PAPER

CIVIL SERVICES EXAMINATION (PRELIMS) 2025

HISTORY

1. The irrigation device called 'Araghatta' was

[Ancient History]

- (a) a water bag made of leather pulled over a pulley
- **(b)** a large wheel with earthen pots tied to the outer ends of its spokes
- (c) a larger earthen pot driven by bullocks
- (d) a large water bucket pulled up by rope directly by hand
- 2. Who among the following rulers in ancient India had assumed the titles 'Mattavilasa', Vichitrachitta' 'Gunabhara'? [Ancient History]
 - (a) Mahendravarman I
- (b) Simhavishnu
- (c) Narasimhavarman I
- (d) Simhavarman
- 3. With reference to ancient India (600-322 BC), consider the following pairs: [Ancient History]

	Territorial region	River flowing in the region
I.	Asmaka	Godavari
II.	Kamboja	Vipas
III. Avanti Mahanadi	Mahanadi	
IV.	Kosala	Sarayu

How many of the pairs given above are corectly matched?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All the four
- 4. Ashokan inscriptions suggest that the 'Pradeshika', Rajuka' and Yukta' were important officers at the

[Ancient History]

- (a) village-level administration
- (b) district-level administration
- (c) provincial administration
- (d) level of the central administration
- 5. Fa-hien (Faxian), the Chinese pilgrim, travelled to India during the reign of [Medieval History]
 - (a) Samudragupta
- (b) Chandragupta II
- (c) Kumaragupta I
- (d) Skandagupta
- 6. Who among the following led a successful military campaign against the kingdom of Srivijaya, the powerful maritime State, which ruled the Malay Peninsula, Sumatra, Java and the neighbouring islands? [Medieval History]
 - (a) Amoghavarsha (Rashtrakuta)
 - (b) Prataparudra (Kakatiya)
 - (c) Rajendra I (Chola)
 - (d) Vishnuvardhana (Hoysala)

- 7. Consider the following statements about Raja Ram Mohan Roy: [Modern History]
 - He possessed great love and respect for the traditional philosophical systems of the East.
 - II. He desired his countrymen to accept the rational and scientific approach and the principle of human dignity and social equality of all men and women.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II
- 8. Consider the following subjects with regard to Non-Cooperation Programme: [Modern History]
 - I. Boycott of law-courts and foreign cloth
 - II. Observance of strict non-violence
 - III. Retention of titles and honours without using them in public
 - IV. Establishment of Panchayats for settling disputes

How many of the above were parts of Non-Cooperation Programme?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All the four
- 9. Consider the following statements in respect of the Non-Cooperation Movement: [Modern History]
 - The Congress declared the attainment of 'Swaraj' by all legitimate and peaceful means to be its objective.
 - II. It was to be implemented in stages with civil disobedience and non-payment of taxes for the next stage only if 'Swaraj' did not come within a year and the Government resorted to repression.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II
- 10. "Sedition has become my religion" was the famous statement given by Gandhiji at the time of

[Modern History]

- (a) the Champaran Satyagraha
- (b) publicly violating Salt Law at Dandi
- (c) attending the Second Round Table Conference in London
- (d) the launch of the Quit India Movement
- 11. Who provided legal defence to the people arrested in the aftermath of Chauri Chaura incident?

[Modern History]

- (a) C. R. Das
- (b) Madan Mohan Malaviya and Krishna Kant
- (c) Dr. Saifuddin Kitchlew and Khwaja Hasan Nizami
- (d) M. A. Jinnah

- 12. Subsequent to which one of the following events, Gandhiji, who consistently opposed untouchability and appealed for its eradication from all spheres, decided to include the upliftment of Harijans' in his political and social programme? [Modern History]
 - (a) The Poona Pact
 - **(b)** The Gandhi-Irwin Agreement (Delhi Pact)
 - (c) Arrest of Congress leadership at the time of the Quit India Movement
 - (d) Promulgation of the Government of India Act, 1935
- 13. Consider the following fruits:

[Modern History]

- I. Papaya
- II. Pineapple
- III. Guava

How many of the above were introduced in India by the Portuguese in the sixteenth and seventeenth centuries?

- (a) Only one
- (b) Only two
- (c) All the three
- (d) None
- 14. Who among the following was founder of the 'Self-**Respect Movement?** [Modern History]
 - (a) Periyar' E. V. Ramaswamy Naicker
 - (b) Dr. B. R. Ambedkar
 - (c) Bhaskarrao Jadhav
 - (d) Dinkarrao Javalkar
- 15. The first Gandharva Mahavidvalava, a music training school, was set up in 1901 by Vishnu Digambar Paluskar [Art & Culture]
 - (a) Delhi
- (b) Gwalior
- (c) Ujjain
- (d) Lahore
- 16. The famous female figurine known as 'Dancing Girl', found at Mohenjo-daro, is made of [Art & Culture]
 - (a) carnelian
- (b) clay
- (c) bronze
- (d) gold

SCIENCE AND TECHNOLOGY

- 17. Consider the following statements: [Basic Biology]
 - I. No virus can survive in ocean waters.
 - II. No virus can infect bacteria.
 - III. No virus can change the cellular transcriptional activity in host cells.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All the three
- (d) None
- 18. In the context of electric vehicle batteries, consider the following elements: [Chemistry]
 - I. Cobalt
- II. Graphite
- III. Lithium
- IV. Nickel

How many of the above usually make up battery cathodes?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All the four
- 19. With reference to monoclonal antibodies, often mentioned in news, consider the following statements:

[Nanotechnology]

- I. They are man-made proteins.
- II. They stimulate immunological function due to their ability to bind to specific antigens.
- III. They are used in treating viral infections like that of Nipah virus.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III
- 20. GPS-Aided Geo Augmented Navigation (GAGAN) uses a system of ground to provide necessary augmentation. Which of the following statements is/are correct in respect of GAGAN? [Space]
 - It is designed to provide additional accuracy and integrity.
 - II. It will allow more uniform and high quality air traffic management.
 - III. It will provide benefits only in aviation but not in other modes of transportation.

Select the correct answer using the code given below.

- (a) I, II and III
- (b) II and III only
- (c) I only
- (d) I and II Only
- 21. Consider the following space missions: II. SpaDeX

[Space]

- I. Axiom-4
- III. Gaganyaan

How many of the space missions given above encourage and support micro-gravity research?

- (a) Only one
- (b) Only two
- (c) All the three
- (d) None
- 22. What is the common characteristic of the chemical substances generally known as CL-20, HMX and LLM-105, which are sometimes talked about in media?

[Disease]

- (a) These are alternatives to hydro-fluorocarbon refrigerants
- (b) These are explosives in military weapons
- (c) These are high-energy fuels for cruise missiles
- (d) These are fuels for rocket propulsion
- 23. Consider the following statements:

[Electronics & Communication]

- It is expected that Majorana 1 chip will enable quantum computing.
- Majorana 1 chip has been introduced by Amazon Web Services (AWS).
- III. Deep learning is a subset of machine learning.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III
- 24. With reference to Unmanned Aerial Vehicles (UAVs), consider the following statements: Defencel
 - I. All types of UAVs can do vertical landing.
 - II. All types of UAVs can do automated hovering.
 - III. All types of UAVs can use battery only as a source of power supply.
- With reference to India's defence, consider the following pairs: [Defence]

Aircraft type		Aircraft type	Description
	I. Dornier-228		Maritime patrol aircraft
II. IL-76 S		IL-76	Supersonic combat aircraft
III. C-17 Globe-master M		C-17 Globe-master III	Military transport aircraft

How many of the pairs given above are correctly matched?

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

26. Consider the following types of vehicles:

- I. Full battery electric vehicles
- II. Hydrogen fuel cell vehicles
- III. Fuel cell-electric hybrid vehicles

How many of the above are considered as alternative powertrain vehicles?

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

27. Consider the following:

[Defence]

[Defence]

- I. Cigarette butts
- II. Eyeglass lenses
- III. Car tyres

How many of them contain plastic?

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

GEOGRAPHY

28. Consider the following statements:

[Physical Geography]

Statement I: Scientific studies suggest that a shift is taking place in the Earth's rotation and axis.

Statement II: Solar flares and associated coronal mass ejections bombarded the Earth's outermost atmosphere with tremendous amount of energy.

Statement III: As the Earth's polar ice melts, the water tends to move towards the equator.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- **(b)** Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

29. With reference to the planet Earth, consider the following statements: [Physical Geography]

- Rain forests produce more oxygen than that produced by oceans.
- **II.** Marine phytoplankton and photosynthetic bacteria produce about 50% of world's oxygen.
- III. Well-oxygenated surface water contains several folds higher oxygen than that in atmospheric air.

Which of the statements given above is/are correct?

- (a) I and II
- **(b)** II only
- (c) I and III
- (d) None of the above statements is correct

30. Which of the following are the evidences of the phenomenon of continental drift?

[Physical Geography]

- The belt of ancient rocks from Brazil coast matches with those from Western Africa.
- **II.** The gold deposits of Ghana are derived from the Brazil plateau when the two continents lay side by side.
- III. The Gondwana system of sediments from India is known to have its counterparts in six different landmasses of the Southern Hemisphere.

Select the correct answer using the code given below.

- (a) I and III only
- **(b)** I and II only
- (c) I, II and III
- (d) II and III only

31. Consider the following statements:

[Physical Geography]

Statement I: The amount of dust particles in the atmosphere is more in subtropical and temperate areas than in equatorial and polar regions.

Statement II: Subtropical and temperate areas have less dry winds.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

32. Consider the following statements:

[Physical Geography]

Statement I: In January, in the Northern Hemisphere, the isotherms bend equatorward while crossing the landmasses, and poleward while crossing the oceans.

Statement II: In January, the air over the oceans is warmer than that over the landmasses in the Northern Hemisphere. Which one of the following is correct in respect of the

above statements? (a) Both Statement I and Statement II are correct and Statement II explains Statement I

- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

33. Consider the following statements:

[Physical Geography]

Statement I: In the context of effect of water on rocks, chalk is known as a very permeable rock whereas clay is known as quite an impermeable or least permeable rock.

Statement II: Chalk is porous and hence can absorb water.

Statement III: Clay is not at all porous. Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

34. Consider the following statements:

[Physical Geography]

- Without the atmosphere, temperature would be well below freezing point everywhere on the Earth's surface.
- **II.** Heat absorbed and trapped by the atmosphere maintains our planet's average temperature.
- III. Atmosphere's gases, like carbon dioxide, are particularly good at absorbing and trapping radiation.

Which of the statements given above are correct?

- (a) I and III only
- **(b)** I and II only
- (c) I, II and III
- (d) II and III only

35. Consider the following statements:

[Physical Geography]

 Anadyr in Siberia and Nome in Alaska are a few kilometers from each other, but when people are waking up and getting set for breakfast in these cities, it would be different days.

II. When it is Monday in Anadyr, it is Tuesday in Nome.

Which of the statements given above is/are correct?

- (a) I only
- **(b)** II only
- (c) Both I and II
- (d) Neither I nor II

36. Consider the following statements:

[Indian Geography]

Statement I: In India, State Governments have no power for making rules for grant of concessions in respect of extraction of minor minerals even though such minerals are located in their territories.

Statement II: In India, the Central Government has the power to notify minor minerals under the relevant law.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

37. Consider the following statements:

[World Geography]

- India has joined the Minerals Security Partnership as a member.
- II. India is a resource-rich country in all the 30 critical minerals that it has identified.
- III. The Parliament in 2023 has amended the Mines and Minerals (Development and Regulation) Act, 1957 empowering the Central Government to exclusively auction mining lease and composite license for certain critical minerals.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

38. Consider the following countries: [World Geography]

- I. Bolivia
- II. Brazil
- III. Colombia
- IV. Ecuador

V. Paraguay

VI. Venezuela

Andes mountains pass through how many of the above countries?

- (a) Only two
- (b) Only three
- (c) Only four
- (d) Only five

39. Consider the following water bodies:

[World Geography]

- I. Lake Tanganyika
- II. Lake Tonlé Sap
- III. Patos Lagoon

Through how many of them does the equator pass?

