



drishti

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(Part-II)**

**Current  
Affairs  
MCQ  
(Consolidation)**

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## Practice Question

1. Consider the following:

1. Ramman
2. Mudi yettu
3. Sankirtana
4. Kumbh Mela

Which of the above have been recognised under UNESCO's list of Intangible Cultural Heritage of India?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 1, 2 and 3 only
- (d) All of the above

2. Consider the following statements:

1. The event horizon is the core of a black hole, marking the point where the escape velocity is equal to the speed of light.
2. A stellar black hole is formed when the core of a very massive star undergoes a catastrophic collapse at the end of its life cycle.

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

3. The Participatory Guarantee System (PGS) sometimes seen in news is related to which of the following?

- (a) Water conservation methods in agriculture
- (b) Regulation of GMO crops
- (c) Certification of organic products
- (d) Promotion of chemical fertilizers in farming

4. Consider the following statements:

1. The National Disaster Management Authority (NDMA) is headed by the Union Home Minister and operates under the Ministry of Home Affairs.
2. The Cabinet Committee on Management of Natural Calamities (CCMNC) coordinates disaster response during emergencies, prepares the National Plan for Disaster Management based on national policies, and monitors the implementation of NDMA guidelines.

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

5. With reference to Central Bank Digital Currencies (CBDCs), consider the following statements:

1. Despite both CBDC and cryptocurrencies being digital currencies, CBDCs are comparatively more stable.
2. The Reserve Bank of India (RBI) introduced the Digital Rupee (e₹) in 2022 as India's CBDC.

3. CBDCs are exchangeable one-to-one with the fiat currency.

Which of the above statements is/are correct?

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

6. Consider the following statements regarding NewSpace India Limited (NSIL):

1. NSIL is the arm of ISRO that promotes the commercial use of Indian space programme products and services.
2. It is registered under the Companies Act, 2013 as a wholly owned Government of India PSU.

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

7. Consider the following statements regarding Tropical rainforests:

1. Tropical rainforests are mostly found near the equator and experience high temperatures (above 22°C) and heavy rainfall (over 2000mm annually) throughout the year.
2. Mesophytic plants are prevalent in these tropical rainforests.
3. The Congo basin is the world's largest tropical forest.

Which of the statements given above is/are **NOT** correct?

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

8. Regarding Guru Ghasidas-Tamor Pingla (GGTP) Tiger Reserve, consider the following statements:

1. It is located in Gujarat and has been recently notified as the country's 100<sup>th</sup> tiger reserve.
2. It is the largest tiger reserve in India followed by Nagarjunasagar-Srisailem (Andhra Pradesh) and Manas (Assam).

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

9. Recently the State of the World's Children 2024 (SOWC 2024) Report, was released by which of the following?

- (a) Child Rights International Network (CRIN)
- (b) United Nations International Children's Emergency Fund (UNICEF)

- (c) World Health Organisation (WHO)  
(d) None of the above

10. Consider the following pairs:

Important Tribes	Habitation
1. Maori Tribe	South Sudan
2. Sentinelese tribe	Andaman Islands (India)
3. Gundjeihmi and Bininj tribes	Australia

How many of the above pairs are correctly matched?

- (a) Only one pair  
(b) Only two pairs  
(c) All three pairs  
(d) None of the pairs

11. Regarding the International Energy Agency (IEA), consider the following statements:

1. The IEA is an autonomous agency that works under the framework of the United Nations (UN).
2. A candidate country to the IEA must be a member country of the Organisation for Economic Co-operation and Development (OECD).
3. World Energy Outlook Report is a flagship publication of the IEA.

How many of the above statements are correct?

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

12. With reference to the functions of Finance Commission, consider the following statements:

1. It advises on the allocation of the net tax proceeds to be shared between the Union and States.
2. It suggests the principles for grants-in-aid from the Consolidated Fund of India to the States.
3. It recommends measures to augment the Consolidated Fund of a State to supplement the resources of Panchayats and Municipalities.

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

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

13. Consider the following statements about the Andaman and Nicobar Islands (ANI):

1. The Ten Degree Channel separates the Andaman Islands from the Nicobar Islands.
2. Indira Point, located on Great Nicobar Island, is the southernmost tip of India.
3. Nicobarese tribe from ANI are listed as Particularly Vulnerable Tribal Groups.

Which of the statements given above is/are correct?

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

14. With reference to the United Nations Tourism Rural Development Program (UNTRDP), consider the following statements:

1. UNTRDP aims to promote sustainable development and counter rural depopulation through tourism.
2. The program evaluates participating villages based on nine key areas, including cultural resources, social sustainability, and tourism infrastructure.
3. Dhudmaras village (Chhattisgarh) has been selected under the Best Tourism Village Upgrade Programme, an initiative of the UN World Tourism Organisation (UNWTO).

Which of the statements given above is/are correct?

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

15. With reference to the Consumer Price Index (CPI), consider the following statements:

1. The CPI focuses on both the general price level of goods & services and addresses income distribution or wealth inequality.
2. CPI is also used to index dearness allowances to employees.

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. Regarding Guru Nanak, consider the following statements:

1. He was the first of the 10 Sikh gurus.
2. His birth anniversary is celebrated as the Prakash Parv.
3. He was a proponent of the Nirguna School of the Bhakti movement and was influenced by Kabir Das.

How many of the statements given above is/are correct?

- (a) Only One  
(b) Only Two  
(c) All Three  
(d) None

17. Regarding the Bodoland Territorial Region (BRT), consider the following statements:

1. Bodoland Territorial Region is an autonomous region in Assam consisting of four districts namely Kokrajhar, Chirang, Baksa, and Udalguri.
2. It is administered by an elected body known as the Bodoland Territorial Council.

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

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

18. Consider the following statements about the Barak River system:

1. The Barak River originates in the Manipur hills in the Senapati district and flows into Bangladesh, where it is known as the Surma and Kushiara.
2. The Barak sub-basin drain area primarily spans over India, Bangladesh and Bhutan.
3. Laterite and red and yellow soils are predominant in the Barak sub-basin.
4. The Barak River flows through the plains and hilly areas, with the plains being densely populated and extensively cultivated.

Which of the statements given above are correct?

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

19. Consider the following statements regarding the State Finance Commission:

1. It recommends to the state finance ministry the principles for determining which taxes and duties should be assigned to Panchayats in the state.
2. Its constitution after every five years to review the financial position of the panchayats is discretionary provision under the 73<sup>rd</sup> Constitutional Amendment Act, 1992.

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. Consider the following statements:

1. National CSR Data Portal is an initiative by the Ministry of Finance to track Corporate Social Responsibility(CSR) spending across the country.
2. Companies must spend 2% of their average net profit over the last three years on Corporate Social Responsibility (CSR) even with losses in two years, if the average is positive.

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

21. Consider the following statements:

1. World Toilet Day is a United Nations initiative as part of Sustainable Development Goal-9.

2. All villages in India have achieved Open Defecation Free (ODF) Plus (+) status under Swachh Bharat Mission (SBM) Grameen.

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

22. Consider the following statements:

1. The Employees' Pension Scheme ensures pension benefits for employees in the organized sector upon retirement at the age of 58 years.
2. The Employees' Deposit-Linked Insurance (EDLI) scheme provides life insurance coverage to employees of establishments covered under Employees' State Insurance Act, 1948.

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

23. Consider the following statements:

1. A civil servant entering into a contract in their official capacity is not personally liable for the contract.
2. Parliament can establish All-India Services through a two-thirds majority resolution passed from the Lok Sabha.

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

24. Consider the following statements related to Food Safety and Standards Authority of India:

1. It is an autonomous statutory body.
2. It consolidates food-related laws like the Prevention of Food Adulteration Act 1954 and the Fruit and Meat Food Products Orders.
3. It operates under the Ministry of Food Processing Industries.

How many of the above statements is/are correct?

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

25. Consider the following features:

1. It is called the "Giant of Africa" and is the most populous country in Africa.
2. It is located in West Africa and opens in the Atlantic Ocean.

3. It is bordered by Niger, Chad, Cameroon, and Benin  
Which of the following countries is best described by the above characteristics?

- (a) Democratic Republic of the Congo
- (b) Ethiopia
- (c) Nigeria
- (d) Ghana

26. With reference to aphantasia, consider the following statements:

- 1. It is a condition where individuals are unable to visualize images in their minds.
- 2. The term "aphantasia" was coined in 2015 by neurologist Adam Zeman.
- 3. Individuals with hyperphantasia, can experience mental images with exceptional vividness.

Which of the statements given above is/are correct?

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

27. Consider the following statements:

- 1. Sickle cell disease (SCD) is a genetic blood disorder characterized by the production of abnormally shaped white blood cells.
- 2. The National Sickle Cell Anaemia Elimination Mission aims to eliminate sickle cell disease as a public health problem in India by 2047.

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

28. Consider the following statements:

- 1. International Container Transshipment Port (ICTP) at Galathea Bay has been proposed as the 13th Major port of India.
- 2. The Maritime Initiative for Training in the Indo-Pacific (MAITRI) between India and US aims to help regional partners utilize tools from the Indo-Pacific Maritime Domain Awareness (IPMDA).

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

29. Consider the following features:

- 1. It is nestled in the Chota Nagpur plateau.
- 2. It is the third-largest tiger reserve in India
- 3. It maintains ecological connectivity with nearby tiger reserves such as Sanjay Dubri and Palamau.

Which of the following protected areas is best defined by above features?

- (a) Similipal Tiger Reserve
- (b) Kanha Tiger Reserve
- (c) Guru Ghasidas-Tamor Pingla Tiger Reserve
- (d) Panna Tiger Reserve

30. 'Back to basics' and 'March to Future' approach, recently in news, is related to?

- (a) Tackling food security challenges
- (b) Promoting digital transformation in rural areas
- (c) Advancing space exploration through traditional and modern technologies
- (d) Reforming the Education System

31. With reference to the Indian tea industry, consider the following statements:

- 1. The Tea Board of India was established under the Tea Act, 1953 as a statutory body under the Ministry of Commerce.
- 2. India is the largest exporter of tea globally, accounting for 10% of global tea exports.
- 3. Assam, Darjeeling, and Nilgiri teas are recognized for their global prominence.

Which of the statements given above is/are correct?

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

32. Skewflation, sometimes in the news, refers to which of the following economic phenomena?

- (a) A divergence in inflation rates between rural and urban areas.
- (b) Certain sectors experiencing inflation, others remain stable or encounter deflation.
- (c) Persistent inflation concentrated only in essential commodities, disregarding other sectors.
- (d) An economic scenario where inflation impacts only goods traded in international markets.

33. Consider the following statements related to Gene Editing:

- 1. It allows for the addition, deletion, or modification of specific DNA sequences.
- 2. Zinc Finger Nucleases and TALENs are widely used techniques in gene editing.

Which of the above statements is/are correct?

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

34. Consider the following statements:

- 1. The National Clean Air Programme (NCAP) aims to achieve a reduction of up to 40% in Particulate Matter 10 (PM 10) concentrations or meet the National Ambient Air Quality Standards by 2025-26.

2. National Ambient Air Quality Standards (NAAQS) set by the Ministry of Environment to ensure uniform air quality across India, with 12 health-based parameters for standardized monitoring and data analysis.
3. The Environmental Protection Agency (EPA) calculates the AQI based on eight pollutants.

Which of the statements given above is/are correct?

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

35. Consider the following statements:

1. Allotropy refers to the existence of a chemical element in two or more forms, differing either in the arrangement of atoms within crystalline solids or in the number of atoms contained in their molecules.
2. Graphite has hexagonal layers of carbon atoms bonded to three others, while diamond has a 3D structure with each carbon bonded to four others.

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

36. Regarding Carbon Credits, consider the following statements:

1. They refer to carbon emissions reductions or removals, measured in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e).
2. Carbon credits represent the "offset" for one ton of carbon dioxide or the equivalent of other greenhouse gasses.
3. These credits are generated by projects that absorb or reduce carbon emissions and are certified by international bodies.

How many of the statements given above is/are correct?

