 is not.

Characteristic 2: Monsoon-like Wind Reversal

This characteristic points towards a climate influenced by large seasonal pressure differences over continents. The development of strong winter high-pressure systems (anticyclones) and weaker summer systems causes winds to shift direction seasonally.

This pattern is strongly associated with continental climates, which experience significant temperature variations between seasons.

While subtropical regions can have monsoon influences, the description of pronounced winter anticyclones and their weakening in summer is more typical of mid-latitude continental interiors.

Tundra climates are primarily driven by extreme cold, and while wind exists, a distinct monsoon-like reversal isn't their defining feature.

A Cold climate with dry winters often occurs in continental interiors at higher latitudes, where such seasonal wind shifts are common.

This characteristic favors option 3.

Characteristic 3: Low Summer Temperatures (Polewards)

The mention of low summer temperatures, particularly "polewards," indicates a climate found at higher latitudes or altitudes.

Subtropical steppe climates typically have hot summers.

Cold climate with dry winters inherently involves low temperatures, including cool summers at higher latitudes.

Tundra climate is defined by extremely cold temperatures year-round, with very short, cool summers.

This characteristic supports both options 3 and 4, but combined with the wind reversal, option 3 becomes stronger.

Conclusion

Considering all three characteristics together:

		Low precipitation (15 cm) fits arid, semi-arid, and cold/polar regions. Monsoon-like wind reversal points towards continental influence and seasonal pressure changes. Low summer temperatures suggest higher latitudes or altitudes. The combination strongly matches a Cold climate with dry winters. This type of climate is often found in continental interiors, experiences significant seasonal temperature shifts, has low annual precipitation (especially dry winters), and can exhibit seasonal wind patterns due to pressure system variations. While Tundra also has low temperatures and precipitation, the monsoon-like wind reversal is less characteristic than in a cold continental climate.
29.	C	Statement 1 is incorrect: "Deendayal Port is situated at the head of Gulf of Khambhat." Fact Check: Deendayal Port (formerly Kandla Port) is located in Gujarat. However, it is situated at the northern end of the Gulf of Kutch, not the Gulf of Khambhat. The Gulf of Khambhat lies to the south of the Gulf of Kutch. Statement is correct: "Cochin Port is situated at the head of Vembanad Kayal." Fact Check: Cochin Port, officially known as the Port of Kochi, is a major port located in the state of Kerala. It is indeed situated within the Vembanad Kayal (Vembanad Lake), a large, long, and brackish lagoon system on the coast of Kerala, forming a natural harbour. Statement 3 is correct: "Mormugao Port is situated at the entrance of the Zuari estuary." Fact Check: Mormugao Port is a natural harbour located in Goa. It is strategically situated at the entrance of the Zuari River estuary, which forms a wide bay. Statement 4 is incorrect: "Paradip Port is situated in the Godavari delta." Fact Check: Paradip Port is a major port on the east coast of India, located in Odisha. It is situated near the confluence of the Mahanadi River with the Bay of Bengal. The Godavari delta is located much further south, in the state of Andhra Pradesh. Based on the analysis, the correct statements are: Statement 2: Cochin Port is situated at the head of Vembanad Kayal. Statement 3: Mormugao Port is situated at the entrance of the Zuari estuary. Therefore, the combination of statements 2 and 3 is correct .
30.	A	Survey Details and MoSPI Conduct 1. Survey on Social Consumption – Health: This survey is part of the National Sample

		Survey (NSS) program, which is conducted by MoSPI. It collects crucial data on health-related expenditures and utilization of health services across India. 2. Comprehensive Modular Survey – Telecom and ICT skills: MoSPI conducts various modular surveys to gather specific data. While this specific title might be less common, MoSPI does collect data related to skills and sector-specific information, including aspects of the Information and Communication Technology (ICT) sector, as part of its mandate. Given the context, it's considered part of their data collection activities. 3. Periodic Labour Force Survey (PLFS): This is a flagship survey by MoSPI, initiated to measure key employment and unemployment indicators in India in the current monthly, quarterly, and annual frequencies. It replaced the earlier Employment-Unemployment surveys. 4. Annual Survey on Unincorporated Enterprises (ASUE): This survey is conducted by MoSPI to gather information on the characteristics and performance of unregistered or unincorporated non-agricultural businesses in India, providing vital data for economic planning. Based on the nature and mandate of the Ministry of Statistics and Programme Implementation, all four listed surveys fall under its purview either directly or as part of its broader statistical data collection initiatives. Survey on Social Consumption – Health (NSS) Comprehensive Modular Survey – Telecom and ICT skills Periodic Labour Force Survey (PLFS) Annual Survey on Unincorporated Enterprises (ASUE) Therefore, surveys 1, 2, 3, and 4 are all conducted by MoSPI.
31.	A	Justice Amitava Roy panel on prison reforms: In 2018, the Supreme Court-appointed this panel. The committee submitted its report on February 2020 with major recommendations includes For overcrowding Special fast-track courts should be set up to deal with petty offences. Lawyers – prisoners ratio: there should be at least one lawyer for every 30 prisoners. For Understaffing The Supreme Court should pass directions to start the recruitment process against vacancies There should be the use of video-conferencing for trial. For Prisoners

		Every new prisoner should be allowed a free phone call a day to his family members to see him through his first week in jail. Alternative punishments should be explored.
32.	C	Wet and humid conditions in the Horn of Africa: This statement is incorrect. La Niña is typically associated with drier-than-normal conditions and severe drought in the Horn of Africa (East Africa). Above-average hurricane season for the Atlantic Ocean: This is correct. La Niña tends to reduce vertical wind shear in the Atlantic, creating conditions favorable for the development and intensification of tropical storms and hurricanes, leading to an above-average season. Drought conditions in southern South America: This is correct. Regions like southern Brazil, Uruguay, northern Argentina, and southern Bolivia experience below-average rainfall, leading to drought conditions during La Niña events. No spring season for India: This statement is incorrect. La Niña affects Indian seasons, typically bringing stronger and/or above-average monsoon rainfall and potentially harsher, colder winters. It does not eliminate the spring season.
33.	C	Statement 1: I-STEM is a dynamic and interactive national portal, which was initiated by the Office of the Principal Scientific Adviser (PSA) to the Government of India, under the aegis of the Prime Minister Science, Technology, and Innovation Advisory Council (PM-STIAC) mission. It is an important national program to build a unique "One Nation One Research Web Portal" for the scientific community. Statement 2: The main objective of I-STEM is to strengthen the R&D ecosystem of the country by connecting researchers with publicly funded R&D resources and facilities across various institutions, in part by promoting indigenous technologies and scientific equipment development. It aims to support researchers, especially those in smaller or remote institutions, and industries/start-ups, thereby reducing duplication of investments and enhancing R&D productivity. Both statements are correct.
34.	A	Statement 1 is correct: Plastic is indeed a synthetic organic polymer derived from petroleum. Plastics are created by joining smaller molecules (monomers) into long chains, forming polymers. Petroleum provides the source of many of these monomers.

		Statement 2 is incorrect: While Puneet Sagar Abhiyan focuses on cleaning water bodies like seashores, rivers, and lakes of plastic and other waste, its scope is broader. The campaign aims to raise awareness about the importance of water conservation and plastic pollution. It's not solely focused on just sea shores
35.	B	A Dark Sky Reserve is a designation given to a place that has policies in place to ensure that a tract of land or region has minimal artificial light interference. The International Dark Sky Association is a U.S.-based non-profit that designates places as International Dark Sky Places, Parks, Sanctuaries and Reserves, depending on the criteria they meet. India is established its first Dark Sky Reserve in Hanle, located in eastern Ladakh. This region was chosen for its clear, dark skies, high altitude, and dry weather, making it ideal for astronomical observations and astro-tourism. The reserve is located in Hanle, eastern Ladakh, within the Changthang Wildlife Sanctuary.
36.	C	Launched in 2009, Delhi Dialogue is India's premier annual track 1.5 international conference bringing together foreign ministers, senior officials, business leaders, scholars, academicians and eminent persons of India and ASEAN to discuss ways to further strengthen the ASEAN-India Strategic Partnership. ADMM-Plus is a platform for ASEAN member states (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor Leste & Vietnam) and its eight Dialogue Partners (India, US, China, Russia, Japan, South Korea, Australia & New Zealand) to strengthen security and defence cooperation. Statement 1 is correct: The Delhi Dialogue is an annual event hosted by India to engage with ASEAN nations on various political, economic, and socio-cultural issues. Statement 2 is correct: ADMM-Plus is a platform for ASEAN member states and their dialogue partners, including India, to discuss security and defence matters.
37.	C	The UNFCCC is the parent treaty: The UNFCCC serves as the foundational agreement for addressing climate change, and subsequent agreements like the Paris Agreement and Kyoto Protocol build upon its framework. Yes, India has hosted the COP of all three Rio conventions: the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the United Nations Convention to Combat Desertification (UNCCD). The UNCCD COP was hosted in New Delhi in 2019, while the CBD COP was held in Hyderabad in 2012.

		India also hosted the UNFCCC COP 8 in New Delhi in 2002. Both 1 and 2 are correct ...
38.	B	Statement 1 is incorrect: Tax buoyancy is not defined as changes in tax revenue due to tax rate changes. That concept is called tax elasticity. Tax buoyancy measures how responsive tax revenue is to changes in economic activity (GDP) regardless of tax rate adjustments. Tax buoyancy describes how tax revenue changes in relation to GDP growth, meaning when the economy grows, tax revenue also tends to grow. Statement 2 accurately reflects this relationship.
39.	D	Statement 1 is correct: While slow-moving continental plates themselves don't directly cause volcanic activity, when they collide with oceanic plates at convergent boundaries, the oceanic plate is subducted, leading to melting and the formation of magma, which can result in volcanoes. However, slow continental plates can also experience volcanic activity due to hot spots. Statement 2 is correct: Volcanoes can occur at both convergent and divergent plate boundaries. At convergent boundaries, like where oceanic plates subduct under continental plates or other oceanic plates, intense volcanic activity is common. At divergent boundaries, plates pull apart, creating fissures where magma rises to the surface and forms volcanoes. Statement 3 is correct: The Ring of Fire is a major horseshoe-shaped zone around the Pacific Ocean that is home to most of the world's volcanoes and earthquakes, a phenomenon caused by the movement of tectonic plates. This region is characterized by a large number of volcanic arcs, trenches, and fault lines where tectonic plates collide and grind against one another, creating seismic and volcanic activity.
40.	D	1. Low latency & greater download speeds: 5G offers ultra-low latency (as low as 1 millisecond) and significantly faster download speeds, up to 10 Gbps and peak speeds of 20 Gbps. 2. Connecting multiple devices and exchanging data in real-time: 5G can support a massive number of connected devices per square kilometer (up to 1 million), which is vital for the Internet of Things (IoT) and enables real-time data exchange. 3. Improving road safety by allowing vehicles to communicate between themselves: 5G enables Vehicle-to-Everything (V2X) communication, allowing vehicles to exchange data with each other (V2V), infrastructure, and pedestrians in real-time, enhancing safety and traffic management. 4. Creating efficient sensor networks to track patients: In healthcare, 5G's capabilities (low latency, high reliability, and massive connectivity) support remote patient monitoring

		systems and IoT sensors for tracking medical equipment in real-time. 5. Increased energy savings: 5G networks and connected devices are designed to be more energy-efficient than previous generations, optimizing power consumption and extending the battery life of IoT devices. All the above.
41.	A	L69 Group advocates for a rotational permanent membership system for developing nations. Incorrect. The L69 Group, which includes 42 developing countries (including India), does not advocate for a rotational permanent membership system. Instead, it calls for expansion in both permanent and non-permanent categories of UNSC membership to better reflect global realities and ensure representation for the Global South. The C-10 Group, based on the Ezulwini Consensus, demands that Africa be given two permanent UNSC seats with veto power. Correct. The C-10 (Committee of Ten) represents the African Union's position on UNSC reform. Based on the Ezulwini Consensus and Sirte Declaration, it demands two permanent seats for Africa with veto power, along with five non-permanent seats. The G4 countries aim to secure permanent UNSC membership for themselves but do not support veto power reforms. Incorrect. The G4—India, Brazil, Germany, and Japan—seek permanent membership in the UNSC. While they prioritize securing seats, they do not oppose veto power reforms. In fact, they support text-based negotiations that include discussions on veto privileges. Only 1 statement is correct — Statement 2.
42.	D	China is the world's top milk producer followed by India. Incorrect. India is actually the world's largest milk producer, followed by the United States and China. India has held this position for several years due to its vast dairy sector and large livestock population. More than half of India's total milk production comes from indigenous buffaloes. Incorrect. Indigenous buffaloes contribute 31.94% of India's total milk production. When combined with non-descript buffaloes (12.87%), buffaloes overall contribute 44.81%, which is less than half. As per the Basic Animal Husbandry Statistics (BAHS) 2023, the top milk-producing

		state is Uttar Pradesh , contributing 15.72% of India's total milk output. Madhya Pradesh ranks third with 8.73% .
43.	B	It is bordered by Syria to the north and east by Israel. Incorrect. Lebanon is bordered by: Syria to the north and east Israel to the south The statement incorrectly places Israel to the east, which is geographically inaccurate. It is bordered by the Mediterranean Sea to the west. Correct. Lebanon has a western coastline along the Mediterranean Sea, stretching approximately 140 miles. 
44.	A	Seraikala, Khera, and Deosa have recently been in the news due to their recognition as important megalithic sites in India. These locations are part of a broader archaeological focus on Iron Age burial practices, where large stone structures like dolmens, cists, and stone circles were used to commemorate the dead. The renewed attention comes amid a wave of discoveries across India—especially in Kerala and Odisha—where over 110 megalithic structures were unearthed, offering fresh insights into early Iron Age societies, their belief systems, and burial customs. While the spotlight has been on southern sites like Malampuzha in Kerala, places like Seraikala (Jharkhand), Khera (Rajasthan), and Deosa (likely in the same region) are being revisited for their archaeological significance and potential to deepen our understanding of prehistoric India.