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

40. Consider the following statements: [World Geography]

Statement I: Of the two major ethanol producers in the world, i.e., Brazil and the United States of America, former produces more ethanol than the latter.

Statement II: Unlike in the United States of America where corn is the principal feedstock for ethanol production, sugarcane is the principal feedstock for ethanol production in Brazil.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

41. Consider the following countries: [World Geography]

I. United Kingdom

II. Denmark.

III. New Zealand

IV. Australia

V. Brazil

How many of the above countries have more than four time zones?

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

42. Consider the following pairs:

[World Geography]

	Country	Resource-rich in
I.	Botswana	Diamond
II.	Chile	Lithium
III.	Indonesia	Nickel

In how many of the above rows is the given information correctly matched?

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

43. Consider the following statements: [Miscellaneous] Statement I: Some rare earth elements are used in the manufacture of flat television screens and computer monitors.

Statement II: Some rare earth elements have phosphorescent properties.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

ECOLOGY AND ENVIRONMENT

44. Consider the following statements:

[Ecology]

Statement I: Activated carbon is a good and an attractive tool to remove pollutants from effluent streams and to remediate contaminants from various industries.

Statement II: Activated carbon exhibits a large surface area and a strong potential for adsorbing heavy metals.

Statement III: Activated carbon can be easily synthesized from environmental wastes with high carbon content.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

45. Consider the following statements:

Statement I: Studies indicate that carbon dioxide emissions from cement industry account for more than 5% of global carbon emissions.

Statement II: Silica-bearing clay is mixed with limestone while manufacturing cement.

Statement III: Limestone is converted into lime during clinker production for cement manufacturing.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

46. Regarding Peacock tarantula (Gooty tarantula), consider the following statements: [Biodiversity]

- I. It is an omnivorous crustacean.
- II. Its natural habitat in India is only limited to some forest areas.
- III. In its natural habitat, it is an arboreal species.

Which of the statements given above is/are correct?

- (a) I only
- (b) I and III
- (c) II only
- (d) II and III

47. Consider the following pairs:

[Biodiversity]

[Ecology]

	Plant	Description
I. Cassava Woody shrub		Woody shrub
II. Ginger Herb with pseudostem		Herb with pseudostem
III. Malabar spinach Herbaceous climber		Herbaceous climber
IV.	Mint	Annual shrub
V.	Papaya	Woody shrub

How many of the above pairs are correctly matched?

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

48. The World Bank warned that India could become one of the first places where wet-bulb temperatures routinely exceed 35°C. Which of the following statements best reflect(s) the implication of the above-said report?

[Biodiversity]

- Peninsular India will most likely suffer from flooding, tropical cyclones and droughts.
- II. The survival of animals including humans will be affected as shedding of their body heat through perspiration becomes difficult.

Select the correct answer using the code given below.

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

49. With reference to 'Direct Air Capture', an emerging technology, which of the following statements is/are correct?

- I. It can be used as a way of carbon sequestration.
- II. It can be a valuable approach for plastic production and in food processing.
- **III.** In aviation, it can be a source of carbon for combining with hydrogen to create synthetic low-carbon fuel.

Select the correct answer using the code given below.

- (a) I and II only
- (b) III only

- (c) I, II and III
- (d) None of the above statements is correct

50. Consider the following statements: [Miscellaneous]

- Carbon dioxide (CO₂) emissions in India are less than 0.5 t CO₂/ capita.
- II. In terms of CO₂ emissions from fuel combustion, India ranks second in Asia-Pacific region.
- III. Electricity and heat producers are the largest sources of CO₂ emissions in India.

Which of the statements given above is/are correct?

- (a) I and III only
- **(b)** II only
- (c) II and III only
- (d) I, II and III

51. Artificial way of causing rainfall to reduce air pollution makes use of [Miscellaneous]

- (a) silver iodide and potassium iodide
- (b) silver nitrate and potassium iodide
- (c) silver iodide and potassium nitrate
- (d) silver nitrate and potassium chloride

52. Which organisation has enacted the Nature Restoration Law (NRL) to tackle climate change and biodiversity loss? [Miscellaneous]

- (a) The European Union
- (b) The World Bank
- (c) The Organisation for Economic Cooperation and Development
- (d) The Food and Agriculture Organisation

53. Consider the following substances: [Miscellaneous]

- I. Ethanol
- II. Nitroglycerine
- III. Urea

Coal gasification technology can be used in the production of how many of them?

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

INDIAN POLITY & GOVERNANCE

54. Consider the following subjects under the Constitution of India: [Salient Features of Indian Constitution]

- I. List I-Union List, in the Seventh Schedule
- II. Extent of the executive power of a State
- III. Conditions of the Governor's office

For a constitutional amendment with respect to which of the above, ratification by the Legislatures of not less than one-half of the States is required before presenting the bill to the President of India for assent?

- (a) I and II only
- **(b)** II and III only
- (c) I and III only
- (d) I, II and III

55. Consider the following statements about Lokpal:

[The Judiciary]

- The power of Lokpal applies to public servants of India, but not to the Indian public servants posted outside India.
- II. The Chairperson or a Member shall not be a Member of the Parliament or a Member of the Legislature of any State or Union Territory, and only the Chief Justice of India, whether incumbent or retired, has to be its Chairperson.
- III. The Chairperson or a Member shall not be a person of less than forty-five years of age on the date of assuming office as the Chairperson or Member, as the case may be.
- IV. Lokpal cannot inquire into the allegations of corruption against a sitting Prime Minister of India.

Which of the statements given above is/are correct?

- (a) III only
- (b) II and III
- (c) I and IV
- (d) None of the above statements is correct
- 56. Consider the following pairs: [Fundamental Rights]

	Provision in the Constitution of India	Stated under
I.	Separation of Judiciary from	The Directive
	the Executive in the public	Principles of the
	services of the State	State Policy
II.	Valuing and preserving	The Fundamental
	of the rich heritage of our	Duties
	composite culture	
III.	Prohibition of employment	The Fundamental
	of children below the age of	Rights
	14 years in factories	

How many of the above pairs are correctly matched?

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

57. Consider the following statements with regard to pardoning power of the President of India:

[Union Executive]

- The exercise of this power by the President can be subjected to limited judicial review.
- **II.** The President can exercise this power without the advice of the Central Government.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

58. Consider the following statements: [Union Executive]

- I. If any question arises as to whether a Member of the House of the People has become subject to disqualification under the 10th Schedule, the President's decision in accordance with the opinion of the Council of Union Ministers shall be final.
- II. There is no mention of the word 'political party' in the Constitution of India.

Which of the statements given above is/are correct?

- (a) I only
- **(b)** II only
- (c) Both I and II
- (d) Neither I nor II

59. Consider the following statements: [Union Legislature]

- I. On the dissolution of the House of the People, the Speaker shall not vacate his/her office until immediately before the first meeting of the House of the People after the dissolution.
- II. According to the provisions of the Constitution of India, a Member of the House of the People on being elected as Speaker shall resign from his/her political party immediately.
- III. The Speaker of the House of the People may be may be removed from his/her office by a resolution of the House of the People passed by a majority of all the then Members of the House, provided that no resolution shall be moved unless at least fourteen days' notice has been given of the intention to move the resolution.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

- 60. With reference to the Indian polity, consider the following statements: [Union Legislature]
 - I. An Ordinance can amend any Central Act.
 - II. An Ordinance can abridge a Fundamental Right.
 - III. An Ordinance can come into effect from a back date.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

61. Consider the following statements:

[State Legislature & Executive]

- The Constitution of India/explicitly mentions that in certain spheres the Governor of a State acts in his/her own discretion.
- II. The President of India can, of his/her own, reserve a bill passed by a State Legislature for his/her consideration without it being forwarded by the Governor of the State concerned.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

62. With reference to the Indian polity, consider the following statements: [State Legislature & Executive]

- The Governor of a State is not answerable to any court for the exercise and performance of the powers and duties of his/her office.
- II. No criminal proceedings shall be instituted or continued against the Governor during his/her term of office.
- III. Members of a State Legislature are not liable to any proceedings in any court in respect of anything said within the House.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

63. Consider the following statements:

[Local Government]

- I. Panchayats at the intermediate level exist in all States.
- II. To be eligible to be a Member of a Panchayat at the intermediate level, a person should attain the age of thirty years.
- III. The Chief Minister of a State constitutes a commission to review the financial position of Panchayats at the intermediate levels and to make recommendations regarding the distribution of net proceeds of taxes and duties, leviable by the State, between the State and Panchayats at the intermediate level.

Which of the statements given above are not correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

64. Consider the following pairs: [Local Government]

	State	Description
I.	Arunachal Pradesh	The capital is named after a fort, and the State has two National Parks
II.	Nagaland	The State came into existence on the basis of a Constitutional Amendment Act
III.	Tripura	Initially a Part 'C' State, it became a centrally administered territory with the reorganisation of States in 1956 and later attained the status of a full-fledged State

How many of the above pairs are correctly matched?

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

65. Consider the following statements:

[Local Government]

With reference to the Constitution of India, if an area in a State is declared as Scheduled Area under the Fifth Schedule

- the State Government loses its executive power in such areas and a local body assumes total administration
- II. the Union Government can take over the total administration of such areas under certain circumstances on the recommendations of the Governor

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

66. Consider the following activities: [Local Government]

- I. Production of crude oil-free
- II. Refining, storage and distribution of petroleum
- III. Marketing and sale of petroleum products
- IV. Production of natural gas

How many of the above activities are regulated by the Petroleum and Natural Gas Regulatory Board in our country?

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

67. With reference to India, consider the following:

[Miscellaneous]

- I. The Inter-State Council
- II. The National Security Council
- III. Zonal Councils

How many of the above were established as per the provisions of the Constitution of India?

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

ECONOMY

68. Which of the following are the sources of income for the Reserve Bank of India?

- I. Buying and selling Government bonds
- II. Buying and selling foreign currency
- III. Pension fund management
- IV. Lending to private companies
- V. Printing and distributing currency notes

Select the correct answer using the code given below.

- (a) I and II only
- (b) II, III and IV
- (c) I, III, IV and V
- (d) I, II and V

69. Consider the following statements: [Monetary Policy]

- The Reserve Bank of India mandates all the listed companies in India to submit a Business Responsibility and Sustainability Report (BRSR).
- II. In India, a company submitting a BRSR makes disclosures in the report that are largely non-financial in nature.

Which of the statements given above is/are correct?

- (a) I only
- **(b)** II only
- (c) Both I and II
- (d) Neither I nor II

70. Consider the following statements: [Fiscal Policy]

- Capital receipts create a liability or cause a reduction in the assets of the Government.
- II. Borrowings and disinvestment are capital receipts.

III. Interest received on loans creates a liability of the Government.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III
- 71. Suppose the revenue expenditure is ₹80,000 crores and the revenue receipts of the Government are ₹60,000 crores. The Government budget also shows borrowings of ₹10,000 crores and interest payments of ₹6,000 crores. Which of the following statements are correct?

[Fiscal Policy]

- I. Revenue deficit is ₹20,000 crores.
- II. Fiscal deficit is ₹10,000 crores.
- III. Primary deficit is ₹4,000 crores.

Select the correct answer using the code given below.

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III
- 72. A country's fiscal deficit stands at ₹50,000 crores. It is receiving ₹10,000 crores through non-debt creating capital receipts. The country's interest liabilities are

₹1,500 crores. What is the gross primary deficit?

[Fiscal Policy]

- (a) ₹48,500 crores
- **(b)** ₹51,500 crores
- (c) ₹58,500 crores
- (d) None of the above
- 73. Consider the following statements in respect of RTGS and NEFT: [Public Finance in India]
 - I. In RTGS, the settlement time is instantaneous while in case of NEFT, it takes some time to settle payments.
 - II. In RTGS, the customer is charged for inward transactions while that is not the case for NEFT.
 - III. Operating hours for RTGS restricted on certain days while this is not true for NEFT.

Which of the statements given above is/are correct?

- (a) I only
- (b) I and II
- (c) I and III
- (d) III only
- 74. With reference to investments, consider the following:

[External Sector]

- I. Bonds
- II. Hedge Funds
- III. Stocks
- IV. Venture Capital

How many of the above are treated as Alternative Investment Funds?