- (a) Only One
- (b) Only Two
- (c) All Three
- (d) None

37. Consider the following:

1. It is India's largest saline wetland.
2. It is located in the Nagaur and Jaipur districts of Rajasthan, bordered by the Aravalli hills.
3. It was designated a Ramsar site in 1990 due to its ecological significance.

Which of the following lakes best matches the above description?

- (a) Chilika Lake
- (b) Sambhar Lake
- (c) Loktak Lake
- (d) Pulicat Lake

38. Consider the following statements about the Ottawa Convention 1997:

1. The Ottawa Convention, also known as the Anti-Personnel Mine Ban Treaty, is an international agreement that prohibits the use, production, stockpiling, and transfer of cluster munitions.
2. The US, Russia, and India are not parties to the Ottawa 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

39. Consider the following statements about Over-The-Top (OTT) platforms:

1. The Ministry of Electronics and Information Technology is responsible for regulating the OTT platforms in India.
2. The Central Government introduced the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, to regulate OTT platforms.

Select the correct answer using the code given below:

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

40. Consider the following statements regarding the Guided Pinaka Weapon System:

1. It is a multi-barrel rocket launcher designed by the DRDO's Armament Research and Development Establishment (ARDE).
2. It is renowned for its mobility, with the upgraded version attaining ranges of 120 km and 300 km.

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

41. Wood Wide Web, recently in the news, is related to which of the following?

- (a) A global initiative for reforestation to combat climate change.
- (b) A symbiotic network of mycorrhizal fungi connecting plant roots underground.
- (c) A digital communication system used by forestry researchers for real-time data sharing.
- (d) A technological platform for monitoring forest health using satellite data.

42. Consider the following statements related to Human Immunodeficiency Virus (HIV):

1. It primarily targets and damages CD4 immune cells.
2. It primarily spread through the exchange of bodily fluids.



3. It can be managed using antiretroviral therapy.

How many of the above statements is/are correct?

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

43. Consider the following statements related to Megalithic Sites in India:

1. The main concentration of megalithic culture is in the Northeast Region.
2. Rock paintings found at megalithic sites depict scenes of hunting, cattle raids, and group dancing.
3. Junapani in Vidarbha and Adichanallur in Tamil Nadu are key megalithic sites.

How many of the above statements is/are correct?

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

44. Consider the following statements regarding the Global Soil Conference (GSC) 2024:

1. It was organised by the Food and Agriculture Organisation (FAO) under the ambit of United Nations Convention to Combat Desertification (UNCCD).
2. The event aimed to foster a global dialogue on how caring for soils can drive sustainability across various sectors.
3. The conference highlights that more than 70% of soil in India is facing degradation from erosion.

How many of the above statements are correct?

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

45. Consider the following statements regarding G20:

1. G20 nations account for over 95% of global GDP and about 60% of the world's population.
2. G20 Rio de Janeiro Leaders' Declaration, 2024 advocates for progressive and effective taxation of the super-rich.
3. India is the first G20 country to have fulfilled the commitments made under the Paris Agreement ahead of time.

How many of the above statements is/are correct?

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

46. Global Estimates of Intimate Partner/Family Member Femicides report was recently released by which of the following:

- (a) UN Women
- (b) World Bank
- (c) OECD
- (d) None of the above

47. Consider the following statements about the National Cadet Corps (NCC):

1. The NCC was established in 1948 under the NCC Act of 1948, based on the recommendations of the H. N. Kunzru Committee (1946).
2. The primary objective of the NCC is to prepare cadets for direct recruitment into the Armed Forces.
3. The NCC is headed by a Director General, who is an officer of the rank of Lieutenant General.

Which of the above statements is/are correct?

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

48. Consider the following statements about Guru Tegh Bahadur:

1. Guru Tegh Bahadur ascended as the 9<sup>th</sup> Sikh Guru in 1664, succeeding Guru Har Krishan.
2. He established the city of Anandpur Sahib and contributed extensively to the Guru Granth Sahib.
3. He opposed forced conversions during Aurangzeb's reign and was executed for encouraging fearlessness (nirbhau) and harmony (nirvair).
4. The Gurdwara Sis Ganj Sahib in Amritsar marks the site of his execution.

Which of the above statements is/are correct?

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

49. With reference to the Major Atmospheric Cherenkov Experiment (MACE) telescope, consider the following statements:

1. MACE is the highest imaging Cherenkov telescope, making it the largest of its kind in Asia and the second-largest in the world.
2. It detects high-energy gamma rays directly from cosmic sources.
3. The telescope is equipped with a light collector consisting of 356 mirror panels in a honeycomb structure.
4. One of MACE's objectives is to study dark matter through the detection of gamma rays from weakly interacting massive particles (WIMP) annihilation events.

Which of the statements given above is/are correct?

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

50. With reference to the United Nations Convention on the Law of the Sea (UNCLOS): consider the following statements:

1. UNCLOS is often referred to as the "Constitution of the Oceans" and governs the rights and duties of nations concerning the use of seas and oceans.
2. It establishes five marine zones: Internal Waters, Territorial Sea, Contiguous Zone, Exclusive Economic Zone (EEZ), and High Seas.
3. According to UNCLOS, the Exclusive Economic Zone (EEZ) extends up to 24 nautical miles from a nation's baseline.

Which of the statements given above is/are correct?

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

51. With reference to Minke Whales, consider the following statements:

1. Minke Whales are the smallest members of the rorqual whale family and can grow up to a maximum length of 10.7 meters.
2. The Common Minke Whale is listed as "Least Concern" under the IUCN Red List, but it is included in Appendix I of CITES.
3. The Antarctic Minke Whale is classified as "Endangered" under the IUCN Red List.

Which of the statements given above is/are correct?

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

52. Consider the following statements regarding Bioplastics:

1. Bioplastics are always biodegradable and compostable, unlike traditional plastics.
2. Polylactic acids (PLAs) and polyhydroxyalkanoates (PHAs) are common polymers used in the production of bioplastics.
3. The production of bioplastics can contribute to reducing the carbon footprint by absorbing carbon dioxide (CO<sub>2</sub>).
4. Bioplastics are unsuitable for applications like medical supplies due to their lack of durability.

Which of the above statements is/are correct?

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

53. With reference to the telescope projects of India, consider the following statements:

1. The IOA, the second highest observatory in the world, features several telescopes, including the Himalayan Chandra Telescope (HCT).

2. High Altitude Gamma Ray (HAGAR), is the first high-altitude gamma-ray telescope array designed by utilizing the atmospheric Cherenkov technique.

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

54. With reference to the Voter verifiable paper audit trail (VVPAT), consider the following statements:

1. When a vote is cast under the VVPAT system, a slip is printed displaying the serial number, candidate's name, party name, and symbol.
2. VVPATs were used for the first time alongside EVMs in a bye-election for an assembly constituency in Meghalaya.

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

55. With reference to the 'Cooperatives in India', consider the following statements:

1. The 67<sup>th</sup> Constitutional Amendment, 1990 gave constitutional status and protection to cooperatives in India.
2. The right to form cooperative societies is a fundamental right under Article 19 (1).
3. The UN International Year of Cooperatives 2025, centered on the theme "Cooperatives Build a Better World."

How many of the above statements are correct?

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

56. Consider the following statements:

1. The New Collective Quantified Goal on Climate Finance (NCQG) seeks to increase funding for developing countries to USD 300 billion annually by 2035.
2. Countries such as the US, Germany, the UK, the UAE, and India have endorsed the COP29 Declaration aimed at reducing methane emissions from organic waste.

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

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

57. Consider the following statements:

1. Medicines Patent Pool (MPP) is a WHO-supported organization, primarily funded by Unitaid, with the goal of enhancing access to life-saving medicines for low- and middle-income countries.



2. WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases (2013-2020) aims to reduce NCD mortality by 25% by 2025.

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

58. Consider the following statements about bacteria:

1. Cyanobacteria are photosynthetic autotrophs with chlorophyll, existing as unicellular, colonial, or filamentous forms in freshwater, marine, and terrestrial environments.
2. Lactobacillus is a heterotrophic bacteria that feeds on lactose (milk sugar) to convert milk into curd.

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

59. Consider the following characteristics:

1. Lives only in freshwater.
2. Essentially blind and hunts using echolocation.
3. Cannot breathe underwater.
4. Known as "Sussu" due to the sound it makes while breathing.

Which aquatic species is best described by the above characteristics?

- (a) Dugong
- (b) Sea Turtle
- (c) River Dolphin
- (d) Manatee

60. Divyavandana, Pratityasamutpada and Dipavansa, is associated with which of the following?

- (a) Jainism
- (b) Buddhism
- (c) Hinduism
- (d) Sikhism

61. With reference to the Nataraja Statue consider the following statements:

1. The iconic and globally renowned form developed during the Chola dynasty's rule, reflecting their artistic and cultural achievements.
2. Ananda Tandava (Dance of Bliss) symbolizes the eternal rhythm of the universe.

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

62. Consider the following statements:

1. Leucism is a genetic condition that results in a lack of pigmentation in skin cells.
2. Albinism is caused by mutations in melanin-producing genes, resulting in a lack of pigmentation in the skin, hair, and eyes.

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

63. Consider the following statements:

1. Static cloud seeding involves spraying fine particles of hygroscopic materials, like salts, into warm clouds using flares or explosives.
2. Hygroscopic cloud seeding involves introducing ice nuclei, like silver iodide or dry ice, into cold clouds with supercooled liquid water droplets.

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

64. Consider the following statements related to Comptroller and Auditor General of India (CAG):

1. CAG is appointed by the President of India by a warrant under his hand and seal.
2. CAG is ineligible for any further office under the Government of India or any state after leaving office.
3. The Minister of Finance can represent the CAG in Parliament.

How many of the above statements is/are correct?

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

65. Consider the following characteristics:

1. They were first classified in 1836 as Ophiophagus hannah.
2. It is the only snake that builds and guards a nest until the eggs hatch.
3. Its venom is used in developing pain relievers like Cobroxin.

Which of the following snake species is best described by above characteristics?

- (a) Russell's Viper
- (b) Reticulated Python
- (c) King Cobra
- (d) Black Mamba

66. Regarding the One Nation One Subscription (ONOS) scheme, consider the following statements:

1. It has recently been approved by the Union Cabinet for three years to provide nationwide access to scholarly research articles and journals.
2. It will be coordinated by the Information and Library Network (INFLIBNET), which is an autonomous inter-university center under the NITI Aayog.

Which of the statements given above is/are correct?

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

67. Consider the following statements:

1. The India Employment Report 2024 released by the Ministry of Labour and Employment, is based on data from the National Sample Surveys and Periodic Labour Force Surveys.
2. The Consumer Price Index Numbers for Agricultural and Rural Labourers, released by the Labour Bureau, is based on the base year 1986-87.

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

68. Consider the following statements:

1. The Committee on the Functions of the Constituent Assembly was chaired by G.V. Mavalankar.
2. The Constitution was handwritten by Prem Behari Narain Raizada in calligraphy, with its pages decorated by Nandalal Bose.

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

69. Consider the following provisions:

1. Added Socialist, secular and integrity in the Preamble.
2. Made the president bound by the advice of the cabinet.
3. Raised the tenure of Lok Sabha and state legislative assemblies from 5 to 6 years.

How many of the above provisions were added to the Constitution by the 42nd Amendment Act, 1976?

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

70. Consider the following statements related to protection provisions under Design Act, 2000:

1. Protection applies to the appearance of an article as well its functional aspects.

2. Design should not have been publicly disclosed in India or abroad.

3. Protection lasts for at least 10 years under the TRIPS Agreement.

How many of the above statements is/are correct?

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

71. The Sami community, recently in the news, is indigenous to which of the following countries?

- (a) India
- (b) Norway
- (c) Afghanistan
- (d) China

72. Consider the following statements:

1. In 1973, based on the Bhuria Committee (1960-61), Primitive Tribal Groups (PTGs) were created as a separate category.
2. The criteria for identifying Particularly Vulnerable Tribal Groups (PVTGs) include pre-agricultural technology, low literacy levels, economic backwardness, and a declining or stagnant population.