45.	B	Tara, Chunda, and Manjusri are important deities in Vajrayana Buddhism, often associated with wisdom, compassion, and esoteric practices: Tara A revered female bodhisattva symbolizing compassion and protection. Known in two main forms: Green Tara (active compassion) and White Tara (healing and longevity). Widely worshipped across Himalayan and Southeast Asian Buddhist traditions. Chunda A lesser-known deity in Vajrayana Buddhism, often depicted as a female protector or emanation of Tara. Associated with ritual offerings and spiritual purification. Manjusri The bodhisattva of wisdom, often shown wielding a flaming sword to cut through ignorance. Central to Mahayana and Vajrayana traditions, especially in monastic education and meditation. These deities were recently in the news due to Archaeological Survey of India (ASI) excavations at Ratnagiri in Odisha, where votive stupas bearing their images were discovered. This highlights the site's significance as a major Vajrayana Buddhist center during the early medieval period.
46.	C	Statement 1 is correct: An Anti-Tank Guided Missile (ATGM) is designed specifically to target and destroy armored military vehicles like tanks. This is its primary function. Statement 2 is also correct: HELINA is a type of ATGM developed in India, and it is designed to be launched from the Advanced Light Helicopter (ALH). HELINA (Helicopter based NAG): Indigenously developed (by DRDO) helicopter launched Anti-Tank Guided Missile (ATGM). It is third generation fire and forgets class ATGM system mounted on the Advanced Light Helicopter. The system has all weather day and night capability.
47.	C	CITES was drafted as a result of a resolution adopted in 1963 at a meeting of members of IUCN (The World Conservation Union). The text of the Convention was finally agreed at a meeting of representatives of 80 countries in Washington, D.C., United States of America, on 2 March 1973, and was opened for signature on 3 March 1973. On 1 July 1975 CITES entered in

		force. Statement 1 is correct: CITES is an international treaty, meaning it is legally binding on the countries that have signed and ratified it. Statement 2 is correct: India is indeed a signatory to the CITES convention, having joined it in 1976.
48.	D	Statement 1 is incorrect: The Financial Inclusion Index (FI-Index) is published annually by the Reserve Bank of India (RBI), not the State Bank of India (SBI). Statement 2 is correct: The index is a composite measure based on three broad parameters: Access, Usage, and Quality, making it responsive to ease of access, availability and usage of services, and the quality of services. Statement 3 is correct: The FI-Index has been constructed without any "base year" and, as such, reflects the cumulative efforts of all stakeholders (government, RBI, sectoral regulators, etc.) over the years towards financial inclusion.
49.	A	Statement 1 is correct: The IAEA is commonly referred to as the "Atoms for Peace and Development" organization due to its focus on promoting the peaceful use of nuclear energy. Statement 2 is correct: The IAEA is an independent organization established by the United Nations but functions autonomously. Statement 3 is incorrect: While the IAEA does report annually to the UN General Assembly, it only reports to the Security Council in specific cases of non-compliance with safeguards and security obligations. Option (a) 1 and 2 only.
50.	D	The Energy Conservation (Amendment) Bill, 2022 primarily focuses on promoting energy efficiency and conservation. Key provisions include: Mandating the use of non-fossil sources: The bill aims to enforce the use of greener energy sources like green hydrogen, green ammonia, biomass, and ethanol. The government can set minimum quotas for their usage by designated consumers. Establishment of Carbon Markets: The bill establishes a carbon credit trading scheme, allowing companies to trade carbon credits based on their emissions reduction efforts. Bringing large residential buildings under the Energy Conservation regime: The bill expands the Energy Conservation Building Code to include large residential buildings. This means these buildings will be subject to energy efficiency standards. Increasing the members of the governing council of the BEE: The bill may include provisions to increase the size or modify the composition of the governing council of the Bureau of Energy Efficiency (BEE), the organization responsible for overseeing energy

		conservation efforts. The bill does not explicitly mention increasing the number of members on the BEE governing council in all sources. However, mentions of expanding the Energy Conservation regime and establishing carbon markets are consistent across multiple sources.
51.	C	Statement 1 is correct: The term "Cotton Route" refers to the maritime trade route used to export cotton textiles from India. Historical accounts mention the export of cotton fabrics from India along these sea routes. Statement 2 is also correct: Tagara, located in present-day Maharashtra, was a significant center for cotton production and export in ancient India. Historical texts and archaeological evidence support this fact. Since 2013 China has made efforts to connect with South Asian nations & India's extended neighborhood. China has identified nations like India, Maldives & Sri Lanka that connect its ports with Africa's eastern coast. The Indian Government is trying to counter Maritime Silk Road of China with its own strategies which include revival of ancient spice route, ancient Cotton Route and the so called Project Mausam. Further, we note that India's first cotton exports date back to the 1st century CE. There were regular supplies of large quantities of cloth of ordinary quality from Tagara (Ter in Maharashtra).
52.	D	OTEC plants utilize the temperature difference between warm surface ocean water and cold deep ocean water to generate electricity. However, besides power generation, they can also produce several byproducts. These include: Air-conditioning systems: The cold deep water can be used for cooling purposes in buildings and other facilities. Chilled-soil agriculture: Cool water from OTEC can be used to create a suitable growing environment for temperate-climate crops in tropical regions. Seawater desalination: Certain OTEC systems can desalinate seawater, producing fresh water for drinking and irrigation. Hydrogen extraction: While not yet widely implemented, research is exploring the use of OTEC to generate hydrogen through electrolysis. This hydrogen can then be used as a clean fuel.
53.	A	Faience were an artificially produced material and were used to make beads, bangles, earrings, and tiny vessels. Faience is a manufactured substance created by mixing quartz sand with a gum and then glazing it, allowing for the creation of various small objects like beads and bangles. So, Option (a) is the correct answer.

54.	B	Iqta was a system in medieval India where land revenue from a specific geographical area was granted to army officers in exchange for their services. This allowed the rulers to maintain a large and efficient military force while also giving the officers a source of income and authority.
55.	D	William D. Pattison identified four traditions of geography: Spatial tradition: Focuses on the spatial analysis of phenomena across Earth's surface Area studies tradition: Examines the unique characteristics of different regions Man-land tradition (also called human-environment tradition): Analyzes the relationship between humans and their physical environment Earth science tradition: Studies the physical processes that shape Earth and the interaction between Earth and the sun "Cultural diffusion" is not one of Pattison's four traditions of geography, although it is a significant concept in cultural geography, which falls under the broader area studies tradition.
56.	D	Statement 1 is correct: The East India Company's colonial rule in India first began in Bengal. Statement 2 is correct: The early attempts to restructure rural society and introduce new land rights and revenue systems were made in Bengal. Statement 3 is correct: The Permanent Settlement was implemented in 1793, where the East India Company fixed the revenue that zamindars (landlords) had to pay.
57.	C	The British colonial government implemented two key measures after the Santhal Uprising: Creation of Santhal Parganas: A separate administrative unit called "Santhal Parganas" was established to specifically manage and oversee the Santhal tribal areas. This was intended to provide them with a degree of autonomy and protection. Restriction on Land Transfer: The British introduced laws prohibiting Santhals from selling or transferring their land to non-Santhals. This measure aimed to prevent exploitation and safeguard the tribal land holdings.
58.	B	Statement 2 is correct: The Pala Dynasty is indeed credited with the patronage of the first Bengali literary work, Charyapada. This collection of mystical poems is considered a significant development in Bengali literature. Statement 1 is incorrect: While the Pala Dynasty were strong patrons of Buddhism, they are not associated with the establishment or promotion of Jainism. Their primary religious focus was Buddhism.

		Statement 3 is incorrect: Vikaramsila and Nalanda were actually pre-existing Buddhist universities that flourished during the Pala period. The Palas are recognized for their significant support of these universities, not for their founding. Therefore, only statement 2 accurately reflects facts about the Pala Dynasty.
59.	D	Statement 1: This statement refers to the archaeological discovery of traces of ash in the Kurnool caves in India, which is considered evidence of early human use of fire. Statement 2: This statement describes the finding of the Rosetta Stone in Egypt, a crucial archaeological artifact with inscriptions in three languages (Egyptian hieroglyphs, Demotic Egyptian, and Greek) that helped decipher hieroglyphics. Statement 3: This statement mentions the discovery of tools made from limestone in caves in France, which provides evidence of early human tool-making and potentially their habitation in caves.
60.	B	I. Mrichchakatikam - Shudraka: This is a correct match. "Mrichchakatikam," also known as "The Little Clay Cart," is a Sanskrit play attributed to the playwright Shudraka. It is one of the earliest surviving Indian dramas. II. Buddhacharita - Vasuvandhu: This is not a correct match. The "Buddhacharita" is an epic poem written by Ashvaghosha, not Vasuvandhu. Ashvaghosha was a Buddhist philosopher and poet, known for his contributions to Buddhist literature. III. Mudrarakshasa - Vishakhadatta: This is a correct match. "Mudrarakshasa" is a Sanskrit play attributed to the playwright Vishakhadatta. It is a historical drama based on the life of Chandragupta Maurya and the political events of his time. IV. Harshacharita - Banabhatta: This is a correct match. "Harshacharita" is a biography of the Indian emperor Harsha, written by the court poet Banabhatta. It provides insights into the life and achievements of Emperor Harsha. Therefore, the correct matches are I, III, and IV.
61.	B	(i) The Communist Party of India (CPI) was founded in Tashkent in 1920 and formally established in India in December 1925 at Kanpur. The Congress Socialist Party (CSP) was founded in 1934. Therefore, both parties did not emerge in the late 1920s. (ii) The Labour Kisan Party of Hindustan was formed in Madras (Chennai) on May 1, 1923, by

		Singaravelu Chettiar. The spelling in the statement is likely a minor error ("Kiti Kisan Party" instead of "Labour Kisan Party"). (iii) Mahatma Gandhi did not attend the Brussels Congress of Oppressed Nationalities (which was attended by Jawaharlal Nehru, among others). Mahatma Gandhi did not visit the Soviet Union. Since all three statements contain factual inaccuracies, none of the options listing them as correct can be chosen.
62.	B	An Ordinance is a temporary law issued by the President when Parliament is not in session. While the President can use this power to amend existing laws, including tax laws, they cannot use it to amend the Constitution. The power to amend the Constitution is specifically reserved for Parliament under Article 368. The President can promulgate an ordinance to amend tax laws. There's no constitutional restriction explicitly barring this. An ordinance has the same force and effect as an Act of Parliament, and Parliament can enact tax laws. Thus, the President, acting in the absence of Parliament, can also enact or amend tax laws through an ordinance.
63.	C	The Champaran Satyagraha was a non-violent resistance movement led by Mahatma Gandhi in 1917 in Champaran district of Bihar, India, against the forced cultivation of Indigo by British landlords. This was one of the first movements led by Gandhi in India, which later became a significant catalyst for India's freedom struggle. Gandhi's involvement in the Champaran Satyagraha saw the peasants' plight being highlighted on the national level, leading to widespread support for the movement across the country. The success of the movement also inspired other regions to join the Indian National Movement, leading to an upsurge of peasant unrest and mass mobilization of the Indian masses. The Champaran Satyagraha marked a significant milestone in India's struggle for independence as it highlighted the importance of non-violent resistance and mass mobilization in achieving the goal of self-rule. It also saw the emergence of Gandhi as a national leader and the subsequent adoption of his philosophy of Satyagraha as a means to attain freedom. The most significant aspect of the Champaran Satyagraha was Joining of peasant unrest to India's National Movement.
64.	A	Concurrent List: This list in the Indian Constitution outlines subjects where both the