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

75. Consider the following statements:

Statement I: As regards returns from an investment in a company, generally, bondholders are considered to be relatively at lower risk than stockholders.

Statement II: Bondholders are lenders to a company whereas stockholders are its owners.

Statement III: For repayment purpose, bond-holders are prioritised over stockholders by a company.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement I and Statement II are correct and Statement I explains Statement II
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

76. Consider the following statements: [Miscellaneous]

- India accounts for a very large portion of all equity option contracts traded globally thus exhibiting a great
- II. India's stock market has grown rapidly in the recent past even overtaking Hong Kong's at some point of
- III. There is no regulatory body either to warn the small investors about the risks of options trading or to act on unregistered financial advisors in this regard.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I. II and III

77. Consider the following statements: [Agriculture] Statement I: In India, income from allied agricultural activities like poultry farming and wool rearing in rural areas is exempted from any tax.

Statement II: In India, rural agricultural land is not considered a capital asset under the provisions of the Income-tax Act, 1961.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement I and Statement II are correct and Statement II explains Statement I
- (b) Both Statement I and Statement II are correct but Statement II does not explain Statement I
- (c) Statement I is correct but Statement II is not correct
- (d) Statement I is not correct but Statement II is correct

78. Consider the following statements about turmeric during the year 2022-23: [Agriculture]

- I. India is the largest producer and exporter of turmeric in the world.
- II. More than 30 varieties of turmeric are grown in India.
- III. Maharashtra, Telangana, Karnataka and Tamil Nadu are major turmeric producing States in India.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

79. With reference to the Government of India, consider the following information: [Miscellaneous]

	Organisation	Some of its functions	It works under
I.	Directorate of Enforcement	Enforcement of the Fugitive Economic Offenders Act, 2018	Internal Security Division-I, Ministry of Home Affairs
II.	Directorate of Revenue Intelligence	Enforces the Provisions of the Customs Act, 1962	Department of Revenue, Ministry of Finance
III.	Directorate General of Systems and Data Management	Carrying out big data analytics to assist tax officers for better policy and nabbing tax evaders	Department of Revenue, Ministry of Finance

In how many of the above rows is the information correctly matched?

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

80. Consider the following statements: [Miscellaneous] Statement I: Circular economy reduces the emissions of

greenhouse gases.

Statement II: Circular economy reduces the use of raw materials as inputs.

Statement III: Circular economy reduces wastage in the production process.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

81. Which of the following statements with regard to recommendations of the 15th Finance Commission of India are correct? [Miscellaneous]

- I. It has recommended grants of ₹4,800 crores from the year 2022-23 to the year 2025-26 for incentivizing States to enhance educational outcomes.
- II. 45% of the net proceeds of Union taxes are to be shared with States.
- III. ₹45,000 crores are to be kept as performance-based incentive for all States for carrying out agricultural reforms.
- IV. It reintroduced tax effort criteria to reward fiscal performance.

Select the correct answer using the code given below.

- (a) I. II and III
- (b) I. II and IV
- (c) I, III and IV
- (d) II, III and IV

82. Consider the following statements: [Miscellaneous]

- Indian Railways have prepared a National Rail Plan (NRP) to create a 'future ready' railway system by 2028.
- II. 'Kavach' is an Automatic Train Protection system developed in collaboration with Germany.
- III. 'Kavach' system consists of RFID tags fitted on track in station section.

Which of the statements given above are not correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

CURRENT AFFAIRS

83. Consider the following statements:

[International Relations]

Statement I: At the 28th United Nations Climate Change

Conference (COP28), India refrained from signing the Declaration on Climate and Health'.

Statement II: The COP28 Declaration on Climate and Health is a binding declaration; and if signed, it becomes mandatory to decarbonise health sector.

Statement III: If India's health sector is decarbonised, the resilience of its health-care system may be compromised.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I

- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct
- 84. Which one of the following launched the 'Nature Solutions Finance Hub for Asia and the Pacific'?

[International Relations]

- (a) The Asian Development Bank (ADB)
- **(b)** The Asian Infrastructure Investment Bank (AIIB)
- (c) The New Development Bank (NDB)
- (d) The International Bank for Reconstruction and Development (IBRD)
- 85. Consider the following countries:

[International Relations]

I. Austria

II. BulgariaIV. Serbia

III. CroatiaV. Sweden

VI. North Macedonia

How many of the above are members of the North Atlantic Treaty Organisation?

(a) Only three

(b) Only four

(c) Only five

(d) All the six

86. Consider the following statements in respect of BIMSTEC: [International Relations]

- It is a is a regional organisation consisting of seven member States till January 2025.
- II. It came into existence with the signing of the Dhaka Declaration, 1999.
- III. Bangladesh, India, Sri Lanka, Thailand and Nepal are founding member States of BIMSTEC.
- IV. In BIMSTEC, the subsector of 'tourism' is being led by India.

Which of the statements given above is/are correct?

(a) I and II

(b) II and III

(c) I and IV

(d) I only

87. Consider the following statements regarding Al Action Summit held in Grand Palais, Paris in February 2025:

[International Relations]

- Co-chaired with India, the event builds on the advances made at the Bletchley Park Summit held in 2023 and the Seoul Summit held in 2024.
- II. Along with other countries, US and UK also signed the declaration on inclusive and sustainable AI.

Which of the statements given above is/are correct?

(a) I only

(b) II only

(c) Both I and II

(d) Neither I nor II

88. Consider the following statements with regard to BRICS: [International Relations]

- 16th BRICS Summit was held under the Chairship of Russia in Kazan.
- II. Indonesia has become a full member of BRICS.
- III. The theme of the 16th BRICS Summit was Strengthening Multiculturalism for Just Global Development and Security.

Which of the statements given above is/are correct?

(a) I and II

(b) II and III

(c) I and III

(d) I only

89. India is one of the founding members of the International North-South Transport Corridor (INSTC), a multimodal transportation corridor, which will connect [International Relations]

- (a) India to Central Asia to Europe via Iran
- (b) India to Central Asia via China
- (c) India to South-East Asia through Bangladesh and Myanmar
- (d) India to Europe through Azerbaijan

90. Consider the following statements in respect of the International Bank for Reconstruction Development (IBRD): [International Relations]

- It provides loans and guarantees to middle income countries.
- **II.** It works single-handedly to help developing countries to reduce poverty.
- III. It was established to help Europe rebuild after the World War II.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

91. Consider the following pairs: [International Relations]

	Region	Country
I.	Mallorca	Italy
II.	Normandy	Spain
III.	Sardinia	France

In how many of the above rows is the given information correctly matched?

(a) Only one

(b) Only two

(c) All the three

(d) None

92. Consider the following statements:

[Government programs & schemes]

Statement 1: Article 6 of the Paris Agreement on climate change is frequently discussed in global discussions on sustainable development and climate change.

Statement II: Article 6 of the Paris Agreement on climate change sets out the principles of carbon markets.

Statement III: Article 6 of the Paris Agreement on climate change intends to promote inter-country non-market strategies to reach their climate targets.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I
- (b) Both Statement II and Statement III are correct but only one of them explains Statement I
- (c) Only one of the Statements II and III is correct and that explains Statement I
- (d) Neither Statement II nor Statement III is correct

93. Consider the following statements about the Rashtriya Gokul Mission: [Government programs & schemes]

- It is important for the upliftment of rural poor as majority of low producing indigenous animals are with small and marginal farmers and landless labourers.
- II. It was initiated to promote indigenous cattle and buffalo rearing and conservation in a scientific and holistic manner.

Which of the statements given above is/are correct?

(a) I only

(b) II only

(c) Both I and II

(d) Neither I nor II

94. Consider the following countries:

[Government programs & schemes]

- I. United Arab Emirates II. France
- III. Germany IV. Singapore
- V. Bangladesh

How many countries amongst the above there other than India where international merchant payments are accepted under UPI?

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

95. Consider the following statements about 'PM Surya Ghar Muft Bijli Yojana':

[Government programs & schemes]

- It targets installation of one crore solar rooftop panels in the residential sector.
- II. The Ministry of New and Renewable Energy aims to impart training on installation, operation, maintenance and repairs of solar rooftop systems at grassroot levels.
- III. It aims to create more than three lakhs skilled manpower through fresh skilling, and up- skilling, under scheme component of capacity building.

Which of the statements given above are correct?

- (a) I and II only
- (b) I and III only
- (c) II and III only
- (d) I, II and III

96. Who amongst the following are members of the Jury to select the recipient of 'Gandhi Peace Prize'?

[Miscellaneous]

- I. The President of India
- II. The Prime Minister of India
- III. The Chief Justice of India
- IV. The Leader of Opposition in the Lok Sabha

Select the correct answer using the code given below.

- (a) II and IV only
- (b) I, II and III
- (c) II, III and IV
- (d) I and III only

97. Consider the following pairs:

[Miscellaneous]

I.	International Year of the Woman Farmer	
II.	International Year of Sustainable and Resilient Tourism	
III.	II. International Year of Peace and Trust	
IV.	IV. International Year of Asteroid Awareness and Planetary Defence	

How many of the pairs given above are correctly matched?

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

98. Consider the following statements in respect of the first Kho Kho World Cup: [Miscellaneous]

- I. The event was held in Delhi, India.
- II. Indian men beat Nepal with a score of 78-40 in the final to become the World Champion in men category.
- **III.** Indian women beat Nepal with a score of 54-36 in the final to become the World Champion in women category.

Which of the statements given above is/are correct?

- (a) I only
- (b) II and III only
- (c) I and III only
- (d) I, II and III

99. Consider the following statements:

- I. In the finals of the 45th Chess Olympiad held in 2024, Gukesh Dommaraju became the world's youngest winner after defeating the Russian player Ian Nepomniachtchi.
- II. Abhimanyu Mishra, an American chess player, holds the record of becoming world's youngest ever Grandmaster.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

100. With reference to India, consider the following pairs:

[Miscellaneous]

Organisation		Union Ministry
		Ministry of Commerce and Industry
II.	The Coir Board	Ministry of Heavy Industries
III.	The National Centre for Trade Information	Ministry of Micro, Small and Medium Enterprises

How many of the above pairs are correctly matched?

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

ANSWERS

HISTORY

1. Option (b) is correct

The 'Araghatta' was an ancient Indian irrigation device, essentially a water-lifting wheel. It was also called 'Ghanti-Yantra'. It consisted of a large wheel with several earthen pots attached to its rim. As the wheel rotated, the pots would dip into the water source and lift water to the fields.

2. Option (a) is correct

Mahendravarman-I was a Pallava king during 7th century CE. He was a noted patron of art and literature. He assumed a number of titles like Gunabhara, Satyasandha, Chettakari (builder of temples) Chitrakarapuli, Vichitrachitta and Mattavilasa. The Mandagappattu inscription hails him as Vichitrachitta who

constructed a temple for Brahma, Vishnu and Shiva without the use of bricks, timber, metal and mortar. His title Chitrakarapuli reveals his talents in painting. Meanings of his titles were:

- Mattavilasa ("delight of the intoxicated") associated with his authorship of the Sanskrit satirical play Mattavilasa Prahasana, which critiques religious hypocrisy.
- Vichitrachitta ("curious-minded" or "unique intellect")

 highlighting his innovative thinking and patronage of unconventional ideas.
- Gunabhara ("full of virtues") emphasizing his moral and regal qualities.

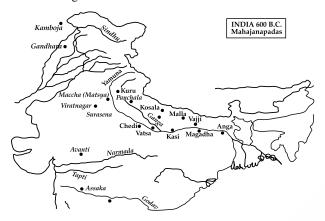
3. Option (b) is correct

Asmaka (or Assaka) was a Mahajanapada located in the Deccan region, on the banks of the Godavari River. This pair is correctly matched.

Kamboja was located in the north-western part of the Indian subcontinent, around present-day Afghanistan and Tajikistan. The river Vipas (Beas) flows in the Punjab region, not in Kamboja.

Avanti was a Mahajanapada located in western Madhya Pradesh, with its capital at Ujjain. The main river flowing through Avanti was the Narmada, not the Mahanadi.

