

MOCK TEST 1

1) Consider the following

Assertion (A):

The Delimitation Commission's final orders cannot be challenged in any court because they are treated as having the same legal status as an Act of Parliament.

Reason (R):

The Delimitation Commission is a constitutional body established under Articles 82 and 170 of the Constitution, and therefore enjoys constitutional immunity from judicial review.

Which of the following is correct?

- a) Both A and R are true, and R is the correct explanation of A.
- b) Both A and R are true, but R is not the correct explanation of A.
- c) **A is true, but R is false.**
- d) A is false, but R is true

Exp:

Under the Delimitation Act, the Delimitation Commission's final orders have the force of law and shall not be called in question in any court. This immunity is statutory, not constitutional. Parliament itself gives this protection through the Delimitation Act. The Delimitation Commission is NOT a constitutional body. It is a statutory body created by a Delimitation Act passed by Parliament. Articles 82 and 170 only empower Parliament to enact such a law; they do not create the Commission. Therefore, the claim that it "enjoys constitutional immunity" is incorrect.

2) Statement-I: Plate tectonics explains the uneven distribution of natural resources such as petroleum, coal, and minerals.

Statement-II: Recent discoveries of hydrothermal mineral deposits along mid-ocean ridges highlight the role of tectonic activity in resource formation.

Which one of the following is correct?

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

Exp:

Both are correct. Tectonics explains resource distribution, and hydrothermal deposits are a direct example of this process

3) Consider the following statements regarding the rock art of Bhimbetka:

1. The caves of Bhimbetka were discovered by archaeologist V. S. Wakankar.

2. The mesolithic paintings of Bhimbetka are smaller than the upper paleolithic paintings.
3. In mesolithic paintings, animals were painted in a naturalistic style whereas humans were depicted only in a stylistic manner.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 and 3 only
- C. 1, 2 and 3**
- D. 1 and 3 only

Exp:

The caves of Bhimbetka were discovered in 1957–58 by eminent archaeologist V. S. Wakankar and later on, many more were discovered. Hence statement 1 is correct. The largest number of Bhimbetka paintings belong to Period II which covers the Mesolithic paintings. During this period the themes are multiple but the paintings are smaller in size compared to Upper Palaeolithic paintings. Hence statement 2 is correct. Hunting scenes predominate. The hunting scenes depict people hunting in groups, armed with barbed spears, pointed sticks, arrows and bows. In some paintings, these primitive men are shown with traps and snares probably to catch animals.

- o The hunters are shown wearing simple clothes and ornaments. Sometimes, men have been adorned with elaborate headdresses, and sometimes painted with masks also.

- o Elephant, bison, tiger, boar, deer, antelope, leopard, panther, rhinoceros, fish, frog, lizard, squirrel, and at times birds are also depicted.

- o The Mesolithic artists loved to paint animals. In some pictures, animals are chasing men. In others, they are being chased and hunted by men. Some of the animal paintings, especially in the hunting scenes, show fear of animals, but many others show a feeling of tenderness and love for them.

- o Though animals were painted in a naturalistic style, humans were depicted only in a stylistic manner. Hence statement 3 is correct.

- o Women are painted both in the nude and clothed. The young and the old equally find their place in these paintings. Children are painted running, jumping, and playing. Community dances provide a common theme.

- o There are paintings of people gathering fruit or honey from trees, and of women grinding and preparing food.

- o Some of the pictures of men, women, and children seem to depict a sort of family life. In many of the rock shelters, we find handprints, fist prints, and dots made by the fingertips.

- o The artists of Bhimbetka used many colors, including various shades of white, yellow, orange, red ochre, purple, brown, green, and black. But white and red were their favorite colors.

4) Consider the following statements regarding the Directive Principles of the state policy (DPSPs) in the Indian Constitution:

Statement I: DPSPs aim to establish the political democracy in the country.

Statement II: The ideal of the welfare state in the Indian constitution is enshrined in the DPSPs.

Which one of the following is correct in reference to the above statements?

(a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I

(b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I

(c) Statement-I is correct but Statement-II is incorrect

(d) Statement-I is incorrect but Statement-II is correct

Exp:

Political democracy is ensured by Fundamental Rights , Universal adult franchise, Independent judiciary Free & fair elections. These belong to Part III and the broader constitutional structure. DPSPs (Part IV) aim at social and economic democracy, not political democracy. They promote welfare, reduce inequalities, ensure social justice, etc. The Constitution explicitly states that India shall be a welfare state, and this vision is operationalized through Directive Principles. Articles like 38, 39, 41, 42, 43, 47 directly reflect welfare-state goals. So Statement II is correct.

5) Consider the following statements regarding the Republican nature of the Indian state:

1. India became a republic state with the enactment of the Indian Independence Act of 1947.
2. The republic means that all citizens are equal in the eyes of the law.
3. The Republican nature ensures that all public offices are open to every citizen without any discrimination.

How many of the statements given above are correct?

(a) Only one

(b) Only two

(c) All three

(d) None

Exp:

The Indian Independence Act, 1947 created two Dominions (India & Pakistan) with the British Crown still the nominal head (Governor-General representing the Crown). India became a Republic only on **26** January 1950, when the Constitution came into force. So Statement 1 is wrong. Equality before law is a feature of Rule of Law (Article 14), not the definition of a Republic. A Republic means the head of state is elected, not hereditary. So Statement 2 is **incorrect**. The Republican nature ensures that all public offices are open to every citizen without any discrimination. It is reflected in **Article 16** (equality of opportunity in public employment). So Statement 3 is **correct**.

6) Consider the following statements:

1. Carvaka sect is one of the orthodox (astika tradition) school of Indian philosophy
2. Makkhali Ghosa is considered as the founder of Ajivika sect.
3. The Lomas Rishi caves were patronized by Bindusara for the Ajivika sect.

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

A. Only one

B. Only two

- C. All three
- D. None

Exp:

Carvaka is one of the nāstika or "heterodox" schools of Indian philosophy. Hence statement 1 is not correct. Makkhali Gosala is considered as its founder in 5th century BCE. Several rock-cut caves belonging to Ajivika are dated to the times of the Mauryan emperor Ashoka who patronized the Ajivika sect. Hence statement 2 is correct. The rock-cut cave carved at Barabar hills near Gaya in Bihar is known as the Lomas Rishi cave. The facade of the cave is decorated with the semicircular chaitya arch as the entrance. It was carved during the Ashokan period of the Maurya Empire in the 3rd century BC. Hence statement 3 is not correct. The elephant frieze carved in high relief on the chaitya arch shows considerable movement. The interior hall of this cave is rectangular with a circular chamber at the back.