		Centre (national government) and the States can make laws. However, in case of a conflict between a Central law and a State law on the same subject, the Central law will prevail. Executive Power: While both the Centre and States can legislate on Concurrent List matters, the executive power (implementing the laws) primarily rests with the States for subjects enumerated in the Concurrent List. This is unless a specific Constitutional provision or Parliamentary law explicitly grants the executive power to the Centre in certain situations. This statement 2 is incorrect because the legislative power for Concurrent List matters is shared between the Centre and the States.
65.	B	The quote, "So far as Bengal is concerned, Vivekananda may be regarded as the spiritual father of Modern Nationalist Movement," was written/said by Subhas Chandra Bose.
66.	B	Statement 1 is correct: The Indian Independence Act of 1947 technically allowed princely states to become independent when British paramountcy lapsed. However, Lord Mountbatten, the last Viceroy, used his influence and persuasion to strongly urge the rulers to accede to either India or Pakistan, arguing against independence due to geographical and economic realities. This aligned with the Congress's view that an independent princely state would lead to the "Balkanization" of India. This statement 2 is incorrect: The "August Offer" was made by Viceroy Lord Linlithgow in 1940, not Lord Wavell. Lord Wavell was later responsible for the Wavell Plan and the Simla Conference in 1945. This statement 3 is correct: The Congress rejected the August Offer because it did not grant immediate independence and gave a virtual veto to the Muslim League. Following this rejection, Mahatma Gandhi decided to launch the limited, non-violent Individual Satyagraha movement to affirm the right to free speech and protest India's forced involvement in World War II.
67.	D	Tenets of Jainism Belief in God: Jainism recognised the existence of god but placed them lower than Jina (Mahavira). It did not condemn the varna system but attempted to mitigate the evils of the varna order and the ritualistic Vedic religion. According to Mahavira, a person is born in higher or lower varna as the consequence of the sins or the virtues in the previous birth. Thus, Jainism believes in the transmigration of the soul and the theory of Karma. It mainly aims at the attainment of liberation, for which no ritual is

		required. It can be attained through three principles called Three Jewels or Triratna i.e. Right Faith (Samyakdarshana) Right Knowledge (Samyakjnana) Right Action (Samyakcharita) Jainism emphasizes that all living beings, even the smallest particles, possess a soul. Karma is seen as a force that determines the soul's destiny in future lifetimes, and it must be eradicated to achieve liberation. Penance is considered a key practice for reducing karma. Five Doctrines of Jainism Ahimsa: Non-injury to a living being Satya: Do not speak a lie Asteya: Do not steal Aparigraha: Do not acquire property Brahmacharya: Observe continence
68.	B	Certiorari: This writ allows a higher court to review the decision of a lower court or administrative tribunal to determine if there were errors in jurisdiction, application of law, or other legal errors. It can be issued against administrative authorities. Mandamus: This writ compels a public official or authority to perform a duty they are legally obligated to perform. This can also be issued against administrative authorities. Prohibition, Certiorari and Mandamus: While Certiorari and Mandamus can be issued against administrative authorities, Prohibition is generally only issued against judicial or quasi-judicial bodies. Prohibition & Mandamus: Prohibition is primarily used to prevent lower courts or tribunals from acting further in a case if they lack jurisdiction or are acting illegally. It is not typically issued against administrative authorities. Prohibition & Certiorari: While both Certiorari and Prohibition can be issued against lower courts, Prohibition is not typically used against administrative authorities.
69.	C	GOLD (C. Karnataka): Gold was imported from present-day Karnataka. TIN (B. Afghanistan): Tin came from present-day Afghanistan. COPPER (A. Rajasthan): Copper was sourced from present-day Rajasthan. PRECIOUS STONE (D. Gujarat): Precious stones were brought from present-day Gujarat, among other places. The correct match is (c) 1.C 2.B 3.A 4.D (GOLD - Karnataka, TIN - Afghanistan, COPPER - Rajasthan, PRECIOUS STONE - Gujarat).

70.	D	The growth of small regional kingdoms in the history of southern India was influenced by several factors. One significant factor was the absence of large empires, which allowed smaller political entities to emerge and flourish. However, among the given options, the most relevant factor for the growth of small regional kingdoms in southern India was the scarcity of manpower. Southern India, particularly during ancient and medieval times, faced challenges related to a relatively lower population density compared to other regions. This scarcity of manpower meant that it was difficult to sustain large empires with expansive territories. Instead, smaller kingdoms emerged, which were more manageable in terms of administration and defense. The smaller regional kingdoms often focused on consolidating their local power bases, exploiting available resources, and maintaining control over smaller territories. They were able to effectively govern their limited areas, establish trade networks, and engage in regional politics. While the other factors mentioned in the options (absence of minerals like iron, too many divisions in the social structure, and absence of vast areas of fertile land) may have had some influence on the political landscape, the scarcity of manpower was a key factor in shaping the history of southern India and the growth of small regional kingdoms.
71.	C	Shrenis or Trade Guilds: The Ramayana and many plays from the Gupta period and Tamil Sangam literature write in detail about the trade guilds or shrenis. These were professional bodies of jewelers, weavers, ivory carvers, or even salt-makers who came together to control quality production, create sound business ethics, maintain fair wages and prices, sometimes operated as a cooperative, and controlled the entry of newcomers by laying down high standards of craftsmanship and enforcing rules regarding apprenticeship. Hence, statement 2 is correct. Each guild had its own chief, assisted by others. Hence, statement 1 is not correct. These functionaries were selected with great care. Guild members were even entitled to impeach and punish a chief found guilty of misconduct. Hence, statement 3 is correct. The shrenis were not necessarily restricted to a locality and were known to move from one town to another, over a period of time. Occasionally, shrenis (of merchants and artisans) came together in a joint organization, called the nigama, or the equivalent of a chamber of commerce and industry. Some nigamas also included a class of exporters, who transported the specialties of a town over long distances and sold them at higher margins

		of profit than those they could obtain locally. By all accounts, the shrenis were very sound and stable institutions and enjoyed considerable moral and social prestige not only among their own members but in society at large. This conclusion is borne out by their records, preserved in inscriptions all over North and South India.
72.	D	Statement 1 is correct: Historical records clearly indicate that the Chola army was well-organized and comprised of various branches including elephants, cavalry, infantry, and a strong navy. The Chola army had three main divisions: infantry, cavalry (kudirai sevagar), and elephant corps (anaiyatkai). Statement 2 is correct: The Chola period, particularly under rulers like Rajaraja I and Rajendra I, is considered the zenith of Tamil naval power. Their dominance was so significant that the Bay of Bengal was for some time referred to as the "Chola Lake". The Chola period is considered the pinnacle of Tamil naval achievements. Their extensive maritime expeditions and control over the Bay of Bengal are well-documented. Statement 3 is correct: The Cholas maintained a formidable navy, which, while largely composed of converted merchant ships, was capable of projecting power across vast distances. They launched successful overseas expeditions to places like Sri Lanka, the Maldives, and the Srivijaya Empire (present-day Malaysia and Indonesia). These expeditions were for both territorial expansion and to control vital maritime trade routes to China and the Arabian Peninsula. The presence of a developed Chola navy facilitated their naval ventures into foreign territories.
73.	C	A Constitutional Amendment Bill passed by special majority of the Parliament and ratified by half of the state legislatures. Emoluments, allowances, and privileges of Governors: These are defined in the Constitution and can be modified through amendments. Constitutional Amendment: To amend the Constitution, a special majority is required in both houses of Parliament, followed by ratification by half of the state legislatures. Normal legislative process: While Parliament can pass regular laws, changing the Constitution requires the formal amendment process described above.
74.	C	During a national emergency declared under Article 352, the central government has broad powers. These powers include the ability to direct state governments on any matter. Additionally, the President can modify the constitutional distribution of revenues between the Centre and the states. This means the Centre can reduce or withhold funds from states if needed during an emergency.

75.	A	Article 356 of the Indian Constitution allows for the imposition of President's Rule in a state when the government of the state cannot be carried on in accordance with the provisions of the Constitution. This is generally interpreted as meaning that the state government has failed to function effectively. Option 1: A hung assembly, where no party has a majority, clearly indicates a failure of the constitutional machinery to form a government. This is a recognized ground for President's rule. The Supreme Court has upheld this interpretation. Option 2: While "serious maladministration" might seem like a justifiable reason, the Supreme Court has held that mere maladministration is not sufficient to justify President's rule. The failure of the constitutional machinery must be established. Maladministration can be a contributing factor, but it needs to be coupled with other failures. Option 3: Stringent financial exigencies, or economic difficulties, are also not explicitly mentioned in Article 356 as grounds for President's rule. While the Constitution does have provisions related to financial emergencies under Article 360, these are distinct from the conditions for President's rule. The focus of Article 356 is on the failure of the constitutional machinery, not solely on financial problems.
76.	C	The Council of Ministers does include Deputy Ministers, but does not include Parliamentary Secretaries or the Deputy Chairman of the Planning Commission. The Council of Ministers consists of Cabinet Ministers, Ministers of State, and Deputy Ministers, but Parliamentary Secretaries have a different role and are not part of it. The Deputy Chairman of the Planning Commission (now known as the NITI Aayog) is also not a member of the Council of Ministers.
77.	A	The Jersey breed of milch-cow originated from the Channel Islands (specifically, the Island of Jersey). Therefore, option a. Channel Island is the correct answer. Here is a breakdown of the origins of the other options for context: Scotland: The Ayrshire breed originated in Scotland. Netherlands: The Holstein-Friesian breed originated in the Netherlands and Germany. Denmark: The Red Dane breed was developed in Denmark
78.	A	Mackinder's Heartland Theory divides the world into three main zones: Outer Crescent: This includes the areas beyond the Inner Crescent, such as the Americas, Australia, and most of Africa. Pivot Area/Heartland: This is the central region of Eurasia, considered geographically

		crucial due to its landmass and resources. Inner Crescent: This area surrounds the Heartland and consists of regions like Europe (excluding Russia), the Middle East, South Asia, and East Asia. Therefore, options 1, 2, and 4 accurately represent the divisions according to Mackinder's theory.
79.	B	It is the lightest element on the Earth. This statement is incorrect. Hydrogen is the lightest element on Earth and in the universe, with an atomic mass of approximately 1 amu. Helium is the second lightest, with an atomic mass of about 4 amu. It is the only element that cannot be solidified by sufficient cooling at normal atmospheric pressure. This statement is correct. Due to weak interatomic forces and significant zero-point energy (a quantum mechanical effect), helium remains a liquid down to absolute zero at normal atmospheric pressure. It can only be solidified by applying pressure of at least 25 atmospheres (about 2.5 MPa) at a temperature of around 1 Kelvin. Therefore, only statement 2 is correct option (b) 2 only.
80.	D	Trivandrum, located in Kerala, India, is known for its dense tropical evergreen forests. As you fly north towards Calcutta, the climate becomes progressively drier and warmer. The vegetation transitions to deciduous forests, then dry savannas, and finally, in some areas near Calcutta, wet deciduous forests.
81.	C	The correct chronological order of the given events is: 1 (Simla Agreement, 1972), 4 (India's first nuclear test, 1974), 3 (SAARC Charter, 1985), 2 (Agra Summit, 2001). Signing of the Simla Agreement: This agreement was signed on July 2, 1972, between India and Pakistan after the 1971 war. Agra Summit between India and Pakistan: This summit took place from July 14 to July 16, 2001. Signing of the SAARC Charter at the First SAARC Summit: The SAARC Charter was signed on December 8, 1985, establishing the South Asian Association for Regional Cooperation. India's first nuclear test: This test, codenamed Operation Smiling Buddha, occurred on May 18, 1974.
82.	A	Candidate Wins Without Majority : This is a defining characteristic of FPTP. If there are three or more candidates, it's common for the winner to receive less than 50% of the total votes. They simply need to get more votes than any other individual candidate. For instance, in a constituency, results might be Candidate A: 35%, Candidate B: 30%, Candidate C: 25%, Candidate D: 10%. Candidate A wins with a plurality (35%), but not a majority.

Multiple Representatives from Constituency : FPTP is typically a single-member constituency system. Each electoral district elects only one representative. Systems that elect multiple representatives from one area usually employ different methods, like multi-member districts within a proportional representation framework.

Party vs Candidate Voting : In FPTP, the voter's choice is primarily focused on the individual candidate standing for election in their specific constituency. While candidates represent parties, the vote is cast for the person, not directly for the party list or overall party strength.

Proportional Seats vs Vote Share : This describes a Proportional Representation (PR) electoral system. In PR, seats are allocated to parties roughly in proportion to the percentage of votes they receive nationally or regionally. FPTP often leads to disproportionate results, where a party's seat share doesn't match its vote share.

Therefore "First Past the Post" (FPTP) system is an electoral method where the candidate who polls more votes than any other single candidate is elected. This means the winner needs only a plurality, not necessarily an absolute majority (over 50%) of the votes cast in their constituency.

83.

D

Solution - The Constitution (One Hundred and Sixth Amendment) Act, 2023, is indeed a significant amendment which introduces reservations for women in the Lok Sabha and the State Legislative Assemblies. However, the amendment does not directly provide for reservation of seats for women in the Rajya Sabha. While members of the Rajya Sabha are indirectly elected by the State Legislative Assemblies, the specific provision of reservation applies primarily to the lower house of Parliament (Lok Sabha) and the lower houses of the state legislatures. Therefore, **statement 1 is incorrect** as it includes Rajya Sabha.

As mentioned above, the 106th Amendment Act, 2023, provides for reservation of seats for women in the State Legislative Assemblies. However, there is no corresponding mandate in the Constitution of India for mandatory reservation of seats for women in the State Legislative Councils (the upper house in some states). **Thus, statement 2 is incorrect**

The Constitution of India, through Part IX (Articles 243 to 243 O), deals with Panchayats. Specifically, Article 243D mandates the reservation of seats for Scheduled Castes and Scheduled Tribes in every Panchayat at each level.