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

73. Daulat Beg Oldie (DBO) plateau sometimes seen in news is situated between:

- (a) Shyok River and Karakoram Pass
- (b) Pangong Lake and Siachen Glacier
- (c) Galwan Valley and Aksai Chin
- (d) Sela Pass and Namcha Barwa

74. Consider the following pairs:

State	Dance Form
Himachal Pradesh	Charba
Kerala	Jawara
Madhya Pradesh	Kummi
Mizoram	Cheraw

How many of the above pairs is/are correctly matched?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

75. With reference to Samos Island, recently in the news, consider the following statements:

1. It is located in Eastern Aegean Sea.
2. It is home to the ancient Temple of Heraion, a UNESCO Heritage Site.

3. It is the birthplace of the ancient Greek mathematician Pythagoras.

How many of the above statements is/are correct?

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

76. With reference to the regulation of prisons in India, consider the following statements:

- Article 39A ensures free legal aid to ensure justice for those unable to afford legal representation.
- The Prisons Act, 1894, governs prisoner identification and the collection of biometric data.
- The Supreme Court in D.K. Basu vs. State of West Bengal (1997), mandated strict protocols for arrest and detention.

How many of the above statements is/are correct?

- (a) Only One  
(b) Only Two  
(c) All Three  
(d) None

77. Which of the following statements correctly describes Moiré materials?

- They are created by overlaying two repetitive structures at an angle, which generates interference patterns that lead to unique properties.
- They are produced by stacking 2-D materials and aligning the layers perfectly to enhance their crystalline symmetry.
- They are formed by twisting multiple layers of graphene at arbitrary angles, creating random electronic behaviors.
- They derive their unique properties from natural variations in atomic arrangements rather than external structural modifications.

78. Consider the following statements:

- Competition Commission of India (CCI) is a statutory body established by the Central Government under the Monopolies and Restrictive Trade Practices Act, 1969.
- The Baba Kalyani committee's recommendations aimed to promote fair competition and regulate anti-competitive practices.

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

79. The Red Sea is a saltwater inlet between northeastern Africa and the Arabian Peninsula, connecting to the Mediterranean via the Suez Canal. It is surrounded by which of the following countries?

- Jordan
- Egypt
- Saudi Arabia
- Eritrea
- Djibouti

Select the correct option from the codes given below:

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

80. Consider the following statements regarding the 73rd Constitutional Amendment Act, 1992:

- The act mandates the reservation of at least half of the total seats for women, including those reserved for SCs and STs, in local bodies.
- Not less than one-third of the total number of offices of chairpersons in the panchayats at each level shall be reserved for women.

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

81. Consider the following statements:

**Statement-I:** Launched in 2020 by the Department of Telecom (DoT), the PM-WANI framework aims to expand public Wi-Fi hotspots across India, particularly in rural areas.

**Statement-II:** National Digital Communications Policy, 2018 aims to transform India into a digitally empowered economy by enhancing digital infrastructure and services. Which one of the following is correct in respect of the above statements?

- Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- Statement-I is correct but Statement-II is incorrect
- Statement-I is incorrect but Statement-II is correct

82. Regarding the Centre for Processing Accelerated Corporate Exit (C-PACE), consider the following statements:

- C-PACE was launched by the Ministry of Finance to centralise and streamline the process of company closure.
- It has strengthened the 'Ease of Doing Business' by ensuring timely physical interactions with stakeholders.

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

83. Consider the following features:

1. It is the only port-town of the Harappan Civilisation.
2. It was discovered in 1954 by SR Rao.
3. The National Maritime Heritage Complex is being constructed in this location.

Which of the following sites is best described from above features?

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

84. Consider the following statements related to Apabhramsa School of Art:

1. Himachal and Uttarakhand region are the origins of this school.
2. It dominated Western Indian painting from the 11<sup>th</sup> to 15<sup>th</sup> centuries

3. Initially focusing on Buddhist themes, it later incorporated Shaivite subjects.

How many of the above statements is/are correct?

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

85. Which of the following statements are correct regarding Jim Corbett National Park?

1. It is located in Uttarakhand and was the first area under the Project Tiger initiative in 1973.
2. It was established in 1936 as Hailey National Park to protect the Bengal tiger and is recognized as the oldest national park in India.

Select the correct answer using the code below:

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

## Answers

- |         |         |         |         |         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (d)  | 2. (b)  | 3. (c)  | 4. (d)  | 5. (d)  | 6. (c)  | 7. (b)  | 8. (d)  | 9. (b)  | 10. (b) |
| 11. (b) | 12. (d) | 13. (a) | 14. (d) | 15. (b) | 16. (c) | 17. (d) | 18. (b) | 19. (d) | 20. (b) |
| 21. (d) | 22. (a) | 23. (a) | 24. (b) | 25. (c) | 26. (d) | 27. (b) | 28. (a) | 29. (c) | 30. (a) |
| 31. (c) | 32. (b) | 33. (c) | 34. (b) | 35. (c) | 36. (c) | 37. (b) | 38. (b) | 39. (b) | 40. (a) |
| 41. (b) | 42. (c) | 43. (b) | 44. (a) | 45. (b) | 46. (a) | 47. (b) | 48. (c) | 49. (a) | 50. (c) |
| 51. (a) | 52. (b) | 53. (b) | 54. (d) | 55. (b) | 56. (b) | 57. (b) | 58. (c) | 59. (c) | 60. (b) |
| 61. (c) | 62. (c) | 63. (d) | 64. (b) | 65. (c) | 66. (a) | 67. (b) | 68. (c) | 69. (c) | 70. (b) |
| 71. (b) | 72. (b) | 73. (a) | 74. (b) | 75. (c) | 76. (b) | 77. (a) | 78. (d) | 79. (c) | 80. (b) |
| 81. (a) | 82. (d) | 83. (b) | 84. (a) | 85. (c) |         |         |         |         |         |

## Explanations

1. (d)

Exp:

**Intangible Cultural Heritage of India, recognised by UNESCO:**

- **Intangible cultural heritage** is the practices, expressions, knowledge and skills that communities, groups and sometimes individuals recognise as part of their cultural heritage.
- Also called **living cultural heritage**, it is usually expressed in one of the following forms:
  - ◆ Oral Traditions
  - ◆ Performing Arts
  - ◆ Social Practices
  - ◆ Rituals and Festive events
  - ◆ Knowledge and Practices concerning nature and the universe
  - ◆ Traditional Craftsmanship

S.No.	Intangible Cultural Heritage Element	Year of Inscription
1	Kutiyattam, Sanskrit Theater	2008
2	Tradition of Vedic Chanting	2008
3	Ramlila, the Traditional Performance of the Ramayana	2008
4	<b>Ramman</b> , Religious Festival and Ritual Theatre of the Garhwal Himalayas, India	2009
5	Chhau Dance	2010
6	Kalbelia Folk Songs and Dances of Rajasthan	2010
7	<b>Mudiyettu</b> , Ritual Theatre and Dance Drama of Kerala	2010
8	Buddhist Chanting of Ladakh: Recitation of Sacred Buddhist Texts in the Trans-Himalayan Ladakh region	2012
9	<b>Sankirtana</b> , Ritual Singing, Drumming, and Dancing of Manipur	2013
10	Traditional Brass and Copper Craft of Utensil Making among the Thatheras of Jandiala Guru, Punjab	2014
11	Nowruz	2016
12	Yoga	2016
13	<b>Kumbh Mela</b>	2017
14	Durga Puja in Kolkata	2021
15	Garba of Gujarat	2023

Hence, option (d) is correct.

2. (b)

Exp:

- The **event horizon** is the **boundary** of a black hole, marking the point where the escape velocity is equal to the speed of light. Hence, statement 1 is not correct.
- A **stellar black hole** is formed when the core of a very massive star undergoes a catastrophic collapse at the end of its life cycle. Hence, statement 2 is correct.

- ◆ This process is driven by the fundamental physics of gravity, nuclear fusion, and the balance between the outward pressure from nuclear reactions and the inward pull of gravity.

3. (c)

Exp:

- The **Participatory Guarantee System (PGS)** is an alternative process for **certifying organic products** in India, managed by the **Ministry of Agriculture and Farmers' Welfare**.
  - ◆ It provides certification in the form of a logo or a statement, and allows **organic farmers** full control over the certification process. However, PGS certification is only available to farmers or communities that can organize and operate as a collective group; individual farmers or groups smaller than five members are excluded.
  - ◆ The certification applies to **on-farm activities** like crop production, processing, and livestock rearing, but does not cover off-farm processing activities such as storage, transport, or value addition carried out by non-PGS members or agencies.

Hence, option (c) is correct.

4. (d)

Exp:

- The National Disaster Management Authority (NDMA) is headed by the **Prime Minister of India** and operates under the **Ministry of Home Affairs**. Hence, statement 1 is not correct.
  - ◆ The Disaster Management (DM) Division is the nodal division in the Ministry of Home Affairs (MHA) for disaster management.
- The **NEC** (National Executive Committee) is the executive arm of the **NDMA** that coordinates disaster response during **emergencies**, prepares the **National Plan for Disaster Management** based on national policies, and monitors the implementation of NDMA guidelines. Hence, statement 2 is not correct.
  - ◆ The **Cabinet Committee on Management of Natural Calamities** (CCMNC) was established to oversee the management of natural disasters, including assessing the situation, identifying impact-reducing measures, and recommending long-term prevention strategies.

5. (d)

Exp:

- **Central bank digital currency (CBDC)** are a digital form of a **paper currency** and unlike private cryptocurrencies, CBDCs are backed by the central bank, ensuring stability and trust. Hence, statement 1 is correct.
- The **Reserve Bank of India (RBI)** launched the **Digital Rupee (₹₹)** in 2022, as Central bank digital currency (CBDC). Hence, statement 2 is correct.
- It is the **same as a fiat currency** and is **exchangeable one-to-one with the fiat currency**. Hence, statement 3 is correct.



- ◆ A fiat currency is a national currency that is not pegged to the price of a commodity such as gold or silver.

6. (c)

Exp:

- The NewSpace India Limited (NSIL) is the commercial arm of ISRO that was incorporated on 6th March 2019 as a wholly owned Government of India company under the Department of Space (DOS).
- Its primary responsibility is enabling Indian industries to take up high technology space related activities and commercial exploitation of the products and services emanating from the Indian space programme. **Hence, statement 1 is correct.**
- NSIL is a Public Sector Undertaking (PSU) of the Government of India that is registered under the Company Act 2013. It is a Schedule 'A' Category Company under the Department of Space (DoS). **Hence, statement 2 is correct.**

7. (b)

Exp:

- Tropical rainforests are mostly found near the equator and experience high temperatures (above 22°C) and heavy rainfall (over 2000mm annually) throughout the year. **Hence, statement 1 is correct.**
- Mesophytic plants are plants that can grow in moderate conditions, such as average temperatures and water amounts. They are prevalent in these tropical rainforests. **Hence, statement 2 is correct.**
- The Amazon rainforest is the largest rainforest in the world, covering an area of over 3.8 million square kilometers. **Hence, statement 3 is not correct.**

8. (d)

Exp:

**Guru Ghasidas-Tamor Pingla (GGTP) Tiger Reserve:**

- India has recently notified the Guru Ghasidas-Tamor Pingla (GGTP) Tiger Reserve in Chhattisgarh as the **country's 56<sup>th</sup> tiger reserve**. **Hence, statement 1 is not correct.**
- It is the **third-largest tiger reserve** in India followed by Nagarjunasagar-Srisailem (Andhra Pradesh) and Manas (Assam). **Hence, statement 2 is not correct.**

9. (b)

Exp:

**State of the World's Children 2024 (SOWC 2024) Report:**

- Recently, the **United Nations International Children's Emergency Fund (UNICEF)** released the **State of the World's Children 2024 (SOWC 2024) report** that examines the forces and trends shaping children's future by 2050.
  - ◆ The report highlights three megatrends shaping children's lives by 2050 i.e., demographic shifts, climate crises, and frontier technologies.