7) Consider the following statements:

Statement-I: Rights under articles 14 and 19 cannot be violated for implementing any of the Directive Principles of State Policy (DPSP)

Statement-II: The Supreme Court in Minerva Mills Case declared the balance between DPSPs and fundamental rights as part of the basic structure of the Indian Constitution

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

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I.
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect
- (d) Statement-I is incorrect but Statement-II is correct**

Exp:

Under the Indian Constitution, there was a constitutional provision- Article 31C-that protected certain laws implementing Directive Principles of State Policy (DPSPs) from being challenged on the ground that they violate Fundamental Rights under Articles 14 and 19. Currently, only laws made to implement Article 39(b) and 39(c) can receive protection from challenge under Articles 14 and 19. Therefore, "Rights under Articles 14 and 19 cannot be violated for implementing any DPSP" is **incorrect**. Rights under Articles 14 and 19 may be restricted only for laws implementing the DPSPs contained in Article 39(b) and 39(c), subject to Article 31C.

8) In the context of British expansion in India during the late 18th century, the battles of Adas, Aras, Wadgaon were fought in the course of

- A. The First Anglo-Sikh War
- B. The First Anglo-Maratha War**
- C. The First Anglo-Afghan War
- D. The First Anglo-Burmese War

Exp:

The battles of Adas, Aras, and especially Wadgaon (1779) were fought during this conflict between the British and the Marathas. The war began due to British support to Raghunath Rao in Maratha succession disputes. The Battle of Wadgaon was a significant Maratha victory, forcing the British to sign the Convention of Wadgaon. The conflict finally ended with the Treaty of Salbai (1782), restoring relative balance

9) Which of the following was not the achievement of the moderate phase of the Indian National Congress?

- A. They exposed the basic exploitative character of the British rule.
- B. They widened their democratic base through increase in scope of their demands.**
- C. They trained people in political work through popularization of modern ideas.
- D. They created a feeling of a common nation to rally against a common enemy.

Exp:

The moderate phase of the Indian National Congress can be analysed in the following manner:

- The early nationalists did a great deal to awaken the national sentiment, even though they could not draw the masses to them.
- They represented the most progressive forces of the time.
- They were able to create a wide national awakening of all Indians having common interests and the need to rally around a common program against a common enemy, and above all, the feeling of belonging to one nation.
- They trained people in political work and popularised modern ideas.
- They exposed the basically exploitative character of colonial rule, thus undermining its moral foundations.
- Their political work was based on hard realities, and not on shallow sentiments, religion, etc.
- They were able to establish the basic political truth that India should be ruled in the interest of Indians.
- They created a solid base for a more vigorous, militant, mass-based national movement in the years that followed.
- However, they failed to widen their democratic base and the scope of their demands.
- The moderate phase of the national movement had a narrow social base and the masses played a passive role. This was because the early nationalists lacked political faith in the masses; they felt that there were numerous divisions and subdivisions in Indian society, and the masses were generally ignorant and had conservative ideas and thoughts. The Moderates felt that these heterogeneous elements had first to be welded into a nation before they entered the political sphere. But they failed to realize that it was only during a freedom struggle and with political participation that these diverse elements could come together. Hence, option B is the correct answer.

10) The concept of asymmetric federalism has been adopted by the Indian constitution.

Which feature of the Indian federal arrangement highlights the concept of asymmetric federalism?

- (a) Establishment of an independent judiciary
- (b) Bicameralism at the Centre
- (c) Separation of powers between the Centre and the states

(d) Special provisions for some states in the Constitution

Exp:

The concept of **asymmetric federalism** means that different states in a federation may have different powers, responsibilities, or constitutional provisions based on their unique historical, cultural, geographical, or political circumstances.

In India, this is reflected through:

- Special constitutional provisions for certain states under articles like **Articles 371 to 371J**
- Earlier special status of Jammu and Kashmir under Article 370
- Special protections for northeastern states such as Nagaland, Mizoram, etc

11) 'Coccolithophores', frequently mentioned in the news in the context of ocean acidification and the global carbon cycle, belong to which of the following taxonomic groups?

- A) Cnidarians
- B) Echinoderms
- C) Molluscs
- D) Haptophyta**

EXP:

- Option D is Correct: Coccolithophores are single-celled, marine phytoplankton (microalgae) that belong to the phylum Haptophyta. They are universally famous for being covered in microscopic chalk (calcium carbonate) plates called coccoliths. They are heavily mentioned in climate news because they are the largest producers of calcium carbonate in the oceans, making them a critical component of the global carbon cycle (sequestering carbon when they die and sink). However, because their protective plates are made of calcium carbonate, they are highly vulnerable to dissolving due to rising ocean acidification.

12) The term "Black Mass", frequently mentioned in recent news, is best described as:

- A) A highly toxic, carbon-dense bottom ash byproduct generated during the flue-gas desulfurization process in modern coal-fired thermal power plants.
- B) The intermediate, mineral-rich powdery residue obtained after shredding end-of-life lithium-ion batteries, essential for recovering critical metals.**

- C) A recently hypothesized super-dense state of dark matter believed to be responsible for gravitational lensing anomalies observed around rogue galaxies.
- D) An agglomeration of deeply decomposed microplastics and crude oil sludge that permanently settles into the abyssal plains of the ocean floor.

Exp:

- Option B is Correct: "Black Mass" is the crucial industry term for the material created during the recycling process of end-of-life EV and electronic lithium-ion batteries. When old batteries are collected, discharged, and mechanically shredded, they produce a dark, powdery substance. This 'black mass' is incredibly valuable as it contains high concentrations of critical minerals like lithium, cobalt, nickel, and manganese. This mass is then subjected to hydrometallurgical or pyrometallurgical processes to extract these purified metals to build brand new batteries, driving the "circular economy."
- Option A is Incorrect: This distractor plays on terms like "coal ash," "fly ash," and "carbon-dense residue." While thermal power plant pollution is a favorite UPSC topic, the byproduct of desulfurization is typically synthetic gypsum, not "black mass."
- Option C is Incorrect: This plays on the literal translation of the words. UPSC often includes a space or astrophysics distractor for ambiguous terms (similar to past questions on "Event Horizon" or "Goldilocks Zone").
- Option D is Incorrect: This distractor targets the recent current affairs surrounding marine pollution, deep-sea mining, and the UN High Seas Treaty, making it sound like a plausible ecological disaster term.