Kosala was a Mahajanapada in the region of present-day eastern Uttar Pradesh, and the Sarayu River (modern Ghaghara) flowed through it.



This map is not to scale and is for reference

4. Option (b) is correct

According to Ashokan edicts and inscriptions, 'Pradesika', 'Rajuka', and 'Yukta' were important officers at the district level. The 'Pradesika' was incharge of a district (Pradesa), the 'Rajuka' was incharge for revenue and judicial functions, and the 'Yukta' was a subordinate official, involved in record-keeping and administration.

5. Option (b) is correct

Fa-Hien visited India during the reign of Chandragupta-II (also known as Chandragupta Vikramaditya). He travelled extensively throughout North India, seeking Buddhist scriptures and learning about Buddhist practices. He arrived in India around 399 CE and stayed for about 10 years. He visited Kapilvastu (Lumbini), Bodh Gaya, Benares (Varanasi), Shravasti, and Kushinagar, all linked to events in Buddha's life.

6. Option (c) is correct

Rajendra Chola-I, the son of Rajaraja Chola I, led a successful naval expedition against the Srivijaya kingdom in 1025 CE. The Srivijaya kingdom was located in what is today parts of the Malay Peninsula, Sumatra, and Java. This campaign is documented in Chola inscriptions and is considered one of the most significant overseas military expeditions in Indian history. The Cholas attacked various ports and cities of Srivijaya, asserting their dominance over the maritime trade routes of Southeast Asia.

7. Option (c) is correct

Raja Ram Mohan Roy had deep respect for the traditional philosophical systems of the East, particularly the Vedas and Upanishads. He studied Sanskrit, Persian, and Arabic texts and sought to revive the monotheistic and rational aspects of ancient Indian philosophy. However, he criticised later Hindu practices like idol worship and superstitions, emphasizing a return to the original teachings of the scriptures.

He was a strong advocate for rationalism, scientific thinking, and social equality. He promoted Western education, opposed regressive practices like Sati, child marriage, and caste discrimination, and supported women's rights, including education and property rights.

8. Option (c) is correct

A special session of the Congress was held in Calcutta in September 1920 to finally deliberate and decide the issue of non-cooperation. The Non-Cooperation Movement (1920-22) included the boycott of law courts, government schools, and foreign cloth as major components.

- This was a direct action against British institutions and goods. Mahatma Gandhi insisted on the strict observance of non-violence (ahimsa) as a core principle of the movement.
- The Non-Cooperation Programme called for the surrender (not retention) of titles and honours conferred by the British government.
- As part of constructive programmes, Gandhi promoted alternative dispute resolution through Panchayats to reduce dependence on British courts.

9. Option (c) is correct

In December 1920, in the Nagpur session of the Indian National Congress the Congress adopted the goal of attaining 'Swaraj' (self-government) by all legitimate and peaceful means. This became the official objective of the Congress during the Non-Cooperation Movement.

The Non-Cooperation Movement was planned to be implemented in stages. The initial phase included surrender of titles, boycott of government schools, law courts, and foreign goods. The next stage, which included civil disobedience and non-payment of taxes, was to be launched only if the government did not grant 'Swaraj' within a year and resorted to repression.

10. Option (b) is correct

On 6 April, Dandi March, Gandhiji reached Dandi and declared: The British rule in India has brought about moral, material, cultural, and spiritual ruination of this great country. I regard this rule as a curse. I am out to destroy this system of Government. ... Sedition has become my religion. Ours is a nonviolent battle. We are not to kill anybody but it is our dharma to see that the curse of this Government is blotted out.

11. Option (b) is correct

After the Chauri Chaura incident in February 1922, a large number of people were arrested and put on trial. Pandit Madan Mohan Malaviya played a very significant role in defending the accused. It was to support the appeal of the 172 persons sentenced to death by the Sessions Judge of Gorakhpur in the Chauri Chaura case. In this case, 225 persons were tried for setting fire to the police station in Chauri Chaura (in Deoria district), which resulted in the death of one Sub-Inspector and 21 constables who were trapped inside. He, along with his son Krishna Kant Malaviya and other lawyers, argued the case for the accused, particularly in the appeal stages.

Due to his efforts, out of 172 people sentenced to death by the sessions court, only 19 were eventually hanged, and the rest were either acquitted or had their sentences commuted to imprisonment. The incident also compelled Mahatma Gandhi to call off the Non-Cooperation Movement in 1922, fearing further violence.

12. Option (a) is correct

The Poona Pact was signed in 1932 between Mahatma Gandhi and Dr. B. R. Ambedkar. The British government announced Communal Award, which provided separate electorates for the Depressed Classes.

Gandhi strongly opposed separate electorates for untouchables, fearing it would divide Hindu society. He went on a fast unto death, which led to negotiations and the eventual signing of the Poona Pact.

After this event, Gandhi intensified his efforts for the upliftment of Harijans, making it a central part of his social and political programme. He founded the Harijan Sevak Sangh in September 1932 and, on 11 February 1993, started the weekly Harijan to campaign against untouchability.

13. Option (c) is correct

Papaya is native to tropical America (Central America and southern Mexico). It was introduced to India by the Portuguese in the 16th century.

Pineapple is also native to South America. The Portuguese introduced pineapple to India in the 16th century.

Guava is native to tropical America, specifically Mexico, Central America, the Caribbean, and parts of northern South America. It was later introduced to other regions, including India in the 16th–17th centuries by the Portuguese, where it has since become a major producer.

Thus, all three fruits were introduced by the Portuguese during their colonial presence in India.

The Portuguese also introduced several other crops to India, such as sweet potato, arrowroot, cassava, tomato, chillies, pumpkin, custard apple, groundnut, cashew nut, tobacco, American cotton, and rubber.

14. Option (a) is correct

Periyar E. V. Ramaswamy Naicker was the founder of the Self-Respect Movement in 1925 in Tamil Nadu. The movement aimed at achieving a society where backward castes had equal human rights, and it strongly opposed the caste system and the dominance of Brahminism in social and religious life.

15. Option (d) is correct

Vishnu Digambar Paluskar established the first Gandharva Mahavidyalaya in Lahore in 1901. It aimed to train students in classical music formally, away from the traditional guru-shishya parampara (teacher-disciple tradition in homes or temples).

16. Option (c) is correct

The famous "Dancing Girl" statuette found at Mohenjo-daro is a small bronze sculpture, approximately 10.5 centimeters (4.1 inches) high. It is a masterpiece of Harappan art and showcases their skill in bronze casting using the lost-wax technique. The figurine depicts a confident young woman in a dynamic pose, possibly a dancer. It is currently housed in the National Museum, New Delhi.

SCIENCE AND TECHNOLOGY

17. Option (d) is correct

Viruses can survive in ocean waters. For example, Hepatitis A and E can be spread through contaminated water, including ocean water. Various marine viruses are abundant and play a crucial role in marine ecosystems by influencing microbial populations and biogeochemical cycles.

Viruses that infect bacteria are called bacteriophages. Bacteriophages are highly specific to certain bacterial hosts and are important for regulating bacterial populations.

Viruses can change the cellular transcriptional activity in host cells. Viruses manipulate the host cell's machinery, including transcriptional activity, to facilitate their own replication and survival. They can introduce viral genes or proteins which interact with the host cell's transcription factors, leading to altered gene expression patterns. For example, HIV-1 integrates into host DNA, hijacks transcription factors (e.g., NF-κB) to boost viral genes and silence immunity. SARS-CoV-2's NSP1 degrades host mRNA, and ORF6 blocks nuclear export, crippling cellular gene expression.

Therefore, none of the statements are correct.

18. Option (c) is correct

In electric vehicle batteries, the cathode is typically composed of materials containing lithium, cobalt, and nickel while Graphite is mainly used as the anode material.

Cobalt is an important component of many lithium-ion battery cathodes, such as Lithium Cobalt Oxide (LCO) and Nickel Manganese Cobalt Oxide (NMC).

Lithium is present in the cathode material of lithium-ion batteries, such as Lithium Cobalt Oxide (LCO), Lithium Iron Phosphate (LFP), etc.

Nickel is used in various cathode chemistries, such as Nickel Manganese Cobalt (NMC) and Nickel Cobalt Aluminium (NCA).

19. Option (d) is correct

Monoclonal antibodies (mAbs) are man-made (synthetic) proteins, developed through advanced biotechnological processes like hybridoma technology or recombinant DNA methods.

They are produced in laboratories by cloning a single type of immune cell. Monoclonal antibodies are designed to bind to specific antigens such as those found on the surface of pathogens or cancer cells. These molecules are engineered to act as substitute antibodies that can restore, enhance or mimic the immune system's attack on harmful cells.

Monoclonal antibodies are used in the treatment of various viral infections, including the Nipah virus. The monoclonal antibody m102.4 has been used to treat Nipah virus infections in humans (only in emergency situation).

Therefore, all three statements are correct.

20. Option (d) is correct

GAGAN (GPS-Aided Geo Augmented Navigation) is an Indian Satellite Based Augmentation System (SBAS) developed jointly by ISRO and Airports Authority of India (AAI). It is designed to provide additional accuracy and integrity to GPS signals, which is essential for safety-critical applications like aviation.

GAGAN enables more uniform and high-quality air traffic management by improving the accuracy, reliability, and availability of GPS signals, it allows for more precise navigation and landing, which enhances safety and efficiency in airspace management.

GAGAN was developed for aviation, but its benefits are not limited to aviation alone. It can be used in other modes of transportation such as railways, roadways, maritime, and even in agriculture, surveying, and disaster management.

21. Option (c) is correct

Axiom-4 is a planned private crewed mission to the International Space Station (ISS) by Axiom Space. Such missions typically include micro-gravity research as a key component, with astronauts conducting various scientific experiments in the micro-gravity environment of the ISS.

SpaDeX (Space Docking Experiment) is an Indian mission by ISRO aimed at demonstrating autonomous docking technology. It includes micro-gravity research and experiments, as the environment is suitable for such studies.

Gaganyaan is India's first human spaceflight mission to Low Earth Orbit (LEO) and return them safely. One of its objectives is to encourage and support micro-gravity research by allowing scientists to conduct experiments in space.

22. Option (b) is correct

The substances CL-20, HMX, and LLM-105 are all part of a class of chemicals known as high-energy explosives. They are known for their high energy density and brisance (shattering effect).

The CL-20 was developed in the 1980s at the China Lake facility, part of the Naval Air Weapons Station in California. It is one of the most powerful non-nuclear, high-energy nitramine explosive, 15 times stronger than HMX. It is also known as HNIW.

CSIR-Indian Institute of Chemical Technology (IICT), in collaboration with Premier Explosives Ltd., has developed an indigenous process to prepare the key material used in CL20, a high energy material primarily used as propellant in rockets and missiles.

23. Option (c) is correct

The Majorana 1 chip is a quantum computing chip based on Majorana zero modes, which are theorised to be more stable for quantum computation. Such chips will enable advancements in quantum computing.

Majorana 1 chip has not been introduced by Amazon Web Services (AWS). It is a project by Microsoft, which is working on topological quantum computing using Majorana zero modes.

Deep learning is a subset of machine learning. Deep learning uses neural networks with many layers to model complex patterns in data, and in a broader sense it is a part of machine learning.

Therefore, only statements I and III are correct.

24. Option (d) is correct

Statement 1: Incorrect

Vertical landing is a feature associated with multirotor drones (like quadcopters) and some VTOL (Vertical Take-Off and Landing) fixed-wing aircraft. Fixed-wing UAVs typically require a runway for take-off and landing. So all UAVs are not capable for vertical lending.

Statement 2: Incorrect

Multi-rotor UAVs (e.g., quadcopters) can automatically hover using multiple rotors and stabilisation systems (GPS/IMU). They excel in photography, inspections, and surveillance.

Fixed-wing UAVs (e.g., military/mapping drones) cannot hover—they need forward motion to stay airborne. Some can "loiter" (circle a point) but only hybrids (VTOL) achieve true hovering. So not all types of UAVs can do automated hovering.

