



GENERAL STUDIES (PAPER-I)
CURRENT AFFAIRS
CA: JANUARY 2024

Test ID

0413

Time Allowed: 1 Hour

Maximum Marks: 100

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN or MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. This Test Booklet contains **50** items (questions). Each item is printed in **English Only**. Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
3. You have to mark all your responses **ONLY** on the separate Answer Sheet (OMR sheet) provided. Read the directions in the Answer Sheet.
4. **All** items carry equal marks.
5. Before you proceed to mark in the Answer Sheet the response to various items in the Test booklet, you have to fill in some particulars in the Answer Sheet as per instructions contained therein.
6. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer Sheet**. You are permitted to take away with you the Test Booklet.
7. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

1. With reference to the X-ray Polarimeter Satellite (XPoSat) mission, consider the following statements:

1. The XPoSat is the world's first satellite designed to measure the polarisation of the X-rays emitted by various cosmic sources.
2. The mission consists of two scientific payloads placed into the Geostationary Earth Orbit.
3. The satellite is designated for observation in the medium X-ray band.

How many of the above statements is/are correct?

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

2. Consider the following statements with reference to nuclear energy:

1. Natural Uranium comprises more than 90% of the Uranium-235 isotope.
2. A nuclear reactor is said to be critical when the rate of neutron production is way less than the rate of neutron loss.
3. The Pressurised Heavy Water Reactor uses heavy water as both the coolant and the moderator.

How many of the above statements is/are correct?

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

3. Consider the following applications:

1. Creating digital maps
2. Monitoring tectonic plate activity
3. Supply chain management
4. Yield monitoring in agriculture

How many of the above is/are the application(s) of the Global Positioning System (GPS)?

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

4. The Global Partnership on AI (GPAI) is best described by which one of the following statements?

- (a) An Act passed by the European Union to regulate Artificial Intelligence.
- (b) An initiative by the G7 nations to adopt best practices on AI policy development.
- (c) A US led initiative to ban deployment of high-risk AI technology.
- (d) A multi-stakeholder initiative to promote responsible development and use of AI.

5. Consider the following statements with reference to the mutation of a virus:

1. Mutations are the errors in replicating the genetic code of the virus.
2. A virus can mutate to enhance its attachment to the host cell surfaces.
3. Certain mutations in viruses can make them less infectious.

How many of the above statements is/are correct?

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

6. Consider the following statements with reference to Quantum technology:

1. Quantum Superposition refers to the instantaneous change in the state of one qubit affecting the state of the other.
2. Quantum Entanglement allows for a parallel processing of information that classical bits cannot achieve.

Which of the statements given above is/are correct?

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

7. With reference to the office of the Governor, consider the following statements:

- 1. He can make rules for more convenient transaction of the business of a State Government.
- 2. He can make advances out of the Contingency Fund of the State to meet any unforeseen expenditure.
- 3. He acts as the Chancellor of the Universities in the State.

How many of the above comes / come under the executive powers of the Governor of a State?

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

8. With reference to the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, consider the following statements:

- 1. It provides the right of ownership, collect, use and dispose of the minor forest produce, including the timber forest produce.
- 2. It ensures protection of land by restricting selling, transfer or inheritance.

Which of the statements given above is/are correct?

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

9. With respect to the Aspirational Districts Programme, consider the following statements:

- 1. It is a flagship Programme anchored by NITI Aayog in 2018 to transform the most backward districts in the country.
- 2. NITI Aayog releases 'delta ranking' every month to assess the progress achieved in the Key Performance Indicators (KPIs).

Which of the statements given above is/are correct?

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

10. With reference to the recently passed Bharatiya Nyaya Sanhita (BNS), 2023, consider the following statements:

- 1. It repealed Section 377 of the Indian Penal Code (IPC), 1860 which criminalized homosexuality.
- 2. It brought organized crime under the realm of ordinary criminal law.
- 3. The BNS provisions codify offences linked to mob lynching and hate-crime murders.

How many of the above statements is/are correct?

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

11. With reference to the National Anti-Doping Agency, consider the following statements:

- 1. It was established as a Registered Society under the Societies Registration Act, 1860.
- 2. It is the coordinating agency for UNESCO's Convention Against Doping in Sport and compliance for obligations placed by the Convention.
- 3. It works under the overall control of the Ministry of Home Affairs.

How many of the above statements is/are correct?

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

12. With respect to the Post Office Act, 2023, consider the following statements:

1. It empowers the Union Government to appoint an officer in-charge to 'intercept, open, or detain' any postal article only on the grounds of security of the state.
2. It exempts the Post Office from incurring any liability related to its services.

Which of the statements given above is/are correct?

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

13. With reference to the Foreigners Tribunals, consider the following statements:

1. Under the Foreigners Act, 1946, such Tribunals have been constituted to determine whether an individual is a foreigner or not.
2. Only the Union Government can constitute the Foreigners Tribunals.
3. These Tribunals have the powers of both, the civil court and the criminal court.

How many of the above statements is/are correct?

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

14. With reference to the withdrawal and suspension of a Member of the Parliament, consider the following statements:

1. If the Speaker is of the opinion that the conduct of any member is disorderly.
2. If a member disregards the authority of the Chair, or abuses the rules of the House by persistently and willfully obstructing the business thereof.

Which of the above is/are the ground(s) mentioned under the Rules of Procedure and Conduct of Business in Lok Sabha?

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

15. Consider the following statements with respect to the admission, withdrawal and removal of strangers from the Parliament:

1. The admission of strangers during the sittings of the House shall be regulated in accordance with the orders made by the Union Government.
2. An authorized officer of the Secretariat shall remove any stranger from the portion of the precincts of the House, which is reserved for the exclusive use of the members.

Which of the statements given above is/are correct?

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

16. With reference to the registration of political parties, consider the following statements:

1. The registration of political parties is governed by the provisions of the Representation of the People Act, 1950.
2. The application for registration should be submitted to the Election Commission within 120 days following the date of formation of the party.
3. There is no provision of de-registering a political party once it gets registered with the Election Commission.

How many of the above statements is/are correct?

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

17. With reference to the heritage and culture of India, consider the following pairs:

S.N.	Folk dance	State associated with
1.	Kunitha	Maharashtra
2.	Cheraw	Mizoram
3.	Raut Nacha	Odisha

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

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

18. Consider the following statements with reference to the scientific developments during the ancient Indian period:

1. Varahamihira authored 'Hastyayurveda', which is associated with veterinary science.
2. Charak, who contributed to the science of Ayurveda, was the court physician of the Kushan ruler Kanishka.
3. The 'Rasachikitsa system' contributed to the treatment of diseases using mineral medicines.

How many of the above statements is/are correct?

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

19. With reference to the cultural history of India, consider the following statements:

1. 'Ayagapata', a votive slab, central to Jain worship, developed under the Gandhara School of Sculptures.

2. 'Lohanipur Torso', a sandstone statue of the Jain Tirthankara, was found in Madhya Pradesh.

Which of the statements given above is/are correct?

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

20. Consider the following statements with reference to the folk painting tradition in India:

1. The Warli paintings from Maharashtra have been granted the Geographical Indication (GI) tag.
2. Traditionally, the Warli art was practised by the 'Suvasinis', belonging to the Warli tribe.
3. The central theme of the Warli art revolves around the tribal goddess 'Ma Mansa'.

How many of the above statements is/are **incorrect**?

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

21. With reference to the resolution passed at the Calcutta Town Hall on 7th August, 1905, which one of the following statements is correct?

- (a) The Indian National Congress was formally split into two groups, i.e., the Moderates and the Extremists.
- (b) The resolution disapproved the formation of separate electorates based on religion.
- (c) The Swadeshi Movement was formally launched in response to the Government's decision to partition Bengal.
- (d) The resolution, for the first-time, mentioned Swaraj as the goal of the Congress.

22. Consider the following:

1. The Global River Cities Alliance
2. Nature Solutions Finance Hub
3. Phase-down of coal
4. Methane emission cuts

How many of the above is/are India-led initiative(s)?

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

23. With reference to the Green Credit Programme, consider the following statements:

1. It is inspired by the 'Lifestyle for Environment' movement.
2. It is a market-based instrument limited to the Public Sector Undertakings.
3. It will focus solely on CO₂ emissions reductions.

How many of the above statements is/are **incorrect**?

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

24. In the context of volcanoes, consider the following pairs:

S.N.	Volcanic eruption	Description
1.	Mantle plume	A linear volcanic vent through which lava erupts, usually without any explosive activity.
2.	Fissure eruption	A buoyant mass of material in the mantle, which rises because of its buoyancy.
3.	Geysers	Openings at the surface where

		volcanic gases and vapours are emitted.
4.	Fumaroles	Hot spring that intermittently spout jets of steam and hot water.

How many of the above pairs is/are **incorrectly** matched?

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

25. With reference to the Climate Vulnerable Forum, consider the following statements:

1. It is an international partnership of the countries highly vulnerable to a warming planet.
2. India is one of the members in the Asia and the Pacific region.

Which of the statements given above is/are correct?

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

26. With reference to river Teesta, consider the following statements:

1. It originates from the Angsi Glacier in the Himalayan mountains.
2. River Rangeet is a tributary of river Teesta.
3. It falls into the Brahmaputra river in West Bengal.

How many of the above statements is/are correct?

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

27. With reference to the National Logistics Policy of 2022, consider the following statements:

1. It aims to bring the cost of logistics in India comparable to the global benchmarks by 2030.
2. It endeavours to improve the Logistics Performance Index ranking of India - to be among top 15 countries by 2030.

Which of the statements given above is/are correct?