13) Who among the following women served as Presidents of the Indian National Congress?

1. Annie Besant
2. Sarojini Naidu
3. Nellie Sengupta
4. Sucheta Kriplani

Select the correct answer using the code given below.

- A. 1 and 2 only
- B. 1, 2 and 3 only**
- C. 1, 3 and 4 only
- D. 2, 3 and 4 only

Exp:

The first woman to preside over the Congress was Annie Besant, a British-born theosophist, social reformer, and leader of the Home Rule League.

○ Her election as president in 1917 symbolized the growing assertiveness of Indian nationalism during World War I and also the space for women in political leadership.

- Sarojini Naidu became the first Indian woman to preside over the Congress. A gifted poet and powerful orator, she was deeply involved in the Gandhian phase of the national movement.
 - o Her presidency in 1925 marked the Congress's recognition of Indian women as equal participants in the struggle.
- A remarkable figure, Nellie Sengupta was British by birth but threw herself into India's struggle for independence after marrying Jatindra Mohan Sengupta, a nationalist leader from Bengal.
 - o In 1933, when most senior Congress leaders were in prison following the Civil Disobedience Movement, she was chosen to preside over the Calcutta session. Her election was both symbolic and practical, demonstrating the Congress's resilience under repression.
- Although Sucheta Kriplani was a prominent freedom fighter and later became the first woman Chief Minister of an Indian state (Uttar Pradesh, 1963), she was never elected as president of the INC.

14) Consider the following statements regarding 'Zero Liquid Discharge' (ZLD) systems:

1. They produce zero solid waste by completely vaporizing the industrial effluents.
2. They are highly energy-intensive and significantly increase a plant's carbon footprint.
3. The CPCB mandates them exclusively for 'Red Category' highly polluting industries.

How many of the above statements are correct?

- A) Only one
- B) Only two**
- C) All three
- D) None

Exp:

- Statement 1 is Incorrect: This is the biggest misconception about ZLD. You cannot vaporize salt and heavy metals. When the water is boiled off, the system leaves behind massive amounts of highly toxic, concentrated solid sludge that must be dumped in secure landfills. It converts liquid waste into solid waste; it does not eliminate it.
- Statement 2 is Correct: To recover pure water, ZLD forces effluent through extreme high-pressure Reverse Osmosis (RO) membranes and massive thermal boilers. This consumes huge amounts of electricity (often coal-based), actually driving up the plant's operational costs and carbon emissions.
- Statement 3 is Correct: Because it is so expensive and energy-hungry, the Central Pollution Control Board (CPCB) does not force every industry to use it. It is strictly

mandated only for massive water-guzzling and highly toxic sectors (the 'Red Category'—like tanneries, distilleries, and textile dyeing units).

15) The 'Right to be Forgotten' in India, has been judicially recognised as falling under the scope of:

- a) Article 14
- b) Article 19
- c) Article 20
- d) Article 21

Exp:

The Right to be Forgotten has been judicially recognized in India as part of the Right to Privacy, which falls under Article 21 (Right to Life and Personal Liberty) of the Indian Constitution.

16) This constitutional principle dictates that 'what cannot be done directly by the legislature cannot be done indirectly'. It comes into play when a legislature lacks the competence to enact a law on a particular subject but attempts to do so under the guise of exercising another legislative power.

Which one of the following doctrines is described above?

- a) Doctrine of Severability
- b) Doctrine of Harmonious Construction
- c) Doctrine of Eclipse
- d) Doctrine of Colourable Legislation**

Exp:

- The Doctrine of Colourable Legislation is built upon the legal maxim: “Quando aliquid prohibetur ex directo, prohibetur et per obliquum” (What cannot be done directly, cannot be done indirectly). It is applied when a legislature, while appearing to act within its jurisdiction, actually transcends its constitutional powers. In a federal setup like India, where power is divided between the Centre and States (Seventh Schedule), this doctrine prevents one legislature from "disguising" a law to encroach upon the subject matter of another.
- Option A is Incorrect: The Doctrine of Severability (derived from Article 13) states that if a particular provision of a statute is found to be unconstitutional, the entire Act does not become void. Only the offending part is struck down, provided that the remaining portion is capable of standing on its own and functioning effectively without the severed part.
- Option B is Incorrect: The Doctrine of Harmonious Construction is a rule of interpretation used when two or more provisions of the Constitution or a statute appear to be in conflict with each other. The court attempts to interpret them in a way that gives effect to both, ensuring that the law is read as a whole and no provision is rendered "dead letter" or redundant.

- Option C is Incorrect: The Doctrine of Eclipse pertains to pre-constitutional laws. If a law enacted before 1950 became inconsistent with the newly inaugurated Fundamental Rights, it was not considered dead but merely "eclipsed" or dormant. If a subsequent constitutional amendment removes the inconsistency, the "eclipse" is lifted, and the law becomes active and enforceable again.

17) With reference to the religious history of India, consider the following statements:

1. Jainism embodies the philosophy of Anekantavada.
2. Both Buddhism and Jainism reject the authority of the Vedas.
3. Madhyamaka and Yogacara are sub- schools of Jainism.

Which of the statements given above are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Exp:

Jainism is built on the concept of Anekantavada, which means "non-absolutism" and states that reality is complex, multifaceted, and can only be fully understood from multiple viewpoints, rather than a single absolute truth. This doctrine encourages tolerance, open-mindedness, and a deeper understanding by acknowledging that every perspective offers a partial truth about a complex reality, fostering harmony and co-existence rather than conflict. Hence, statement 1 is correct.