Crucially, Article 243D(3) also states that "not less than one-third of the total number of seats

		reserved under clause (2) and the total number of seats to be filled by direct election in every Panchayat shall be reserved for women and such seats may be allotted by rotation to different constituencies in a Panchayat." This clearly indicates a constitutional provision for reserving at least one-third of the seats for women in Panchayats. Therefore, statement 3 is correct.
84.	B	Afghanistan and Iran - The border between Afghanistan and Iran is known as the Great Motherland, but it is distinct from the Durand Line. Afghanistan and Pakistan - The Durand Line serves as the official border between Afghanistan and Pakistan. Established in 1896, it stretches for approximately 2,670 kilometers (1,660 miles). India and Pakistan - The border between India and Pakistan is primarily known as the Radcliffe Line. Afghanistan and China - Afghanistan shares a very short border with China, located in the northeastern Pamir Mountains (Wakhan Corridor), which is not related to the Durand Line.
85.	C	The Satyashodhak Samaj The Satyashodhak Samaj (Truth-Seekers' Society) was founded by Jyotirao Phule in 1873 in Pune, Maharashtra. Its primary objective was to fight against caste discrimination and promote social equality for the lower castes and women. Bardoli Satyagraha The Bardoli Satyagraha was a major peasant revolt in the Bardoli taluk of Gujarat. It took place in 1928 and was led by Sardar Vallabhbhai Patel. This movement protested against excessive land revenue demands by the British government. Chipko Movement The Chipko Movement is a forest conservation movement that emerged in the Garhwal Himalayas (now in Uttarakhand). While it has earlier roots, its significant phase began in 1973, famously involving villagers hugging trees to prevent them from being cut down. It became a symbol of non-violent environmental activism. The earliest movement is Satyashodhak Samaj (1873), followed by Bardoli Satyagraha (1928), and the latest is the Chipko Movement (1973).
86.	D	Graphene possesses several remarkable properties:

		Thinnest Material: Graphene is considered the thinnest material known because it consists of only a single layer of atoms. Its thickness is just one atom. Optical Transparency: It is almost completely transparent. A single layer of graphene absorbs only about 2.3% of visible light, making it highly transparent. High Conductivity: Graphene is an excellent conductor of electricity and heat. This is due to the delocalized electrons that can move freely across the material. Band Gap: Materials are often classified based on their electronic band gap. Metals have overlapping bands, conductors have overlapping or small gaps, semiconductors have a small to moderate gap, and insulators have large gaps. Graphene's Structure: Graphene is classified as a semimetal. This means it has a unique electronic structure where the conduction band and valence band touch at specific points (the Dirac points) in the momentum space. Zero Band Gap: Crucially, graphene has a zero band gap at these points. This differs significantly from a semiconductor, which requires a non-zero band gap to exhibit its characteristic semiconducting behavior (like switching conductivity on and off with an applied voltage). A "wide band-gap semiconductor" implies a large energy gap between the valence and conduction bands, which is fundamentally different from graphene's zero band gap. Therefore, stating that graphene is a wide band-gap semiconductor is incorrect.
87.	C	The explanation of the special provisions mentioned in List-I and the states they apply to: Article 371: This article contains provisions concerning the states of Maharashtra and Gujarat, establishing development boards for specific regions. In the context of the given options, it corresponds to Gujarat. Article 371-A: This article was specifically added for Nagaland. It deals with significant special provisions related to the administration of the state, including its customary laws and practices. Article 371-B: This article focuses on Assam, providing for the establishment of an administrative council to address the state's specific needs, particularly concerning tribal areas.

		Article 371-I: This article relates to Goa, offering special provisions for its Governance.
88.	A	Ancient Indian literature is broadly divided into two categories: Shruti (meaning "that which is heard") and Smriti (meaning "that which is remembered"). Shruti primarily refers to the Vedas, considered divine revelations. Smriti, on the other hand, encompasses texts considered to be of human origin, though often divinely inspired, and includes a vast range of works that interpret and elaborate on Vedic principles. Shruti: The foundational texts of Hinduism, including the four Vedas (Rigveda, Samaveda, Yajurveda, Atharvaveda) and their associated Upanishads. They are considered eternal truths. Smriti: Texts that are remembered and transmitted, often dealing with law, conduct, tradition, and history. They are secondary to Shruti but essential for understanding religious and social life. 1. Puranas: The Puranas are encyclopedic collections of myths, legends, genealogies of gods, goddesses, kings, and heroes, as well as descriptions of cosmology, philosophy, and rituals. They are definitely considered a part of Smriti literature. 2. Ramayana: The Ramayana is one of the two major Sanskrit epics of ancient India, known as the Itihasas. Itihasas, along with Puranas and the Dharma Shastras, form a significant portion of the Smriti corpus. Therefore, the Ramayana is part of Smriti literature. 3. Kalpa-Sutra: The Kalpa-Sutras are a category of foundational texts within the Vedanga (limbs of the Veda). They deal with Vedic rituals, ceremonies, and rules of conduct. While connected to the Vedas, the Sutras themselves, which elaborate on Vedic practices and injunctions, are classified under Smriti literature, specifically the Dharma Shastras or ritualistic texts. 4. Vedas: As mentioned earlier, the Vedas are the primary Shruti literature, not Smriti. They are considered divinely revealed and form the basis upon which Smriti texts often elaborate.
89.	D	Forest : Concurrent List Forests were originally in the State List but were transferred to the Concurrent List by the 42nd Constitutional Amendment Act, 1976 (Entry 17A). Therefore, this pair is correctly matched.

		Taxes on land and building : State List Taxes on land and buildings are subjects listed under Entry 49 of the State List. This means states have the power to legislate on and collect these taxes. Thus, this pair is correctly matched. Insurance : Union List Insurance is a key subject that falls under the exclusive domain of the Union government. It is specifically mentioned in Entry 47 of the Union List. Hence, this pair is correctly matched. Census : Concurrent List The subject of Census is placed under Entry 69 of the Union List. This indicates that only the Union Parliament can make laws related to Census. Therefore, matching it with the Concurrent List is incorrect. This pair is incorrectly matched.
90.	B	"Maitree" is a collaborative military drill designed to improve the capabilities and coordination between the Indian Army and Thailand. This exercise represents an important aspect of the defense diplomacy between India and Thailand, reinforcing their strategic partnership through joint training and operational planning. Exercise Maitree- Type: JointMilitaryExercise Participants: India&Thailand Focus: The exercise typically involves counter-terrorism operations and jungle warfare training. Goal: To strengthen defense ties and enhance interoperability between the two armies.
91.	C	A Motion of No-Confidence is a serious parliamentary procedure that can only be moved against the <i>entire</i> Council of Ministers, not against an individual minister. The principle is that the government as a whole must command the confidence of the Lok Sabha. Therefore, this statement is incorrect. Grounds for No-Confidence Motion Statement: A No-Confidence Motion must set out

		grounds on which it is based. Unlike a Censure Motion, a No-Confidence Motion, as per the Rules of Procedure and Conduct of Business in Lok Sabha (Rule 198), does not require the member moving it to state specific grounds or reasons for lack of confidence. It is a broad expression of dissatisfaction with the government's performance. Thus, this statement is incorrect. Rajya Sabha's Power on No-Confidence Motion Statement: A Motion of No-Confidence can only be moved and discussed in the Lok Sabha (the lower house of Parliament). This is because the Lok Sabha represents the people directly, and the executive government (Council of Ministers) is collectively responsible to it. The Rajya Sabha (the upper house) does not have the power to entertain or vote on a No-Confidence Motion against the government. This statement is correct. Grounds for Censure Motion Statement: A Censure Motion need not be based on specific grounds or charges. A Censure Motion, which is moved against a specific minister or the entire Council of Ministers on a particular issue, <i>must</i> state the specific grounds or charges on which the censure is sought. The lack of specific grounds makes it invalid.
92.	B	The Tashkent Agreement was a significant peace accord signed in the aftermath of the Indo-Pakistani War of 1965. Date and Location: It was signed on January 10, 1966, in Tashkent, which was then part of the Soviet Union. Parties Involved: The primary signatories of the agreement were India and Pakistan. Purpose: The main objective was to formally end the conflict that occurred in August-September 1965. It aimed to restore normal peaceful relations between the two countries and involved commitments to withdraw troops to pre-war positions. Mediation: While the agreement was signed in the Soviet Union and brokered with the significant efforts of Soviet Premier Alexei Kosygin, the Soviet Union itself was not a signatory party to the agreement. The Tashkent Agreement was formally signed by the Prime Minister of India, Lal Bahadur Shastri, and the President of Pakistan, Ayub Khan.
93.	B	Plastics are mainly composed of long molecular chains called polymers. These chains are formed by linking together smaller units called monomers. The type of chemical bonds holding these atoms together within the polymer chain significantly affects the plastic's

		properties, including its resistance to degradation. Strong covalent bonds is the primary reason. In polymers that make up plastics, atoms are linked together by covalent bonds. Covalent bonds involve the sharing of electrons between atoms and are generally very strong and stable. Breaking these strong bonds requires a significant amount of energy (heat or chemical reactivity), making it difficult for environmental factors to cause rapid degradation.
94.	A	A. Kudi Arasu was a Tamil newspaper founded by E.V. Ramaswami Naicker, a prominent figure in the Dravidian movement. Therefore, Kudi Arasu matches with E.V. Ramaswami Naicker (4). B. Kisan Bulletin was a publication associated with agricultural workers' movements. It was edited by Indulal Yagnik, a leader involved in the peasant movement. Thus, Kisan Bulletin matches with Indulal Yagnik (3). C. The Bombay Chronicle was an influential English-daily newspaper founded in 1913 by Pherozeshah Mehta, a prominent leader of the Indian National Congress in Bombay. So, Bombay Chronicle matches with Pherozeshah Mehta (2). D. Bhawani Mandir ("Temple of Bhawani") was a pamphlet written by Sri Aurobindo Ghosh, outlining his vision for India's spiritual and political freedom. Therefore, Bhawani Mandir matches with Aurobindo Ghosh (1). Based on the analysis, the correct matches are: A - 4 (E.V. Ramaswami Naicker) B - 3 (Indulal Yagnik) C - 2 (Pherozeshah Mehta) D - 1 (Aurobindo Ghosh)
95.	D	Objective Lens in Astronomical Telescopes The objective lens is the primary lens in an astronomical telescope that faces the distant object. Its main purpose is to gather as much light as possible from the object and form a bright, real, and inverted image inside the telescope tube. To achieve this light-gathering and image-forming capability, a convergent lens (also known as a convex lens) is used. Its converging power helps focus the parallel light rays from distant objects to a point. Eyepiece Lens in Astronomical Telescopes

		The eyepiece lens is the lens closest to the observer's eye. It takes the real, inverted image formed by the objective lens and magnifies it to produce a final virtual, inverted image that the observer can see. For a simple astronomical telescope, a convergent lens is typically used as the eyepiece. It acts like a magnifying glass, enlarging the intermediate image formed by the objective. Lens Combination for Simple Telescopes Based on the functions required: The objective needs to gather light and form a real image, requiring a convergent lens. The eyepiece needs to magnify the real image, also typically requiring a convergent lens in a simple refracting design. Therefore, the combination used is a convergent lens for the objective and a convergent lens for the eyepiece.
96.	C	The Erok Sim festival is indeed a significant cultural event for the Santhal people, who are one of the largest tribal groups in India. This festival is typically observed during the sowing season, marking the beginning of agricultural activities and seeking blessings for a good harvest. It is particularly prominent in regions where the Santhal community resides, such as parts of Assam, Jharkhand, West Bengal, and Odisha. Therefore, Statement 1 is considered correct. The second statement identifies Sangken as a Buddhist festival celebrated in Arunachal Pradesh. Sangken, also known as the water festival, is a major celebration for several communities in Arunachal Pradesh, including the Khampti, Tangsa, and Tai Phake people. These communities have strong Buddhist traditions. The festival usually takes place in April, coinciding with the traditional New Year, and involves purification rituals, processions of deities, and joyous water splashing, symbolizing cleansing and renewal. Therefore, Statement 2 is also considered correct.
97.	C	The Bharat Ratna is India's highest civilian honor, established in 1954. In the inaugural year of the award, 1954, it was conferred upon three distinguished individuals. These initial recipients were C. Rajagopalachari, the renowned scientist Sir C.V. Raman, and the philosopher-president Dr. Sarvepalli Radhakrishnan. Consequently, C. Rajagopalachari was indeed one of the very first individuals to receive the Bharat Ratna. The statement is accurate. Pandit Deen Dayal Upadhyaya was a significant political thinker and leader in post-

		independence India. He is primarily associated with the development and articulation of the political and social philosophy known as "Integral Humanism". This ideology seeks to provide a holistic approach to governance and societal development, emphasizing the inherent dignity and potential of every individual within the national framework. Therefore, the assertion that Pandit Deen Dayal Upadhyaya initiated the concept of "Integral Humanism" is factually correct.
98.	B	The first statement claims that the word "secular" appears before the word "socialist" in the Preamble. Let's look at the actual text of the Preamble: "WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC..." As seen above, the Preamble lists "socialist" before "secular". Therefore, statement 1 is incorrect The second statement posits that the word "justice" comes before the word "equality". Examining the Preamble's text reveals: "...JUSTICE, social, economic and political; LIBERTY of thought, expression, belief and faith; EQUALITY of status and of opportunity..." The text clearly shows "justice" is mentioned before "equality". Thus, statement 2 is correct. The Preamble lists "liberty" and then "equality", followed by "fraternity". Therefore, "fraternity" indeed comes after "liberty". Statement 3 is correct.
99.	B	Part IV-A of the Constitution of India specifically deals with Fundamental Duties. This part was added to the Constitution by the 42nd Amendment Act of 1976. It was inspired by the Soviet Constitution and is based on the recommendations of the Swaran Singh Committee. Part IV-A currently contains only one article, Article 51A, which lists the fundamental duties of the citizens of India. These duties are considered moral responsibilities of every citizen towards the nation. While they are not legally enforceable like Fundamental Rights, they serve as a constant reminder to citizens about their role and responsibilities in building a better society and nation.
100.	A	Let's look at each option to see how it spreads: Tuberculosis (TB)

		Transmission: Tuberculosis is caused by bacteria called Mycobacterium tuberculosis. It is primarily an airborne disease. When someone with active TB in their lungs coughs, sneezes, or talks, they release tiny infectious droplets into the air. Other people can get infected by breathing in these droplets. Malaria Transmission: Malaria is caused by a parasite (Plasmodium) that spreads to people through the bites of infected female mosquitoes (specifically, Anopheles mosquitoes). This mode of transmission makes it a vector-borne disease, not an airborne one. Dengue Transmission: Dengue is a viral infection spread by infected mosquitoes, mainly the Aedes species. Similar to Malaria, Dengue is transmitted through mosquito bites, classifying it as a vector-borne disease. Cholera Transmission: Cholera is an intestinal infection caused by the bacterium Vibrio cholerae. It spreads mainly through contaminated water or food that has been infected by the feces of an infected person. This makes it a waterborne and foodborne disease. Conclusion - Tuberculosis spreads through the air via respiratory droplets. Malaria and Dengue are spread by mosquitoes (vector-borne). Cholera is spread through contaminated food and water (waterborne/foodborne).
101.	C	The criteria for granting Special Category Status were originally based on the recommendations of the Fifth Finance Commission. Over time, these have evolved, but core principles remain. Generally, states considered for SCS exhibit a combination of factors indicating significant development challenges. Hilly and difficult terrain: This is a significant factor. States with challenging geographical conditions often face higher infrastructure costs and development hurdles. Many states that have received SCS, like those in the Northeast, have such terrain. Economic and infrastructural backwardness: This is a primary criterion. States lagging significantly in economic development, with low per capita income, poor infrastructure (roads, power, etc.), and limited industrialization, are typically considered.