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

28. With reference to the Indian National Rupee, consider the following:

1. Brings down the transaction costs.
2. Reduces dependency on foreign currencies.
3. Enhances vulnerability to external shocks.

How many of the above is/are consequence(s) of trade in Indian Rupee?

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

29. Which of the following statements **does not reflect** the benefits of the Domestic Corporate Bond Market?

- (a) Reduces pressure on the government for financing infrastructure projects.
- (b) Diversifies the risks in the financial system.
- (c) Facilitates intermediation in the banking system.
- (d) Reduces the foreign currency exposures for the businesses.

30. With reference to the Countervailing Duty (CVD), consider the following statements:

1. The Countervailing Duty rectifies the situation of the goods being exported by a country at a price lower than its normal value.

2. The WTO's 'Agreement on Agriculture' allows the importing countries to impose the CVD.

Which of the statements given above is/are correct?

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

31. With reference to the Remission of Duties and Taxes on Exported Products Scheme (RoDTEP), consider the following statements:

1. It provides for rebates only on the hidden direct costs incurred by the exporters.
2. All direct exporters of goods are eligible to take benefit under this Scheme.
3. The Scheme is being administered by the Ministry of Commerce and Industry.

How many of the above statements is/are correct?

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

32. Which of the following organizations provides concessional financial support to its low-income members through the Poverty Reduction and Growth Trust (PRGT)?

- (a) The Asian Development Bank
- (b) The International Monetary Fund
- (c) The United Nations Development Programme
- (d) The World Bank

33. With reference to the Mississippi river, consider the following statements:

1. The river lies within the United States and Mexico.

2. It drains into the Gulf of Mexico.
3. Its major tributaries are the Illinois river, the Missouri river and the Red river.

How many of the above statements is/are correct?

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

34. With reference to the Namdapha Flying Squirrel, consider the following statements:

1. It is a diurnal flying squirrel.
2. It is endemic to Arunachal Pradesh.
3. It is herbivorous and feeds on fungi.
4. Its known habitat is on the hill slopes within the catchment area of the Dihing river.

How many of the above statements is/are correct?

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

35. With reference to the Indian Tent Turtle, consider the following statements:

1. It is a species of carnivorous saltwater turtle.
2. It is native to India, Nepal and Bangladesh.
3. Pangshura Tentoria is one of the sub-species of the Indian Tent Turtle.

How many of the above statements is/are **incorrect**?

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

36. With reference to the UNESCO Global Geopark, consider the following statements:

1. It is a single, unified geographical area where sites and landscapes are managed with the concept of sustainable development.

2. The designation of a Geopark is permanent.

3. India does not have any UNESCO Global Geopark.

How many of the above statements is/are correct?

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

37. With reference to the Ennore Creek, consider the following statements:

1. It is situated along the Coromandel Coast.
2. The northern channel of the Creek connects to the Kolleru Lake.
3. The Kosasthalaiyar river passes through the Creek.

How many of the above statements is/are correct?

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

38. With reference to the policy for the use of land acquired under the Coal Bearing Areas (Acquisition and Development) Act, 1957, consider the following statements:

1. The policy provides a framework for the utilization of the lands that are no longer suitable or economically viable for coal mining activities.
2. Under the policy, the government coal PSUs can deploy private capital in joint projects for coal and energy-related infrastructure development activities.
3. The lands will be considered for activities, such as setting up washeries, coal gasification, fisheries activities and coal-to-chemical plants.

How many of the above statements is/are correct?

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

39. With reference to the UN Global crisis response group (GCRG), consider the following statements:

1. It was established by the UN Secretary-General in response to food, energy and finance crises in the world.
2. India has joined as a member of the Global Crisis Response Group (GCRG).
3. The UN Global crisis response group is overseen by the United Nations Security Council.

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

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

40. With respect to the UN Convention against Transnational organised crimes (UNTOC), consider the following statements:

1. It was the first international convention to fight transnational organized crime, trafficking of human beings, and terrorism.
2. India has signed but not ratified the convention.
3. The United Nations Office on Drugs and Crime (UNODC) acts as custodian of the UNTOC and its protocols.
4. Its decisions are legally binding on its member countries.

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

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

41. 'Camp David Accords' sometimes mentioned in news, is associated with

- (a) a pair of interim agreements for the safe transportation of grain and foodstuffs from Ukrainian ports.
- (b) resolution of disputed islands between China and Philippines.
- (c) extraction of critical mineral resources from Arctic Sea.
- (d) framework for a peace in the Middle East region.

42. With reference to the Organization of the Petroleum Exporting Countries (OPEC), consider the following statements:

1. It is a permanent and intergovernmental organization created by the Baghdad conference.
2. Approval of a new member country requires agreement by three-quarters of OPEC's existing members, including all of the founding members.
3. The OPEC Fund for International Development is the only globally mandated development institution that provides financing from member countries to non-member countries exclusively.

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

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

43. With reference to the Economic Community of West African States (ECOWAS), consider the following statements:

1. It was established by Government of fifteen West African Countries by the signing of Treaty of Lagos.
2. It aims to create a single, large trading bloc through economic cooperation.

3. The Authority of Heads of State of ECOWAS is the supreme institution of the Community whose decisions are binding on the community.

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

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

- 44.** With reference to the India-ASEAN (The Association of Southeast Asian Nations) relations, consider the following statements:

- 1. A Free Trade Agreement between India and the ASEAN was signed in 2009.
- 2. India has a favourable trade balance with the ASEAN.
- 3. India is a member of the ASEAN Regional Forum.

How many of the above statements is/are correct?

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

- 45.** Consider the following statements with reference to the International Criminal Police Organization (INTERPOL):

- 1. The National Investigating Agency is the National Central Bureau for INTERPOL in India.
- 2. In the New Delhi Session of INTERPOL, 'Metaverse', designed for law enforcement worldwide, was launched.
- 3. 'Red Notice' is issued to provide warning about a person's criminal activities.

How many of the above statements is/are correct?

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

- 46.** Consider the following statements:

- 1. Article 99 of the United Nations Charter mandates the Secretary General to bring to the notice about any matter threatening international peace.
- 2. Article 41 of the United Nations Charter authorizes the Security Council to imposed sanctions on the nations in case of 'Act of Aggression'.

Which of the statements given above is/are correct?

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

- 47.** Consider the following statements with reference to the 'European Union':

- 1. Croatia and Ukraine are the new members of the European Union.
- 2. To become a member of the European Union, the country must fulfill the 'Copenhagen Criteria' of 1993.
- 3. France and Germany were the founding members of the European Union.

How many of the above statements is/are correct?

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

- 48.** Regarding the 'Financial Stability Board', consider the following statements:

- 1. It has released the 'Crypto-asset Intermediaries Report' to regulate the multi-function crypto-asset intermediaries (MCIs) operating globally.
- 2. The Financial Stability Board was established by the Group of Seven (G7) intergovernmental forum.

Which of the statements given above is/are correct?

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

49. Consider the following statements:

1. Saudi Arabia, Eritrea, Ethiopia and Yemen are the countries sharing border with the Red Sea.
2. The Red Sea is an inlet of the India Ocean, connected through the Bab-el-Mandeb Strait and the Gulf of Aqaba.
3. The Sinai Peninsula is located to the south of the Red Sea.

How many of the statements given above is/are **incorrect**?

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

50. With reference to the 'Treaty on the Non-Proliferation of Nuclear Weapons' (NPT), which one of the following statements is correct?

- (a) Under the Treaty, only NPT nuclear weapon states can have nuclear material and technology for civilian and defense purposes.
- (b) The International Atomic Energy Agency (IAEA), entrusted with the key verification responsibilities, is a party to the Treaty.
- (c) The Comprehensive Safeguards Agreement (CSA) is required to be signed only by the nuclear weapon state, party to the Treaty.
- (d) India, Pakistan and Israel never joined the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

Answers & Explanations *of*

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**ANSWERS & EXPLANATIONS OF
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1. Answer: (a)

Explanation:

- The X-ray Polarimeter Satellite (XPoSat) is India's first dedicated satellite (polarimetry mission) to study the polarisation of cosmic X-rays and various dynamics of bright astronomical X-ray sources, like pulsars, black holes and neutron stars.
- **XPoSat is the world's second polarimetry mission using X-ray, the first being NASA's Imaging X-ray Polarimetry Explorer, launched in 2021.**
- **XPoSat is designated for observation from the Low Earth Orbit (~650 km altitude) in the medium X-ray band (8 to 30keV).**
- The lifespan of the mission is 5 years.
- **It carries two scientific payloads:**
 - POLIX (Polarimeter Instrument in X-rays) will observe about 40 bright astronomical sources, and measure the degree and angle of polarisation.
 - XSPECT (X-ray Spectroscopy and Timing) will observe a variety of sources, like X-ray pulsars, black hole binaries, low-magnetic field neutron stars, active galactic nuclei, and conduct fast timing and high spectroscopic resolution in a soft X-ray energy band (0.8-15 keV).
- The polarisation measurements – angular and degree of polarisation – are believed to provide information about the bright X-ray emitting sources, the nature of these radiations and the complex process they undergo.

2. Answer: (a)

Explanation:

- **Naturally occurring Uranium is composed of three major isotopes:**
 - **Uranium-238** (primary composition, 99.284% natural abundance);
 - **Uranium-235 (0.711%);** and
 - Uranium-234 (0.005%).
- **A nuclear reactor is said to be critical when the number of neutrons produced in nuclear fission reactions equals the number of neutrons lost through absorption, leakage and other processes.** This equilibrium state allows for a sustained and controlled chain reaction.
- Presently, India operates 22 nuclear reactors across eight sites, with a total capacity of 6,780 MW. Among these, 18 reactors are Pressurised Heavy Water Reactors and 4 are Light Water Reactors. A Pressurised Heavy Water Reactor commonly uses unenriched natural uranium as its fuel and heavy water (deuterium oxide, D₂O), as both the coolant and the moderator.