Buddhism and Jainism are Sramana traditions and are distinct from Vedic orthodox Hinduism. They do not accept the Vedas as supreme authority and instead focus on personal experience, ethical conduct, and liberation. This rejection of Vedic authority is a hallmark of these non-orthodox Indian traditions. Hence, statement 2 is correct. Madhyamaka (Middle Way) and Yogacara (Consciousness-Only) are Mahayana Buddhist schools, not Jain sub-schools. Madhyamaka is a major Mahayana Buddhist philosophical tradition founded by the Indian philosopher Nagarjuna, which emphasizes the "middle path" (madhyamaka) and the doctrine of sunyata (emptiness). Yogacara focuses on mind and consciousness as the basis of reality. Hence, statement 3 is not correct.

18) Consider the following statements regarding the advisory jurisdiction of the Supreme Court of India:

1. The Advisory jurisdiction of the Supreme Court in the Constitution of India is sourced from the Government of India Act, of 1935
2. Legal opinions of the Supreme Court under advisory jurisdiction are binding on the President of India.
3. It is obligatory for the Supreme Court to provide advisory opinions sought by the President.

How many of the statements given above are correct?

(a) Only One

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

Exp:

The advisory jurisdiction under **Article 143** was indeed inspired by provisions in the Government of India Act 1935. Advisory opinions given under Article 143 are **not binding** on the President. They are persuasive in nature. The Supreme Court may decline to answer a Presidential Reference. Hence, it is **not mandatory** for the Court to provide an opinion.

19) Which of the following countries have a coastline on the Black Sea?

- 1. Romania
- 2. Bulgaria
- 3. Serbia
- 4. Georgia
- 5. Moldova

Select the correct answer:

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

Exp:

Countries having a coastline on the Black Sea are Romania, Bulgaria, Georgia, Russia, Ukraine, Turkey. Serbia and Moldova are Landlocked.

20) Consider the following statements regarding a cave site in India:

- 1. The site consists exclusively of Buddhist caves depicting both Hinayana and Mahayana traditions.
- 2. The caves are famous for their mural paintings illustrating Jataka tales and the life of the Buddha.
- 3. The caves were primarily excavated during the Satavahana and Vakataka periods.

Which of the above statements correctly describe the site?

- A. Bagh
- B. Hatigumpha
- C. Ajantha**
- D. Ellora

Exp:

Ajanta consists entirely of Buddhist caves and reflects both Hinayana and Mahayana phases of Buddhism. It is especially renowned for its exquisite mural paintings depicting Jataka tales and various events from the life of the Buddha. The caves were excavated mainly during the Satavahana period (early phase) and later under the Vakataka rulers, particularly Harisena. Statement 4 is incorrect because the monolithic Kailasa temple dedicated to Shiva is found at Ellora, not Ajanta.

Bagh Caves — Buddhist caves with paintings, but not exclusively fitting all features as precisely as Ajanta.

Hatigumpha — famous for Kharavela inscription, not Buddhist mural caves.

Ellora Caves — includes Buddhist, Hindu, and Jain caves, so not exclusively Buddhist

21) He ruled not only over Sindh, Kutch and Gujarat, but had also recovered from the Satavahanas Konkan, the Narmada valley, Malwa and Kathiawar. He is famous in history because of the repairs he undertook to improve the Sudarshan lake in the semi- arid zone of Kathiawar. He was a great lover of Sanskrit. Although a foreigner settled in India, he issued the first-ever long inscription in chaste Sanskrit.

Which of the following is best described in the passage given above?

- A. Gondophernes
- B. Rudradaman I**
- C. Kanishka
- D. Narasimhavarman

Exp:

Although Sakas established their rule in different parts of the country, only those who ruled in western India held power for any considerable length of time, for about four centuries or so. The most famous Saka ruler in India was Rudradaman I (AD 130-150) He ruled not only over Sindh, Kutch and Gujarat, but had also recovered from the Satavahanas Konkan, the Narmada valley, Malwa and Kathiawar. He is famous in history because of the repairs he undertook to improve the Sudarsana lake in the semi-arid zone of Kathiawar. This lake had been in use for irrigation for a long time and was as old as the time of the Mauryas. Rudradaman was a great lover of Sanskrit. Although a foreigner settled in India, he issued the firstever long inscription in chaste Sanskrit. Hence, option (b) is the correct answer.

22) Consider the following pairs:

Rulers Origin

1. Shakas Tamilakam
2. Palas Western India
3. Gangas Kashmir and Utrakhand

How many of the pairs given above are correctly matched?

- A. Only one pair
- B. Only two pairs
- C. All three pairs

D. None of the pairs

Exp:

The Shakas were of Central Asian origin, not Tamilakam.

The Pala Empire belonged to eastern India (Bengal–Bihar), not Western India.

The Western Ganga dynasty were native to southern India, not Kashmir and Uttrakhand.

23) Consider the following:

1. Dominion status
2. Responsible government at centre
3. Joint electorates
4. Linguistic provinces

How many of the above were the recommendations of the Nehru Report?

- A. Only one
- B. Only two
- C. Only three
- D. All four**

Exp:

- As an answer to Lord Birkenhead's challenge, an All Parties Conference met in February 1928 and appointed a subcommittee under the chairmanship of Motilal Nehru to draft a constitution. This was the first major attempt by the Indians to draft a constitutional framework for the country.

- The Nehru Report confined itself to British India, as it envisaged the future link-up of British India with the princely states on a federal basis. For the dominion it recommended:

- o Dominion status on lines of self-governing dominions as the form of government desired by Indians.

- o Rejection of separate electorates which had been the basis of constitutional reforms so far; instead, a demand for joint electorates with reservation of seats for Muslims at the Centre and in provinces where they were in minority (and not in those where Muslims were in majority, such as Punjab and Bengal) in proportion to the Muslim population there with right to contest additional seats.

- o Linguistic provinces.

- o Nineteen fundamental rights including equal rights for women, right to form unions, and universal adult suffrage.

- o Responsible government at the Centre and in provinces-

- > The Indian Parliament at the Centre to consist of a 500-member House of Representatives elected on the basis of adult suffrage, a 200-member Senate to be elected by provincial councils; the House of Representatives to have a tenure of 5 years and the Senate, one of 7 years; the central government to be headed by a governor-general, appointed by the British government but paid out of Indian revenues, who would act on the advice of the central executive council responsible to the Parliament.

- > Provincial councils to have a 5-year tenure, headed by a governor acting on the advice of the provincial executive council.

Full protection to cultural and religious interests of Muslims.

Complete dissociation of State from religion. Hence, option (d) is the correct answer.