		Strategic coastal zone: While a strategic location can be important for national security and economy, it is not typically listed as a direct criterion for granting Special Category Status. SCS is primarily focused on addressing internal developmental deficits. Sizeable share of tribal population: The presence of a significant tribal population, often facing socio-economic challenges and requiring special developmental focus, is also considered a relevant factor, especially in conjunction with economic backwardness and difficult terrain.
102.	B	In the ABO system, there are four main blood types, determined by the specific antigens present on the red blood cells: Type A: Characterized by the presence of the A antigen. Type B: Characterized by the presence of the B antigen. Type AB: Features both the A and B antigens on the red blood cells. Type O: Lacks both the A and B antigens.
103.	D	Statement 1 is correct regarding the start year (1913) and location (San Francisco). Historical records confirm that the Ghadar Party was indeed established in 1913 in San Francisco, USA. It was founded by Indian immigrants who were motivated to fight against British rule in India. Statement 2 is correct as Sohan Singh Bhakna was a key founder and the first president. Statement 3 is correct as the movement's name was inspired by the "Ghadar" newspaper. The newspaper "Ghadar" was published in Punjabi and Urdu, and later in other languages, serving as the primary organ of the movement. Its publication aimed to mobilize Indians globally for the cause of independence, and the movement itself became known by the name of its influential newspaper. Since all three statements are accurate, the correct option includes all of them.
104.	A	Kalibangan is a crucial site belonging to the Indus Valley Civilization. It provides valuable insights into the culture, agriculture, and urban planning of this ancient civilization. Excavations at Kalibangan have revealed significant findings, including evidence of town planning, pottery, seals, and notably, agricultural practices.



The Ploughed Field Evidence-

One of the most remarkable discoveries at Kalibangan is the evidence of a ploughed field. This finding is particularly important as it indicates early agricultural activities in the region. The field shows furrows that were made using agricultural tools, suggesting systematic farming practices.

Dating the Kalibangan Ploughed Field-

Archaeological dating and the associated pottery styles found at the same stratigraphic level place this evidence of the ploughed field firmly within the **Early Harappan period**. This phase represents the formative stage of the Harappan Civilization, preceding its more developed phase.

105.	A	The structure of tooth enamel is predominantly mineral-based. The main ingredient is a form of calcium phosphate . This mineral exists in a crystalline structure known as hydroxyapatite . This specific composition is responsible for enamel's exceptional hardness and its ability to withstand the forces of chewing and resist acid erosion.
106.	B	The Permanent Settlement was a significant land revenue system introduced by the East India Company (EIC) in 1793 in the Bengal presidency. Its main goal was to establish a fixed revenue demand from land, thereby ensuring a steady income for the Company and encouraging agricultural improvement by landowners. This policy had profound effects on the social and economic structure of the Bengal countryside.

Statement 1 is Correct: A key objective of the Permanent Settlement was to consolidate the EIC's authority and curb the independent power of the traditional landed elites. The Company required zamindars to disband their troops and rely solely on the Company's forces for protection and law enforcement. This helped centralize power under the EIC.

Statement 2 is Correct: The Permanent Settlement recognized zamindars as the primary revenue payers, but it inadvertently strengthened the position of rich local landlords or peasants known as jotedars. These jotedars often held large tracts of land directly and leased portions to poorer cultivators. Their control over land and local economic activities frequently made their power more effective at the village level than that of the zamindars, who were often absentee landlords focused primarily on revenue collection.

Statement 3 is Correct: During the EIC's governance, various legal and administrative reforms were introduced. While the Permanent Settlement primarily focused on land revenue, subsequent regulations and the evolving legal framework under the Company did address aspects of property rights, including those of women. Although interpretations vary, the existence of rules aimed at protecting certain property rights, potentially including those of women, is considered accurate in this context, especially concerning inheritance and preventing confiscation for revenue defaults in some cases.

Statement 4 is Incorrect: Adhiyars are a term often used for sharecroppers, particularly in regions like Malabar, though similar systems existed elsewhere. Bargadars are tenants in Bengal who cultivate land owned by others and share the crop produce with the landowner. The statement suggests Adhiyars were sharecroppers on land owned by Bargadars. This is typically incorrect; Bargadars themselves are usually tenants/sharecroppers, not necessarily landowners leasing land to others like Adhiyars. Adhiyars would generally work land belonging to zamindars, jotedars, or other landowners.

107.

B

Sphincter: This refers to a ring of muscle that controls the opening and closing of passages in the body, such as at the junction of the stomach and small intestine. It is not a finger-like projection lining the intestine.

Villi: These are precisely the small, finger-like or hair-like projections that carpet the inner surface of the small intestine. Each individual projection is called a "villus" (plural: "villi"). They significantly increase the surface area for nutrient absorption.

Enzymes: Enzymes are proteins that act as biological catalysts, speeding up chemical reactions like digestion. While essential for digestion within the small intestine, they

		are molecules, not physical projections. Plaques: This term usually refers to a flat, often raised patch on a surface, like on artery walls or as a bacterial film. It does not describe the structures within the small intestine's lining.
108.	B	Chronologically 3. Dandi March: This iconic event, also known as the Salt March, was a nonviolent civil disobedience action led by Mahatma Gandhi. It began on March 12, 1930, and concluded on April 6, 1930. 2. Gandhi-Irwin Pact: This agreement was signed between Mahatma Gandhi and Lord Irwin, the Viceroy of India, on March 5, 1931. It led to the suspension of the Civil Disobedience Movement. 4. Second Round Table Conference: This conference was held in London. Mahatma Gandhi represented the Indian National Congress. It took place from September 7, 1931, to December 11, 1931. 1. Muslim League Resolution for Pakistan: This significant resolution, often referred to as the Lahore Resolution, was passed by the All-India Muslim League on March 23, 1940. It demanded the creation of a separate Muslim State.
109.	A	The Guntupalle Buddhist Caves represent an ancient complex of rock-cut caves, serving as a significant archaeological site that provides valuable insights into the history and practices of Buddhism in India. The Guntupalle Buddhist Caves are situated in the state of Andhra Pradesh. They are specifically located near the village of Kamavarapu Konda, within the Eluru district of Andhra Pradesh. This area is known for its historical importance related to Buddhist activities. Significance of Guntupalle Caves These caves are estimated to date back to around the 1st century CE and are primarily associated with the Hinayana school of Buddhism. The site comprises a main stupa, several rock-cut caves (including chaityagrihas, which were prayer halls, and viharas, which were monks' residences), and other associated structures. This makes Guntupalle a crucial monument for studying early Buddhist art and monastic life in India.
110.	C	A pH value strictly less than 7 signifies an acidic condition. Common examples of acidic substances include vinegar, lemon juice, and stomach acid.

		pH Range Solution Type pH < 7 Acidic pH = 7 Neutral pH > 7 Basic (Alkaline)
111.	B	In the context of Indian history, the term "kopeki" is specifically associated with Coins. Throughout India's long history, various forms of currency, including numerous types of coins, have been used. These coins provide valuable insights into the economic conditions, trade relations, and political powers of different eras. The term "kopeki", therefore, falls under the category of monetary instruments, specifically Coins
112.	C	I. Girnar: Sudarshana Lake Girnar is a famous hill and ancient monastic retreat located in the Junagadh district of Gujarat. It is historically significant for its numerous temples and ancient rock inscriptions. The Sudarshana Lake is an ancient artificial lake situated near Girnar and Junagadh. It was originally constructed during the Mauryan dynasty and was renowned for its engineering and importance as a water source, maintained and repaired by subsequent rulers. Its association with the Girnar region is well established. Conclusion for Pair I: This is a correctly matched pair. II. Cholistan: Terracotta model of Plough The Cholistan Desert, located in the Punjab province of Pakistan, is rich in archaeological sites, many belonging to the Indus Valley Civilization (Harappan culture). While the discovery of a terracotta model of a plough is most famously attributed to the site of Kalibangan in Rajasthan, India, the broader Indus Valley culture, prevalent in Cholistan, included various terracotta artifacts representing tools, toys, and figurines. Finds from Cholistan sites like Ganweriwala and others confirm the existence of similar cultural elements. Thus, associating terracotta models of tools with the Indus Valley context of Cholistan is plausible. Conclusion for Pair II: This is considered a correctly matched pair within the cultural context. III. Mant (near Mathura): Headless standing figure of Kanishka Mant is a village situated near the historically vital city of Mathura in Uttar Pradesh, India. Mathura was a significant urban center and a melting pot of cultures, particularly during the Kushan period. It is renowned for its distinct school of art. The headless standing figure of Kanishka, a prominent Kushan ruler, is a significant sculpture discovered in the

		Mathura region, exemplifying the art and political history of the era. Conclusion for Pair III: This is a correctly matched pair. IV. Sannati: Asokan Pillar Edict in Odisha Sannati is an important archaeological site in the Gulbarga district of Karnataka, known for its extensive Buddhist heritage, including sculptures and inscriptions from the Mauryan period. It notably contains a version of the Asokan Pillar Edict. However, Odisha (formerly Kalinga) is a state located on India's east coast. While Odisha also has famous Asokan inscriptions (major rock edicts at Dhauli and Jaugada), Sannati itself is in Karnataka, not Odisha. The geographical attribution in this pair is incorrect. Conclusion for Pair IV: This is an incorrectly matched pair. Let's summarize the findings for each pair: Pair I: Girnar & Sudarshana Lake - Correct Pair II: Cholistan & Terracotta model of Plough - Correct Pair III: Mant & Headless standing figure of Kanishka - Correct Pair IV: Sannati & Asokan Pillar Edict in Odisha – Incorrect
113.	B	The line "Khoob ladi mardani woh to Jhansi wali rani thi" translates to "Like a man she fought, she was the Rani of Jhansi". It has become an iconic phrase celebrating the courage and sacrifice of Rani Lakshmibai. The poem was penned by the prominent Hindi writer Subhadra Kumari Chauhan. Her contribution to Hindi literature, particularly through patriotic and nationalist themes, is significant. She captured the spirit of the uprising and the heroic resistance of the Rani of Jhansi in a way that resonated deeply with the Indian populace.
114.	B	The human brain is an incredibly complex organ responsible for controlling thoughts, memory, emotion, touch, motor skills, vision, breathing, temperature, hunger, and every process that regulates our body. It is broadly divided into three main sections, each with specific functions. The main structural divisions of the human brain are: - Fore brain - Mid brain - Hind brain Let's look at each part in more detail: Fore brain (Prosencephalon)

The Fore brain is the largest and most complex part of the brain. It is responsible for higher-level functions like reasoning, language, and voluntary actions. It includes:

Cerebrum: The largest part, divided into two hemispheres (left and right), responsible for processing sensory information, controlling voluntary movements, and higher cognitive functions like learning and memory.

Diencephalon: Located beneath the cerebrum, it includes the thalamus (relaying sensory and motor signals) and the hypothalamus (regulating body temperature, hunger, thirst, and sleep cycles).

Mid brain (Mesencephalon)

The Mid brain acts as a relay center connecting the fore brain and the hind brain. It plays a role in visual and auditory reflexes, eye movement, and motor control.

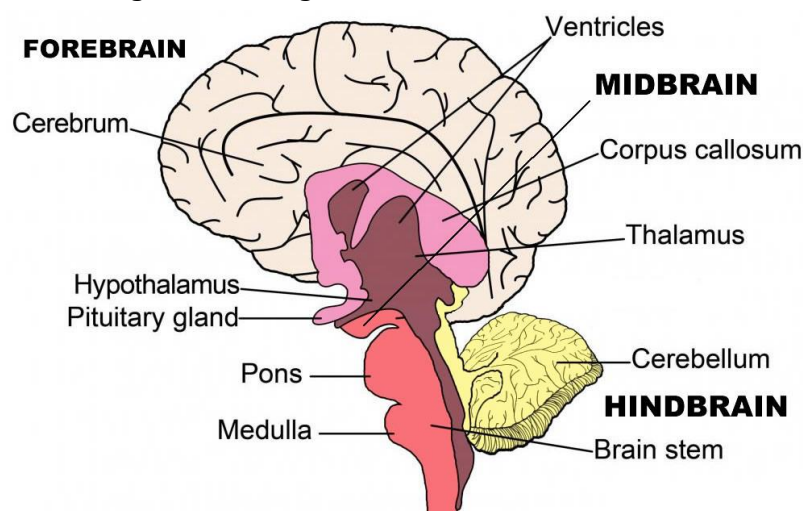
Hind brain (Rhombencephalon)

The Hind brain is located at the back and base of the skull. It controls essential involuntary functions that keep us alive. It includes:

Cerebellum: Located below the cerebrum, it coordinates voluntary movements like posture, balance, coordination, and speech, resulting in smooth and balanced muscular activity.

Pons: Acts as a bridge relaying signals between the cerebrum and the cerebellum, and also between the fore brain and the hind brain. It is involved in sleep, respiration, swallowing, and facial expressions.

Medulla Oblongata: The lowest part of the brainstem, connecting to the spinal cord. It controls vital autonomic functions such as breathing, heart rate, blood pressure, and reflexes like sneezing and vomiting.