3. Answer: (d)

Explanation:

- 'Global Positioning System' (GPS) is a satellite-based navigation system. It is a network of satellites and receiving devices that allows the users to determine their precise location (in latitude, longitude and altitude) and obtain accurate time information anywhere on the Earth.
- **The applications of GPS include:**
 - **Terrestrial, aerial and marine navigation.** For example, location-

based services in mobile devices, visual and voice navigation for drivers.

- **Vehicle tracking and supply chain management.**
- **Mapping, survey and geodetic measurements.** For example, mapping of terrains, creating digital maps, and conducting land surveys, terrestrial navigation aid for hikers and travellers.
- **Precision agriculture.** For example, yield monitoring, variable rate application of fertilisers and pesticides.
- **Meteorology.** For example, GPS receivers on weather balloons and satellites provide data on atmospheric conditions to monitor and predict weather patterns more accurately.
- **Seismology:** To monitor ground movements and tectonic plate activity, aiding in earthquake research and early warning systems.
- **Disaster management.**
- **Military operations:** GPS for navigation, target tracking and coordination of operations.

4. Answer: (d)

Explanation:

- **The Global Partnership on AI (GPAI) is a multi-stakeholder initiative which aims to bridge the gap between theory and practice on Artificial Intelligence (AI) by supporting cutting-edge research and fostering international collaboration for responsible AI development.**
- It was launched in June, 2020.
- India is a founding member of the GPAI.
- **Members:** Presently, the GPAI has 29 members, including Australia, Canada, France, Germany, India, the

United Kingdom, the United States, the European Union, among others.

- The GPAI has a Council and a Steering Committee, supported by a Secretariat, hosted by the Organization for Economic Co-operation and Development (OECD), and two Centres of Expertise (in Montreal and in Paris).

5. Answer: (c)

Explanation:

- Mutation of a virus means that it is acquiring genetic changes. During replication, the virus copies its genetic material (usually RNA or DNA) to create new copies of itself (replicates). Sometimes, errors happen in the replication of the virus's genetic code, and these mistakes can lead to changes in the virus's genetic code, which are called mutations.
- Viruses may mutate to:
 - Make the virus more replicative (virulent) and reproduce faster.
 - Attach better to the surfaces of the target host cells.
 - Move from host to host more effectively.
 - Evade immune system and vaccines.
- However, some mutations could make the virus less replicative or less infectious. In some cases, these mutations can even make the virus unable to replicate at all.

6. Answer: (b)

Explanation:

- **Quantum Superposition:** Superposition is a phenomenon in quantum computing that allows the qubits to simultaneously exist in more than one location or state at one time, while remaining as a single entity. Thus, superposition enables the qubits to perform multiple operations simultaneously, making

them faster than the conventional computers.

- **Quantum Entanglement:** When two or more particles become entangled, the state of one particle becomes linked with the state of the other(s), regardless of the distance between them. Changes to the state of one particle instantaneously affect the state of the other. Entangled qubits in a quantum computer can be manipulated collectively, allowing for the parallel processing of information in a way that classical bits cannot achieve.

7. Answer: (b)

Explanation:

The Governor of a State possesses executive, legislative, financial and judicial powers, more or less analogous to the President of India. However, he does not have diplomatic, military or emergency powers like the President.

- He can make rules for more convenient transaction of the business of a State Government and for the allocation among the Ministers of the said business. (Executive power).
- He acts as the Chancellor of the Universities in the State. He also appoints the Vice-Chancellors of the Universities in the State. (Executive power).
- **He can make advances out of the Contingency Fund of the State to meet any unforeseen expenditure. (Financial power).**

8. Answer: (d)

Explanation:

Rights recognized under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA 2006):

- The individuals cultivating land for their livelihood, even without available documents, can claim a minimum of 4 hectares under the Act.

- The individuals can claim land rights even if their land has been illegally occupied by the Forest Department, or is under dispute with the Forest Revenue Department, provided they present a *Patta* or a government lease.
- **The Act ensures the protection of land by restricting selling or transfer, except through inheritance.**
- **It provides the rights to use minor, traditionally collected forest products, such as *Tendu Patta*, herbs, or medicinal plants, excluding timber to prevent deforestation.**
- The Act enlists places like grazing grounds and water bodies, that can be used by the forest dwellers.
- Special provision is made for the traditionally nomadic or pastoralist communities, that do not follow the settled agriculture practices.

9. Answer: (c)

Explanation:

The Aspirational Districts Programme:

- Launched in January, 2018, the Aspirational Districts Programme (ADP) aims to quickly and effectively transform 112 most under-developed districts across the country.
- **The broad contours of the Programme are:**
 - (i) Convergence (of the Central and State Schemes);
 - (ii) Collaboration (of the Central, State-level Nodal Officers and District Collectors); and
 - (iii) Competition among the districts through monthly 'delta ranking', all driven by a mass movement.
- With the States as the main drivers, this Programme focuses on the strength of each district, identifying low-hanging fruits for immediate improvement and measuring progress by ranking the districts on a monthly basis.

- The ranking is based on the incremental progress made across 49 Key Performance Indicators (KPIs) under 5 broad socio-economic themes - Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development and Infrastructure.

10. Answer: (c)

Explanation:

The Bharatiya Nyaya Sanhita (BNS), 2023:

- The BNS (2023) introduces Clause 69 that seems to ostensibly tackle the “love jihad” narrative by criminalizing “deceitful” promise to marry.
- The BNS provisions codify offences linked to mob lynching and hate-crime murders, for cases when a mob of five or more individuals commits murder based on factors such as race, caste, community, or personal belief.
- For the first time, tackling organized crime is brought under the realm of ordinary criminal law.
- Section 377 of the Indian Penal Code, which criminalized homosexuality among other “unnatural” sexual activities, has been repealed under the BNS, 2023.

11. Answer: (b)

Explanation:

The National Anti-Doping Agency (NADA):

- NADA was established by the Government of India as a Registered Society in 2004, under the Societies Registration Act, 1860, with the objective of acting as the National Anti-Doping Organization for India.
- The National Anti-Doping Act (2022) constituted NADA as a statutory body.
- NADA promotes, coordinates and monitors the doping control programme in sports in all its forms in India.

- It regulates anti-doping activities in sports.
- It is the coordinating agency for UNESCO’s Convention Against Doping in Sports and compliance for obligations and commitment placed by the Convention.

12. Answer: (b)

Explanation:

The Post Office Act, 2023:

- The Act seeks to replace the Indian Post Office Act, 1898, and simplify the legislative framework to facilitate the evolution of India Post into a citizen-centric service network. This legislation is an attempt to ensure the effective functioning of the Postal Department as a messenger service and as a provider of banking facilities.
- It states that India Post will have the exclusive privilege over issuing postage stamps.
- The Act exempts the Post Office from incurring any liability related to its services. It specifically stipulates that no officer shall incur any liability, unless the officer has acted fraudulently or willfully caused any loss, delay, or mis-delivery of service.
- **The Post Office Act, 2023, empowers the Union Government to appoint an officer in-charge who is empowered to ‘intercept, open, or detain’ any postal article on grounds, such as the security of the state, friendly relations with foreign states, public order, emergency, public safety, or contravention of the provisions of the Act or any other laws.**

13. Answer: (a)

Explanation:

The Foreigners Tribunals:

- The Central Government; the State Government; the Union Territory administration; the District Collector, or the District Magistrate can refer questions about a person's foreigner status to a Tribunal for its opinion.

- The appeals related to the Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003, can be made to the designated Tribunal.
- **The Tribunals have the powers of a civil court under the Code of Civil Procedure.**
- **The Ministry of Home Affairs (MHA) has amended the Foreigners (Tribunals) Order, 1964, and has empowered the District Magistrates in all States and Union Territories to set up Tribunals to decide whether a person staying illegally in India is a foreigner or not. Earlier, the powers to constitute Tribunals were vested only with the Centre.**

14. Answer: (c)

Explanation:

The Rules of Procedure and Conduct of Business in Lok Sabha:

- **Withdrawal:** The Speaker, if is of the opinion that the conduct of any member is grossly disorderly, may direct such member to withdraw immediately from the House, and any member so ordered to withdraw shall do so forthwith and shall remain absent during the remainder of the day's sitting.
- **Suspension of Member:** The Speaker, may, if deems it necessary, name a member who disregards the authority of the Chair, or abuses the rules of the House by persistently and willfully obstructing the business thereof.

15. Answer: (b)

Explanation:

The Rules of Procedure and Conduct of Business in Lok Sabha provide for the admission, withdrawal and removal of strangers under the following rules:

- **The admission of strangers during the sittings of the House to those portions of the House which are not reserved for the exclusive use of members shall be regulated in**

accordance with the orders made by the Speaker.

- The Speaker, whenever thinks fit, may order the withdrawal of strangers from any part of the House.
- An officer of the Secretariat, authorized in this behalf by the Speaker, shall remove from the precincts of the House or take into custody, any stranger seen therein or who may be reported to such officer to be, in any portion of the precincts of the House which is reserved for the exclusive use of the members, and also any stranger who, having been admitted into any portion of the precincts of the House, misconducts or willfully infringes the regulations made by the Speaker under Rule 386 or does not withdraw when the strangers are directed to withdraw under Rule 387 while the House is sitting.