Statement 3: Incorrect

Power sources vary by type: Battery-powered UAVs (e.g., multi-rotor drones) are clean and simple but have short flight times (20-60 mins); Fuel-powered UAVs (e.g., military fixed-wing drones like Predator) offer endurance (hours-days) but is noisy; Solar-powered UAVs (e.g., HAPS) achieve ultralong flights (days-months) but depend on weather; Hybrid UAVs combine sources (e.g., battery + fuel/solar) for balanced efficiency. So not all types of UAVs can use battery only as a source of power supply.

25. Option (b) is correct

The Dornier-228 is an Indian-made aircraft used by the Indian Navy and Coast Guard for maritime patrol, surveillance, and transport roles.

The Ilyushin IL-76 is a multi-purpose, fixed-wing, fourengine turbofan strategic airlifter designed by the Soviet Union. It is primarily used for military transport, not as a supersonic combat aircraft.

The C-17 Globemaster III is a large military transport aircraft used by the Indian Air Force for strategic and tactical airlift missions.

26. Option (c) is correct

Powertrain Vehicles: In a car, the powertrain is the system that transfers power from the engine to the wheels.

It includes the engine (or motor in electric cars) and other parts that carry power from the engine to the wheels, like the transmission, drive shafts, and differential.

Full battery electric vehicles (BEVs) are vehicles powered solely by stored energy in a battery pack, which is charged from an external source. They do not use an internal combustion engine and are therefore considered an alternative to conventional gasoline or diesel vehicles.

Hydrogen fuel cell vehicles (FCEVs) uses hydrogen as fuel and convert it into electricity through a fuel cell. The electricity then powers an electric motor, propelling the vehicle. The only emission is water vapor, making them a zero-emission alternative.

Fuel cell electric hybrid vehicles (FCEHVs) combine a fuel cell with a battery pack and an electric motor. The fuel cell provides the primary source of electricity, while the battery pack provides additional power during acceleration or hill climbing and captures energy through regenerative braking.

27. Option (c) is correct

Cigarette butts contain a filter made of cellulose acetate, which is a type of plastic. The cellulose acetate filters are non-biodegradable and contribute significantly to plastic pollution.

Most modern eyeglasses are made of plastic, particularly materials like CR-39, polycarbonate, and Trivex. They contain plastic.

Car tyres are made from a blend of natural rubber and synthetic polymers (such as styrene-butadiene rubber), which are types of plastic.

GEOGRAPHY

28. Option (b) is correct

Scientific studies confirm that the Earth's rotation and axis are experiencing shifts. These changes include a wobble in the axis of rotation and a slowing of the Earth's spin.

Statement- I: Solar flares and CMEs do release a lot of energy, affecting the Earth's magnetosphere and causing phenomena like auroras. These events primarily impact the ionosphere and can disrupt satellites and communications, however, these energy bursts do not contribute to shifts in Earth's rotation or axis.

Statement-II: Melting polar ice redistributes water from the poles to lower latitudes. This redistribution can change the Earth's mass distribution, affecting its rotation. This is related to the concept of post-glacial rebound and changes in the moment of inertia.

Answer is (b) Both Statement II and Statement III are correct but only one of them explains Statement I.

29. Option (b) is correct

Oceans are the primary producers of oxygen on Earth. Marine phytoplankton, through photosynthesis, contribute a significantly larger portion of the world's oxygen compared to rainforests. Marine phytoplankton, including algae and photosynthetic bacteria like cyanobacteria, are responsible for global oxygen production. Estimates suggest that the ocean contributes around 50-70% of the world's oxygen, while rainforests contribute about 30%.

Scientific estimates suggest they produce about 50% of the world's oxygen. This is due to their vast numbers and widespread distribution in the oceans. Atmospheric air contains significantly more oxygen than well-oxygenated surface water. Air is composed of roughly 21% oxygen, while the amount of dissolved oxygen in water is much lower. Water does not contain 'several folds higher oxygen' than atmospheric air.

Therefore, only statement II is correct.

30. Option (c) is correct

All the given three statements represent valid evidence for continental drift theory proposed by Alfred Wegener.

The belt of ancient rocks from Brazil coast matches with those from Western Africa. This is one of the geological pieces of evidence for continental drift. The rock formations, particularly the Precambrian cratons and fold belts on the eastern coast of South America align perfectly with those on the western coast of Africa when the continents are fitted together. The ages, rock types, and structural show remarkable continuity across the Atlantic Ocean.

The gold deposits of Ghana are derived from the Brazil plateau when the two continents lay side by side. The gold-bearing conglomerate beds and the geological structures containing gold deposits in Ghana have their direct counterparts in Brazil.

The source rocks and geological processes that created these deposits were originally part of the same continental mass before the Atlantic Ocean opened.

The Gondwana system of sediments from India does have counterparts in six different landmasses of the Southern Hemisphere. The Gondwana sedimentary sequences found in India match remarkably well with similar formations in Antarctica, Australia, South Africa, South America, and Madagascar. These sediments contain similar fossil assemblages and show similar depositional environments, indicating they were formed when these landmasses were joined together as the supercontinent Gondwanaland.

31. Option (c) is correct

The amount of dust particles in the atmosphere is higher in subtropical and temperate regions compared to equatorial and polar regions. This is because:

- Subtropical and temperate areas often have dry conditions, sparse vegetation, and strong winds, which lift dust into the atmosphere like in, Sahara Desert, Middle East, Central Asia.
- Polar regions are covered with ice and snow, and have little exposed soil, so dust is minimal.
- Equatorial regions are humid and have dense vegetation, which prevents dust from being easily lifted.
- Dry winds are less common in equatorial regions (which are humid) and polar regions (which are cold and moist).
- Subtropical and temperate areas actually have more dry winds, not less. For example, the trade winds and westerlies in these regions are often dry and strong, contributing to dust storms and the movement of dust particles.

32. Option (a) is correct

In January (winter in the Northern Hemisphere), isotherms (lines of equal temperature) bend equatorward (towards the equator) while crossing landmasses because land cools down faster than water. Over the oceans, the isotherms bend poleward (towards the poles) because the sea retains heat and is warmer than the adjacent land at the same latitude.

In January, due to the high specific heat of water, the air over the oceans remains warmer compared to the air over the landmasses in the Northern Hemisphere. Land loses heat quickly, making it colder than the oceans during winter.

33. Option (c) is correct

Chalk is a soft, sedimentary rock composed primarily of calcium carbonate and has a structure with large, well-connected pores. These pores allow water to pass through easily, making chalk a highly permeable rock. In contrast, clay is made up of very fine particles that are tightly packed together, with extremely small pores. As a result, water moves through clay very slowly, making it one of the least permeable types of soil or rock. Therefore, in terms of water movement, chalk allows easy water flow, while clay resists it.

Chalk is a porous rock, meaning it has many small holes or spaces that can absorb and hold water. This porosity is what makes chalk permeable.

Clay is made up of very fine particles and has tiny pores. However, these pores are so small that water moves through them very slowly, making clay poorly permeable. This is why clay retains water and drains slowly, despite having high porosity. Hence, only one statement is correctly explaining statement-I.

34. Option (c) is correct

The greenhouse effect, facilitated by atmospheric gases (e.g., CO₂, water vapor), traps heat and prevents Earth from becoming extremely cold. Without the atmosphere, Earth's surface would lose heat rapidly, especially at night, and the average temperature would be much lower about -18°C (0°F), far below freezing.

The atmosphere absorbs and traps heat mainly through the greenhouse effect which helps maintain Earth's average temperature at a level suitable for life. Greenhouse gases (CO₂, methane, water vapor) efficiently absorb longwave (infrared) radiation, re-emitting it back toward the surface.

This selective absorption is why these gases are critical to climate regulation.

35. Option (a) is correct

Anadyr (Russia) and Nome (Alaska, USA) are located on opposite sides of the International Date Line (IDL), but geographically they are relatively closer. Due to the IDL, there is a date difference of almost one day between them. When it is morning in Anadyr, it is still the previous day in Nome, even though the local time of day (morning) may be similar.

Anadyr is almost a day ahead, not behind. So, when it is Monday in Anadyr, it is still Sunday in Nome, not Tuesday. When it is Monday in Anadyr, it is still Sunday in Nome, not Tuesday. Anadyr is ahead of Nome by almost 21 hours (Anadyr is UTC+12, Nome is UTC-9).

36. Option (d) is correct

Under the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act), the regulation of minor minerals is primarily a state subject (Entry 23, List II of the Seventh Schedule). State Governments have the power to make rules for the grant of concessions for extraction of minor minerals (such as sand, clay, gravel, etc.) within their territories.

The Central Government has the power to notify which minerals are to be considered as 'minor minerals' under the Section 3(e) of MMDR Act. The Central Government, through notification, classifies certain minerals as minor minerals, and then the States regulate their extraction.

37. Option (c) is correct

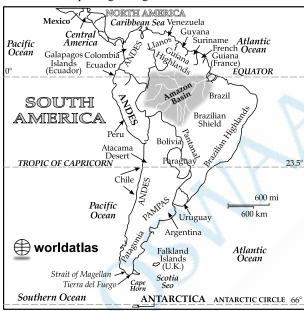
India had joined the Minerals Security Partnership (MSP) in 2023. The MSP is a US-led initiative launched in 2022 to strengthen critical mineral supply chains among partner countries. The government has launched the Khanij Bidesh India Ltd (KABIL) to secure overseas mineral assets.

India is not resource-rich country in all 30 critical minerals it has identified. Central government gets exclusive power to auction 24 critical minerals (including cobalt, lithium recently discovered in Jammu & Kashmir), rare earth elements, graphite, and others, it lacks adequate domestic reserves of many critical minerals. India is heavily import-dependent for several critical minerals including cobalt, nickel, copper, and others.

The Parliament in 2023 amended the Mines and Minerals (Development and Regulation) Act, 1957 through the Mines and Minerals (Development and Regulation) Amendment Act, 2023. This amendment empowered the Central Government to exclusively auction mining leases and composite licenses for certain critical and strategic minerals.

38. Option (c) is correct

The Andes Mountains form the longest continental mountain range in the world, stretching along South America's western coast They extend through seven countries total: Venezuela, Colombia, Ecuador, Peru, Bolivia, Chile, and Argentina. Thus, from above given countries only Brazil and Paraguay do not have the Andes passing through them.



This map is not to scale and is for reference only.

39. Option (d) is correct

Lake Tanganyika is located in Central Africa. It is shared by the countries of Tanzania, Democratic Republic of the Congo, Burundi, and Zambia. Given its location north of the equator, the equator does not pass through it.

Lake Tonlé Sap is located in Cambodia. Given its location north of the equator, the equator does not pass through it.

Patos Lagoon is located in the state of Rio Grande do Sul in southern Brazil. Given its location south of the equator,

the equator does not pass through it. Thus, the equator passes through none of these water bodies.

40. Option (d) is correct

The United States of America is the largest producer of ethanol in the world, not Brazil. The USA produces more ethanol than Brazil, primarily from corn. Brazil is the second-largest producer, using sugarcane as the main feedstock.

The U.S. primarily uses corn (maize) for ethanol (90% of production).

Brazil relies on sugarcane (over 90% of its ethanol output).

This difference stems from agricultural strengths: the U.S. grows massive corn surpluses, while Brazil's tropical climate favors sugarcane.

41. Option (c) is correct

I. United Kingdom: Includes overseas territories like the Falkland Islands, Bermuda, British Indian Ocean Territory, etc.

Total time zones: 9

II. Denmark: Includes Greenland and the Faroe Islands.

Time zones: Denmark mainland: UTC+1 and Greenland spans multiple zones (up to UTC-4)

Total time zones: 3

III. New Zealand: Includes Chatham Islands and other territories.

Time zones: NZ mainland: UTC+12 and Chatham Islands: UTC+12:45

Possibly also includes Tokelau and other territories

Total time zones: 2–3

IV. Australia: Main zones: Western (UTC+8), Central (UTC+9:30), Eastern (UTC+10)

Daylight saving and external territories (e.g., Lord Howe Island, Cocos Islands, Norfolk Island) add variation

Total time zones: 5+

V. Brazil:

Fernando de Noronha Time (UTC-2), Brasília Time (BRT) (UTC-3), Amazon Time (AMT) (UTC-4) and Acre Time (ACT) (UTC-5)

Spans across 4 official time zones, but with consideration of daylight saving, some sources count 5

42. Option (c) is correct

Botswana is one of the world's leading producers of diamonds. The major mines include Jwaneng and Orapa.