115.	D	The question asks us to identify the statement that is NOT correct regarding the "Amara-Nayaka system" which was a significant feature of the Vijayanagara Empire. Let's analyze each statement: Statement 1: Innovation of the Vijayanagara Empire - The Amara-Nayaka system was indeed a major political and administrative innovation introduced and developed during the Vijayanagara Empire. It played a crucial role in the empire's expansion and consolidation. Therefore, this statement is correct. Statement 2: Role of Amara-Nayakas - Amara-Nayakas were essentially military governors or commanders. They were granted territories (called "Nayakatvam") to administer. Their responsibilities included maintaining law and order, collecting taxes and other dues (like tributes) from the peasants, craftspersons, and traders within their assigned territory. They were also expected to lead military campaigns when required by the central authority. This statement accurately describes their role and hence is correct. Statement 3: Revenue Utilization - The Amara-Nayakas were allowed to retain a portion of the collected revenue. This share was crucial for their personal expenses and, importantly, for maintaining a specified contingent of soldiers, including horses and elephants, as mandated by the empire. This ensured they had the military capacity to fulfill their duties. Thus, this statement is correct. Statement 4: Use of Revenue for Temple Maintenance - This statement claims that Amara-Nayakas were <i>not allowed</i> to use their share of revenue for the maintenance of temples. Historical evidence suggests the opposite. Patronage of temples was a common practice among rulers and officials in medieval India, including the Vijayanagara period. Amara-Nayakas often endowed temples, participated in religious festivals, and contributed to temple construction and upkeep. Therefore, the assertion that they were prohibited from using revenue for temples is incorrect. In fact, temple support was often a way for them to gain legitimacy and public support.
116.	C	Shah Mal, a significant figure in the Revolt of 1857, particularly in the Baraut region of Uttar Pradesh. Historical accounts suggest that Shah Mal indeed mobilized the local population against the British authorities. He is noted for his leadership in organizing resistance, which included capturing properties belonging to Englishmen. Specifically, the capture of a bungalow and its conversion into a "hall of justice" demonstrates his efforts to establish an alternative system of administration and control in the areas under his influence during the rebellion.

		Gonoo, identifying him as a Kol leader from the Singhbhum region of Chotanagpur. The Kol people were one of the indigenous tribal groups who participated actively in the anti-British movements in the region. Singhbhum, located in present-day Jharkhand, was a significant area of tribal resistance. Gonoo is recognized as a leader within the Kol community who actively participated in the struggles against colonial rule in the Chotanagpur plateau during this period. Based on the historical evidence concerning the actions of Shah Mal in Baraut and the role of Gonoo as a Kol leader in Singhbhum, both statements provided are accurate representations of events and figures related to the Revolt of 1857. Therefore, the option that includes both statements as correct is the appropriate choice.
117.	D	Both Matangini Hazra and Lakshman Naik made the ultimate sacrifice during the fervor of the Quit India Movement: Matangini Hazra: A dedicated Congress leader from Bengal, she was famously known as "Gandhi Buri" (the old woman Gandhi). During the Quit India Movement, she bravely led a procession of around 6,000 people towards the Tamluk police station to hoist the Indian flag. Despite warnings, she advanced but was shot dead by the police. Her unwavering courage in the face of armed forces became a symbol of defiance. Lakshman Naik: Hailing from the Ganjam district of Odisha, Lakshman Naik was a respected tribal leader and freedom fighter. He played a crucial role in mobilizing people during the Quit India Movement in his region. He was arrested by the British authorities for his participation and alleged involvement in activities related to the movement. Later, he was sentenced to death and executed in March 1943, becoming a martyr for the cause of Indian independence.
118.	C	Option 1 is a correct match: Oligopoly firm - Interdependence in decision-making An oligopoly is a market structure dominated by a small number of firms. Because there are only a few players, the decisions of one firm (like changing prices or output) directly affect the others, leading to strategic behavior and interdependence. Option 2 is a correct match: Monopolistic firm - Firm is a price setter A monopolistic firm (specifically, a firm in monopolistic competition) operates in a market with many competitors selling differentiated products. While competition limits pricing power, the product differentiation gives the firm some degree of control over its price, making it a price setter within a certain range.

Option 3 is an incorrect match: Monopoly firm - Produces an efficient level of output

A monopoly firm is the sole seller of a product with no close substitutes. To maximize profits, a monopoly typically produces less output and charges a higher price than would occur in a socially efficient market. Allocative efficiency occurs when Price equals Marginal Cost ($P = MC$). Monopolies usually set price (P) greater than Marginal Cost (MC), leading to underproduction and deadweight loss, which signifies inefficiency.

Option 4 is a correct match: Perfectly competitive firm - Produces socially optimum output

In a state of perfect competition, numerous firms sell identical products, and entry/exit is easy. Firms are price takers and produce at the level where Marginal Cost equals Price ($MC = P$). This condition, $P = MC$, is considered the benchmark for socially optimum output or allocative efficiency, meaning resources are allocated in the most valued way by society.

Economic efficiency is often evaluated based on two criteria:

Allocative Efficiency: Occurs when resources are distributed to produce the goods and services that society most desires. This happens when the price of a good equals the marginal cost of producing it ($P = MC$).

Productive Efficiency: Occurs when goods are produced using the fewest possible resources, minimizing the average cost of production. This happens when production occurs at the minimum point of the Average Total Cost (ATC) curve.

A monopoly firm maximizes profit where Marginal Revenue equals Marginal Cost ($MR = MC$). However, because the demand curve is downward sloping for a monopoly, the price (P) is greater than the marginal revenue (MR) and thus $P > MC$. This demonstrates that monopolies typically do not achieve allocative efficiency.

119.

D

The Salt Satyagraha, a pivotal act of civil disobedience led by Mahatma Gandhi in 1930, aimed to protest the British monopoly on salt production and impose a salt tax. This movement involved violating the British salt laws by making salt from seawater. The Sanikatta Salt Works was one of the key locations where this protest took place. It is situated in the Uttara Kannada district of Karnataka. This coastal area provided easy access to seawater, making it a suitable site for the production of illicit salt during the Satyagraha.

120.	B	Upon review, the Indian Institute of Entrepreneurship (IIE) was actually established in 1993, not 1999. While it is located in Guwahati, the year provided in the statement is incorrect. Therefore, Statement 1 is incorrect. IIE Aims and Objectives The main aim of the institute is to provide training, research and consulting activities for small and micro enterprises. The Indian Institute of Entrepreneurship is dedicated to promoting entrepreneurship. Its core objectives include conducting training programs, undertaking research, and offering consultancy services, primarily focusing on supporting the development of small and micro enterprises. This statement accurately reflects the mission of the IIE. Therefore, Statement 2 is correct.
121.	B	Statement 1 is factually correct : DEH was launched in August 2019. The Districts as Export Hubs initiative was indeed launched around August 2019 as part of efforts to boost district-level exports. Statement 2 is the incorrect one: While the DEH initiative focuses on identifying and supporting districts with significant export potential, the use of the word "only" makes this statement inaccurate. The broader goal is to leverage the potential of various districts across the country for export promotion, rather than being strictly limited to a pre-selected, exclusive group. The initiative aims to identify potential export champions in more districts and provide them with the necessary support to grow. Statement 3 is correct: Recent trade policies, including the Foreign Trade Policy (FTP) 2023, have emphasized the importance of district-level export promotion and recognized the role of initiatives like DEH in achieving broader trade goals. Statement 4 is correct: DEH aims to promote exports by providing financial inclusion and facilitating logistical and infrastructural support. A key objective of the DEH initiative is to support exporters at the district level by addressing critical needs such as access to finance (financial inclusion), improving logistics, and developing necessary infrastructure to enhance their competitiveness in global markets. Based on the analysis, the statement claiming that the aim of DEH is to boost exports of only selected districts is the one that is not correct.
122.	A	

		U-WIN: Stands for Universal Immunization Plus – Web Enabled Application. This is a digital platform designed to register beneficiaries and track immunization services across India. It specifically targets the digitization of vaccination records for pregnant women and children. PM-ABHIM: Pradhan Mantri Ayushman Bharat Health Mission aims to strengthen India's healthcare system across primary, secondary, and tertiary levels. While it incorporates digital health aspects, its scope is broader than just digitizing vaccination records. eSanjeevani: This is the national telemedicine service of India, enabling remote doctor consultations. Its primary function is telehealth, not the management of vaccination records. FDSI: This abbreviation typically relates to food safety or drug standards and administration, not directly to immunization record management.
123.	B	Computer programs are written at different levels of abstraction. These levels relate to how closely the language instructions resemble the actual electronic signals (binary code) the processor understands. Machine Language: This is the lowest level of programming language. It consists of binary digits (0s and 1s) that the processor can directly execute. There is no symbolic representation; it's just raw data that instructs the CPU. For example, a machine code instruction might look like 01010110 . It is processor specific. Assembly Language: This language acts as a bridge between machine language and human-readable code. Instead of using binary codes, it uses short abbreviations called mnemonics (like MOV ,ADD ,JMP) to represent specific machine instructions. It also uses symbols for memory addresses and data. Each assembly instruction typically corresponds directly to one machine code instruction. This symbolic representation makes it easier for humans to read, write, and debug programs compared to raw machine code. Crucially, assembly language is specific to a particular processor architecture or family, as the mnemonics map directly to that processor's unique machine codes. High-Level Language: Languages like Python, Java, C++, or JavaScript are considered high-level. They use syntax closer to natural language and abstract away the hardware details. A single high-level instruction might translate into many machine code instructions. They are generally portable across different processor types, unlike assembly or machine language.

		Assembly language directly uses symbolic representation (mnemonics and labels) to stand in for the binary patterns that form the machine codes. This symbolic representation is tailored to the specific instruction set architecture (ISA) of the target processor or family. Therefore, if you need to program using symbolic equivalents of machine codes for a particular processor, Assembly Language is the correct choice.
124.	C	The Amsterdam-St. Paul Plateau is a significant submarine feature. It is an oceanic plateau located in the southeastern part of the Southern Indian Ocean. This plateau is known for its unique geological characteristics and is situated southwest of Australia. Therefore, based on geographical data, the Amsterdam-St. Paul Plateau is correctly placed within the Southern Indian Ocean.
125.	B	The Richter scale is a widely known method used in seismology to measure the size of earthquakes. It's important to understand what exactly it measures. Magnitude: This refers to the amount of energy released at the earthquake's source (hypocenter). The Richter scale quantifies this magnitude. Intensity: This describes the effects of an earthquake at a specific location, such as the observed shaking and damage caused. Scales like the Modified Mercalli Intensity (MMI) scale measure intensity. The Richter scale provides a single, objective measure of an earthquake's size based on instrument readings. Statement 1 is incorrect: As explained above, the Richter scale measures the magnitude (the size or energy released) of an earthquake, not its intensity (the effects or shaking felt at different locations). Intensity scales, like the MMI scale, are used to describe the effects on people, buildings, and the environment. Statement 2 is correct : The Richter scale is fundamentally a measure of an earthquake's magnitude. Magnitude is directly related to the amount of energy released by the seismic event. The scale is logarithmic, meaning that each whole number increase on the Richter scale represents an increase of about 32 times in the energy released. For example, a magnitude 7 earthquake releases approximately 32 times more energy than a magnitude 6 earthquake, and about 1000 times (32×32) more energy than a magnitude 5 earthquake. Therefore, only statement 2 is correct.

126.	B	The city of Buffalo is located in western New York, situated at the eastern end of Lake Erie. This is a well-known and correct geographical pairing. The city of Detroit is located in Michigan, on the Detroit River, which connects Lake Erie and Lake St. Clair. Detroit is not directly situated on the shores of Lake Superior. Lake Superior is the largest and northernmost of the Great Lakes, located further northwest. The city of Milwaukee is located in Wisconsin, on the western shore of Lake Michigan. The city of Toronto is located in Ontario, Canada, on the northwestern shore of Lake Ontario. This pairing is also geographically correct.
127.	C	Statement 1 says: "The distance between two successive latitudes changes slightly from the equator to the poles." Lines of latitude, also known as parallels, are imaginary circles drawn on the Earth's surface that are parallel to the equator. While these parallels are spaced at regular angular intervals (usually 1 degree), the actual physical distance between them isn't perfectly constant. This is because the Earth is not a perfect sphere but an oblate spheroid – it bulges slightly at the equator and is flattened at the poles. Consequently, the length of one degree of latitude is slightly shorter at the equator (about 110.57 km) and slightly longer at the poles (about 111.70 km). This minimal variation means the distance between successive latitudes does indeed change slightly from the equator towards the poles. Statement 2 says: "If parallels of latitude are drawn at an interval of one degree, the total number of parallels thus drawn, including the equator, will be 179." Latitude measures the angular distance, north or south, from the Earth's equator (0°). The latitude scale ranges from 0° at the Equator to 90° N at the North Pole and 90° S at the South Pole. A "parallel" is technically a circle of latitude. The North Pole (90° N) and South Pole (90° S) are points, not circles. If we count the distinct circular parallels drawn at 1-degree intervals: 1. The Equator (0°) counts as 1 parallel. 2. In the Northern Hemisphere, we have parallels from 1° N up to 89° N. This makes 89 parallels.

3. In the Southern Hemisphere, we have parallels from 1° S up to 89° S. This also makes 89 parallels.

So, strictly speaking, there are 179 unique parallel circles. However, often in geography or when discussing map grids, people might count all the lines of latitude from 0° to 90° N (91 lines) and 0° to 90° S (91 lines), or perhaps 1° N to 90° N (90 lines) and 1° S to 90° S (90 lines) plus the equator (1 line), leading to different totals like 181 or 182 depending on the exact convention used and whether poles are included in the count. The statement specifies "parallels" and gives a total of 179. While 179 is the count of distinct circles, ambiguity in counting methods (potentially including the poles in a broader sense) leads to this statement often being classified as incorrect in test scenarios.