16. Answer: (a)

Explanation:

Registration of political parties in India:

- Any association or body of individual citizens in India, intending to be recognized as a political party, must apply to the Election Commission for registration.
- **The registration of political parties is governed by the provisions of Section 29A of the Representation of the People Act, 1951.**
- **A party seeking registration under the said Section with the Election Commission has to submit an application to the Commission within a period of 30 days following the date of its formation in prescribed format.**

Note: The Election Commission of India (ECI) is not empowered to de-register the political parties, which are registered under Section 29A of the Representation of the People Act, 1951.

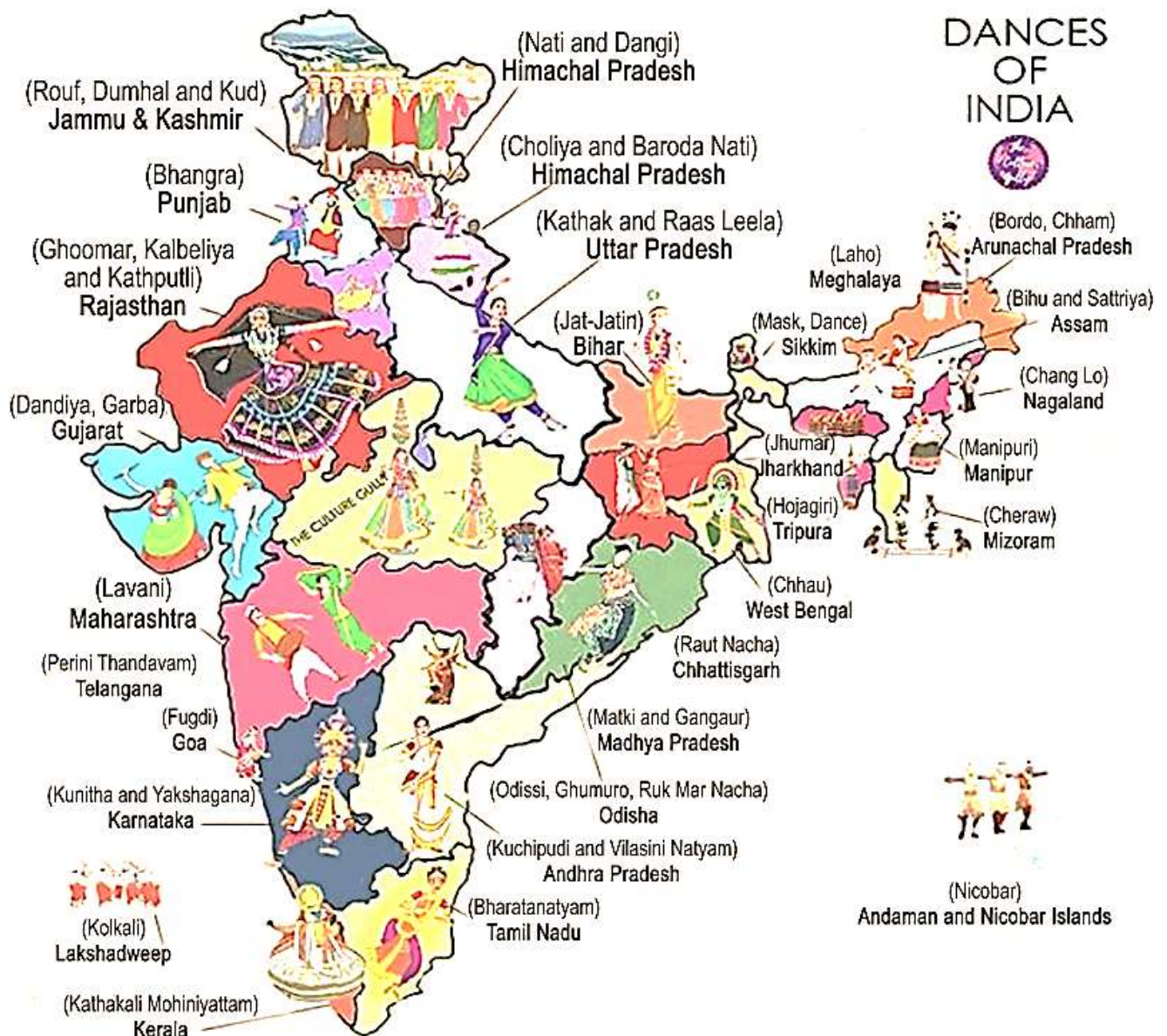
17. Answer: (a)

Explanation:

Kunitha: Dollu Kunitha is a folk dance that originated from the Kuruba community in Karnataka. Dollu and Kunitha mean drum and dance, respectively. The group dances around the performance area in a semi-circle to the beat of the drums and other instruments. The Kuruba community is traditionally an agrarian and herding community. They live in Karnataka, Tamil Nadu, Andhra Pradesh and Telangana.

Cheraw: Cheraw, or the Bamboo dance, is a part of the tradition of Mizoram, characterized by the use of bamboo staves to set the rhythm for the dancers. The dance is believed to have existed since the 1st century CE. The women dancers wear a *Thihna* (necklace), a *Vakiria* (head-dress made of bamboo and decorated with bright objects, such as feathers), and *Kawrchei* (blouse), and *Puanchei* (sarong). The men wear a *Bandana* and *Mizo shawl*.

Raut Nacha: Mainly performed by the Yadava clan, the folk dance of Raut Nacha originated from the state of Chhattisgarh. During the end of the auspicious festival of Diwali, this sacred dance is presented to worship the Lord of cowherds, Krishna or 'Gopinath'. The dance imitates Lord Krishna's dance or 'Rasa Leela' with the 'Gopis', and is believed as a devotional performance.



18. Answer: (b)

Explanation:

India's contributions to the world's material culture include the techniques of algebra and algorithm, the concept of zero, the technique of surgery, the concepts of atom and relativity, the herbal system of medicine, etc., which all signify India's legacy of scientific ideas.

Atharva Veda is considered as the first book that has mentioned about the diseases, their cure and medicines. It has mentioned cure for diarrhoea, sores, cough, leprosy, fever and seizure.

Around 600 BC, practical and more rational cure to diseases emerged. Two centres for medicinal learning emerged: Takshila and Varanasi.

Varahamihira has mentioned about metallic preparations for the purpose of the medicine and references has been made about the use of mercury. Navanitakam, a medical work, gives manual of recipes, formulation and prescriptions.

Palakapya authored Hastayurveda (on veterinary science), which exemplifies the advances made in medical science during the Gupta period.

In the medieval period, Sarangdhara Samhita, written in the 13th century, emphasized on the use of opium in medicines and for urine examination in laboratories.

Charak was the court physician of the Kushan king Kanishka. He authored Charaka Samhita. It mainly deals with the science of Ayurveda science, which has the following eight components: Kaya Chikitsa (General Medicine); Kaumara-Bhrtiya (Paediatrics); Shalya Chikitsa (Surgery); Salakya Tantra (Ophthalmology/ENT); Buta Vidya (Demonology/Psychiatry); Agada Tantra (Toxicology); Rasayana Tantra (Aphrodisiacs); and (Elixirs) Vajikarana Tantra. Charaka has put more emphasis on prevention, rather than cure. It also

mentions about 'genetics'. He is regarded as the "Father of Indian Medicine".

The Rasachikitsa system dealt with the treatment of diseases using mineral medicines.

19. Answer: (d)

Explanation:

Jain paintings and sculptures often revolve around common themes, such as the Tirthankaras, Yakshas, Yakshinis and symbolic representations, like the lotus and the Swastika, embodying notions of peace and well-being.

The Mathura School of Sculptures: Jain sculptures in the Mathura School depict Jina in various poses, including seated and standing, with distinctive emblems for different Tirthankaras. **The School contributed reliefs, known as Ayagapata (a votive slab, central to Jain worship, adorned with symbols like the Stupa, Dharmacakra and Triratna).**

Lohanipur Torso (Patliputra, Bihar): A polished sandstone statue of a Jain Tirthankara.

Gopachal Rock-Cut Jain Monuments (Gwalior Fort, Madhya Pradesh): Depict the Tirthankaras in seated Padmasana and Kayotsarga postures.

Vasantgarh Hoard (Rajasthan): A discovery of 240 Jain bronze idols, showcasing the Tirthankaras and the Jain deities of the Shwetambara sect.

20. Answer: (a)

Explanation:

The Warli painting tradition, named after the Warli people. Traditionally, the Warli art was practised by the Suvasinis, the women of the Warli tribe, who adorned the wedding square, or the *Lagn Chowk*, with joyous depictions related to marriages. The art bears striking similarities to Bhimbetka's mural paintings in Madhya Pradesh. The Warli

paintings revolve around a central motif, known as 'Chauk' or 'Chaukat,' featuring scenes of fishing, hunting, farming, dances, animals, trees and festivals. The male gods in the Warli paintings represent the spirits in human form, while Palaghata, the goddess of fertility, holds a prominent place. The equilibrium depicted in human and animal representations, using inverse triangles, symbolizes the balance of the universe.

The Registrar of Geographical Indications at Intellectual Property Office at Chennai has granted the status of proprietor of the Geographical Indications (GI) for the world famous Warli paintings from Maharashtra.

The Paitkar paintings, or scroll paintings, (Jharkhand) represent one of the ancient schools of paintings in India. Culturally associated with Ma Mansa, a revered goddess in the tribal households, this art form carries deep cultural significance.