Chile is one of the world's top lithium producers and holds vast reserves in the Atacama Salt Flat.

Indonesia is the world's largest producer of nickel,

Therefore, all three pairs are correctly matched.

43. Option (a) is correct

Rare earth elements (REEs) are extensively used in manufacturing flat television screens and computer monitors. These elements are crucial for the colour reproduction and functionality of modern display technologies.

Phosphorescence is the property of absorbing energy and then slowly releasing it as light over time, which is different from fluorescence where light emission stops immediately when the energy source is removed.

Several rare earth elements exhibit phosphorescent properties: Europium compounds show strong red phosphorescence Terbium compounds exhibit green phosphorescence Dysprosium shows yellow phosphorescence Samarium exhibits orangered phosphorescence.

ECOLOGY AND ENVIRONMENT

44. Option (a) is correct

Activated carbon is widely used for removing pollutants from wastewater and industrial effluents. Its effectiveness stems from its ability to absorb a variety of contaminants.

Activated carbon has a very high surface area due to its porous structure, which makes it an excellent absorbent. It has a significant capacity for adsorbing heavy metals from solutions.

Activated carbon can be synthesized from a variety of carbon-rich waste materials, such as agricultural waste (e.g., coconut shells, rice husks), industrial by-products, and even certain types of plastic waste. This makes its production more sustainable and cost-effective.

Therefore, both Statement II and Statement III are correct and both of them explain Statement I.

45. Option (a) is correct

Statement I: Studies suggested that the cement industry is one of the most significant contributors to global carbon emissions. The percentage is generally estimated to be around 5-8%.

Statement II: Cement production typically involves combining limestone with materials like clay or shale, which contain silica, alumina, and iron. These components are necessary for the chemical reactions that form clinker, the intermediate product in cement making. This mixture is ground into a raw meal before being heated in a kiln.

Statement III: Limestone is converted into lime during clinker production. This is a fundamental part of the cement manufacturing process. When limestone (CaCO₃) is heated in a kiln at high temperatures (around 1450°C), it undergoes calcination, breaking down into lime (CaO) and carbon dioxide (CO₂). This CO₂ release is a major contributor to the industry's emissions.

Statement II provides the raw material composition.

Statement III explains the release of CO₂ during production, accounting for the cement industry's high emissions.

Both Statement II and Statement III are correct and both of them explain Statement I.

46. Option (d) is correct

The Peacock tarantula (Gooty tarantula), scientifically known as 'Poecilotheria metallica', is not a crustacean (like crabs or lobsters). It is an arachnid (a spider).

It is primarily insectivorous, feeding on insects and other small animals. The natural habitat of the Gooty tarantula in India is extremely limited. It is found only in a few forested areas, particularly in the Eastern Ghats of Andhra Pradesh. Its distribution is highly restricted and fragmented. In its natural habitat, the Gooty tarantula is an arboreal species, meaning it lives in trees.

47. Option (b) is correct

Cassava (Manihot esculenta) is a perennial woody shrub native to South America. It is cultivated for its edible starchy tuberous root.

Ginger (Zingiber officinale) is a herbaceous plant. The stem of ginger is actually a pseudostem formed by the rolled bases of the leaves.

Malabar spinach (Basella alba) is a fast-growing, softstemmed, perennial vine (climber) with succulent, herbaceous stems.

Mint is not a shrub. It is a perennial herb, not an annual shrub. Shrubs are woody, but mint is a soft-stemmed herb.

Papaya (Carica papaya) is technically a large herbaceous plant, not a woody shrub. Its stem is soft and hollow, not woody.

Therefore, only three pairs are correctly matched.

48. Option (b) is correct

Both statements are correct.

Wet-bulb temperature is a measure of heat and humidity. When the wet-bulb temperature reaches 35 °C, it becomes extremely dangerous for humans and animals because sweat can no longer evaporate to cool the body.

The World Bank's warning emphasises the health hazards of extreme heat and humidity, it also implicitly highlights that the same underlying climate shifts will exacerbate Peninsular India's susceptibility to these damaging hydrometeorological events such as flooding, tropical cyclones, and droughts etc.

Peninsular India suffering from flooding, tropical cyclones, and droughts are climate risks for Peninsular India, the specific warning from the World Bank about 'wet-bulb temperatures routinely exceeding 35°C' is not directly related.

49. Option (c) is correct

Direct Air Capture (DAC) is a technology that captures carbon dioxide (CO₂) directly from the atmosphere. The captured CO₂ can then be stored underground (carbon sequestration) or can be utilised in various industrial processes. DAC is a method of carbon sequestration.

The Captured CO₂ from DAC can be used as a feedstock in the production of plastics (such as polycarbonates and polyurethanes) and in food processing (for example, carbonation of beverages and as a preservative).

In aviation, synthetic fuels (also called e-fuels) can be produced by combining captured CO₂ with hydrogen (produced via electrolysis using renewable energy).

This process creates synthetic hydrocarbons that can be used as low-carbon aviation fuels.

50. Option (c) is correct

India's per capita CO_2 emissions are actually higher than 0.5 t CO_2 /capita. According to the Global Carbon Atlas and IEA, India's per capita CO_2 emissions are approximately 1.9-2.0 tonnes per capita as of 2020-2022. However it is still significantly lower than developed countries like the USA (15-16 t CO_2 /capita) or China (7-8 t CO_2 /capita).

India ranks second in the Asia-Pacific region in terms of absolute CO_2 emissions from fuel combustion, after China. China is the largest emitter globally and in Asia-Pacific, followed by India.

Electricity and heat production sector are the largest source of CO_2 emissions in India, accounting for approximately 44-48% of total CO_2 emissions. This is mainly due to India's heavy dependency on coal-fired power plants for electricity generation. Coal accounts for about 70% of India's electricity generation, making the power sector the dominant contributor to CO_2 emissions.

Therefore, statements II and III are correct.

51. Option (a) is correct

Artificial rainmaking, also known as cloud seeding, commonly uses silver iodide (AgI) and potassium iodide (KI) as seeding agents.

Silver Iodide (AgI) primary seeding agent due to its crystalline structure, which resembles ice. Acts as a nucleating agent, promoting the formation of ice crystals in supercooled clouds. Potassium Iodide (KI) used as an additive to enhance dispersion. Helps in stabilizing the silver iodide solution when dissolved in acetone or other solvents for aerial dispersal.

52. Option (a) is correct

The Nature Restoration Law (NRL) is a legislative initiative of the European Union. It was proposed by the European Commission and adopted by the European Parliament and Council in 2024. The law aims to restore degraded ecosystems, tackle climate change, and halt biodiversity loss across EU member states. It sets legally binding targets for nature restoration on land and sea within the EU.

53. Option (b) is correct

Coal gasification is a process which transforms Coal into a Synthetic gas (Syngas), consisting of mixture of gasses like Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen (H₂), Methane (CH₄) and Water vapor (H₂O).

Ethanol can be produced indirectly from coal through the coal gasification process. In this method, coal is gasified to produce syngas, which is then converted into ethanol through a catalytic or microbial fermentation process.

Nitroglycerine cannot be produced through coal gasification. It is a chemical compound synthesized by the nitration of glycerol (glycerin) using a mixture of concentrated nitric acid and sulfuric acid. Glycerol, the key raw material in this process, is typically a byproduct of the soap-making or biodiesel industries and has no direct connection with coal or syngas.

Coal gasification can produce syngas, and from syngas, we get ammonia. Ammonia is a crucial ingredient in the production of urea. Haber-Bosch process is used to convert hydrogen (derived from syngas) and nitrogen into ammonia, which then reacts with carbon dioxide (also potentially derived from syngas) to form urea.

INDIAN POLITY & GOVERNANCE

54. Option (a) is correct

Changes to the distribution of powers between the Union and the States affect the federal structure.

Article 368(2) of the Constitution states that if a constitutional amendment seeks to make any change in the Seventh Schedule (which includes the Union List), it requires ratification by not less than one-half of the State Legislatures.

Any amendment that seeks to change the extent of the executive power of the State also requires ratification by at least half of the State Legislatures. This is because it directly affects the relationship between the Union and the States, which is a federal feature protected by the Constitution.

Amendments relating to the conditions of the Governor's office do not require ratification by the States.

The Governor is the constitutional head of the state, and the conditions of their office are part of the federal scheme, as the Governor serves as a link between the Union and the State. While the Governor is appointed by the President, any changes to the conditions of their office could impact the balance of power between the Union and the States.

55. Option (a) is correct

The Lokpal and Lokayuktas Act, 2013, does not exclude Indian public servants posted abroad from its purview. The Lokpal's jurisdiction covers all public servants in India, including those posted outside India.

The salient features of the Lokpal and Lokayuktas Act, 2013 are as follows:

- The Lokpal consists of One Chairperson who must be a former Chief Justice of India, Supreme Court Judge, or an eminent person meeting specific eligibility criteria.
- The Chairperson or a Member shall not be a Member of the Parliament or a Member of any State or Union Territory.
- The Chairperson or a Member shall not be a person of less than forty-five years of age, on the date of assuming office as the Chairperson or Member, as the case may be.
- The Lokpal can investigate allegations of corruption made in a complaint against the Prime Minister. However, the Lokpal cannot inquire into allegations against the Prime Minister if:
 - The matter relates to international relations, security (external or internal), public order, atomic energy, or space, Unless the full bench of the Lokpal (Chairperson and all Members) decides to take up the case and at least two-thirds of the Members approve the inquiry.

56. Option (c) is correct

Article 50 of the Directive Principles of State Policy (DPSP) directs the State to take steps to separate the judiciary from the executive in the public services of the State.

Article 51A(f) of the Fundamental Duties states that it is the duty of every citizen to value and preserve the rich heritage of our composite culture.

Article 24, of Fundamental Right, prohibits the employment of children below the age of 14 years in factories, mines or any other hazardous employment.

Therefore, all three pairs are correctly matched.

57. Option (a) is correct

The pardoning power of the President of India (Article 72) can be subjected to limited judicial review. The Supreme Court has held that while the President's power is broad, it is not absolute.

The Supreme Court (in cases like Epuru Sudhakar vs. Govt. of A.P., 2006) ruled that judicial review is permissible if:

- The decision is arbitrary, malafide, or discriminatory.
- The President acts without proper application of mind.
- The order violates constitutional principles (e.g., equality under Article 14).

The President cannot exercise the pardoning power independently. As per Article 74, the President is bound to act on the advice of the Council of Ministers (Central Government). The President does not have discretion to act without or against such advice.

58. Option (a) is correct

The Tenth Schedule of the Constitution (anti-defection law) states that if any question arises as to whether a member of a House has become subject to disqualification, the decision of the Chairman (for Rajya Sabha) or the Speaker (for Lok Sabha) of such House shall be final. The President does not have a role in this decision.

After the 52nd Amendment Act (1985), which introduced the 10th Schedule (Anti-Defection Law), the term "political party" was expressly defined and incorporated into the Constitution. Article 361 B states that "A member of a House belonging to any *political party* who is disqualified for being a member of the House under paragraph 2 of the Tenth Schedule shall also be disqualified to hold any remunerative political post for duration of the period commencing from the date of his disqualification till the date on which the term of his office.... "so

However, the original Constitution (1950) did not explicitly mention "political parties."

59. Option (c) is correct

Article 94 of the Constitution of India states that the Speaker of the Lok Sabha does not vacate his/her office upon the dissolution of the House. The Speaker continues in office until immediately before the first meeting of the newly constituted House.

There is no constitutional provision that requires a Member of the House of the People (Lok Sabha) to resign from his/her political party upon being elected as Speaker. However, by convention, the Speaker is expected to be impartial and may resign from the party, but it is not mandated by the Constitution.

Article 94 of the Constitution provides that the Speaker may be removed from office by a resolution of the House of the People passed by a majority of all the then members of the House. The Constitution also requires that at least 14 days' notice must be given of the intention to move such a resolution.