24) Consider the following pairs:

Terms	Description
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1. Dawa : Horse run postal system
2. Dahsala : Land revenue system
3. Zimmis : Religious scholars

How many of the above pairs are correctly matched?

- A. **Only one pair**
- B. Only two pairs
- C. All three pairs
- D. None of the pairs

Exp:

Non muslims subjects during Delhi Sultanate period had been given the status of zimmis or protected people i.e., those who accepted the Muslim rule and agreed to pay tax called jizyah. Hence, pair 3 is correctly not matched.

Ibn Battuta in his book 'Rihla' explained the unique system of communication of India which impressed him very much. In India, the postal system was of two kinds. The horse post, called uluq, is run by royal horses stationed at a distance of every four miles. The foot-post has three stations per mile; it is called dawa. Hence, pair 1 is incorrectly matched. In 1580, Akbar instituted a new land revenue system called dahsala. Under this system, the average produce of different crops as well as average prices prevailing over the last ten (dah) years were calculated. One-third of the average share was state's share. Hence, pair 2 is correctly matched.

25) Consider the following statements regarding the powers of a High Court in issuing judicial orders against a State Government:

1. A High Court may issue writs under Article 226 not only for the enforcement of Fundamental Rights but also for "any other purpose," including directing the State Government to perform statutory duties.
2. Orders of the High Court are binding on all authorities within the territory of the State, and non-compliance may amount to contempt of court.
3. The High Court cannot issue directions to the State Government in matters involving policy decisions, even if such decisions violate constitutional provisions.
4. Under Article 227, the High Court has the power of superintendence over all courts and tribunals within the State, except those constituted under laws relating to the armed forces.

How many of the above statements are correct?

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

Exp:

Courts generally avoid interfering in policy matters, but they can intervene if a policy violates the Constitution, is arbitrary, or infringes legal rights. so third statement is incorrect

26) Consider the following statements about the Ibn Battuta:

1. Ibn Battuta was a Moroccan traveler who visited India in the fourteenth century.
2. He was appointed as qazi of Delhi by Alauddin Khalji.
3. He wrote a book of travels called 'Rihla' in Arabic.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1 and 3 only**

Exp:

- Ibn Battuta was born in Tangier into one of the most respectable and educated families known for their expertise in Islamic religious law or sharia.
- Traveling overland through Central Asia, Ibn Battuta reached Sind in 1333. He had heard about Muhammad bin Tughlaq, the Sultan of Delhi, and lured by his reputation as a generous patron of arts and letters, set off for Delhi, passing through Multan and Uch. The Sultan was impressed by his scholarship, and appointed him the qazi or judge of Delhi. Hence, statement 2 is not correct.
- Ibn Battuta's book of travels, called Rihla, written in Arabic, provides extremely rich and interesting details about the social and cultural life in the subcontinent in the fourteenth century. Hence, statements 1 and 3 are correct.

27) Consider the following statements regarding Article 142 of the Constitution of India:

1. Article 142 empowers the Supreme Court to pass any decree or order necessary for doing complete justice in any cause or matter pending before it.
2. The powers under Article 142 allow the Supreme Court to override statutory provisions even in matters where the law is explicit and unambiguous.
3. Orders passed under Article 142 are enforceable throughout the territory of India.
4. Article 142 can be invoked by the Supreme Court even in cases where no fundamental right is involved.

How many of the above statements are correct?

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

Exp:

The Supreme Court's powers under Article 142 are wide but not unlimited. It cannot be used to completely override substantive statutory law in a manner that contradicts legislation's core provisions. The Court has itself emphasized that Article 142 must not be used to supplant or ignore express law. So second statement is incorrect.

28. Consider the following architectural structures:

1. Shivneri fort
2. Khanderi fort
3. Rajgad Fort

4. Kumbhalgarh fort

How many of the above are part of the Maratha Military Landscapes of India, a UNESCO World Heritage Site?

- A. Only one
- B. Only two
- C. Only three**
- D. All four

Exp:

Maratha Military Landscapes of India inscribed in UNESCO's World Heritage list.

- Maratha Military Landscapes of India

- o Spanning from the 17th to 19th centuries CE, Maratha Military Landscapes of India is an extraordinary network of twelve forts that demonstrates the strategic military vision and architectural ingenuity of the Maratha Empire.

- o Spread across the states of Maharashtra and Tamil Nadu, the selected sites, include Salher, Shivneri, Lohgad, Khanderi, Raigad, Rajgad, Pratapgad, Suvarnadurg, Panhala, Vijaydurg, and Sindhudurg in Maharashtra, along with Gingee Fort in Tamil Nadu. Hence, options 1,2 and 3 are correct.

- o Kumbhalgarh, also known as the Great Wall of India, is a fortress located on the western range of the Aravalli Hills in Kumbhalgarh, Rajsamand district, Rajasthan, India. Located approximately 48 km from Rajsamand and 84 km from Udaipur, the fort was constructed in the 15th century by Rana Kumbha. Hence option 4 is not correct.

29) Consider the following statements about Padma Awards, one of the highest civilian honours in India:

1. It is instituted in 1954 and announced every year on the eve of Republic Day.
2. It can be used as a suffix or prefix to the awardees' name
3. The selection process includes public nominations, including self-nominations.
4. Padma Awards Committee, constituted by the Prime Minister every year recommends the awards every year.
5. Govt Servants including civil servants are eligible for Padma Awards.

Which among of the above statements are correct?

- A. 1, 2, 4 and 5 only
- B. 3, 4 and 5 only
- C. 3 and 4 only**
- D. 1, 3, 4 and 5 only

Exp:

1. It is instituted in 1954 and announced every year on the eve of Republic Day except for interruption(s) during years 1978, 1979, and 1993-1997.

2. It cannot be used as a suffix or prefix to the awardees' name(Art 18)

3. The selection process includes public nominations, including self-nominations.

4. Padma Awards Committee, constituted by the Prime Minister every year recommends the awards every year.

5. Govt Servants including civil servants are ineligible for Padma Awards.

- Excluded: Serving government employees, PSU employees, and those working in autonomous bodies funded by the government.
- Exceptions: Doctors and scientists are eligible, even if they work for the government.