**Hence, option (b) is correct.**

10. (b)

Exp:

**Important Tribes:**

- **Maori Tribe:** The Maori Tribe is an indigenous tribe who have inhabited **New Zealand**. The **Haka** is a traditional Maori dance. **Hence, pair 1 is not correctly matched.**

- **Sentinelese Tribe:** The Sentinelese tribe in the **Andaman Islands** lives in total isolation, protected by strict laws under the Andaman and Nicobar Islands, India (Protection of Aboriginal Tribes) Act, 1956. **Hence, pair 2 is correctly matched.**

- **Gundjeihmi and Bininj tribes:** The Gundjeihmi and Bininj tribes work alongside the Australian government in managing **Kakadu National Park, Australia** combining traditional knowledge with modern conservation practices. **Hence, pair 3 is correctly matched.**

11. (b)

Exp:

**About International Energy Agency (IEA)**

- **Overview:** The **IEA** is an autonomous agency that works under the framework of the **Organisation for Economic Co-operation and Development (OECD)**.
  - ◆ It was established to promote energy security, economic growth, and environmental sustainability. **Hence, statement 1 is not correct.**
- **Focus Areas of IEA:** The IEA focuses on energy policy, data collection, energy market analysis, and recommendations for improving energy security and sustainability.
  - ◆ It also plays a key role in managing energy crises and promoting the adoption of **renewable energy**.
- **Members:**
  - ◆ The IEA family is made up of 31 member countries, 13 association countries including India, and 5 accession countries.
  - ◆ A candidate country to the IEA **must be a member country of the OECD**. **Hence, statement 2 is correct.**
- **Major Publications:**
  - ◆ World Energy Outlook Report.
    - The **IEA's flagship World Energy Outlook**, published every year, identifies and explores the trends in energy demand and supply. **Hence, statement 3 is correct.**
  - ◆ India Energy Outlook Report
  - ◆ World Energy Investment Report
  - ◆ The IEA Technology Roadmap and Policy Pathway series

12. (d)

Exp:

**Finance Commission:**

- **Constitutional Basis:** It is a constitutional body established under **Article 280** of the 'Indian Constitution'.
  - ◆ It is appointed by the **President** every **five years** or at an earlier time deemed necessary by the President.
- **Composition:** The Commission consists of a **Chairman** and **four other members** appointed by the President.
  - ◆ The **chairman** should be a person having **experience in public affairs**.
- **Functions and Duties:** The primary function of the Finance Commission is to make **recommendations to the President** on various financial matters.

- ◆ **Tax Distribution:** It recommends the distribution between the **Union and States** of the net proceeds of taxes that are to be divided between them. **Hence, statement 1 is correct.**
- ◆ **Grants-in-Aid:** It suggests the principles for grants-in-aid from the **Consolidated Fund of India** to the States. **Hence, statement 2 is correct.**
- ◆ **Augmentation of State Funds:** It recommends measures to augment the Consolidated Fund of a State to supplement the resources of **Panchayats** and **Municipalities** based on the recommendations of the State's Finance Commission. **Hence, statement 3 is correct.**
- ◆ **Additional Matters:** The Finance Commission may also address any other matter referred to it by the President in the interest of sound public finance.
- **16<sup>th</sup> Finance Commission:** The **16<sup>th</sup> Finance Commission** was constituted in December 2023 with **Arvind Panagariya** as its Chairman.
  - ◆ It covers an award period of **5 years commencing 1<sup>st</sup> April, 2026.**

13. (a)

Exp:

- **Andaman and Nicobar Islands:**
  - ◆ This comprises two island groups (Andaman Islands and the Nicobar Islands) which **separates the Andaman Sea to the east from the Indian Ocean.**
  - ◆ The **Ten Degree Channel** is a narrow strait that separates both the group of Islands. **Hence, statement 1 is correct.**
  - ◆ **Indira Point** (situated on Great Nicobar Island) is the **southernmost tip** of the Nicobar Islands. **Hence, statement 2 is correct.**
  - ◆ The ANI is home to 5 **Particularly Vulnerable Tribal Groups:** Great Andamanese, Jarwas, Onges, Shompens and North Sentinelese.
    - The Nicobarese, who are of Mongloid Stock, have a large population of over 27,000. **They are not divisible into tribes**, but there are distinctions, chiefly territorial. **Hence, statement 3 is not correct.**

14. (d)

Exp:

- **The United Nations Tourism Rural Development Program (UNTRDP)** promotes **development, inclusion, and innovation** in rural areas through tourism, aiming to combat depopulation and encourage sustainable practices. **Hence, statement 1 is correct.**
- **Evaluation Criteria:**
  - ◆ Villages participating in the program are **evaluated under nine key areas**, which include cultural and natural resources, economic and social sustainability, tourism development, and infrastructure, among others. **Hence, statement 2 is correct.**
  - ◆ This evaluation ensures that the selected villages meet standards of sustainability, inclusiveness, and governance.

- **Dhudmaras**, a village in **Chhattisgarh's Bastar district**, has been selected to participate in the **Best Tourism Village Upgrade Programme (BTVUP)** under the **United Nations Tourism for Rural Development Programme (UNTRDP)** by the **UN World Tourism Organisation (UNWTO)**. **Hence, statement 3 is correct.**

15. (b)

Exp:

**Consumer Price Index (CPI):**

- **About:** The CPI measures the change in retail prices of goods and services commonly purchased by households for daily consumption.
  - ◆ It is used to track inflation, with the base year for the CPI being 2012.
- **Purpose:** CPI is a widely used **macroeconomic indicator of inflation**, used by governments and central banks for inflation targeting and price stability monitoring, and as **deflators** in national accounts. **Hence, statement 1 is not correct.**
  - ◆ CPI is also **used to index dearness allowance** to employees for increases in prices. **Hence, statement 2 is correct.**
  - ◆ CPI helps understand the cost of living, **purchasing power**, and the expensiveness of goods and services.

16. (c)

Exp:

**Guru Nanak (1469-1539):**

- **Guru Nanak (1469-1539)** was born in **1469** in **Talwandi village**, near Lahore in Pakistan.
- He was the **first** of the 10 Sikh gurus. **Hence, statement 1 is correct.**
- His birth anniversary is celebrated as the **Prakash Parv**. **Hence, statement 2 is correct.**
- He was a **proponent of the Nirguna School** of the Bhakti movement and was influenced by Kabir Das. **Hence, statement 3 is correct.**

17. (d)

Exp:

**Bodoland Territorial Region (BTR):**

- Bodoland Territorial Region is an **autonomous region** in Assam consisting of four districts namely Kokrajhar, Chirang, Baksa, and Udalguri. **Hence, statement 1 is correct.**
- It is administered by an **elected body** known as the Bodoland Territorial Council. **Hence, statement 2 is correct.**

18. (b)

Exp:

● **Barak River:**

- ◆ It originates from the **Manipur hills in Senapati district**. It flows along the **Nagaland-Manipur border**, enters **Assam**, and then Bangladesh, where it is known as the **Surma** and **Kushiyara**, and later as the **Meghna** (before receiving the combined flow of the **Ganga** and the **Brahmaputra**). **Hence, statement 1 is correct.**

- ◆ The principal tributaries of Barak are the **Jiri, the Dhaleswari, the Singla, the Longai, the Sonai and the Katakhal**.
- ◆ The Barak sub-basin drain area primarily spans over India, Bangladesh and Burma (Myanmar). **Hence, statement 2 is not correct.**
- ◆ It is bounded by the Barail range separating it from the **Brahmaputra basin on the north**, by the **Naga and Lushai hills** on the east and by **Mizo hills** and territory of Bangladesh on the south and west.
  - The predominant soil types found in the **sub-basin are laterite and red and yellow soils**. **Hence, statement 3 is correct.**
- ◆ The Barak sub-basin is divided into **two major physiographic regions**: the hilly areas (home to tribal populations) and the plains, which are densely populated and extensively cultivated. **Hence, statement 4 is correct.**

19. (d)

Exp:

- The **State Finance Commission** recommends to the **Governor of a State** the principles for determining the taxes and duties which may be appropriated by the Panchayats in that particular State. **Hence, statement 1 is not correct.**
- ◆ **State Finance Commissions** are constitutional bodies set up by state governments under **Article 243-I** of the Indian Constitution.
- ◆ According to this article, the Governor must establish an SFC within one year of the enactment of the 73<sup>rd</sup> Constitutional Amendment Act 1992, and every five years thereafter.
- The Constitution of a **State Finance Commission** after every five years to review the financial position of the panchayats is **compulsory/ mandatory (not discretionary)** provision under the **73<sup>rd</sup> Constitutional Amendment Act, 1992**. **Hence, statement 2 is not correct.**

20. (b)

Exp:

- **National CSR Data Portal** is an initiative by the **Ministry of Corporate Affairs** to track **Corporate Social Responsibility (CSR)** spending across the country. **Hence, statement 1 is not correct.**
- Companies must spend 2% of their average net profit over the last three years on **Corporate Social Responsibility (CSR)** even with losses in two years, if the average is positive. **Hence, statement 2 is correct.**
  - ◆ As per **section 135** of the **Companies Act, 2013**, Every company to which the provisions of Section 135 apply shall spend at least 2% of average net profits made during the **three immediately preceding financial years**.
  - ◆ If the company suffers loss in 2 out of 3 preceding years but the average is still positive, the company has to spend 2% of the average as compliance with the CSR provisions.

21. (d)

Exp:

- **World Toilet Day**, observed annually (since 2013) on **19<sup>th</sup> November**, is a **United Nations** initiative raising awareness about the global sanitation crisis and promoting safe, accessible toilets as part of **Sustainable Development Goal 6**: Ensuring water and sanitation for all by 2030. **Hence, statement 1 is not correct.**
- **India's Efforts for Safe Sanitation**: India launched the "**Hamara Shauchalay: Hamara Samman**" campaign, linking sanitation with human rights, dignity, and privacy, particularly for women and girls.
  - ◆ **Swachh Bharat Mission (SBM) (Grameen)**: **75%** of villages in India achieved **Open Defecation Free(ODF) Plus(+)** status under Phase II of the **SBM Grameen**. **Hence, statement 2 is not correct.**
  - ◆ **SBM-Urban**: 63.63 lakh household latrines and 6.36 lakh community toilets were constructed under SBM-Urban.

22. (a)

Exp:

- The **Employees' Pension Scheme (EPS)** ensures pension benefits for employees in the organized sector upon retirement at the age of 58 years. **Hence, statement 1 is correct.**
  - ◆ The EPS, administered by the EPFO, came into being in 1995. The pension fund was to comprise a deposit of 8.33% of the employers' contribution towards the PF corpus.
- The **Employees' Deposit-Linked Insurance (EDLI)** scheme is an integral part of the **Employees' Provident Fund (EPF)** in India. It provides **life insurance coverage** to employees of establishments covered under the **Employees' Provident Funds and Miscellaneous Provisions Act, 1952**. **Hence, statement 2 is not correct.**
  - ◆ This scheme aims to offer financial security to the family of an employee in the unfortunate event of their death during the period of service.

23. (a)

Exp:

- The **Constitution** grants civil servants personal immunity from legal liability for official contracts. This means that a civil servant entering into a contract in their official capacity is **not personally liable**; instead, the government (Central or State) is responsible for the contract. **Hence, statement 1 is correct.**
  - ◆ However, if the contract is made in violation of constitutional provisions, the civil servant who entered into it may be held personally liable.
- The Constitution empowers Parliament to establish All-India Services through **Article 312**, requiring a **two-thirds majority** resolution from the **Rajya Sabha** affirming its necessity in **national interest**. **Hence, statement 2 is not correct.**

- ◆ Currently, there are three All-India Services - the **Indian Administrative Service (IAS)**, **Indian Police Service (IPS)**, and **Indian Forest Service (IFS)**, whose recruitment and service conditions are regulated by Parliament while ensuring a balance between national integration and state autonomy.

24. (b)

Exp:

- FSSAI is an **autonomous statutory body** established under the Food Safety and Standards Act, of 2006. **Hence, statement 1 is correct.**
- The Act of 2006, consolidates various laws related to food, such as the **Prevention of Food Adulteration Act, 1954**, the **Fruit Products Order, 1955**, the **Meat Food Products Order, 1973**, and other acts that were previously handled by different ministries and departments. **Hence, statement 2 is correct.**
- FSSAI is responsible for protecting and promoting public health by regulating and supervising food safety and quality in India, operating under the **Ministry of Health & Family Welfare**. **Hence, statement 3 is not correct.**

25. (c)

Exp:

Nigeria

- **Nigeria**, often referred to as the “**Giant of Africa**,” is the most populous country on the continent.
- It boasts the largest economy in Africa and is rich in oil resources.
- Situated in **West Africa**, Nigeria **opens into the Atlantic Ocean** and shares borders with **Niger, Chad, Cameroon, and Benin**.