128.

A

To understand the statements, let's clarify the terms:

Revenue Account Expenditure: This refers to the government's spending on day-to-day running of the country, salaries, subsidies, interest payments, etc. These expenditures do not create assets for the government.

Effective Capital Expenditure: This is a broader measure than just capital expenditure. It includes capital expenditure plus grants given to states for creating capital assets. It represents spending that enhances the country's productive capacity and future economic growth.

Percentage of GDP: This metric shows the size of the government's expenditure relative to the total size of the economy (GDP). It helps in understanding the fiscal burden or stimulus provided by the government.

Statement 1 is correct: The effective capital expenditure of the Central Government of India, as a percentage of GDP, has consistently increased from 2020-21 to 2023-24. This trend reflects the government's focus on boosting infrastructure development and productive capacity to spur economic growth. The data from government sources shows the effective capital expenditure as a percentage of GDP was 4.73% in 2020-21, 5.21% in 2021-22, 5.70% in 2022-23, and 5.94% in 2023-24.

Widen and deepen existing river valleys.

This process transforms typically V-shaped river valleys into characteristic U shaped valleys, known as glacial troughs. The immense weight and abrasive action of the ice effectively strips away the valley's surface material.

The second statement is also correct: Glacial troughs that extend below current sea level are often flooded by the sea when the glacier retreats. These flooded glacial troughs are called fiords (or fjords). Fiords are typically long, narrow, deep inlets with steep sides, characteristic of drowned glacial valleys.

Therefore, the process described accurately defines the formation of a fiord from a glacial trough.

Conclusion

Both statement 1, describing the formation of glacial troughs by glacial erosion, and statement 2, explaining how glacial troughs can become fiords when flooded by the sea, are correct.

130.

A

According to the Census of India 2011, towns are grouped into six classes based on the population they contain. The definition for each class is as follows:

Town Class	Population Range
Class I	100,000 and above
Class II	50,000 to 99,999
Class III	20,000 to 49,999
Class IV	10,000 to 19,999
Class V	5,000 to 9,999
Class VI	Less than 5,000

131.

A

Social Mobilisation and Institution Development (SM & ID) is a crucial aspect of many development programs.

It focuses on:

Encouraging community participation in development activities.

Building and strengthening local institutions, such as Self-Help Groups (SHGs),

Village Organisations (VOs), and Cluster Level Federations (CLFs).

Enhancing the capacity of these institutions to manage resources, implement projects, and advocate for community needs.

Promoting social inclusion and empowerment, particularly for vulnerable sections of society.

1. Deen Dayal Antyodaya Yojana (DAY)

The Deen Dayal Antyodaya Yojana (DAY), also known as the National Rural Livelihoods Mission (NRLM) in rural areas and the National Urban Livelihoods Mission (NULM) in urban areas, is a flagship scheme aimed at poverty alleviation.

Key Objectives of DAY:

Mobilising poor households into functional Self-Help Groups (SHGs).

Providing financial assistance and support to these SHGs for livelihood activities.

Building skills and capacity for sustainable livelihoods.

Ensuring social security and access to basic amenities.

Social Mobilisation and Institution Development (SM & ID) is indeed a foundational and major component of the Deen Dayal Antyodaya Yojana. It underpins the entire strategy of empowering the poor by organising them into strong, self-sustaining community institutions.

2. National Urban Digital Mission

This mission focuses on creating digital infrastructure and services for urban areas, improving governance and citizen services through technology. SM & ID is not a primary component of this mission.

3. Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

AMRUT aims to ensure that every household has access to a basic supply of water and that the sewerage infrastructure connects to growing urban areas. Its focus is on infrastructure development, not directly on social mobilisation and institution building as a core component.

4. Rashtriya Gram Swaraj Abhiyan (RGSA)

RGSA focuses on strengthening Panchayati Raj Institutions (PRIs) for rural development and governance. While it involves capacity building, the specific emphasis on SHGs and micro-finance linked institution building aligns more closely with DAY than RGSA.

		Based on the objectives and operational strategies, Social Mobilisation and Institution Development (SM & ID) is most prominently and centrally featured as a major component within the Deen Dayal Antyodaya Yojana.
132.	C	Statement 1 is correct: The HAMMER (Highly Agile Modular Munition Extended Range) weapon system is indeed integrated with the Rafale fighter aircraft. Developed by Safran Electronics & Defense, HAMMER is an air-to-ground munition designed for high precision strikes. India's acquisition of the Rafale fighter jets includes their capability to deploy these advanced weapons. Statement 2 is accurate: SCALP Cruise Missile The SCALP missile is commonly known by another name. SCALP, which stands for "Système de Croisière Autonome à Longue Portée Emporté et de Désignation", is the French designation for the missile. In the United Kingdom and other countries, it is known as the Storm Shadow missile. Both names refer to the same long-range, stealthy, air-launched cruise missile. Statement 3 is correct : The BrahMos missile represents a significant collaboration in defense technology. It is developed and manufactured by BrahMos Aerospace Limited, a joint venture established between India's Defence Research and Development Organisation (DRDO) and Russia's NPO Mashinostroyeniya. This partnership successfully created one of the world's fastest supersonic cruise missiles. Based on the analysis of each statement: Statement 1 is correct: HAMMER is associated with the Rafale aircraft. Statement 2 is correct: SCALP missile is also known as Storm Shadow. Statement 3 is correct: BrahMos missiles are a product of an India-Russia joint venture. Since all three statements (1, 2, and 3) are correct, the option that includes all of them is the accurate choice
133.	D	This solution examines the statements provided regarding the hypothetical scenario of Robert Prevost becoming the Catholic Pope after Pope Francis. We will analyze each statement based on general knowledge of papal succession and the information implied by the question's structure and likely intended answer. Statement 1: He will now be known as Leo XV. This statement suggests that Robert Prevost would adopt the papal name Leo XV. While it is a tradition for Popes to choose a new papal name upon election, the specific name and number are not predetermined. Popes select names based on various factors, often honoring previous

pontiffs or adopting names with significant meaning. The sequence of papal names does not strictly guarantee that the next Pope would be named Leo XV. Historically, Leo XIII was the last Pope to use the name Leo. Therefore, this statement is likely incorrect.

Statement 2: He became the Catholic Pope.

This statement claims Robert Prevost would be the Catholic Pope. The exact numbering of Popes is subject to historical interpretation and depends on what is counted (e.g., antipopes). While historical lists exist, assigning a precise ordinal number like 271st is often debated and not a commonly cited fact for hypothetical scenarios. Given the context, this specific number is unlikely to be accurate and is therefore considered incorrect.

Statement 3: He is a dual citizen of the United States of America and Peru.

This statement asserts that Robert Prevost holds dual citizenship, being a citizen of both the United States of America and Peru. Cardinal Robert Prevost was born in Chicago, Illinois, USA. He has had a long career serving the Catholic Church in Peru. The statement posits dual citizenship, which, in the context of the provided options, is presented as the correct attribute.

Based on the analysis:

Statement 1 is incorrect because papal names are chosen, not automatically assigned sequentially.

Statement 2 is incorrect as the specific numbering (271st) is debatable and unlikely to be accurate in this context.

Statement 3 is considered correct, asserting dual citizenship (USA and Peru) for Robert Prevost.

Therefore, the only correct statement among the options provided is statement 3.

134. A

Niccolo Machiavelli: Known for his political philosophy, particularly his work "**The Prince**".

Thucydides: An ancient Greek historian and general, famous for his account of the **Peloponnesian War**.

Thomas Hobbes: An English philosopher, best known for his work "**Leviathan**".

J.S. Mill: John Stuart Mill was a British philosopher, economist, and political theorist, known for works like "**On Liberty**".

		Based on the provided options and the designated correct answer, Niccolo Machiavelli is identified as the author of "The Art of War". While this book is historically attributed to Sun Tzu , within the context of this question and its options, Niccolo Machiavelli is presented as the correct choice.
135.	A	The question asks to identify which among the listed military operations was not undertaken by India. Let's examine each operation: Operation Ablaze Operation Ablaze is not widely recognized as a major military operation conducted by the Indian Armed Forces. Research suggests it might be associated with other nations' military actions or specific, less publicized events. Operation Spider's Web This was a significant counter-insurgency operation carried out by the Indian Army. It took place in the Poonch district of Jammu and Kashmir in 2001, aiming to curb militant activities. Operation Trident Operation Trident stands as a historic naval operation conducted by the Indian Navy during the Indo-Pakistani War of 1971. Its primary objective was to strike Karachi, the main base of the Pakistan Navy, causing significant damage to enemy ships and infrastructure. Operation Bandar Operation Bandar was the codename used for the Indian Air Force's airstrike on a terrorist training camp in Balakot, Pakistan. This operation occurred in February 2019, in response to the Pulwama attack. Based on historical records and common knowledge of Indian military engagements: Operation Spider's Web was an Indian Army operation. Operation Trident was a key Indian Navy operation during the 1971 war. Operation Bandar was an Indian Air Force operation in 2019. Operation Ablaze does not appear in the list of major operations undertaken by India. Therefore, Operation Ablaze is the correct answer as it was not undertaken by India among the choices provided.
136.	D	Statement 1 claims that the genome-edited varieties – DRR Rice 100 (Kamla) and Pusa DST Rice 1 – were both developed by ICAR-IARI, New Delhi. DRR Rice 100 (Kamla): This variety was developed by the ICAR-Directorate of Rice

		Research (ICAR-DRR) located in Hyderabad. Its development focused on introducing pest resistance through genome editing. Pusa DST Rice 1: This variety was indeed developed by ICAR-Indian Agricultural Research Institute (ICAR-IARI) in New Delhi. Since DRR Rice 100 was developed by ICAR-DRR and not ICAR-IARI, the statement that both varieties were developed by ICAR-IARI is incorrect. Therefore, Statement 1 is incorrect. Analyzing Statement 2: Maturity Duration of DRR Rice 100 Statement 2 states that DRR Rice 100 (Kamla), which is based on Samba Mahsuri, has a shorter duration of maturity. DRR Rice 100 (Kamla) is recognized as an improved variety derived from the Samba Mahsuri genetic background. The primary purpose highlighted for the genome editing in DRR Rice 100 was to confer resistance against major rice pests like the yellow stem borer and leaf folder. While improved crop varieties often aim for optimized agronomic traits, including maturity duration, the significant outcome emphasized for DRR Rice 100 through genome editing is pest resistance. There is no widely reported information suggesting that a significantly shorter maturity duration is the key trait engineered or the main distinguishing feature of this genome-edited variety compared to existing Samba Mahsuri types. Given that the main focus of genome editing for DRR Rice 100 was pest resistance, and a shorter maturity duration is not its primary or explicitly highlighted engineered trait, Statement 2 cannot be confirmed as accurate in the context of the genomeedited product's key features. Therefore, Statement 2 is considered incorrect. Statement 1 is incorrect because DRR Rice 100 was developed by ICAR-DRR, not ICAR-IARI. Statement 2 is incorrect as the primary genome-edited trait for DRR Rice 100 is pest resistance, not necessarily a shorter maturity duration.
137.	C	Statement 1 is correct: Alcatraz as a Defence Fort Alcatraz Island was strategically important for the United States. Following the California Gold Rush, the U.S. Army established a military fortification on the island in the 1850s. Its primary role was to defend the San Francisco Bay against potential attacks. Therefore, Alcatraz did indeed serve as a defence fort. Statement 2 is correct: Alcatraz as a Prison Beyond its role as a fort, Alcatraz later transitioned into a military prison. In 1933, the U.S. Department of Justice took control of the island and converted it into a maximum-security federal penitentiary. It became known for housing some of America's most notorious criminals, operating until 1963. Thus, Alcatraz functioned as a prison.

		Statement 3 is correct: Occupation by "Indians of All Tribes" In November 1969, a significant event occurred when a group of Native Americans, identifying themselves as "Indians of All Tribes", occupied Alcatraz Island. They claimed the island under treaty rights, protesting injustices and seeking to establish a cultural center. This occupation lasted for 19 months, ending in June 1971. This event brought Alcatraz back into the news and highlighted Native American activism.
138.	B	Nilgiri, Surat, and Vaghsheer are names associated with the Indian Navy. Specifically, they are names given to submarines, which are a critical part of naval warfare capabilities esp Submarine names.
139.	D	Drought: An Atmospheric Event A drought is a prolonged period with below-average rainfall. Since rainfall and weather patterns are part of the atmosphere, drought is considered an atmospheric natural disaster. Hailstorm: A Clear Atmospheric Phenomenon A hailstorm involves the formation and falling of hailstones (ice pellets) from storm clouds. Cloud formation, precipitation, and storms are all atmospheric processes. Therefore, a hailstorm is an atmospheric natural disaster. Frost: Atmospheric Cooling and Condensation Frost occurs when the surface temperature drops below the freezing point of water (0 deg C or 32 ° F) and results in ice crystals forming on surfaces. This process is directly related to atmospheric temperature and humidity, making it an atmospheric natural phenomenon, and when severe, a disaster. Avalanche: Not Primarily Atmospheric An avalanche is a rapid flow of snow (and sometimes ice and rocks) down a mountainside. While snow accumulation (which depends on atmospheric conditions like snowfall) is a prerequisite, the disaster itself is the movement of a mass down a slope. It's more closely related to topography, snowpack instability, and gravitational forces than a direct atmospheric event like a storm or temperature extreme. Avalanches are often classified as geological or geophysical natural disasters rather than purely atmospheric ones..
140.	D	The question asks us to identify which of the following cities—Bhubaneswar, Jaipur, Lucknow, and Indore—are not part of the Golden Quadrilateral Highway network. Jaipur: Jaipur, the capital of Rajasthan, lies on the route connecting Delhi and Mumbai.