- Eligible Personnel: Private individuals, professionals, and retired government employees are eligible

30) Match List-I (Strait) with List-II (Countries it separates / connects):

List-I: Strait

List-II: Location / Countries

- | | |
|-------------------------|---|
| A. Strait of Hormuz | 1. Oman and Iran |
| B. Bab-el-Mandeb Strait | 2. Djibouti/Eritrea and Yemen |
| C. Strait of Malacca | 3. Indonesia and Malaysia |
| D. Bosphorus Strait | 4. Separates European Turkey and Asian Turkey |

Select the correct matching combination:

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

Exp:

A. Strait of Hormuz → 1. Oman and Iran

Connects the Persian Gulf with the Gulf of Oman/Arabian Sea.

B. Bab el Mandeb Strait → 2. Djibouti/Eritrea and Yemen

Connects the Red Sea with the Gulf of Aden.

C. Strait of Malacca → 3. Indonesia and Malaysia

Lies between the Malay Peninsula and Sumatra.

D. Bosphorus Strait → 4. Separates European Turkey and Asian Turkey

Connects the Black Sea to the Sea of Marmara.

31) With reference to the Panchayati Raj system in India, consider the following statements:

1. The term “Gram Sabha” has well defined in the Constitution of India.
2. All the seats in panchayat shall be filled by persons chosen by direct election from territorial constituencies in panchayat area.
3. Disputes relating to Panchayat elections can be challenged only through an election petition before an authority determined by the State Legislature.

Which of the statements given above is/are correct?

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

Exp:

1. **“Gram Sabha” is well defined in the Constitution**

Article 243(b) of the Constitution defines Gram Sabha as a body consisting of persons registered in the electoral rolls relating to a village comprised within the area of a Panchayat. Statement 1 is correct.

2. **All seats in Panchayats are filled through direct elections**

Article 243C provides that all seats in a Panchayat shall be filled by persons chosen by direct election from territorial constituencies in the Panchayat area. Statement 2 is correct.

3. **Panchayat election disputes are challenged only through election petitions**

Article 243O bars interference by courts in Panchayat elections except through an election petition presented to an authority and in a manner provided by the State Legislature. Statement 3 is correct. Therefore, all three statements are correct.

32) Consider the following statements:

1. Womesh Chandra Bonnerjee was the first President of the Indian National Congress.
2. Mahatma Gandhi has presided over only one session of the Indian National Congress.
3. Mahadev Govind Ranade has never presided over any session of the Indian National Congress.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3**

Exp:

• Womesh Chandra Bonnerjee was the first President of the Indian National Congress. He presided

over the inaugural session of the Congress in 1885 at Bombay (venue: Gokuldas Tejpal Sanskrit college). Hence, statement 1 is correct.

• Mahatma Gandhi presided over the 39th session of the Indian National Congress held in Belgaum (now Belagavi) in December 1924. This was the only session he ever presided over. The

session was significant for its emphasis on national unity and communal harmony, and it marked a pivotal moment in India's freedom struggle. Hence, statement 2 is correct.

• Mahadev Govind Ranade (18 January 1842–16 January 1901), popularly referred to as Nyayamurti Ranade (Justice Ranade), was an Indian scholar, social reformer, judge and author. He was one of the founding members of the Indian National Congress party but never presided over any session of the Indian National Congress. Although he had held several designations such as Member of the Bombay Legislative Council and Member of the Finance Committee at the Centre. He was also a judge of the Bombay High Court, Maharashtra. Hence, statement 3 is correct.

33) Who among the following had given the title of ‘Mahatma’ to Jyotibha Phule?

- A. Vithalrao Krishnaji Vandekar**
- B. B.R Ambedkar
- C. Gopal Ganesh Agarkar
- D. Dadabhai Naoroji

Exp:

• Jyotiba Phule was an Indian social activist, anti-caste social reformer and writer. Phule and his wife, Savitribai Phule, were pioneers of women's education in India. In 1848, he started the first school for girls in Pune. Jyotiba was an influential figure during a time when women and Shudras were denied their rights. Phule founded the Satyashodhak Samaj (Truth Seekers' Society) in 1873, with the leadership of the samaj coming from the backward classes, malis, telis, kunbis, saris and dhangars. The main aims of the movement were (i) social service, and (ii) spread of education among women and lower caste people.

• More about Jyotiba Phule:

o Dhananjay Keer, the author of Phule's biography, said that the title of Mahatma was bestowed on Phule by fellow reformer from Bombay, Vithalrao Krishnaji Vandekar. He was the first to start schools for untouchables and girls. Hence, option (a) is the correct answer.

o He was also appointed commissioner to the Poona municipality and served in the position until 1883. He was also a reputed author. His well known books include Gulamgiri (Slavery) and Shetkarayacha Aasud (Cultivator's Whipcord).

o He started the Satyashodhak marriage system which involved marriage rituals and alternative verses that contained egalitarian content.

34) Consider the following pairs:

Policy/ Action Associated Governor-General

1. Doctrine of Lapse : Lord Dalhousie

2. The Policy of Ring- Fence : John Lawrence

3. Subsidiary Alliance : Warren Hastings

How many of the pairs given above are correctly matched?

A. Only one

B. Only two

C. All three

D. None

Exp:

• The Doctrine of Lapse was a policy introduced by Lord Dalhousie, who served as the Governor-

General of India from 1848 to 1856. Under this policy, any princely state under the suzerainty of the British East India Company would automatically lapse to the Company if the ruler died without a natural male heir. Several states, including Jhansi, Satara, and Sambalpur, were annexed using this doctrine. This policy aimed to expand British territories in India without direct military conquest and was one of the major causes of unrest leading up to the 1857 Revolt. Hence, pair 1 is correctly matched.

• The Policy of Ring-Fence was implemented by Warren Hastings (1773–1785). This policy aimed to safeguard British interests in India by limiting interference in the internal affairs of Indian states

unless necessary, creating a "ring-fence" of security and stability around British-controlled territories. Hence, pair 2 is not correctly matched.

• Subsidiary Alliance was the brainchild of Lord Wellesley, designed to bring Indian princely states under British influence without outright conquest. Under a Subsidiary Alliance, Indian rulers were required to maintain British troops at their own expense and were forbidden from forming alliances with other powers or waging war independently. Hence, pair 3 is not correctly matched.

35) Which of the following matters are strictly excluded and not accepted as grievances on the CPGRAMS portal?