Hence, option (c) is correct.

26. (d)

Exp:

- **Aphantasia** is a condition where individuals **cannot visualise images in their mind**. **Hence, statement 1 is correct.**
- Aphantasia, first noted by Francis Galton in the 1880s; the term “aphantasia” was coined in 2015 by neurologist Adam Zeman. **Hence, statement 2 is correct.**
  - ◆ It affects about **2% of the population**, with ongoing research needed to understand its causes and implications.
- Individuals with **hyperphantasia** possess an exceptionally vivid imagination, often experiencing mental images as if they were real. **Hence, statement 3 is correct.**

Hence, option (d) is correct.

27. (b)

Exp:

- **Sickle cell disease (SCD)** is a genetic blood disorder characterized by the production of abnormally shaped **red blood cells**, which are crescent or “sickle” shaped, instead of the normal round shape. This condition can block blood flow, leading to pain, anemia, infections, and organ damage. **Hence, statement 1 is not correct.**

- The **National Sickle Cell Anaemia Elimination Mission** aims to eliminate sickle cell disease as a public health problem in India by **2047**. **Hence, statement 2 is correct.**

28. (a)

Exp:

- The Indian government has proposed the establishment of a mega **International Container Transshipment Port (ICTP)** at **Galathea Bay** on Great Nicobar Island in the Bay of Bengal, as the 13th Major port of India. **Hence, statement 1 is correct.**
- The **Maritime Initiative for Training in the Indo-Pacific (MAITRI)** of **Quad** aims to help regional partners utilize tools from the **Indo-Pacific Maritime Domain Awareness (IPMDA)**. **Hence, statement 2 is not correct.**

29. (c)

Exp:

- **Guru Ghasidas-Tamor Pingla Tiger Reserve** is nestled in the **Chota Nagpur plateau** and partly in the Baghelkhand plateau.
- It has a core habitat of **2,049.2 sq. km** (comprising Guru Ghasidas National Park and Tamor Pingla Wildlife Sanctuary) and a buffer zone of 780.15 sq. km.
- It is the **third-largest tiger reserve in India** followed by **Nagarjunasagar-Srisailem (Andhra Pradesh)** and **Manas (Assam)**.
- GGTP Tiger Reserve adopts the landscape approach, emphasizing interconnected habitats for biodiversity conservation.
  - ◆ It ensures ecological connectivity with neighboring tiger reserves like **Sanjay Dubri (Madhya Pradesh)**, **Bandhavgarh (Madhya Pradesh)**, and **Palamau (Jharkhand)**.

Hence, option (c) is correct.

30. (a)

Exp:

- India advocates for a dual approach of ‘**Back to Basics**’ and ‘**March to Future**,’ for tackling food security. blending traditional wisdom with modern innovation.
- This vision emphasizes promoting **organic farming**, **popularizing millets (referred to as Shree Anna in India)**, and developing climate-resilient crop varieties.
- By harnessing these strategies, India aims to ensure **sustainable agriculture, enhance nutritional security, and build resilience against climate change impacts**, setting an example for holistic food security solutions.

Hence, option (a) is correct.

31. (c)

Exp:

- **Tea Board of India** was established under the **Tea Act, 1953** as a **statutory body** of the Central Government under the **Ministry of Commerce**, has its **head office in Kolkata, West Bengal**, also has three overseas offices in **London, Dubai, and Moscow**. **Hence, statement 1 is correct.**
  - ◆ Policies of **Tea Board of India** including **early garden closures** and **quality compliance**, helped align stakeholder interests and improve market signals,



while cost management and quality focus **boosted profitability for some companies.**

- China is the world's top tea exporter and India is one of the **top 5 tea exporters globally**, accounting for 10% of global exports. **Hence, statement 2 is not correct.**
- In 2023-24, it exported 250.73 million kg of tea, with Assam, Darjeeling, and Nilgiri teas renowned globally. **Hence, statement 3 is correct.**

**32. (b)**

**Exp:**

- **Skewflation** refers to an **uneven inflation pattern** where **certain sectors experience high inflation, others remain stable, and some even face deflation.**
- Unlike general inflation, which affects the entire economy, skewflation highlights sector-specific price distortions due to factors like supply chain disruptions, policy interventions, or varying demand dynamics.
- This phenomenon can lead to economic imbalances and affect consumers unevenly. Understanding skewflation is crucial for targeted economic policies rather than one-size-fits-all inflation measures.

**Hence, option (b) is correct.**

**33. (c)**

**Exp:**

- Gene editing is the **process of making precise changes to the DNA sequence of one or more genes.**
- It is used to introduce desired modifications, such as correcting genetic defects, altering gene expression, or incorporating new genetic traits.
  - ◆ It facilitates the **addition, removal, or modification of specific DNA sequences to achieve the intended outcomes.** **Hence, statement 1 is correct.**
- Techniques like **CRISPR-Cas9, zinc finger nucleases, TALENs**, and other specialized tools enable this process. **Hence, statement 2 is correct.**

**34. (b)**

**Exp:**

- The **National Clean Air Programme (NCAP)**, launched by the **Ministry of Environment, Forest and Climate Change**, aims to improve air quality through collaboration with various ministries and states. It aims to achieve a reduction of up to 40% in Particulate Matter 10 (PM 10) concentrations or meet the National Ambient Air Quality Standards by 2025-26. **Hence, statement 1 is correct.**
- The Central Pollution Control Board (CPCB) revised the National Ambient Air Quality Standards (NAAQS) in 2009 under the Air (Prevention & Control of Pollution) Act, 1981, to ensure consistent air quality across India, incorporating 12 health-based parameters for monitoring, sampling, and data analysis using standardized methods. **Hence, statement 2 is not correct.**
  - ◆ National Ambient Air Quality Standards (NAAQS) set permissible limits for pollutants, including PM 10 (60 µg/m<sup>3</sup> annual, 100 µg/m<sup>3</sup> 24-hour), PM 2.5 (40 µg/m<sup>3</sup> annual, 60 µg/m<sup>3</sup> 24-hour), NO<sub>2</sub> (40 µg/m<sup>3</sup> annual, 80 µg/m<sup>3</sup> 24-hour), SO<sub>2</sub> (50 µg/m<sup>3</sup> annual, 80 µg/m<sup>3</sup> 24-hour), CO, O<sub>3</sub>, NH<sub>3</sub>, and Pb.

- The Environmental Protection Agency (EPA) calculates the AQI based on eight pollutants: PM 10, PM 2.5, Nitrogen Dioxide (NO<sub>2</sub>), Sulphur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Ozone (O<sub>3</sub>), Ammonia (NH<sub>3</sub>), and Lead (Pb). **Hence, statement 3 is correct.**

**35. (c)**

**Exp:**

- **Allotropy** refers to the existence of a chemical element in two or more forms, differing either in the arrangement of atoms within crystalline solids or in the number of atoms contained in their molecules. **Hence, statement 1 is correct.**
- Graphite consists of two-dimensional sheets of carbon atoms arranged in **hexagonal arrays**, where each carbon bonds with three others, while **diamond** features a **three-dimensional tetrahedral structure** where each carbon atom is bonded to four others. **Hence, statement 2 is correct.**

**36. (c)**

**Exp:**

**Carbon Credits:**

- Carbon credits, or carbon offsets, refer to **carbon emissions reductions or removals**, measured in **tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)**. **Hence, statement 1 is correct.**
- The concept of carbon credit, introduced in the **Kyoto Protocol, 1997** and reinforced by the **Paris Agreement, 2015** aims to reduce **greenhouse gasses (GHG)** emissions through **carbon trading**.
  - ◆ Each carbon credit permits the emission of **one tonne of CO<sub>2</sub>** or its equivalent. **Hence, statement 2 is correct.**
- These credits are generated by projects that **absorb or reduce carbon emissions** and are certified by international bodies like the **Verified Carbon Standard (VCS)** and the **Gold Standard**. **Hence, statement 3 is correct.**

**37. (b)**

**Exp:**

**Sambhar Lake:**

- Sambhar Lake is India's **largest saline wetland**.
  - ◆ It is the source of most of Rajasthan's salt production.
- It is located in the Nagaur and Jaipur districts of Rajasthan, bordered by the Aravalli hills.
- It was designated a **Ramsar site in 1990** due to its ecological significance.
  - ◆ It **attracts thousands of migratory birds**, including flamingos, from November to February. During the monsoon, the lake comes alive with birds like coots, black-winged stilts, sandpipers, and redshanks.

**Hence, option (b) is correct.**

**38. (b)**

**Exp:**

- The **Ottawa Convention 1997**, also known as the **Anti-Personnel Mine Ban Treaty**, is an international agreement that prohibits the use, production, stockpiling, and transfer of **anti-personnel landmines**. **Hence, statement 1 is not correct.**



- ◆ It is an international agreement that aims to eliminate the use, production, stockpiling, and transfer of anti-personnel landmines.
- ◆ It was concluded by the Diplomatic Conference on an International Total Ban on Anti-Personnel LandMines at Oslo on 18th September 1997 and entered into force on 1st March 1999.
- The **US, Russia, and India** are **not** parties to the Ottawa Convention. **Hence, statement 2 is correct.**

39. (b)

Exp:

**OTT (Over-the-Top) platform:**

- **OTT** refers to streaming services delivering content via the internet, bypassing traditional broadcast methods.
- The OTT platforms are regulated by the **Ministry of Information and Broadcasting**, ensuring content compliance and accountability. **Hence, statement 1 is not correct.**
  - ◆ In 2022, the **Central Government** introduced the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021** to regulate OTT platforms. **Hence, statement 2 is correct.**

40. (a)

Exp:

- **Guided Pinaka Missile System** is a multi-barrel rocket launcher system, designed by the **Armament Research and Development Establishment (ARDE)**, a laboratory of the **DRDO**. **Hence, statement 1 is correct.**
  - ◆ Named after **Lord Shiva's bow**, Pinaka is a **versatile and high-precision rocket system**.
- The **Defence Research and Development Organisation (DRDO)** successfully completed the Flight Tests of the **Guided Pinaka Weapon System** as part of **Provisional Staff Qualitative Requirements (PSQR)** Validation Trials.
- **Key Features:** Renowned for its mobility, rapid response, and capability to deliver concentrated firepower on enemy targets.
  - ◆ The initial version of the weapon system was called **Mark I**, which had a **range of 40 km**.
    - The upgraded version or **Pinaka Mark II** has an extended range of **70 to 80 km**, with plans to reach **120 km** and **300 km** in the future. **Hence, statement 2 is not correct.**
  - ◆ Tested successfully from upgraded launchers, firing **12 rockets per salvo**.

41. (b)

Exp:

- The **Wood Wide Web** refers to the **underground network formed by mycorrhizal fungi that connects the roots of plants and trees in forests**. This symbiotic relationship allows plants to exchange nutrients, water, and chemical signals.
- The fungi benefit by **receiving sugars from the plants**, while the plants receive essential minerals and nutrients like phosphorus and nitrogen from the fungi.

- Additionally, **this network helps plants communicate distress signals, such as those triggered by pests or drought**, allowing neighboring plants to prepare defensive mechanisms.

**Hence, option (b) is correct.**

42. (c)

Exp:

- **Human Immunodeficiency Virus** is a virus that attacks the immune system in the human body.
- It primarily targets and damages **CD4 immune cells (a type of White Blood Cell)**, which are essential for the body's ability to fight infections and diseases. **Hence, statement 1 is correct.**
  - ◆ Over time, HIV weakens the immune system, leaving the body vulnerable to opportunistic infections and cancers.
- HIV is **primarily spread through the exchange of certain bodily fluids** such as blood, semen, vaginal fluids, and breast milk. **Hence, statement 2 is correct.**
  - ◆ If left untreated, the virus destroys a person's immune system and they are said to be in the **Acquired Immunodeficiency Syndrome stage (AIDS)** where they get several opportunistic infections that may result in death.
- Although there are no cures for the infection at present, the **disease can be managed using antiretroviral therapy**. **Hence, statement 3 is correct.**
  - ◆ These medicines suppress the replication of the virus within the body, allowing the number of CD4 immune cells to bounce back.