21. Answer: (c)

Explanation:

The Swadeshi Movement (1905): The British Government's decision to partition Bengal was made public in December, 1903. The idea was to have two provinces: Bengal comprising Western Bengal, as well as the provinces of Bihar and Orissa; and Eastern Bengal and Assam. Western Bengal retained Calcutta as its capital, while Dacca became the capital of Eastern Bengal. Within days, protest meetings were held in small towns all over Bengal. It was in these meetings that the pledge to boycott foreign goods was first taken. On August 7, 1905, with the passage of the Boycott Resolution in a massive meeting held in the Calcutta Town Hall, the formal proclamation of Swadeshi Movement was made. After this, the leaders dispersed to other parts of Bengal to propagate the message of

boycott of Manchester cloth and Liverpool salt.

Calcutta Session of Congress, 1906 (Presided over by Dadabhai Naoroji):

Four resolutions were adopted: Swaraj; Boycott Movement; National Education; and Swadeshi. Swaraj was first articulated as the Congress's goal. It was declared that the goal of the Indian National Congress was "self-government, or Swaraj, like the United Kingdom or the colonies of Australia or Canada."

The Moderate-Extremist dispute over the pace of the Swadeshi Movement and techniques of struggle reached a deadlock at the Surat Session of the Indian National Congress (1907), where the party split with serious consequences for the Swadeshi Movement.

The Lahore Session of Congress, 1909, was led by Madan Mohan Malaviya. The Session disapproved the formation of separate electorates based on religion (The Indian Councils Act, 1909).

22. Answer: (a)

Explanation:

India led initiatives:

- **The Global River Cities Alliance (GRCA), led by the National Mission for Clean Ganga (NMCG), under the Ministry of Jal Shakti, Government of India, was launched at COP 28.**

- o This unique Alliance covers 275+ global river-cities in countries (India, Egypt, the Netherlands, Denmark, Ghana, Australia, Bhutan, Cambodia, Japan, and Hungary).
- o International funding agencies, the World Bank; the Asian Development Bank (ADB); and the Asian Infrastructure Investment Bank (AIIB).
- o First of its kind in the world.

- o Sustainable river-centric development.
- o In 2021, the River Cities Alliance (RCA) was launched as a dedicated platform for the river cities in India to ideate, discuss and exchange information for sustainable management of the urban rivers.
- o Headquarters in India.

Nature Solutions Hub: For Asia and the Pacific, launched by the Asian Development Bank, to proactively scale-up the flow of public and private finance into conserving nature and biodiversity loss in Asia and the Pacific.

Phase-down of coal: There was a move to stipulate that no new coal fired power plants could be opened without an in-built carbon capture and storage facility, but this was strongly resisted by India, China, South Africa and other countries. It was dropped, and finally the Glasgow language was reiterated. There is nothing about how this phase-down is to be measured, or from what baseline.

Methane emission cuts: The agreement talks about “accelerating and substantially reducing non-carbon dioxide emissions globally, including, in particular, methane emissions by 2030”.

Methane is the most widespread greenhouse gas, apart from CO₂, accounting for nearly 25 per cent of all emissions. It is also about 80 times more potent than CO₂ in causing global warming. Methane emission reductions can, therefore, bring substantial benefits. But several countries, including India, are extremely opposed to any mandate to cut methane emissions, mainly because one of the major sources happens to be agriculture and livestock. The agreement does not mention any targets for methane emission cuts for the year 2030, although a group of about 100 countries had made a voluntary commitment, in Glasgow in 2021, to reduce their methane emissions by 30% by 2030.

23. Answer: (b)

Explanation:

The Green Credit Initiative:

- o It envisions the issue of Green Credits for plantations on waste/degraded lands and river catchment areas, to rejuvenate and revive the natural eco-systems.
- o Fully digital and tradable instrument for environmental sustainability.

The Green Credit Programme:

- An initiative within the government's broader 'Lifestyle for Environment' or the LiFE movement.
- **Market-based instrument to encourage voluntary environmental actions across various sectors, involving individuals, industries and local bodies.**
- It utilizes Green Credits as distinctive units assigned to specific environmental activities, which function as tradable commodities, which can be sold on a domestic market platform.
- **While the domestic carbon market focuses solely on CO₂ emission reduction, the Green Credit System aims to meet other environmental obligations as well, incentivizing sustainable actions by the companies, individuals and local bodies.** Those earning it will be able to put these credits up for sale on a proposed domestic market platform.
- The Programme identifies eight specific activities: Tree plantation, water conservation, sustainable agriculture, waste management, air pollution reduction, mangrove conservation and restoration, Eco Mark (a government scheme for identifying environmentally friendly products), and sustainable building and infrastructure.
- The administration of the Green Credit Programme is entrusted to the Indian Council of Forestry Research and Education.

24. Answer: (d)

Explanation:

Fissure eruption: A fissure vent, also known as a volcanic fissure, eruption fissure or simply a fissure, is a linear volcanic vent through which lava erupts, usually without any explosive activity. The vent is often a few metres wide and may be many kilometres long. Fissure vents can cause large flood basalts, which run first in lava channels and later in lava tubes.

Mantle plume: It is a buoyant mass of material in the mantle, which rises because of its buoyancy. The existence of mantle plumes in the Earth was first suggested by J. Tuzo Wilson (1963) as an explanation of oceanic island chains, such as the Hawaiian-Emperor chain,

which change progressively in age along the chain.

Geysers: These are hot springs that intermittently spout jets of steam and hot water. The term is derived from the Icelandic word geyser, meaning “to gush.” Geysers result from the heating of groundwater by shallow bodies of magma. They are generally associated with the areas that have seen past volcanic activity.

Fumaroles: These are the vents or openings at the surface where volcanic gases and vapours are emitted. Fumaroles are common features on active volcanoes and are an important sign that a volcano is active in that the fumaroles indicate the presence of heat from volcanic sources.

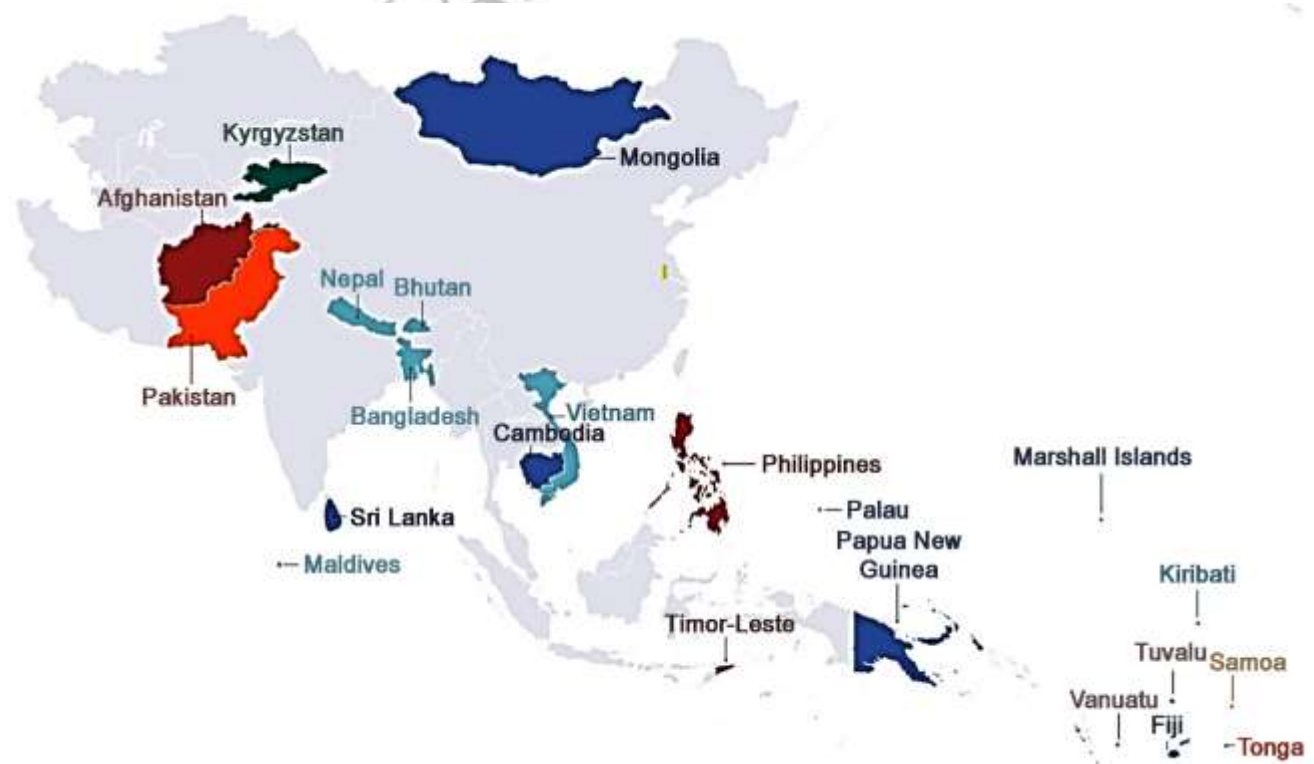
25. Answer: (a)

Explanation:

The Climate Vulnerable Forum (CVF) is an international partnership of the countries highly vulnerable to a warming planet.

- It is composed of 58 members from Africa, Asia, the Caribbean, Latin America and the Pacific.

Members in the Asia-Pacific regions:



26. Answer: (a)

Explanation:

The Brahmaputra river, known as the Yarlung Tsangpo in the Tibetan language, originates from the Angsi Glacier, near Mount Kailash, located on the northern side of the Himalayas in Burang County of Tibet.

River Rangeet originates in Sikkim, and it is a tributary of river Teesta.

The Teesta river originates from the Teesta Khangtse Glacier, west of Pahunri (or Teesta Kangse) Glacier above 5,400 m (17,700 ft) and flows southwards through gorges and rapids in the Sikkim Himalayas of the Eastern Himalayas, and West Bengal and subsequently enters Bangladesh through Rangpur division.