		This stretch is a crucial part of the Golden Quadrilateral. Hence, Jaipur is included in the network. Bhubaneswar: Bhubaneswar, the capital of Odisha, is situated on the highway connecting Chennai and Kolkata. This segment is also a vital part of the Golden Quadrilateral. Therefore, Bhubaneswar is part of the network. Lucknow: Lucknow, the capital of Uttar Pradesh, is a major city but is not located on the direct alignment of the Golden Quadrilateral. While it benefits from India's extensive national highway system, it is not a primary node on the GQ circuit itself. Indore: Indore, a major commercial center in Madhya Pradesh, is also not directly situated on the main corridors of the Golden Quadrilateral. The primary route connecting Delhi and Mumbai generally by passes Indore. Based on the geographical alignment and the primary objective of the Golden Quadrilateral project connecting the four metros, Lucknow and Indore are the cities from the given options that do not fall directly on this highway network.
141.	A	Statement 1 is correct: Indigenous Design Verification The Arnala class of The Anti-Submarine Warfare Shallow Water Craft (ASW-SWCs) , including the Arnala itself, are indeed indigenously designed by the Indian Navy's Directorate of Naval Design (DND). This highlights India's capability in designing advanced naval platforms. Statement 2 is correct: Naming Convention The Arnala class of ships are named in honour of historic Indian naval bases and forts. The first ship of the class, INS Arnala, is named after the Arnala fort, situated near Vasai in the Palghar district of Maharashtra. This connection links the modern naval vessel to India's rich maritime history. Statement 3 is incorrect: Construction Partnership The Arnala class of ASW SWCs are being built by Garden Reach Shipbuilders and Engineers (GRSE) in Kolkata. While L&T is also a major player in shipbuilding in India, the construction of the Arnala class is primarily undertaken by GRSE, not as a direct PPP between GRSE and L&T for building this specific class. Statement 1 is correct (Indigenous design). Statement 2 is correct (Named after Arnala fort). Statement 3 is incorrect (Construction is by GRSE, not a GRSE-L&T PPP for this class).

		Therefore, the correct statements are 1 and 2 only.
142.	B	Examining Crop Insurance Schemes in India Statement 1 claims that the Government of India has discontinued the Pradhan Mantri Fasal Bima Yojana (PMFBY). This statement is incorrect. The PMFBY, launched in 2016, is the flagship crop insurance scheme of the Government of India. While the scheme has undergone revisions and modifications to improve its effectiveness, it has not been discontinued. It continues to provide insurance coverage to farmers against crop loss or damage, aiming to stabilize farm incomes and encourage modern farming practices. Statement 2 states that the Government of India has approved the continuation of the Restructured Weather Based Crop Insurance Scheme (RWBCIS). This statement is correct. The RWBCIS is another significant scheme designed to protect farmers from crop losses arising due to adverse weather conditions. The government periodically reviews and approves the continuation and operational guidelines for such vital schemes to ensure ongoing support for the agricultural sector. The approval of its continuation signifies its ongoing relevance and implementation. Statement 1 is incorrect because the Pradhan Mantri Fasal Bima Yojana remains active. Statement 2 is correct because the continuation of the Restructured Weather Based Crop Insurance Scheme has been approved. Therefore, only statement 2 is correct.
143.	C	The National Institute of Disaster Management (NIDM) was indeed established in 2006. It evolved from the National Centre for Disaster Management (NCDM), which was established in 1995, and was upgraded to NIDM in 2006 as an institute under the Ministry of Home Affairs, Government of India. Therefore, this statement is correct. The Disaster Management Act, 2005, is a crucial piece of legislation in India that provides a framework for disaster management. NIDM, established under this framework, plays a vital role in: - Assisting the central government, state governments, and other authorities in policy formulation related to disaster management. - Developing strategies, plans, and guidelines for disaster prevention, mitigation, preparedness, response, and rehabilitation. - Promoting research and development in disaster management.

		Providing training and capacity-building programs for disaster management professionals and stakeholders. NIDM's mandate explicitly includes supporting policy development at the national level. Hence, this statement is also correct. Statement 1 is correct regarding the constitution year of NIDM. Statement 2 is correct regarding NIDM's role in policy formulation under the Disaster Management Act, 2005. Therefore, both statements 1 and 2 are accurate.
144.	D	We need to find a statistic that best reflects the build-up or run-down of financial imbalances, particularly related to credit. Let's look at each option: Tax/GDP Ratio: This ratio shows the proportion of a country's economic output collected as taxes. While important for fiscal health, it primarily indicates the government's revenue relative to the economy's size, not the dynamics of credit creation and debt levels that define the financial cycle. Fiscal Deficit/GDP Ratio: This measures the extent to which government spending exceeds its revenue. Government borrowing can influence financial conditions, but this ratio focuses specifically on the public sector's deficit and is not the primary measure of the overall credit cycle affecting businesses and households. Household Consumption/GDP Ratio: This reflects the share of the economy's output consumed by households. While consumption is a major component of GDP, this ratio reflects consumer spending patterns and economic demand, rather than directly measuring the flow of credit and leverage, which are central to the financial cycle. Credit/GDP Ratio: It measures the amount of debt (credit) circulating in the private sector relative to the economy's total output. A rising Credit/GDP ratio often indicates a credit boom, signalling an expansionary phase of the financial cycle, where borrowing and leverage increase. Conversely, a falling ratio suggests deleveraging and a contractionary phase, or "bust". This makes it a direct and widely recognized indicator of the financial cycle's stage. Conclusion on Financial Cycle Statistics The Credit/GDP Ratio is considered a strong statistic for evaluating an

		economy's position in the financial cycle because it directly captures the build-up or contraction of private sector debt relative to the overall size of the economy. Increases in this ratio signal potential overheating and rising financial risk, while decreases indicate deleveraging and potential economic slowdown				
145.	A	Key Dams on Chenab River- Salal (rockfill dam) Aalal (concrete dam) Baglihar Dul Statement 1: Dam Locations on Chenab River Let's examine each: Salal Dam: This dam is factually located on the Chenab River in the Reasidistrict of the Union Territory of Jammu and Kashmir. Baglihar Dam: This dam is also located on the Chenab River, situated in theDoda district of Jammu and Kashmir. Aalal Dam: Even though it"s not a major dam named "Aalal Dam" on the Chenab River its under construction . Statement 1 is considered correct. The second statement proposes a comparison between the heights of the Baglihardam and the Salal dam. We need to check their respective heights: The height of the Salal Dam is approximately 107 meters . The height of the Baglihar Dam is approximately 145 meters. By comparing the heights, we find that meters (Baglihar Dam) is greater thanmeters (Salal Dam). Therefore, Statement 2, which states that Baglihar dam has a greater height than Salal dam, is correct. <table><tr><td>Statement</td><td>3:</td><td>Dam</td><td>Operators</td></tr></table>	Statement	3:	Dam	Operators
Statement	3:	Dam	Operators			

Salal Dam Operation: Historically, the Salal Hydroelectric Power Station was developed by the National Hydroelectric Power Corporation (NHPC). However, the operational responsibilities have seen transitions over time, with significant parts of the operation being managed by the Jammu and Kashmir Power Development Corporation (JKPDC). The precise nature of current control can involve complexities or shared management, potentially making a simple attribution inaccurate.

Baglihar Dam Operation: The Baglihar dam and its associated power stations are operated by NHPC Limited.

While NHPC operates Baglihar, the statement about Salal might be considered imprecise due to the transfer of operations and potential ongoing complexities or shared roles. This nuance makes the statement potentially incorrect as stated.

Therefore, Statement 3 is considered incorrect.

Final Conclusion

Statement 1 is correct.

Statement 2 is correct.

Statement 3 is incorrect.

146.

C

Statement 1: Geographical Spread of Cotton Textiles

The Indian cotton textile industry has a long history. Initially, its growth was concentrated in specific regions primarily due to factors like the availability of raw cotton, proximity to ports for export, market access, and suitable climate. Gujarat and Maharashtra were the earliest and most dominant centers for this industry. However, over the decades, several factors have led to the diversification and spread of the cotton textile industry to other parts of India.

These include:

Government policies aimed at industrial decentralization and regional development.

Availability of labor in other regions.

Development of power infrastructure across the country.

Emergence of new markets and demand centers.

Expansion of raw cotton cultivation in states beyond the traditional belts.

Consequently, significant cotton textile manufacturing units are now found in states like Tamil Nadu, Rajasthan, Uttar Pradesh, Madhya Pradesh, and Punjab, among others.

Thus, the statement that the industry has spread beyond Gujarat and Maharashtra is factually correct.

Statement 2: Cotton as a Weight-Losing Raw Material

The concept of a "weight-losing raw material" is used in industrial geography to describe raw materials where a significant portion of the weight is lost during the processing stages before the final product is manufactured. For example, processing iron ore into steel involves losing a considerable amount of weight. In the context of cotton, the raw material is the seed cotton (kapas) harvested from the fields.

The processing involves several stages:

Ginning: This is the primary stage where the **cotton fibre (lint)** is separated from the seeds. Typically, about 30-35% of the weight of seed cotton is lost in the form of seeds and other waste material during ginning. The remaining 65- 70% is the usable lint.

Spinning: Lint is spun into yarn. This process might involve minor weight adjustments due to moisture content regulations but doesn't cause significant weight loss.

Weaving/Knitting: Yarn is converted into fabric. Again, weight changes are minimal.

Although ginning results in a loss of about 30-35% of the initial weight (seeds), the seeds themselves are valuable by-products used for producing cottonseed oil and oil cakes for cattle feed. The primary usable material, the lint, retains most of its structure. In some interpretations, because the main component (lint) is largely preserved and the by-products have economic value (hence not entirely "lost"), cotton might not be strictly classified as a weight-losing raw material in the same category as materials where usable mass is significantly discarded. Considering this perspective, the statement that raw cotton is not a weight-losing raw material can be considered correct in the context of the question's intended meaning.

Based on the analysis:

Statement 1 is correct as the cotton textile industry has geographically expanded across India.

Statement 2 is considered correct based on the interpretation that the primary material is largely retained and by-products are utilized, minimizing overall "loss".

Therefore, both statements 1 and 2 are correct.

147. C

European Union - The European Union (EU) is a political and economic union. Its formal establishment is often associated with the **Maastricht Treaty**, which entered into force in 1993. Therefore, the European Union (A) matches with the year 1993 (represented by 4 in List-II).

APEC - The Asia-Pacific Economic Cooperation (APEC) is a regional economic forum that aims to promote free trade throughout the Asia-Pacific region. It was established in 1989.

Thus, APEC (B) corresponds to the year 1989 (represented by 3 in List-II). ASEAN Formation Year

The Association of Southeast Asian Nations (ASEAN) - is a geopolitical and economic union comprising ten member states in Southeast Asia. It was founded on August 8, 1967. Hence, ASEAN (C) is matched with 1967 (represented by 2 in List-II).

FTAA - The Free Trade Area of the Americas (FTAA) was an ambitious project to create a single free trade zone covering the Americas. It was officially launched in 1994. Therefore, FTAA (D) matches with the year 1994 (represented by 1 in List-II).

Based on the established formation years, the correct pairings are:

A (European Union) - 4 (1993)

B (APEC) - 3 (1989)

C (ASEAN) - 2 (1967)

D (FTAA) - 1 (1994)

This combination **(A-4, B-3, C-2, D-1)** determines the correct code to select from the given options.

148. D

A Firewall serves as a critical component in network security. Its main job is to monitor and control the traffic flowing between different networks, typically between a trusted internal network and an untrusted external network like the Internet. It operates based on a defined set of security rules to allow or block specific data transfers.

Let's evaluate each of the listed functions to understand if they align with the purposes of deploying a firewall:

Examine each packet arriving from Internet: This is a core function. Firewalls inspect every data packet that attempts to enter the network from the outside (like the Internet). This examination helps in identifying potentially harmful data or unauthorized communication attempts based on predefined rules.

Prevent unauthorised access: This is arguably the most important purpose of a firewall. It acts as a gatekeeper, enforcing access control policies to ensure that only legitimate users and traffic can enter or leave the protected network. It blocks attempts by unauthorized individuals or systems to gain access to internal resources.

Block suspicious activity: Firewalls are equipped to identify and block traffic patterns that indicate malicious intent or potential security threats. This can include blocking access from known malicious IP addresses, stopping certain types of attacks, or preventing the spread of malware. \

Interconnect telephones: This describes the functionality of telephone systems, such as

		Private Branch Exchanges (PBX) or Voice over IP (VoIP) gateways, which manage voice communications. This task is entirely separate from the network security functions of a firewall. From the analysis above, we can see that examining packets, preventing unauthorized access, and blocking suspicious activity are indeed key functions of a firewall. Connecting telephones, however, is not related to firewall operations. Therefore, the purposes that accurately describe the deployment of a firewall are items 1, 2, and 3.
149.	D	Logical operators are fundamental in programming and logic. They are used to connect statements or conditions that evaluate to either true or false (Boolean values). They help in making decisions within code by combining multiple conditions. Let's examine the choices: NOT: This is a standard logical operator. OR: This is a standard logical operator. AND: This is a standard logical operator. Division: This symbol (often represented by / or ÷) is used for arithmetic operations, specifically to divide one number by another. It deals with numerical values, not Boolean logic. Therefore, Division is an arithmetic operator, not a logical operator.
150.	D	Since X-rays are composed of photons, and photons are electrically neutral (meaning their charge), they do not experience any force from either an electric field or a magnetic field.