43. (b)

Exp:

- **Megalithic Culture** refers to a prehistoric cultural tradition characterized by the construction of large stone structures or monuments, known as megaliths.
  - ◆ The **Brahmagiri excavation dates South India's megalithic cultures** to between the 3<sup>rd</sup> century BC and 1st century AD.
- The **main concentration of megalithic culture is in Deccan**, especially south of the Godavari River. **Hence, statement 1 is not correct.**
  - ◆ It has been found across the Punjab Plains, Indo-Gangetic basin, Rajasthan, Gujarat, and Burzahom in Jammu and Kashmir, with key sites including Seraikala (Bihar), Khera (Uttar Pradesh), and Deosa (Rajasthan).
- Rock paintings found at megalithic sites depict scenes of **hunting, cattle raids, and group dancing**. **Hence, statement 2 is correct.**
- The Megalithic period in South India marked a full-fledged Iron Age culture, where iron technology was fully utilized.
  - ◆ It is evidenced by iron weapons and agricultural implements discovered from **Junapani in Vidarbha to Adichanallur in Tamil Nadu**. **Hence, statement 3 is correct.**

44. (a)

Exp:

Global Soil Conference (GSC) 2024:

- **About:** The GSC 2024, organised by the **Indian Society of Soil Science (ISSS)** in collaboration with the **International Union of Soil Sciences (IUSS)**, aims to address challenges in sustainable soil/resource management. **Hence, statement 1 is not correct.**
  - ◆ The event aimed to foster a global dialogue on how caring for soils can drive sustainability across various sectors. **Hence, statement 2 is correct.**
- **Theme:** *Caring Soils Beyond Food Security: Climate change mitigation & Ecosystem Services.*
- **Key Highlights of GSC 2024:** Soil health was recognized as a pressing issue, with soil degradation affecting productivity and posing a **threat to global food security.**
  - ◆ Around **30% of India's soil is reportedly compromised** due to erosion, salinity, pollution, and loss of organic carbon. **Hence, statement 3 is not correct.**
  - ◆ The conference underscored the importance of international cooperation in tackling soil erosion, which aligns with **Sustainable Development Goal 15 (SDG 15) of the United Nations.**

45. (b)

Exp:

- **G20's Global Economic Influence:** The G20 nations collectively represent over **85% of global economic output**, around **75% of global exports**, and about 80% of the world's population. **Hence, statement 1 is not correct.**
  - ◆ It offers a more **diverse and accurate** representation of the world's economy than older blocs like the G7.
- **G20 Rio de Janeiro Leaders' Declaration, 2024:**
  - ◆ **Taxing the Super-Rich:** The declaration advocates for **progressive and effective taxation** of the super-rich. **Hence, statement 2 is correct.**
    - Respect for **fiscal sovereignty** is emphasised while promoting international cooperation on **tax principles.**
  - ◆ **Multilateralism:** The declaration emphasised better representation of underrepresented regions such as **Africa, Latin America, and Asia-Pacific** in the **UN Security Council.**
    - G20 launched the **Global Alliance against Hunger and Poverty**, targeting 500 million people with cash transfers and 150 million children with school meals by **2030.**
- **India's Sectoral Progress Highlighted in the G20 Rio Declaration:**
  - ◆ **Paris Agreement Target:** India is the **first G20 country** to have fulfilled the commitments made under the **Paris Agreement** ahead of time. **Hence, statement 3 is correct.**
    - India has already achieved its target of **40% installed electric capacity** from **non-fossil fuels** in **November 2021** itself.
    - Under India's new target of **500 GW** of renewable energy by **2030**, **200 GW has been achieved.**

46. (a)

Exp:

- The **Femicides in 2023: Global Estimates of Intimate Partner/Family Member Femicides** report was released by **UN Women and the United Nations Office on Drugs and Crime (UNODC)** highlighting the severity of the global crisis of femicide.
  - ◆ **Femicide** is defined as an intentional killing with a gender-related motivation. It is driven by discrimination against women and girls, unequal power relations, gender stereotypes, or harmful social norms.
  - ◆ It is different from **homicide**, where the motivation may not be gender-related.

Hence, option (a) is correct.

47. (b)

Exp:

- The NCC was established in 1948 (on the recommendation of **H. N. Kunzru Committee-1946**), under the **NCC Act of 1948**, with the aim to develop character, comradeship, leadership, and service ideals in the youth. **Hence, statement 1 is correct.**
  - ◆ It also seeks to stimulate interest in national defence and build a reserve for the Armed Forces in emergencies. **Hence, statement 2 is not correct.**
- The NCC was preceded by the **University Corps (1917)**, later evolving into the **University Training Corps (UTC)** in 1920, and the **University Officers Training Corps (UOTC)** in 1942.
- NCC is headed by a **Director General**, an Army Officer of the rank of **Lieutenant General**, who oversees its operations from the **NCC Headquarters in Delhi.** **Hence, statement 3 is correct.**

Hence, option (b) is correct.

48. (c)

Exp:

Guru Tegh Bahadur:

- He was **born in Amritsar in 1621**, Guru Tegh Bahadur was initially known as **Tyag Mal** for his ascetic nature. Trained in religious philosophy and martial skills, he earned the title **"Tegh Bahadur"** for his valor in battle.
- He ascended as the **9<sup>th</sup> Sikh Guru in 1664**, succeeding **Guru Har Krishan.** **Hence, statement 1 is correct.**
- He established **Anandpur Sahib in 1665** and contributed over 700 hymns to the **Guru Granth Sahib**, focusing on equality, justice, and devotion. **Hence, statement 2 is correct.**
- He opposed forced conversions during **Aurangzeb's** reign and executed for encouraging **fearlessness (nirbhau) and harmony (nirvair)** among his followers. **Hence, statement 3 is correct.**
- November 24 is observed as **Shaheedi Divas in honor of Guru Tegh Bahadur**, who was executed by Aurangzeb in 1675 for defending **Kashmiri Pandits** and **resisting forced conversions to Islam.** His companions, **Bhai Mati Das, Bhai Sati Das, and Bhai Dyala**, were also martyred.

- ◆ Gurdwara Sis Ganj Sahib in Delhi's Chandni Chowk marks the site of his execution. **Hence, statement 4 is not correct.**

Hence, option (c) is correct.

49. (a)

Exp:

Major Atmospheric Cherenkov Experiment (MACE) telescope:

- MACE is **positioned at an altitude of approximately 4.3 kilometers**, It is the highest imaging Cherenkov telescope globally, making it the **largest of its kind in Asia and the second-largest worldwide**. **Hence, statement 1 is correct.**
- The **MACE** uses an **Imaging Atmospheric Cherenkov Telescope (IACT)** to detect high energy gamma rays indirectly. **Hence, statement 2 is not correct.**
  - ◆ When high-energy gamma rays enter Earth's atmosphere, they create **electron-positron pairs**, producing Cherenkov radiation.
  - ◆ MACE captures this **faint blue light (Cherenkov radiation)** with its sophisticated equipment.
  - ◆ Its light collector, composed of **356 mirror panels in a honeycomb structure**, enhances stability and reflective area. **Hence, statement 3 is correct.**
- **Research Objectives:**
  - ◆ The **primary goal is to study high-energy gamma rays from cosmic sources**.
  - ◆ MACE seeks to understand **dark matter** by detecting gamma rays from **weakly interacting massive particles (WIMP)** annihilation events and investigating WIMPs, which may constitute much of the universe's mass. **Hence, statement 4 is correct.**

Hence, option (a) is correct.

50. (c)

Exp:

United Nations Convention on the Law of the Sea:

- UNCLOS, often referred to as the "**Constitution of the Oceans**," is an international law that defines the rights and duties of nations regarding the use of seas and oceans, covering sovereignty, passage rights, and economic usage. **Hence, statement 1 is correct.**
- It demarcates marine areas into five main zones namely- **Internal Waters, Territorial Sea, Contiguous Zone, Exclusive Economic Zone (EEZ) and the High Seas**. **Hence, statement 2 is correct.**
- The UNCLOS defines the EEZ as a **maritime zone extending 200 nautical miles from a coastal state's baseline**, where that state has **sovereign rights for exploring and exploiting natural resources**. **Hence, statement 3 is not correct.**

51. (a)

Exp:

- **Minke Whales (*Balaenoptera acutorostrata*)** are the **smallest member of the rorqual whale family**, which includes other **baleen whales**. It can reach a maximum length of about **10.7 meters**. **Hence, statement 1 is correct.**
  - ◆ They can detect high-frequency sounds up to **90 kilohertz (kHz)**, a significant finding that enhances our understanding of these marine mammals.

● **Conservation status:**

◆ **Common minke whale:**

- IUCN: Least concern
- CMS: Appendix II
- CITES: Appendix I (threatened with extinction)
- Hence, statement 2 is correct.

◆ **Antarctic minke whale:**

- IUCN: Data Deficient
- CMS: Appendix II
- Hence, statement 3 is not correct.

52. (b)

Exp:

- Bioplastics are derived from **renewable organic** unlike traditional plastics made from petroleum. They are **not always biodegradable or compostable**. **Hence, statement 1 is not correct.**
  - ◆ Bioplastics are produced by **extracting sugar from plants like corn and sugarcane** and converting it into **polylactic acids (PLAs)**. Alternatively, they can be made from **polyhydroxyalkanoates (PHAs)** from microorganisms which are then **polymerized** into **bioplastic**. **Hence statement 2 is correct.**
- **Advantages of Bioplastics:** For sugar companies, bioplastics offer a new revenue stream beyond **traditional sugar production and ethanol**. The bioplastics project is expected to generate Rs 1,700 crore to Rs 1,800 crore annually.
  - ◆ The production of Bioplastics absorbs **carbon dioxide (CO<sub>2</sub>)** and contributes to a **neutral or potentially negative carbon balance**, helping reduce the **carbon footprint** compared to fossil-based plastics. **Hence statement 3 is correct.**
  - ◆ Unlike traditional plastics, bioplastics do not contain harmful chemicals such as **phthalates**, which are known to be hazardous to human health.
  - ◆ Bioplastics are as **strong and durable as traditional plastics**, making them ideal for use in a variety of applications such as **food packaging, agricultural films, and medical supplies**. **Hence statement 4 is not correct.**
  - ◆ The use of renewable resources for bioplastic production helps reduce reliance on **non-renewable materials like petroleum**.

53. (b)

Exp:

Telescope Projects:

● **Indian Astronomical Observatory (IAO):**

- ◆ The IAO, located in Hanle, is **one of the highest astronomical observatories in the world**. It is operated by the Indian Institute of Astrophysics (IIA) and features several telescopes, including the Himalayan Chandra Telescope (HCT). **Hence, statement 1 is not correct.**

● **Dark Sky Reserve:**

- ◆ 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.

- **High Altitude Gamma Ray (HAGAR):**

- ◆ HAGAR, located at 4270 m in Hanle, Ladakh, is the **first high-altitude gamma-ray telescope array** designed by utilizing the atmospheric Cherenkov technique. It was designed for a low energy threshold with a minimal mirror area. **Hence, statement 2 is correct.**

- **Giant Metrewave Radio Telescope:**

- ◆ GMRT is an array of thirty fully steerable parabolic radio telescopes of 45 metre diameter. It is operated by the National Centre for Radio Astrophysics of the Tata Institute of Fundamental Research.

54. (d)

Exp:

- **Voter verifiable paper audit trail (VVPAT):**

- ◆ VVPAT enables voters to **confirm** that their votes are **recorded as intended**.
- ◆ When a vote is cast, a slip showing the **serial number, candidate's name, and symbol** is printed. **Hence, statement 1 is not correct.**
- ◆ It is visible through a transparent window for **7 seconds** before being **automatically cut and stored** in a sealed box.
- ◆ Only trusted Public-Sector Undertakings (PSUs) like **Bharat Electronics Limited (BEL) and Electronics Corporation of India Limited (ECIL)** manufacture EVMs.
- ◆ The Government of India notified the amended Conduct of Elections Rules, 1961 on 14th August, 2013, enabling the Commission to use VVPAT with EVMs.
- ◆ VVPATs with EVMs were used for the first time in a bye-election from 51-Noksen (ST) assembly constituency of **Nagaland**. **Hence, statement 2 is not correct.**
- ◆ The **2019 Lok Sabha election** was the first to be conducted entirely with the use of Voter Verifiable Paper Audit Trail (VVPAT).