1. Matters concerning Right to Information (RTI)
2. Cases pending before any court of law (Sub-judice cases)
3. Grievances regarding religious matters
4. Service matters of government employees (excluding terminal benefits)

Select the correct answer using the code given below:

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

Exp:

The Centralized Public Grievance Redress and Monitoring System (CPGRAMS) is an online web-enabled system developed by the National Informatics Centre (NIC) in association with the Department of Administrative Reforms and Public Grievances (DARPG). While it serves as a unified platform for citizens to lodge grievances against any government organization, it explicitly excludes certain categories of complaints.

- Statement 1 is Correct: Matters concerning the Right to Information (RTI) are strictly excluded from the CPGRAMS portal. Citizens seeking information must use the dedicated RTI mechanisms and portals, as CPGRAMS is meant for addressing service delivery deficits, not for dispensing information under the RTI Act.
- Statement 2 is Correct: Sub-judice cases or any matters pending before any court of law are not accepted. The executive branch cannot intervene in or resolve disputes that are already under the jurisdiction of the judiciary, maintaining the constitutional separation of powers.
- Statement 3 is Correct: Grievances regarding religious matters are excluded from the ambit of CPGRAMS. This is to prevent the administrative grievance mechanism from being misused to address theological disputes, communal issues, or sensitive religious sentiments which fall outside standard public service delivery.
- Statement 4 is Correct: Service matters of government employees (such as transfers, promotions, disciplinary proceedings, etc.) are strictly not entertained on the citizen-facing CPGRAMS portal. Government employees have dedicated internal grievance channels, Administrative Tribunals (like CAT), and specific DoPT guidelines to address

service issues. However, grievances relating to terminal benefits (like pensions, GPF, and gratuity) are the only exception and are accepted

36) Consider the following statements regarding the horizontal devolution formula recommended by the 16th Finance Commission:

1. The weightage for 'Population' has been decreased compared to the 15th Finance Commission to reward states controlling their demographics.
2. A new criterion measuring 'Contribution to GDP' has been introduced to reward economically productive states.
3. The 'Tax and Fiscal Efforts' criterion has been retained but its weightage has been marginally reduced.

How many of the above statements are correct?

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

Exp:

- Statement 1 is Incorrect: The weightage for the 'Population' criterion (based strictly on the 2011 census) was actually increased by the 16th Finance Commission (from 15% under the 15th FC to 17.5%), rather than decreased. To reward states for population control, the Commission utilized a separate 'Demographic Performance' metric rather than reducing the core population weightage.
- Statement 2 is Correct: The 16th Finance Commission introduced a novel criterion measuring a state's 'Contribution to GDP' (assigning it a 10% weight). This was a significant shift designed to directly incentivize and reward states that are highly productive and drive the national economic engine, balancing the scales against purely equity-based transfers.
- Statement 3 is Incorrect: The 'Tax and Fiscal Efforts' criterion (which held a 2.5% weight in the 15th Finance Commission's formula) was not retained. It was completely removed by the 16th Finance Commission and effectively replaced by the broader and more comprehensive 'Contribution to GDP' parameter.

37) The "D.K. Basu Guidelines," frequently mentioned in the news, primarily aims at:

- a) Mandating comprehensive police reforms, including the creation of State Security Commissions.
- b) Formulating a preventive and redressal mechanism against the sexual harassment of women in professional workspaces.
- c) Specifying the criteria for granting anticipatory bail to harmonize individual liberty with the necessities of a fair probe.
- d) **Instituting mandatory protocols and safeguards for law enforcement to follow during the arrest and lock-up of an individual to curb custodial violence.**

Exp:

- Option (d) is Correct: The D.K. Basu Guidelines stem from the landmark Supreme Court judgment in D.K. Basu vs. State of West Bengal (1996). The case was initiated as a Public Interest Litigation (PIL) concerning the alarming rise in custodial deaths and violence. The Supreme Court laid down specific, mandatory guidelines that police and other law enforcement agencies must follow during the arrest, detention, and interrogation of any person. These include requirements like police officers wearing visible name tags, preparing an arrest memo attested by a witness, informing a relative or friend of the arrestee, conducting regular medical examinations, and establishing police control rooms to monitor arrests. These protocols act as a safeguard under Article 21 (Right to Life and Personal Liberty) to prevent torture in police lock-ups.
- Option (a) is Incorrect: Mandating comprehensive police reforms, including the separation of law and order from investigative duties, establishing fixed tenures for police chiefs, and creating State Security Commissions, was the primary aim of the Supreme Court's directives in the Prakash Singh vs. Union of India (2006) case.
- Option (b) is Incorrect: Formulating a preventive and redressal mechanism against the sexual harassment of women at the workplace was the objective of the Vishaka Guidelines, issued by the Supreme Court in Vishaka vs. State of Rajasthan (1997). These guidelines served as the de facto law until the enactment of the POSH Act in 2013.
- Option (c) is Incorrect: The parameters and criteria for granting anticipatory bail to balance individual liberty with the need for a fair investigation are governed by Section 438 of the CrPC (now Section 482 of the Bharatiya Nagarik Suraksha Sanhita, BNSS) and have been clarified through various Supreme Court judgments, such as Sushila Aggarwal vs. State (NCT of Delhi) (2020)

38) Consider the following statements regarding the technological platforms utilized under PM e-VIDYA:

4. The SWAYAM portal is exclusively used for primary school students to access foundational literacy materials.

5. Shiksha Vani is a podcast initiative by the CBSE to disseminate educational content through audio-based learning.

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

Exp:

Statement 1 is Incorrect: The SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) portal is not meant for primary education or foundational literacy. It is an indigenous MOOCs (Massive Open Online Courses) platform designed to provide high-quality educational content and courses for students from Class 9 up to post-graduation. Initiatives for foundational literacy and primary school materials are instead primarily consolidated on the DIKSHA platform under the NIPUN Bharat mission.

Statement 2 is Correct: Shiksha Vani is a dedicated podcast initiative launched by the Central Board of Secondary Education (CBSE). Integrated into the PM e-VIDYA framework, it serves as a critical audio-based learning tool. It disseminates curriculum-aligned educational content, board examination guidelines, and training materials, ensuring that students in remote areas without reliable internet or video access can still receive continuous education.