In Bangladesh, it falls into the Brahmaputra river, which, after meeting some other major rivers of the Bengal delta, finally falls into the Bay of Bengal.

27. Answer: (a)

Explanation:

The vision of the National Logistics Policy (2022) is: "To develop a technologically enabled, integrated, cost-efficient, resilient, sustainable and trusted logistics ecosystem in the country for accelerated and inclusive growth."

The targets for achieving the vision of the National Logistics Policy (2022) are to:

- reduce the cost of logistics in India to be comparable to the global benchmarks by 2030;
- **improve the Logistics Performance Index ranking of India - endeavour is to be among top 25 countries by 2030;** and
- create data driven decision support mechanism for an efficient logistics ecosystem.

28. Answer: (b)

Explanation:

Need for trading in the local currencies:

- **To reduce transaction costs:** When the countries import and export goods and services, they have to make payments in a foreign currency. Since the US dollar is the world's reserve currency, most of these transactions are settled in dollars. For example, if an Indian buyer enters into a transaction with a seller from Germany, the Indian buyer has to first convert his rupees into US dollars. The seller will receive those dollars, which is then converted into euro. Here, both the parties involved have to incur the conversion expenses and bear the risk of foreign exchange rate fluctuations.
- **To absorb geo-political shocks:** Geo-political tensions often create challenges in seamless trade between the countries. For example, the recent Russia-Ukraine war resulted in western sanctions on Russia, which created challenges for India to trade with Russia in dollars.
- **To reduce dependency on foreign currency:** Increasing the use of Indian rupee for cross-border transactions will not only reduce our dependency over foreign currency, but also increases the credibility of rupee in the global market, adding weight to the Indian economy.
- **To insulate from external shocks:** **Reducing dependence on foreign currency makes India less vulnerable to external shocks, like mitigating the pain of reversal of capital flows.**

29. Answer: (c)

Explanation:

Benefits of developing the Corporate Bond Market:

- **Meet investment needs:** The Economic Survey (2018-19) has highlighted that India needs to shift gears from a consumption-driven economy to an investment-led economy, wherein the private sector investment has to become the key driver of the Indian economy. The development of the Corporate Bond Market can significantly enhance the investment rates and enable India to become a \$5 trillion economy by the end of 2024-25.
- **Reduce pressure on the government and the banks:** In most international markets, such as the USA, the Corporate Bond Market is well developed, and this enables the companies to raise funds across different maturities, including for infrastructure projects with long gestation periods. In India, given the absence of a well-functioning Corporate Bond Market, the burden of financing the infrastructure projects, such as roads, ports and airports, is more on the banks and the government.
- **Asset-liability mismatch in the financial sector:** The banks use short-term deposits (3-5 years maturity period) to fund long-term infrastructure projects with long gestation period, leading to asset-liability mismatch. Thus, an active Corporate Bond Market helps in the diversification of risks in the financial system.
- **Lower cost of capital:** The Corporate Bond Markets can help the borrowers reduce their financing costs, as these markets enable the corporates to borrow money directly from the investors and facilitate bank disintermediation, thus removing the “middleman” and related costs.

- **Reduce foreign currency exposures:** The Corporate Bond Market enables the firms to borrow for longer maturity periods in the local currency to meet their investment needs and avoid foreign currency exposures.
- **Provide long-term financial assets:** An active Corporate Bond Market could provide institutional investors, such as the insurance companies and the provident & pension funds, with quality long-term financial assets, helping them in matching their assets and liabilities.

30. Answer: (d)

Explanation:

Countervailing Duty (CVD):

- The Countervailing Duties, or CVDs, are the tariffs on the imported goods that are imposed to offset the subsidies given by the exporting country's government.
- *The World Trade Organization (WTO)*'s agreement on 'subsidies and countervailing measures (SCM)' allows the importing countries to impose CVD against such subsidies which injure the domestic industry of the importing country.

What is an Anti-dumping Duty?

- Dumping is said to occur when the goods are exported by a country to another country at a price lower than its normal value. This is an unfair trade practice which can have a distortive effect on international trade.
- Anti-dumping is a measure to rectify the situation arising out of the dumping of goods and its trade distortive effect. Thus, the purpose of the Anti-dumping Duty is to rectify the trade distortive effect of dumping and re-establish fair trade.
- The use of anti-dumping measures, as an instrument of fair competition, is permitted by the WTO.

31. Answer: (a)

Explanation:

The RoDTEP Scheme:

- RoDTEP stands for the 'Remission of Duties and Taxes on Exported Products' Scheme.
- **This Scheme provides for rebates of all hidden Central, State and local duties/taxes/levies on the goods exported which have not been refunded under any other existing scheme. This does not only include the direct cost incurred by the exporter, but also the prior stage cumulative indirect taxes on goods.**
- All exporters of goods are eligible to take benefit under this Scheme. Such an exporter may either be a merchant or a manufacturer exporter. However, such goods should have been directly exported by such a person.
- **Although the Scheme was notified by the Department of Commerce, it is being fully administered by the Department of Revenue (The Ministry of Finance).**

32. Answer: (b)

Explanation:

The International Monetary Fund (IMF) provides concessional financial support to its low-income members through the Poverty Reduction and Growth Trust (PRGT), which has three lending facilities:

- **Extended Credit Facility (ECF):** Sustained medium-to-long-term engagement in case of protracted 'Balance of Payments' problems.
- **Stand-by Credit Facility (SCF):** Financing for the low-income countries with actual or potential short-term 'Balance of Payments' and adjustment needs caused by domestic or external shocks, or policy slippages. It can also be used on a

precautionary basis during the times of increased risk and uncertainty.

- **Rapid Credit Facility (RCF):** One-off disbursement for the low-income countries facing urgent 'Balance of Payments' needs.

The three facilities have different maturities and grace periods, and are currently interest-free. The interest rate on RCF financing was set permanently at zero, while the IMF reviews the interest rates for ECF and SCF facilities every two years. Currently the interest rate for these two facilities is also kept at zeros.

Just like in other facilities, lending facilities to the low-income countries under PRGT are attached with conditionalities, like adopting the policies that provide confidence that the member's 'Balance of Payments' difficulties will be resolved within a reasonable period.

33. Answer: (b)

Explanation:

The Mississippi river is a primary river, and the second-longest river, of the largest drainage basin in the United States.

The Mississippi river lies entirely within the United States. It drains into the Gulf of Mexico. Its major tributaries are the Illinois river, the Missouri river, the Ohio river and the Red river. It is also the 15th largest river by discharge in the world.

Recently, the National Mission for Clean Ganga (NMCG) has signed a 'Memorandum of Common Purpose' (MoCP) with the 'Mississippi River and Cities and Towns Initiative' (MRCTI), which represents 124 cities/towns situated along the banks of the Mississippi river.

34. Answer: (c)

Explanation:

The Namdapha Flying Squirrel is an arboreal, nocturnal flying squirrel, endemic to Arunachal Pradesh in north-

eastern India, where it is known from a single specimen collected in the Namdapha National Park in 1981.

Its known habitat is the tall Mesua Ferrea jungles, often on the hill slopes in the catchment area of the Dihing river (particularly on the western slope of the Patkai range) in north-eastern India.

It is herbivorous and feeds upon fruits, flowers, sap, seeds, nuts and fungi.

35. Answer: (a)

Explanation:

The Indian Tent Turtle is a species of riverine freshwater turtle native to India, Nepal and Bangladesh. The males are smaller than the females in size, and have longer and thicker tails.

Due to attractive appearance of the species, they are illegally traded in the pet market. These are active swimmers and are mainly herbivorous.

The Indian Tent Turtles have three sub-species:

- **Pangshura Tentoria:** It occurs in Peninsular India and is recorded in Odisha, Maharashtra, Andhra Pradesh, Assam and Madhya Pradesh.
- **Pangshura Circumdata:** It occurs in the western tributaries of the Ganga, and the rivers of Gujarat. Thus, it is found in Rajasthan, Madhya Pradesh, Uttar Pradesh and Gujarat.
- **Pangshura Flaviventer:** It occurs in the northern tributaries of the Ganga and is recorded from Uttar Pradesh, Bihar, West Bengal and Assam.

36. Answer: (b)

Explanation:

The UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development.

While a UNESCO Global Geopark must demonstrate geological heritage of international significance, the purpose of a UNESCO Global Geopark is to explore, develop and celebrate the links between that ecological heritage and all other aspects of the area's natural, cultural and intangible heritages.

The UNESCO Global Geoparks are given this designation for a period of four years, after which the functioning and quality of each UNESCO Global Geopark is thoroughly re-examined during a revalidation process. If, based on the field evaluation report, the UNESCO Global Geopark continues to fulfil the criteria, the area will continue as a UNESCO Global Geopark for a further four-year period (Green Card).

37. Answer: (c)

Explanation:

The Ennore Creek is a backwater located in Ennore, Chennai, along the Coromandel Coast of the Bay of Bengal. It is in the zone comprising lagoons with salt marshes and backwaters, submerged under water during high tide and forming an arm of the sea with the opening to the Bay of Bengal at the Creek.

According to the Department of Environment, the zone of the Creek is identified as a tidal waterbody, which is protected as a No Development Zone under the CRZ (The Coastal Regulation Zone) - I regulations.

The region is drained by a couple of seasonal rivers, namely, the Araniar river flowing in the north and the Kosasthalaiyar river passing through the Creek.