55. (b)

Exp:

**Cooperatives in India :**

- **Constitutional Provision: 97<sup>th</sup> Constitutional Amendment, 2011** gave **constitutional status** and protection to cooperatives in India. **Hence, statement 1 is not correct.**
  - ◆ **Part IX B (Articles 243-ZH to 243-ZT)** was added to the Indian Constitution which deals with **cooperative societies** and their functioning.
  - ◆ The **right to form cooperative societies** is a **fundamental right** under **Article 19 (1)**. **Hence, statement 2 is correct.**
  - ◆ A new **Directive Principle of State Policy, Article 43-B**, was introduced to promote cooperative societies.
- **Promotion of Cooperatives:** The **Ministry of Cooperation** was constituted in **2021** to **strengthen** cooperative movement and deepen its reach up to grassroots.

- ◆ The Union government plans to establish a **cooperative university** and it also plans to unveil a **new cooperative policy**.

- **Contribution of Cooperatives:** India has **over 8 lakh cooperatives**, and **98% of rural areas** are covered by them.

- ◆ About **300 million people** are associated with cooperatives in India.

- Recently, India hosted the **International Cooperative Alliance (ICA) Global Cooperative Conference** in New Delhi for the first time in the organization's 130-year history.

- ◆ The **UN International Year of Cooperatives 2025** was launched at the event.

- ◆ India's Prime Minister launched the **UN International Year of Cooperatives 2025**, centered on the theme **"Cooperatives Build a Better World."** **Hence, statement 3 is correct.**

56. (b)

Exp:

**Key Highlights of the COP29:**

- **New Climate Finance Goal:** A major breakthrough at COP29 was the New Collective Quantified Goal on Climate Finance (NCQG). It aims to triple climate finance for developing countries to **USD 300 billion per year by 2035 from the previous goal of USD 100**, with developed countries taking the lead. **Hence, statement 1 is correct.**
- **Carbon Markets Agreement:** COP29 reached a landmark agreement to finalise the mechanisms for **carbon markets**, including country-to-country trading (Article 6.2 of the Paris Agreement) and a centralised carbon market under the United Nations (UN) (Article 6.4 of the Paris Agreement).
  - ◆ **Paris Agreement Crediting Mechanism** (also known as Article 6.4) seeks to develop a centralised, United Nations-managed carbon emissions offset and trading system.
- **Declaration on Reducing Methane:** Over 30 countries, including the US, Germany, UK, and UAE, endorsed the COP29 Declaration on Reducing Methane from Organic Waste (India is not a signatory). **Hence, statement 2 is not correct.**
- **Indigenous Peoples and Local Communities:** COP29 reinforced the importance of Indigenous Peoples and local communities in addressing climate change.
  - ◆ COP29 adopted the **Baku Workplan** and renewed the **Facilitative Working Group (FWG)** mandate under the Local Communities and Indigenous Peoples Platform (LCIPP).

57. (b)

Exp:

- The **Medicines Patent Pool (MPP)** is a **UN-backed organization** aimed at improving access to life-saving medicines for low- and middle-income countries. Founded by **Unitaid**, MPP is **primarily funded by Unitaid**, with additional support from the **Swiss Agency for Development and Cooperation**, the **Government of Canada**, and the **World Intellectual Property Organization**. **Hence, statement 1 is not correct.**



- WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases (2013-2020) aims to reduce NCD mortality by 25% by 2025. **Hence, statement 2 is correct.**

◆ It emphasizes strengthening health systems, promoting healthy lifestyles, enhancing surveillance, and fostering multi-sectoral collaboration to effectively combat noncommunicable diseases globally through coordinated strategies and awareness efforts.

58. (c)

Exp:

- **Cyanobacteria**, commonly known as **blue-green algae**, contain chlorophyll, similar to green plants, and are classified as **photosynthetic autotrophs**. They can exist as **unicellular, colonial, or filamentous forms** and are found in freshwater, marine, or terrestrial environments. **Hence, statement 1 is correct.**
- **Lactobacillus** is a **heterotrophic bacteria** that feeds on **lactose** (milk sugar) to convert milk into curd. **Hence, statement 2 is correct.**
  - ◆ **Heterotrophic bacteria** are the most abundant bacteria in nature, primarily functioning as essential decomposers. Many play a crucial role in human activities, such as **curd production** from milk, antibiotic production, and nitrogen fixation in legume roots.

59. (c)

Exp:

- The **River Dolphin inhabits freshwater environments**, especially the **Ganges and Brahmaputra river basins** of India and Bangladesh.
- It is distributed across several states in India, including Assam, Uttar Pradesh, Bihar, Rajasthan, Jharkhand, and West Bengal.
  - ◆ Its range is heavily concentrated around the freshwater systems of these regions
- This species is **essentially blind, relying heavily on echolocation** (ultrasound) to hunt. It emits high-pitched sounds that bounce off objects, helping it detect prey and navigate through the murky river waters where vision is limited.
- Unlike marine mammals, the River Dolphin cannot breathe underwater. **It needs to come to the surface to breathe, which is why the "Sussu" sound is often heard when it exhales or takes a breath.**

**Hence, option (c) is correct.**

60. (b)

Exp:

- Buddhism, as a religion, emphasizes **peace, compassion, and the path to enlightenment.**
- The Abhidhamma Pitaka offers a philosophical analysis of the mind and suffering, deepening our understanding of human nature and conflict.
- Additional texts like the **Divyavadana, Dipavamsa, Mahavamsa, and Milind Panha** provide insights into

Buddhist ethics, historical narratives, and discussions on the nature of reality.

- Central to Buddhist conflict resolution are the principles of the Middle Path (Madhyam Marg), which advocates for balanced approaches to problems, and **Pratītyasamutpāda (interdependence)**, which emphasizes mutual responsibility in resolving personal, societal, and global conflicts.

**Hence, option (b) is correct.**

61. (c)

Exp:

**Nataraja Statue:**

- **About:** The Nataraja statue symbolizes **Lord Shiva** as the **cosmic dancer**, embodying the **creation, preservation, and destruction** of the universe.
- **Historical Origin:** The earliest sculptures of Nataraja date back to the 5<sup>th</sup> century CE.
  - ◆ The iconic and world-famous form evolved during the Chola dynasty's reign (9<sup>th</sup>–13<sup>th</sup> century CE), showcasing their **artistic and cultural advancements**. **Hence, statement 1 is correct.**
- **Cosmic Dance:** Known as **Ananda Tandava** (Dance of Bliss), it represents the eternal rhythm of the universe, the cycle of creation and destruction, and the perpetual flow of time. **Hence, statement 2 is correct.**
- **Key Symbolic Features:**
  - ◆ **Flaming Halo (Prabhamandala):** Represents the **cosmos and the cycle of time**, destruction, and renewal.
  - ◆ **Damaru (Upper Right Hand):** The hand drum symbolizes the first sound of **creation** and the rhythm of the universe.
  - ◆ **Agni (Upper Left Hand):** The flame signifies **destruction**, marking the end of the cosmic cycle.
  - ◆ **Abhayamudra (Lower Right Hand):** A gesture of **reassurance and protection**, dispelling fear.
  - ◆ **Left-Hand Gesture:** Points to the raised left foot, symbolizing **refuge and liberation** for the troubled soul.
  - ◆ **Apasmara Purusha:** The dwarf figure under Shiva's right foot represents **ignorance or illusion (maya)** that leads humans astray.
  - ◆ **Raised Left Foot:** Represents grace and the path to **salvation**.

62. (c)

Exp:

- **Leucism** is a genetic condition that results in a lack of pigmentation in skin cells, leading to pale or white coloration in animals or humans. **Hence, statement 1 is correct.**
- **Albinism** is a genetic condition caused by mutations in **melanin-producing genes**, resulting in a lack of pigmentation in the skin, hair, and eyes. **Hence, statement 2 is correct.**



- ◆ **Leucism** is different from **albinism** in that individuals with leucism may still produce some pigment in their eyes and hair, just not in the skin or feathers.

63. (d)

Exp:

- **Hygroscopic cloud seeding** involves spraying fine particles of hygroscopic materials, like salts, into warm clouds using flares or explosives. **Hence, statement 1 is not correct.**
- **Static cloud seeding** involves introducing ice nuclei, like silver iodide or dry ice, into cold clouds with supercooled liquid water droplets. **Hence, statement 2 is not correct.**
  - ◆ The ice nuclei can trigger the formation of ice crystals or snowflakes, which can grow at the expense of the liquid droplets and fall as precipitation.

64. (b)

Exp:

- The **CAG of India**, as per Article 148 of the Constitution, heads the Indian Audit and Accounts Department (IA-AD).
- He/she is responsible for safeguarding the public purse and overseeing the financial system at both the central and state levels.
- The **CAG of India is appointed by the President of India** by a **warrant under his hand and seal**. The officeholder serves a term of six years or until the age of 65, whichever is earlier. **Hence, statement 1 is correct.**
- The Parliament determines the CAG's salary, which is equal to that of a Supreme Court judge.
- The CAG is **ineligible for any further office under the Government of India** or any state after leaving office. **Hence, statement 2 is correct.**
- The CAG's administrative expenses, including salaries, allowances, and pensions, are charged upon the **Consolidated Fund of India**, not subject to Parliamentary vote.
  - ◆ **No minister can represent the CAG in Parliament** or take responsibility for his actions. **Hence, statement 3 is not correct.**

65. (c)

Exp:

- **King cobras were first classified in 1836 as Ophiophagus hannah** by Danish naturalist Theodore Edward Cantor.
  - ◆ King cobras underwent no genetic studies for 186 years until recently.
- The king cobra has been reclassified into four distinct species based on geographical lineages: Northern King Cobra, Sunda King Cobra, Western Ghats King Cobra, Luzon King Cobra
- King cobras are diurnal (active during the day), feeding primarily on snakes like rat snakes, dhamans, and other cobras.
- The king cobra is the **only snake that builds and guards a nest until the eggs hatch**.
- Its venom is used in developing pain relievers like **Cobroxin and Nyloxin**.  
**Hence, option (c) is correct.**

66. (a)

Exp:

**One Nation One Subscription (ONOS) Scheme:**

- The **Union Cabinet** has approved the **One Nation One Subscription (ONOS)** scheme, for three years to provide nationwide access to scholarly research articles and journals. **Hence, statement 1 is correct.**
- ONOS scheme will be coordinated by the **Information and Library Network (INFLIBNET)**, which is an autonomous inter-university center under the University Grants Commission (UGC). **Hence, statement 2 is not correct.**
- ONOS aims to **democratise access** to high-quality academics for students and researchers across India, particularly benefiting those in tier-2 and tier-3 cities.
  - ◆ ONOS will provide access to over 13,000 high-impact journals from 30 leading international publishers, significantly improving the availability of academic resources for students and researchers.

67. (b)

Exp:

- The **India Employment Report 2024**, based on data from the **National Sample Surveys and Periodic Labour Force Surveys**, is released by the **International Labour Organisation (ILO)** and the **Institute for Human Development (IHD)**. **Hence, statement 1 is not correct.**
- The **Consumer Price Index Numbers for Agricultural and Rural Labourers**, released by the **Labour Bureau**, Ministry of Labour and Employment is based on the base year 1986-87 (including the Rural Labour Enquiry). **Hence, statement 2 is correct.**

68. (c)

Exp:

- The **Committee on the Functions of the Constituent Assembly** was chaired by **G.V. Mavalankar**. **Hence, statement 1 is correct.**
- The Constitution was handwritten by **Prem Behari Narain Raizada** in calligraphy, with its pages decorated by artists from **Shantiniketan** under the guidance of **Nandalal Bose**. **Hence, statement 2 is correct.**

69. (c)

Exp:

- The **42<sup>nd</sup> Amendment Act of 1976**, often referred to as the **"Mini-Constitution,"** is one of the most significant amendments to the Indian Constitution.
- Key Provisions:
  - ◆ Added three new words (i.e., **socialist, secular and integrity**) in the Preamble.
  - ◆ Added Fundamental Duties by the citizens (new Part IV A).
  - ◆ Made the president bound by the advice of the cabinet.
  - ◆ Provided for administrative tribunals and tribunals for other matters (Added Part XIV A).
  - ◆ Made the constitutional amendments beyond judicial scrutiny.