60. Option (d) is correct

Ordinance can amend any Central Act, subject to constitutional limitations. An Ordinance issued by the President under Article 123 and Governor under Article 213 has the same force and effect as an Act of Parliament or State Legislature.

An Ordinance cannot abridge or take away Fundamental Rights. Under Article 13(2) of the Constitution, it prohibits the State from making any law (including Ordinances) that takes away or abridged Fundamental Rights. Any such law is void to the extent of the contravention.

An Ordinance can be given retrospective effect, i.e., it can come into effect from a back date, just like an Act of Parliament.

61. Option (a) is correct

The Constitution of India does explicitly mention that the Governor of a State can act in his/her own discretion in certain matters. Article 163(2) states that if any question arises whether a matter falls within the Governor's discretion, the decision of the Governor shall be final.

Also, in matters like reserving a bill for the President (Article 200), or in the appointment of the Chief Minister when no party has a clear majority, the Governor acts in his/her discretion.

The President of India cannot, on his/her own, reserve a bill passed by a State Legislature for consideration. It is the Governor who has the power to reserve certain bills for the consideration of the President under Article 200. There is no provision for the President to directly take up a bill passed by a State Legislature without the Governor's intervention.

The President can only act on a bill once it is reserved and forwarded by the Governor.

62. Option (d) is correct

Article 361(1) of the Indian Constitution provides that the Governor of a State is not answerable to any court for the exercise and performance of the powers and duties of his/her office or for any act done or purported to be done by him/her in the exercise and performance of those powers and duties.

Article 361(2) states that no criminal proceedings whatsoever shall be instituted or continued against the Governor of a State in any court during his/her term of office.

Article 194(2) of the Constitution provides that no member of the Legislature of a State shall be liable to any proceedings in any court in respect of anything said or any vote given by him/her in the Legislature or any committee thereof. The se privilege

in the form parliamentary privileges are enjoyed by Members of Parliament under Article 105.

Thus, all the statements are correct.

63. Option (d) is correct

According to Article 243B of the Constitution, states with a population not exceeding 20 lakhs may not constitute Panchayats at the intermediate level. Thus, smaller states and Union Territories may have only two tiers (village and district levels). Panchayats at the intermediate level (i.e., Block or Mandal Panchayats) do not exist in all States.

The minimum age to be a member of a Panchayat at any level is 21 years, as per Article 243F of the Constitution. The age of thirty years is not required.

The State Finance Commission, which reviews the financial position of Panchayats and makes recommendations regarding the distribution of taxes, is constituted by the Governor of the State, not by the Chief Minister (Article 243I).

64. Option (c) is correct

The capital of Arunachal Pradesh is Itanagar, which is named after the historical Ita Fort. The state has two National Parks: Namdapha National Park and Mouling National Park.

Nagaland became the 16th state of India on 1 December 1963. Its statehood was granted by the State of Nagaland Act, 1962, which was a Constitutional Amendment Act.

Tripura was a Part 'C' state after accession to India. In 1956, it became a Union Territory (centrally administered) under the States Reorganisation Act, and later, in 1972, it attained full statehood.

Therefore, all three pairs are correctly matched.

Note: Strictly speaking from a legal perspective, the basis of the state was the 'State of Nagaland Act,' enacted under Article 3 of the Constitution. Article 371-A (13th Constitutional Amendment) merely grants special privileges to the State of Nagaland. However, UPSC may still consider this statement incorrect.

65. Option (d) is correct

When an area in a State is declared as a Scheduled Area under the Fifth Schedule, the State Government does not lose its executive power. The administration of such areas is carried out by the State Government, but it is subject to special provisions and the Governor has special powers to make regulations for the peace and good governance of these areas. Tribal Advisory Councils (TACs) are established to advise the Governor on matters related to the welfare and advancement of Scheduled Tribes, with the Governor holding special responsibilities. While local bodies (such as Panchayats under PESA) have enhanced powers, they do not assume total administrative control to the exclusion of the State Government's executive authority.

The Governor of the State has special powers and can make regulations for the administration of scheduled areas, but the Union Government does not directly administer them. The President has the power to make regulations for the peace and good governance of Scheduled Areas (Para 5 of the Fifth Schedule); however, this is done in consultation with the Governor and does not constitute a complete takeover of administration. The Union Government does not take over the total administration of Scheduled Areas under the Fifth Schedule, even under special circumstances.

66. Option (b) is correct

The Petroleum and Natural Gas Regulatory Board (PNGRB) was established under the PNGRB Act, 2006. Its objective is to regulate the downstream activities in the petroleum and natural gas sector.

PNGRB does not regulate (Production of crude oil) upstream activities. These are overseen by the Ministry of Petroleum and Natural Gas (MoPNG) and the Directorate General of Hydrocarbons (DGH).

PNGRB is empowered to regulate the refining, processing, storage, transportation, distribution, marketing, and sale of petroleum and petroleum products.

The marketing and sale of petroleum products are within the regulatory scope of PNGRB, ensuring fair trade practices and consumer protection.

Similar to crude oil, the production of natural gas is excluded from PNGRB's regulatory domain. This activity is managed by the Ministry of Petroleum and Natural Gas and the Directorate General of Hydrocarbons (DGH).

67. Option (a) is correct

The Inter-State Council was established under Article 263 of the Constitution of India.

The National Security Council (NSC) was established in 1998 by the Government of India. It is an executive body. There is no mention of the NSC in the Constitution of India.

Zonal Councils were set up under the States Reorganisation Act, 1956, which is a statute and not a constitutional provision.

ECONOMY

68. Option (d) is correct

Buying and selling Government bonds is a major source of income for RBI. When RBI conducts Open Market Operations (OMOs), it buys and sells government securities in the secondary market. The interest earned on these government bonds and the profit/loss from trading activities constitute a significant portion of RBI's income.

As the custodian of India's foreign exchange reserves, RBI actively manages forex reserves by buying and selling foreign currencies. The returns from investing these reserves in foreign government securities and the gains from forex operations contribute to RBI's income. Pension fund management is not a source of income for RBI. RBI does not engage in pension fund management as a business activity. Pension fund management in India is handled by specialised institutions like Pension Fund Regulatory and Development Authority (PFRDA)

Lending to private companies is not a direct source of income for RBI. Private companies get loans from commercial banks, not directly from RBI. RBI provides liquidity to commercial banks through various instruments like repo, reverse repo, and refinance facilities.

Printing and distributing currency notes generate income for RBI. RBI has the sole authority to issue currency notes in India (except one-rupee notes which are issued by Government of India).

69. Option (b) is correct

The Securities and Exchange Board of India (SEBI), not the Reserve Bank of India (RBI), mandates the submission of BRSR.

SEBI introduced the Business Responsibility and Sustainability Report (BRSR) framework in May 2021, replacing the earlier Business Responsibility Report (BRR). The mandate applies to the top 1,000 listed companies by market capitalisation, not all listed companies.

BRSR focuses on Environmental, Social, and Governance (ESG) parameters which are predominantly non-financial metrics. The report covers areas like: Environmental impact (carbon footprint, water usage, waste management) Social

responsibility (employee welfare, community development, human rights) Governance practices.

70. Option (a) is correct

Capital receipts are those receipts that either create a liability or cause a reduction in the assets of the government. For example, borrowings and disinvestment.

Borrowings (like loans raised by the government) and disinvestment (sale of government assets) are classic examples of capital receipts.

Interest received on loans is a revenue receipt, not a capital receipt. It does not create a liability for the government; rather, it is an income earned by the government on the loans it has given to others.

71. Option (d) is correct

Revenue Deficit (RD):

RD = Revenue Expenditure - Revenue Receipts

RD = \$80,000 crores - \$60,000 crores

RD = ₹20.000 crores

Fiscal Deficit (FD):

The fiscal deficit is equal to the total borrowings of the government.

Given Borrowings = ₹10,000 crores

FD = ₹10,000 crores

Primary Deficit (PD):

PD = Fiscal Deficit - Interest Payments

PD = ₹10,000 crores – ₹6,000 crores

PD = 4,000 crores

Therefore, all three statements (I, II, and III) are correct.

72. Option (a) is correct

Fiscal Deficit is the difference between the total expenditure and total receipts of the government, excluding borrowings. It indicates the total borrowings needed by the government.

Fiscal Deficit = ₹50,000 crores

Non-debt creating capital receipts = ₹10,000 crores

Fiscal Deficit = Total Expenditure – (Revenue Receipts + non-debt creating capital receipts). So, the ₹50,000 crore figure already reflects these receipts.)

Interest Liabilities = ₹1,500 crores.

Calculate Gross Primary Deficit:

Gross Primary Deficit = Fiscal Deficit – Interest Liabilities

Gross Primary Deficit = ₹50,000 crores – ₹1,500 crores

Gross Primary Deficit = ₹48,500 crores

73. Option (a) is correct

RTGS (Real Time Gross Settlement) settles transactions individually and instantly, i.e the transfer of funds happens in real time.

NEFT (National Electronic Funds Transfer), settles transactions in batches at specific intervals, so there is a time lag before the beneficiary receives the funds.

For both RTGS and NEFT, inward transactions (i.e., when you receive money) are not charged to the customer. Charges, if any, are usually levied on outward transactions (when you send money). The RBI has also mandated that banks should not levy any charges for inward transactions in both RTGS and NEFT.

Both RTGS and NEFT have similar operating schedules which is round the clock throughout the year.

74. Option (b) is correct

Alternative Investment Funds (AIFs) are privately pooled investment vehicles that are not conventional securities like stocks or bonds. They are categorised under Regulation 2(1)(b) of the SEBI (Alternative Investment Funds) Regulations, 2012 in India.

Bonds are traditional investment instruments and are not classified as Alternative Investment Funds (AIFs).

Hedge funds are a type of Alternative Investment Fund. In India, SEBI classifies hedge funds under Category III AIFs.

Stocks (equity shares) are traditional investment instruments and are not considered AIFs. They are direct investments in companies.

Venture capital funds are a type of Alternative Investment Fund. In India, they are classified under Category I AIFs.

75. Option (a) is correct

Bondholders are generally considered to be at lower risk compared to stockholders because bonds are debt instruments with fixed interest payments and priority in repayment over equity holders in case of liquidation. Stockholders, as owners, face higher risk but also have the potential for higher returns.

Bondholders are lenders to the company—they provide loans to the company in exchange for interest payments.

On the other hand, Stockholders, are owners of the company and have a claim on its residual profits.

In the event of liquidation or bankruptcy, bondholders are paid before stockholders.

This prioritisation in repayment is a key reason why bonds are considered less risky than stocks.

76. Option (a) is correct

India has become the world's largest market for equity options by contracts traded, accounting for over 84% of all equity option contracts globally in 2023 and the first quarter of 2024. This reflects a significant boom in options trading in India

In early 2024, the total market capitalisation of Indian stock markets overtook that of Hong Kong, became 4th largest globally after US, China, Japan.

There is a regulatory body in India, Securities and Exchange Board of India SEBI which regularly issues warnings to investors about the risks of options trading and takes action against unregistered financial advisors. SEBI has also launched investor awareness campaigns and has penalised entities for unauthorised investment advice. Runs investor education programmes (over 5 million trained in 2023).

77. Option (d) is correct

In India, only the income from agricultural activities (like cultivation of land, growing crops, etc.) is fully exempt from income tax under Section 10(1) of the Income-tax Act, 1961. However, income from allied agricultural activities such as poultry farming, dairy farming, and wool rearing is not considered agricultural income and is therefore taxable under the Income-tax Act.

Under Section 2(14) of the Income-tax Act, 1961, rural agricultural land in India is specifically excluded from the definition of 'capital asset'. This means that gains arising from the sale of rural agricultural land are not subject to capital gains tax.

78. Option (d) is correct

India is the largest producer and exporter of turmeric in the world. India accounts for approximately 80% of global turmeric production and about 65% of global turmeric exports. The country dominates international markets, with major exports going to Bangladesh, UAE, USA, and Malaysia.