38. Answer: (b)

Explanation:

The Coal Bearing Areas (Acquisition and Development) Act, 1957:

- The Coal Bearing Areas (Acquisition and Development) Act, 1957, provides for the acquisition of land containing or likely to contain coal deposits and for the matters connected therewith.
- Under the provisions of this Act, the land is acquired for the government companies only for coal mining and activities, strictly incidental to mining purposes.
- For other requirements, like permanent infrastructure, offices, residences, etc., the land is acquired under the Land Acquisition Act, 1894.

The Policy for use of Land Acquired under the Coal Bearing Areas (Acquisition and Development) Act, 1957 (The CBA Act, 1957):

- The approved policy provides a framework for the utilization of the lands that are no longer suitable or economically viable for coal mining activities, or lands from which coal has been mined out/de-coaled and has been reclaimed.
- The government coal companies, such as Coal India Ltd. (CIL) and its subsidiaries shall remain the owners of these lands acquired under the CBA Act and the policy allows only leasing of the land for the specified purposes given in the policy.
- The government coal PSUs can deploy private capital in joint projects for coal and energy-related infrastructure development activities.
- The government company, which owns the land, would lease it for a specific period given under the policy and the entities for leasing will be selected through a transparent, fair and competitive bid process and mechanism, in order to achieve the optimal value.

The lands will be considered for the following activities:

- To set up coal washeries;
- To set up conveyor systems;
- To establish coal handling plants;
- To construct railway sidings;
- Rehabilitation and resettlement of the project affected families due to acquisition of the land under the CBA Act, or other land acquisition law;
- To set up thermal and renewal power projects;
- To set up or provide for coal development related infrastructure, including compensatory afforestation;
- To provide the 'Right of Way';
- Coal gasification and coal to chemical plants; and
- To set up or provide for energy related infrastructure.

39. Answer: (b)

Explanation:

UN Global crisis response group (GCRG):

- In March 2022, **UN Secretary-General António Guterres established** the UN Global Crisis Response Group in response to the unprecedented, interconnected **food, energy and finance crises** in the world.
- India has joined the Champions Group of the Global Crisis Response Group (GCRG), accepting an invitation from United Nations Secretary General (UNSG).
- The GCRG is overseen by the Champions Group comprising of HOS/ HOGs of Bangladesh, Barbados, Denmark, Germany, Indonesia and Senegal.

Note: *Its decisions are not legally binding.*

40. Answer: (c)

Explanation:

UN Convention against Transnational organised crimes (UNTOC):

- It is also called the **Palermo Convention**, which was adopted in 2000 as a multilateral treaty against transnational organized crime.
- Its decisions are **legally binding** on the member states.
- **India has signed and ratified** the convention.
- The United Nations Office on Drugs and Crime (**UNODC**) **acts as custodian of the UNTOC and its protocols.**

41. **Answer: (d)**

Explanation:

The Camp David Accords were a series of agreements negotiated between Egypt, Israel and U.S. in 1978. These accords laid the groundwork for peace between Egypt and Israel, which had been in a state of conflict since the establishment of the state of Israel in 1948.

42. **Answer: (c)**

Explanation:

43. **Answer: (c)**

Explanation:

Economic Community of West African States (ECOWAS):

- The Heads of State and Government of fifteen West African Countries established the Economic Community of West African States (ECOWAS) when they signed the ECOWAS Treaty (**Treaty of Lagos**) in **1975 in Lagos, Nigeria.**
- The **only Arabic-speaking Member Mauritania** withdrew in 2000. Mauritania recently signed a new associate-membership agreement in 2017.

MEMBER STATES



- It was set up to foster the **ideal of collective self-sufficiency** for its member states. As a **trading union**, it is also meant to create a single, large trading bloc through economic cooperation.
- Headquarters: **Abuja, Nigeria.**

Organization of the Petroleum Exporting Countries (OPEC):

- It is an organization enabling the co-operation of leading oil-producing countries in order to collectively influence the global oil market and maximize profit.
- It was founded, in 1960, in Baghdad by the first five members (**Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela**).
- The OPEC Fund for International Development (the OPEC Fund) is the only globally mandated development institution that provides financing from member countries to non-member countries exclusively.
- Headquarters: **Vienna, Austria.**
- OPEC has 12 member countries: five in the Middle East (West Asia), six in Africa, and one in South America.
- Approval of a new member country requires agreement by **three-quarters of OPEC's existing members**, including **all five of the founders.**

- It aims to promote co-operation and integration, leading to the establishment of an economic union in West Africa in order to raise the living standards of its peoples, and to maintain and enhance economic stability, foster relations-among Member States and contribute to the progress and development of the African continent.
- The Authority of Heads of State and Government of ECOWAS is the supreme institution of the Community and is composed of Heads of State and/or Government of Member States. **Decisions of the Authority are binding** on the Member States and Institutions of the Community.

44. Answer: (b)

Explanation:

The ASEAN (The Association of Southeast Asian Nations) –India Free Trade Agreement (AIFTA):

The initial Framework Agreement was signed in 2003 in Bali (Indonesia) and the final Agreement was signed in 2009. It came into effect in 2010.

The 10 member ASEAN region accounted for 11.3% of India's global trade in 2022-23. The ASEAN-India trade took over a decade to double the value of trade. The bilateral trade was \$57 billion in 2010-11, when the Free Trade Agreement (FTA) came into effect, and rose to \$131 billion, only in 2022-23. While India's exports to the ASEAN increased from \$ 25.63 billion in 2010-11 to \$ 43.51 billion in 2022-23, its imports also increased from \$ 30.61 billion to \$ 87.59 billion in the same periods.

India's trade balance with the ASEAN has deteriorated after the implementation of the FTA. India's trade deficit with the region was \$7.5 billion per annum and after the pact, it has ballooned to \$43.57 billion in FY

23. This indicates that the ASEAN has gained a trade surplus on the current account, and India has witnessed a trade deficit.

Established in 1994, the ASEAN Regional Forum (ARF) is an important platform for security dialogue in the Indo-Pacific. It provides a setting in which the members can discuss current security issues and develop cooperative measures to enhance peace and security in the region.

The ARF is characterized by consensus-based decision-making and frank dialogue.

It comprises 27 members:

- The 10 ASEAN member states [Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam];
- 10 ASEAN Dialogue Partners [Australia, Canada, China, the European Union (EU), **India**, Japan, New Zealand, the Republic of Korea (ROK), Russia and the United States];
- Bangladesh, the Democratic People's Republic of Korea, Mongolia, Pakistan, Sri Lanka, Papua New Guinea and Timor-Leste.

45. Answer: (a)

Explanation:

The International Criminal Police Organization (INTERPOL):

It is an intergovernmental organization, formed in 1923, which facilitates worldwide police cooperation and crime control. The General Assembly is its governing body. In each country, a National Central Bureau (NCB) provides the central point of contact for the General Secretariat and other NCBs. An NCB is run by the national police officials.

The headquarter of INTERPOL is situated at Lyon (France).

India's Central Bureau of Investigation (CBI) is the National Central Bureau for INTERPOL in India and coordinates all international police cooperation requirements of the Indian law enforcement agencies, via INTERPOL channels.

India, which joined INTERPOL in 1949, had hosted the 90th INTERPOL General Assembly in Delhi, in October, 2022. Significant resolutions passed at the meeting included those aimed at strengthening the collaborative response to disrupt financial crime and corruption, combating the menace of online child sexual exploitation and promoting diversity within the INTERPOL itself. INTERPOL's first 'Global Crime Trend Report' was released.

The global police organization at the New Delhi session, unveiled the first ever Metaverse, specifically designed for law enforcement worldwide. Fully operational, the INTERPOL Metaverse allows the registered users to tour a virtual facsimile of the INTERPOL General Secretariat headquarter in Lyon (France), without any geographical or physical boundaries, interact with other officers via their avatars, and even take immersive training courses in forensic investigation and other policing capabilities. The INTERPOL Metaverse is provided through the INTERPOL Secure Cloud, ensuring its neutrality.

INTERPOL notices are the international requests for cooperation or alerts allowing the police in the member countries to share critical crime-related information.



Red Notice: To seek the location and arrest of the persons wanted for prosecution or to serve a sentence.

Yellow Notice: To help locate the missing persons, often minors, or to help identify the persons who are unable to identify themselves.

Blue Notice: To collect additional information about a person's identity, location or activities in relation to a criminal investigation.

Black Notice: To seek information on unidentified bodies.

Green Notice: To provide warning about a person's criminal activities, where the person is considered to be a possible threat to public safety.

Orange Notice: To warn of an event, a person, an object or a process representing a serious and imminent threat to public safety.

Purple Notice: To seek or provide information on modus operandi, objects, devices and concealment methods used by the criminals.

INTERPOL – United Nations Security Council Special Notice: Issued for entities and individuals who are the targets of the UN Security Council Sanctions Committees.

46. Answer: (c)

Explanation:

The United Nations Charter: It is the founding document of the United Nations, which was signed on 26th June, 1945, in San Francisco, at the conclusion of the United Nations Conference on International Organization.

The UN Charter is an instrument of international law, and the UN Member States are bound by it.

The UN Charter codifies major principles of international relations, from sovereign equality of the States to the prohibition of use of force in international relations.

The International Court of Justice, the principal judicial organ of the UN, functions in accordance with the Statute of the International Court of Justice, which is annexed to the UN Charter, and forms an integral part of it.

Article 99 of the UN Charter states that, "The Secretary General may bring to the attention of the Security Council any matter which, in his opinion, may threaten the maintenance of international peace and security."

Chapter VII of the Charter: Action with Respect to Threats to the Peace, Breaches

of the Peace, and Acts of Aggression. In this chapter, Article 41 authorizes the Security Council to impose measures not involving the use of armed forces. In some cases, the Security Council can resort to imposing sanctions or even authorize the use of force to maintain or restore international peace and security.