- ◆ Curtailed the power of judicial review and writ jurisdiction of the Supreme Court and high courts.
- ◆ Raised the **tenure of Lok Sabha and state legislative assemblies from 5 to 6 years**.
- ◆ Facilitated the proclamation of national emergency in a part of the territory of India.
- ◆ Extended the one-time duration of the President's rule in a state from 6 months to one year.

● Therefore, **all the three provisions were added to the Constitution by the 42<sup>nd</sup> Amendment Act, 1976**.

Hence, option (c) is correct.

70. (b)

Exp:

**Protection Provisions under the Design Act, 2000:**

- Designs are protected if they are aesthetic in nature and applied to articles.
  - ◆ **Protection only applies to the appearance of an article, not its functional aspects. Hence, statement 1 is not correct.**
- Designs must be registered with the Design Registry to receive protection.
- **Requirements for Protection:**
  - ◆ **Novelty and Originality:** Design must be new and significantly different from existing designs.
  - ◆ **Non-Disclosure:** Design should not have been publicly disclosed in India or abroad. Hence, statement 2 is correct.
  - ◆ **Not Functional:** Designs driven by functionality are not protected.
  - ◆ **Not Offensive:** Designs should not conflict with public morals, security, or integrity.
- **Protection lasts for at least 10 years under the TRIPS Agreement** which can be extended for an additional 5 years through a renewal application. **Hence, statement 3 is correct.**
  - ◆ Design cannot include a trademark, property mark, or any artistic rights as defined under the Copyright Act, 1957.

71. (b)

Exp:

- **Sami Community:**
  - ◆ The Sami community, indigenous to northern Europe, primarily found in Norway, Sweden, Finland, and Russia. They are the speakers of the **Sami languages**.
  - ◆ Reindeer herding **was the traditional basis of the Sami economy**, although that practice has significantly declined.
    - The Sami people **engage in fishing, farming, forestry, and mining** as well as other occupations across northern Europe.

Hence, option B is correct.

72. (b)

Exp:

- In 1973, based on the **Dhebar Commission (1960-61)**, **Primitive Tribal Groups (PTGs)** were created as a separate category, which are less developed among the tribal groups. **Hence, statement 1 is not correct.**

- ◆ As per the 2011 census, India has a Scheduled Tribe population of 10.45 crore (8.6% of the total population), with 75 communities across 18 states and **Andaman and Nicobar Islands** recognized as **Particularly Vulnerable Tribal Groups (PVTGs)**.

- ◆ This category was later renamed to PVTG in 2006.

- The criteria for identifying Particularly Vulnerable Tribal Groups (PVTGs) include **pre-agricultural technology, low literacy levels, economic backwardness, and a declining or stagnant population**. Hence, statement 2 is correct.

73. (a)

Exp:

- **Daulat Beg Oldie (DBO)** is a plateau situated between **Shyok and Karakoram Pass**, at an elevation of more than 16,000 feet. It is home to an **Advanced Landing Ground (ALG)** where the air force drops supplies.
- Daulat Beg Oldie (DBO) plateau is located in the Ladakh region, near the Line of Actual Control (LAC) with China. **Hence, option (a) is correct.**

74. (b)

Exp:

- **Himachal Pradesh is renowned for "Charba,"** a vibrant folk dance traditionally performed during the Dussehra celebrations. **Hence, pair 1 is correctly matched.**
  - In Kerala, **"Kummi"** stands out as a traditional dance form, alongside other notable performances like Kolkali and Padayani. **Hence, pair 2 is not correctly matched.**
  - **Madhya Pradesh showcases "Jawara,"** a joyous harvest dance symbolizing prosperity and abundance. **Hence, pair 3 is not correctly matched.**
  - Meanwhile, **Mizoram is famous for "Cheraw,"** the iconic bamboo dance that reflects the rich cultural heritage of the region. **Hence, pair 4 is correctly matched.**
- Hence, option (b) is correct.

75. (c)

Exp:

- **Samos Island, located in the Eastern Aegean Sea**, is just 1,700 meters from the Turkish coast of Asia Minor, which forms the westernmost part of modern-day Turkey. **Hence, statement 1 is correct.**
- It plays a significant role as a key transit point for migrants attempting to enter the European Union illegally from Turkey.
- Samos is also historically rich, home to the fortified ancient city of Pythagoreion and the **Temple of Hera (Heraion)**, a **UNESCO World Heritage Site**. **Hence, statement 2 is correct**
- Additionally, it is renowned as the **birthplace of the Greek philosopher and mathematician Pythagoras**. **Hence, statement 3 is correct**

76. (b)

Exp:

**Regulation of Prisons in India:**

- **Constitutional Provisions:**
  - ◆ **Article 21:** It protects prisoners against torture and inhuman treatment. It also ensures timely trials for prisoners.

◆ **Article 22:** An arrested person must be promptly informed of the reasons for their arrest and has the right to consult and be defended by a lawyer of their choice.

◆ **Article 39A:** Ensures free legal aid to ensure justice for those unable to afford legal representation. Hence, statement 1 is correct.

● **Legal Framework:**

◆ **Prisons Act, 1894:** The Prisons Act, enacted during British rule, serves as the foundational legal framework for prison management in India.

- It focuses on the custody and discipline of prisoners but lacks provisions for rehabilitation and reform.

◆ **The Identification of Prisoners Act, 1920:** This law governs the identification process for prisoners and the collection of biometric data. Hence, statement 2 is not correct.

◆ **The Transfer of Prisoners Act, 1950:** It provides guidelines for the transfer of prisoners between different states and jurisdictions.

● **Oversight Mechanisms**

◆ **Judicial Oversight:** The Indian judiciary plays a critical role in overseeing prison conditions through Public Interest Litigations (PILs) and specific cases addressing inmate rights.

- For instance, the Supreme Court in *D.K. Basu vs. State of West Bengal* (1997), mandated strict protocols for arrest and detention. Hence, statement 3 is correct.

77. (a)

Exp:

**Moiré Materials:**

- **About:** Moiré materials are materials having unique properties due to the interference pattern formed when two repetitive structures are overlaid at a slight angle.
- **Creation of Moiré Materials:** Moiré materials are created by stacking two layers of a two-dimensional (2-D) material, such as tungsten diselenide, and twisting one layer at a small angle ( $3.65^\circ$ ).
  - ◆ The twist between the layers creates a unique moiré pattern that gives rise to new electronic behaviors not present in individual layers.
- **Electronic Properties:** The twist in layers creates flat bands in the electronic structure, where electrons move slowly with nearly constant energy.
  - ◆ This slow movement boosts electron-electron interactions, crucial for superconductivity.
- **Research on Tungsten Diselenide ( $\text{tWSe}_2$ ):**  $\text{tWSe}_2$ , a semiconductor moiré material, demonstrated superconductivity at a transition temperature of approximately  $-272.93^\circ \text{C}$ , comparable to that of high-temperature superconductors.
  - ◆ The superconducting state in  $\text{tWSe}_2$  was found to be more stable than in other moiré materials.

● **Comparison with Graphene Superconductors:** Graphene-based moiré materials achieve superconductivity through electron-lattice interactions and flat band formation, while  $\text{tWSe}_2$  relies on electron-electron interactions, making it more stable and potentially more robust.

- ◆ Electron-lattice interactions are the interactions between electrons and the atomic lattice (the arrangement of atoms) in a material's crystal structure.

Hence, option (a) is correct.

78. (d)

Exp:

- Competition Commission of India (CCI) is a statutory body established by the Central Government under the Competition Act, 2002. Hence, statement 1 is not correct.
  - ◆ The Competition Act, 2002 replaced the Monopolies and Restrictive Trade Practices Act, 1969 (MRTP Act).
  - ◆ The Commission shall consist of a Chairperson and not less than two and not more than six other Members to be appointed by the Central Government.
- The Raghavan committee's (1999) recommendations aimed to promote fair competition and regulate anti-competitive practices. Hence, statement 2 is not correct.

79. (c)

Exp:

- The Red Sea is bordered by Egypt, Saudi Arabia, Yemen, Sudan, Eritrea, and Djibouti.
- Red Sea is connected to the Mediterranean Sea through the Suez Canal and to the Gulf of Aden and Arabian Sea through the Bab el-Mandeb Strait.

Hence, option (c) is correct.

80. (b)

Exp:

- The 73<sup>rd</sup> Constitutional Amendment Act, 1992 mandates the reservation of at least one-third of the total seats for women, including those reserved for SCs and STs, in local bodies. Hence, statement 1 is not correct.
- Not less than one-third of the total number of offices of chairpersons in the panchayats at each level shall be reserved for women. Hence, statement 2 is correct.

81. (a)

Exp:

**Prime Minister's Wi-Fi Access Network Interface (PM-WANI):**

- Launched in 2020 by the Department of Telecom (DoT), the PM-WANI framework aims to expand public Wi-Fi hotspots across India, particularly in rural areas. Hence, statement I is correct.
  - ◆ It allows local businesses, like shopkeepers, to set up Wi-Fi hotspots, providing affordable internet access and supporting the goals of the National Digital Communications Policy, 2018.
- National Digital Communications Policy, 2018 aims to transform India into a digitally empowered economy by enhancing digital infrastructure and services. Hence, statement II is correct.

- Hence, option A is correct because both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement I.

82. (d)

Exp:

**Centre for Processing Accelerated Corporate Exit (C-PACE):**

- C-PACE was launched by the **Ministry of Corporate Affairs (MCA)** to centralise and streamline the process of company closure. **Hence, statement 1 is not correct.**
- It facilitates 'Ease of Doing Business' by **eliminating** the necessity for physical interactions with stakeholders. **Hence, statement 2 is not correct.**
- The Centre for Processing Accelerated Corporate Exit (C-PACE) has efficiently streamlined the process of company closures to 70-90 days.
  - ◆ It aims to expedite the voluntary winding up of companies within six months.

83. (b)

Exp:

**Lothal**

- Located in the Bhal region of Gujarat, **Lothal** is one of the southernmost sites and **only port-town of the Harappan Civilisation.**
- It is believed to have been built in 2200 BC.
  - ◆ It was **discovered in 1954 by SR Rao.**
- The meaning of Lothal in Gujarati is "the mound of the dead". (Mohenjodaro also means the same in Sindhi).
- It had the world's earliest known dock, connecting the city to an ancient course of the Sabarmati river.

- **Lothal was nominated in April 2014 as a UNESCO World Heritage Site.**

Hence, option (b) is correct.

84. (a)

Exp:

- The **Apabhramsa School of Art** originated in Gujarat and Mewar (Rajasthan). **Hence, statement 1 is not correct.**
- It dominated western Indian painting from the 11th to 15<sup>th</sup> centuries. **Hence, statement 2 is correct.**
- Early paintings were created on **palm leaves, but later on paper, often as book illustrations.**
- Initially focusing on **Jain themes**, it later incorporated **Vaishnava subjects**, including the **Gita Govinda and secular love.** **Hence, statement 3 is not correct.**
- These artworks retained a mural style in a reduced dimension, with symbolic colors like red, yellow, and ochre, transitioning to brighter and gold hues.

85. (c)

Exp:

- Jim Corbett National Park, located in **Nainital district, Uttarakhand**, is part of the **Corbett Tiger Reserve.** It was the **first area to be included under the Project Tiger initiative in 1973.** **Hence, statement 1 is correct.**
  - ◆ It was established in 1936 as **Hailey National Park** to protect the **Bengal tiger**, it is the oldest national park in India. **Hence, statement 2 is correct.**
- The **core zone** is a **strictly protected area** for natural resources, while the **buffer zone surrounds it**, allowing for sustainable nature conservation alongside compatible human activities.

Hence, option (c) is correct.