Some of the most prominent cultivars include the Alleppey Finger from Kerala, Erode and Salem varieties from Tamil Nadu, Rajapore and Sangli Turmeric from Maharashtra. According to agricultural statistics:

- Telangana: Largest producer (around 35-40% of total production)
- Maharashtra: Second largest producer
- Tamil Nadu: Significant producer, especially known for Erode variety
- Karnataka: Important producing state.

79. Option (b) is correct

The Directorate of Enforcement (ED) is responsible for enforcing the Fugitive Economic Offenders Act, 2018. However, it does not work under the Internal Security Division-I, Ministry of Home Affairs. ED works under the Department of Revenue, Ministry of Finance.

- The ED indeed enforces three major laws:
 - Prevention of Money Laundering Act (PMLA), 2002
 - Foreign Exchange Management Act (FEMA), 1999
 - Fugitive Economic Offenders Act, 2018

The Directorate of Revenue Intelligence (DRI) enforces the provisions and plays an anti-smuggling intelligence role. It works under the Department of Revenue, Ministry of Finance.

- DRI's primary role is anti-smuggling intelligence.
 - It enforces:
 - Customs Act, 1962 (primary)
 - NDPS Act (for drug smuggling)
 - Arms Act (for weapon smuggling)

The Directorate General of Systems and Data Management is responsible for big data analytics to assist tax officers and nab tax evaders. It also works under the Department of Revenue, Ministry of Finance.

80. Option (a) is correct

The circular economy is a model of production and consumption that emphasises sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products for as long as possible. This approach helps create a system that minimises waste and reduces the need for new resource extraction.

Core principle of the circular economy is to minimise the need for new raw materials.

The circular economy emphasises ancient resource utilisation and waste minimisation at every stage of the production process. This involves strategies such as eco-design, closedloop manufacturing, and industrial symbiosis, all aimed at reducing waste generation.

81. Option (c) is correct

The 15th Finance Commission (XVFC) recommended a total grant of ₹ 4,800 crores for the period 2022–23 to 2025–26 to incentivize States to enhance educational outcomes, especially in school education.

The 15th FC recommended devolution of 41% of the net proceeds of Union taxes to the States for the period 2021–2026, continuing the level from the 14th Finance Commission but reducing from 42% recommended initially to accommodate the funding requirements of the newly formed Union Territories (J&K and Ladakh).

It also recommended a performance-based incentive of ₹ 45,000 crores to be given to States that carry out specific agricultural reforms.

It reintroduced the 'tax effort' criterion (previously dropped) in its horizontal devolution formula to encourage and reward better fiscal performance by States. It assigned a weightage of

2.5% to this criterion. It is calculated as the ratio of a state's taxto-GSDP, rewarding those who generate more revenue.

82. Option (a) is correct

The National Rail Plan (NRP) aims to develop a 'future ready' railway system by 2030, not 2028.

'Kavach' is an indigenously developed Automatic Train Protection (ATP) system. It's a project under 'Make in India'. It is not developed in collaboration with Germany.

The 'Kavach' system uses Radio Frequency Identification (RFID) tags, which are placed on the tracks in station sections along with radio communication (ultra-high frequency), onboard equipment, and GPS.

CURRENT AFFAIRS

83. Option (c) is correct

India did not sign the 'Declaration on Climate and Health at COP28 in Dubai. While over 120 countries signed this declaration, India was absent from the signatories list.

The COP28 Declaration on Climate and Health is a non-binding declaration. It is a voluntary commitment by countries. The declaration encourages countries to develop a climate resilient and low-carbon health systems, but does not mandate complete decarbonisation. Even if signed, it would not become 'mandatory' to decarbonise the health sector. It would be a voluntary commitment.

India's health infrastructure is still developing and has significant challenges in terms of accessibility and capacity. Immediate decarbonisation requirements could potentially strain resources that are needed for expanding healthcare access.

The transition to low-carbon health systems requires good amount of investment in new technologies and infrastructure. For a developing country like India, prioritising healthcare accessibility and affordability over immediate decarbonisation makes practical sense.

84. Option (a) is correct

Asian Development Bank (ADB) launched the 'Nature Solutions Finance Hub for Asia and the Pacific'. The hub was launched at COP28. The ADB aims to attract at least \$2 billion into investment programmes that incorporate nature-based solutions.

This initiative aims to mobilise finance to address climate change, biodiversity loss, and other environmental challenges in the Asia-Pacific region.

85. Option (b) is correct

North Atlantic Treaty Organisation (NATO) is an intergovernmental military alliance formed in 1949. It was established with the primary goal of providing collective defence against potential aggression, particularly from the Soviet Union during the Cold War era. The alliance currently consists of 32 member countries.

The original 12 founding members of NATO were Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States Bulgaria, Croatia, Sweden, and North Macedonia are member countries of NATO whereas Austria and Serbia are not NATO members. Sweden joined NATO in 2024.

86. Option (d) is correct

BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) is a regional organisation consisting of seven member states as of now and till January 2025. BIMSTEC came into existence with the signing of the Bangkok Declaration in 1997, not the Dhaka Declaration in 1999.

The members are Bangladesh, India, Myanmar, Sri Lanka, Thailand, Nepal, and Bhutan.

The founding members of BIMSTEC were Bangladesh, India, Sri Lanka, and Thailand (initially as BIST-EC in 1997). Nepal and Bhutan joined later in 2004. Myanmar joined in 1997 itself, but Nepal was not a founding member.

In BIMSTEC, the sub sector of tourism is currently being led by Nepal.

87. Option (a) is correct

The AI Action Summit in Paris held in February 2025 was co-chaired with India, and it aimed to build on the progress and commitments made at the Bletchley Park Summit (UK, 2023) and the Seoul Summit (South Korea, 2024). These summits are part of a series of global efforts to coordinate AI governance and safety.

Joint statement on 'Inclusive and Sustainable Artificial Intelligence for People and the Planet' was signed by 58 countries, including India, China, and the European Union, while the United States and the United Kingdom opted not to sign, citing concerns over potential overregulation of AI.

88. Option (a) is correct

The 16th BRICS Summit was held in Kazan, Russia in October 2024 under the chairship of Russia. Indonesia officially became a full member of the BRICS bloc in January, 2025. This makes Indonesia the first Southeast Asian nation and the 10th member of BRICS.

The theme of the 16th BRICS Summit was Strengthening Multilateralism for Just Global Development and Security highlighting the bloc's commitment to tackling global challenges.

89. Option (a) is correct

The International North-South Transport Corridor (INSTC) is a multi-modal network (ship, rail, and road) that connects India (starting from Mumbai) to Iran (Bandar Abbas), then through Iran to Azerbaijan, Russia, and further to Central Asia and Europe. The main route is India–Iran–Azerbaijan–Russia–Europe, facilitating trade between India, Central Asia, and Europe.

90. Option (c) is correct

The International Bank for Reconstruction and Development (IBRD), is part of the World Bank Group, which provides loans and guarantees to middle-income and creditworthy low-income countries. This is a core function of the IBRD. It focuses on infrastructure, public administration, and sustainable development projects.

While the IBRD works to reduce poverty and support development, it does not work 'single-handedly'. It is part of the World Bank Group, which includes other institutions like the International Development Association (IDA), International Finance Corporation (IFC), etc.

The IBRD collaborates with these organisations and other partners to achieve its goals.

The IBRD was established in 1944 (Bretton Woods Conference), to help Europe rebuild after the devastation of World War II. Its initial focus was on post-war reconstruction, especially in Europe.

91. Option (d) is correct

Mallorca is the largest island in the Balearic Islands, which are part of Spain, not Italy.

Normandy is a region in northern France, famous for the D-Day landings during World War II. It is not in Spain.

Sardinia is the second-largest island in the Mediterranean Sea and is part of Italy, not France.

92. Option (a) is correct

Statement 1: Article 6 of the Paris Agreement is discussed frequently in global climate discussions. It deals with international cooperation mechanisms for achieving climate targets, making it a central topic in sustainable development and climate change negotiations.

Statement II: Article 6 of the Paris Agreement does establish principles for carbon markets.

Article 6.2 of this agreement covers Internationally Transferred Mitigation Outcomes (ITMOs) - essentially international carbon trading. Also, Article 6.4 establishes a centralised crediting mechanism (successor to CDM).

Statement III: Article 6 of the Paris Agreement provides a framework for international cooperation, including both market-based (carbon markets) and non-market-based approaches (Article 6.8) to help countries achieve their Nationally Determined Contributions (NDCs).

All three statements are correct, and both Statement II and Statement III explain Statement I.

93. Option (c) is correct

The Rashtriya Gokul Mission (RGM) aims to conserve and develop indigenous breeds of cattle and buffalo. Most of the low-producing indigenous animals are owned by small and marginal farmers and landless labourers. Benefiting these animals directly benefits the rural poor by improving their livelihoods and income through better productivity. The mission was launched in December 2014 with the objective to promote indigenous cattle and buffalo rearing and conservation in a scientific manner. It includes scientific breeding, genetic upgradation, and conservation of indigenous breeds.

94. Option (b) is correct

UPI (Unified Payments Interface) is currently accepted for international merchant payments in the following countries, in addition to India:

- Bhutan
- France
- Mauritius
- Nepal
- Singapore
- Sri Lanka
- UAE

Therefore, only three countries from the list accept international merchant payments under UPI.

95. Option (d) is correct

The 'PM Surya Ghar Muft Bijli Yojana' aims to install one crore (10 million) solar rooftop panels in the residential sector. The Ministry of New and Renewable Energy (MNRE) is responsible for the implementation of the scheme. As part of the scheme, MNRE aims to impart training at the grassroots level on installation, operation, maintenance, and repairs of solar rooftop systems.

Under the scheme capacity building, which aims to create more than three lakh (300,000) skilled manpower through fresh skilling and up-skilling. This is to support the large-scale

deployment and maintenance of rooftop solar systems across the country.

Therefore, all three statements are correct.

96. Option (c) is correct

Gandhi Peace Prize was instituted in the year 1995, on the occasion of the 125th birth anniversary of Mahatma Gandhi, as a tribute to his ideals and contributions to humanity.

The award is conferred by the President of India.

Gandhi Peace Prize jury consists of five-member headed by the Prime Minister. The Chief Justice of India and the Leader of Opposition in Lok Sabha are its permanent members. Two other jury members are nominated for a period of three years.

97. Option (d) is correct

The UN General Assembly has designated 2026 as the International Year of the Woman Farmer to recognise the crucial role women play in agriculture and food security globally.

The UN General Assembly has proclaimed 2027 as the International Year of Sustainable and Resilient Tourism.

The UN General Assembly has designated 2025 as the International Year of Peace and Trust.

The United Nations General Assembly has declared 2029 as the International Year of Asteroid Awareness and Planetary Defence, to mark the close approach of asteroid Apophis in 2029.

98. Option (a) is correct

The inaugural Kho Kho World Cup was indeed held in New Delhi at the Indira Gandhi Indoor Stadium, India from January 13-19, 2025. India, the host nation for this historic first-ever Kho Kho World Cup.

The Indian women's team defeated Nepal in the final with a score of 78-40 to claim the inaugural Kho Kho World Cup title in the men's category.

The Indian men's team also emerged victorious, beating Nepal 54-36 in the women's final. This made India the champion in both men's and women's categories, completing a clean sweep for the host nation in the inaugural tournament.

99. Option (b) is correct

India's Gukesh Dommaraju became the youngest world chess champion after defeating defending champ Ding Liren (of China) in the finals of the 45th Chess Olympiad held in 2024. The finals were not against Russian player Ian Nepomniachtchi.

Abhimanyu Mishra, an American chess player of Indian origin, is the youngest chess Grandmaster in history. He achieved the title at the age of 12 years, 4 months, and 25 days in 2021.

100. Option (d) is correct

The National Automotive Board (NAB) functions under the Ministry of Heavy Industries, not the Ministry of Commerce and Industry.

The Coir Board is under the Ministry of Micro, Small and Medium Enterprises (MSME), not the Ministry of Heavy Industries.

The National Centre for Trade Information (NCTI) is a joint venture between the Ministry of Commerce and Industry and the India Trade Promotion Organisation (ITPO). It is not under the Ministry of Micro, Small and Medium Enterprises.