The Security Council may decide what measures, not involving the use of armed force, are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

All members of the United Nations agree to accept and carry out the decisions of the Security Council.

While other organs of the United Nations make recommendations to the Member States, only the Security Council has the power to make decisions that the Member States are then obligated to implement under the Charter.

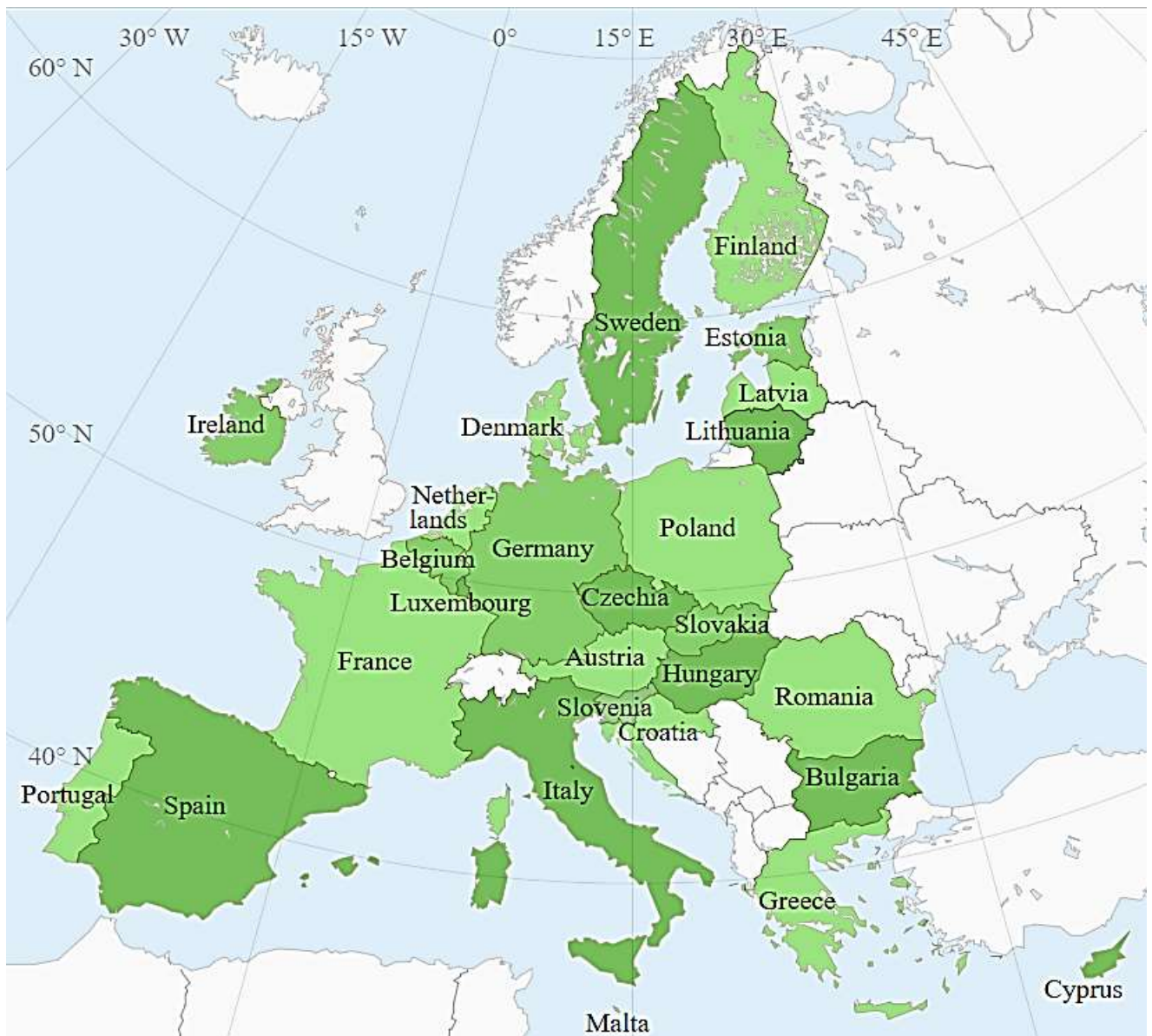
47. Answer: (b)

Explanation:

Ukraine and Moldova both applied to join the European Union (EU) in February, 2022, after Russia launched its full-scale invasion of Ukraine.

The European Union (EU):

It is a political and economic union of 27 European countries.



The Maastricht Treaty of 1993 laid the foundation of the European Union.

Belgium, France, West Germany, Italy, Luxembourg and the Netherlands were the founding members of the EU.

It was awarded the Nobel Peace Prize in 2012, for its contribution to the advancement of peace and reconciliation, democracy and human rights in Europe.

The United Kingdom became the only country to leave the EU in 2023.

Certain criteria must be met for accession. These criteria (known as the Copenhagen Criteria) were established by the Copenhagen European Council in 1993 and strengthened by the Madrid European Council in 1995.

The criteria are:

Stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of the minorities.

Functioning market economy and the ability to cope with competitive pressure and market forces within the EU.

The ability to take on the obligations of membership, including the capacity to effectively implement the rules, standards and policies that make up the body of EU law (the 'acquis'), and adherence to the aims of political, economic and monetary union.

48. Answer: (a)

Explanation:

The Financial Stability Board (FSB)'s latest report on 'Crypto-asset Intermediaries' sought measures to enhance cross-border cooperation and information sharing among the local authorities. This is to effectively regulate and address the gaps in the multi-function crypto-asset intermediaries (MCIs), operating globally.

The report highlights potential risks associated with the MCIs that combine different activities within the platform. This subjects them to structural vulnerabilities, amplified by "lack of effective controls and operational transparency, poor or no disclosures, and conflicts of interest."

The report defines the MCIs as individual firms, or groups of affiliated firms that offer a range of crypto-based services, products and functions, which primarily revolve around operating of the trading platform. The examples include Binance, Bitfinex and Coinbase. In the traditional financial landscape, the functions are provided by separate entities, instead of the same entity. This prevents potential conflict of interest and promotes market integrity, investor protection and financial stability.

The Financial Stability Board:

It is an international body that monitors and makes recommendations about the global financial system.

It was established in 2009 (at G20's Pittsburg Summit) as the successor to the Financial Stability Forum (FSF).

It promotes international financial stability. It does so by coordinating the national financial authorities and the international standard-setting bodies, as they work towards developing strong regulatory, supervisory and other financial sector policies. All G20 countries are its members.

It is hosted and funded by the Bank for International Settlements. The Board is based in Basel (Switzerland), and is established as a 'not-for-profit association' under the Swiss law.

49. Answer: (c)

Explanation:

The Red Sea is a seawater inlet of the Indian Ocean, lying between Africa and Asia. Its connection to the ocean is in the south, through the Bab-el-Mandeb Strait and the Gulf of Aden.

It is connected to the Mediterranean Sea through the Suez Canal. **It is bordered with Saudi Arabia, Yemen, Egypt, Sudan, Eritrea and Djibouti.**



Jordan shares boundary with the Red Sea through the Gulf of Aqaba.

To the north of the Red Sea, lies the Sinai Peninsula, the Gulf of Aqaba and the Gulf of Suez (leading to the Suez Canal). It is underlain by the Red Sea Rift, which is part of the Great Rift Valley.

The Sinai Peninsula, is a peninsula in Egypt, and the only part of the country located in Asia. It is between the Mediterranean Sea to the north and the Red Sea to the south, and is a land bridge between Asia and Africa.



50. Answer: (d)

Explanation:

The Treaty on the Non-Proliferation of Nuclear Weapons (also known as the Nuclear Non-Proliferation Treaty, or NPT) is an international agreement designed to prevent the spread of nuclear weapons, promote cooperation between the states on peaceful uses of nuclear energy and advance nuclear disarmament. The NPT was opened for signature in 1968, and the Treaty went into force in 1970. 191 countries are now a party to the NPT. The Treaty's term was originally 25 years, but it was extended indefinitely at a review conference in 1995.

The NPT distinguishes between 'nuclear weapons states' (NWS) and 'non-nuclear weapons states' (NNWS). The nuclear weapons states are the five states that possessed nuclear weapons when the Treaty was signed in 1968: The United States, the Soviet Union, the United Kingdom,

France and China. The Russian Federation replaced the Soviet Union as an NWS after the disintegration of the Soviet Union. Independent former Soviet states have joined the NPT as NNWS. With the exception of the five states recognized as NWS in the Treaty, the states may only join the NPT as NNWS.

Non-Proliferation: The NPT prohibits the NNWS from developing or acquiring nuclear weapons, and prohibits the NWS from transferring nuclear weapons or control of such weapons to the non-nuclear states. The NWS are also prohibited from assisting, encouraging, or inducing the NNWS to attain nuclear weapons.

Peaceful Use: The NPT allows for the exchange of nuclear material, technology and expertise to the NNWS for use in civilian nuclear programmes, as long as they do not develop nuclear weapons. The International Atomic Energy Agency (IAEA) monitors non-nuclear weapons states' civil nuclear programmes to ensure that they are not developing nuclear weapons.

While the IAEA is not a party to the NPT, it is entrusted with key verification responsibilities under the Treaty. Each non-nuclear weapon State party is required to conclude a Comprehensive Safeguards agreement (CSA) with the IAEA to enable the IAEA to verify the fulfilment of their obligation under the Treaty, with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.

Four UN member states have never accepted the NPT, three of which possess or are thought to possess nuclear weapons: India, Israel and Pakistan. In addition, South Sudan, founded in 2011, has not joined. North Korea joined the NPT in 1985, but withdrew in 2003.