39) The Gujarat Sabha, with Mahatma Gandhi as its President, was formed during:

- a) Individual Satyagraha
- b) Bardoli Satyagraha
- c) Quit India Movement
- d) Kheda Satyagraha**

Exp:

• Kheda Satyagraha:

o Because of drought in 1918, the crops failed in Kheda district of Gujarat. According to the Revenue Code, if the yield was less than one-fourth the normal produce, the farmers were entitled to remission.

o Enquiries by members of the Servants of India Society, Vithalbhai Patel and Gandhiji confirmed the validity of the peasants' case. This was that as the crops were less than one-fourth of the normal yield, they were entitled under the revenue code to a total remission of the land revenue.

o The Gujarat Sabha, of which Gandhiji was the President, played a leading role in the agitation. Appeals and petitions having failed, Gandhiji advised the withholding of revenue, and asked the

peasants to ‘fight unto death against such a spirit of vindictiveness and tyranny,’ and show that ‘it is impossible to govern men without their consent.’ Hence, option (d) is the correct answer.

o Ultimately, the government sought to bring about an agreement with the farmers. It agreed to suspend the tax for the year in question, and for the next; reduce the increase in rate; and return all the confiscated property.

o The struggle at Kheda brought a new awakening among the peasantry. They became aware that they would not be free of injustice and exploitation unless and until their country achieved complete independence.

40) The Lothian Committee of 1932 was related to:

- a) Indian Army and its Indianization
- b) Franchise and electoral reforms in India**
- c) Labour welfare and working conditions
- d) Land revenue and agrarian reforms

Exp:

The Lothian Committee examined the question of voting rights and electoral representation, and laid down qualifications for franchise in British India.

o The Lothian Committee, officially called the Indian Franchise Committee (1932), was chaired by Lord Lothian.

o It was set up by the British Government to recommend franchise (voting rights) provisions under the upcoming constitutional reforms.

o The committee’s main task was to determine who would get the right to vote in the restructured

legislatures, based on property, tax, and educational qualifications.

• Connection with the Communal Award (1932)

o The committee’s report directly influenced the Communal Award, announced by Ramsay MacDonald, British Prime Minister, on 16 August 1932.

o The Award extended separate electorates to Depressed Classes (Scheduled Castes) in addition to Muslims, Sikhs, Indian Christians, Anglo-Indians, and Europeans.

o Thus, the Lothian Committee is remembered as the Indian Franchise Committee, whose recommendations became the basis of the Communal Award.

41) Consider the following statements about the Quit India Movement:

1. The movement was initiated in response to the failure of the Cabinet Mission.

2. Parallel governments were established in several regions, including Ballia, Satara, and Talcher.

3. The movement led to the immediate withdrawal of British forces from India.

Which of the statements given above are not correct?

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Exp:

The Quit India Movement, launched in August 1942 by the Indian National Congress under the leadership of Mahatma Gandhi, was a mass civil disobedience movement demanding an

immediate end to British rule in India. It was initiated primarily in response to the failure of the Cripps Mission, which had been sent by the British government to secure Indian cooperation in World War II by offering a vague promise of post-war self-government. Hence, statement 1 is not correct.

One of the notable features of the Quit India Movement was the establishment of parallel governments (prati-sarkars) in several regions, where local leaders took control and administered areas independently of British authority. For example, Ballia in Uttar Pradesh saw local leaders taking over administrative functions, Tamluk in Bengal had the Tamralipta Jatiya Sarkar operating from 1942 to 1944, Satara in Maharashtra witnessed the Prati Sarkar led by Nana Patil, and Talcher in Odisha also had a localized parallel government. Hence, statement 2 is correct.

However, the movement did not result in the immediate withdrawal of British forces. The colonial government responded with harsh suppression, mass arrests, and violence against protestors. The British retained control, and Indian independence was achieved only in 1947, five years later. Hence, statement 3 is not correct.

42) Consider the following types of cases:

- 1) Compoundable criminal offences
- 2) Non-compoundable criminal offences
- 3) Matrimonial and family disputes
- 4) Bank recovery and commercial disputes

Which of the types of cases listed above can be taken up and settled by the Lok Adalats?

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

Exp:

- Statement 1 is Correct and Statement 2 is Incorrect: Lok Adalats (People's Courts) have the jurisdiction to settle and compromise pending cases or matters at the pre-litigation stage. However, their jurisdiction in criminal matters is strictly limited to compoundable criminal offences (offences where the law allows the complainant to compromise and drop the charges). They have absolutely no jurisdiction over non-compoundable criminal offences; such cases cannot be settled in a Lok Adalat and must go through the standard judicial trial process.

- Statement 3 is Correct: A significant portion of the cases handled by Lok Adalats includes civil cases like matrimonial and family disputes (such as alimony, maintenance, and divorce by mutual consent). They provide a less formal environment to encourage amicable settlements between family members, avoiding prolonged litigation.
- Statement 4 is Correct: Lok Adalats are highly effective and frequently used for resolving financial and commercial disputes, including bank recovery cases, debt tribunals, and insurance claim settlements. Banks often use Lok Adalats to settle non-performing assets (NPAs) and loan recovery disputes quickly and cost-effectively

43) If a Non-Governmental Organization (NGO) registered under the FCRA has its registration certificate suspended by the Ministry of Home Affairs due to alleged governance discrepancies, what is the immediate legal implication on its operations?

- a) It can continue to receive new foreign funds but cannot utilize them until the suspension is revoked.
- b) **It can neither receive any new foreign contribution nor utilize its existing unspent foreign funds without prior, specific approval from the Central Government.**
- c) It must immediately transfer all its existing foreign funds to the Consolidated Fund of India.
- d) Its domestic bank accounts, receiving domestic donations, are automatically frozen alongside its FCRA account.

Exp:

- Option B is Correct: Under Section 13 of the Foreign Contribution (Regulation) Act (FCRA), 2010, when the Ministry of Home Affairs (MHA) suspends the registration certificate of an NGO, there is an immediate and absolute freeze on its foreign funding operations. The organization is strictly barred from receiving any new foreign contributions. Additionally, it cannot utilize the existing, unspent foreign funds already present in its designated FCRA bank account without securing prior and specific approval from the Central Government.
- Option A is Incorrect: A suspended NGO cannot continue to receive new foreign funds. The suspension acts as a complete halt on both the inflow and outflow of foreign contributions.
- Option C is Incorrect: The funds are not immediately transferred to the Consolidated Fund of India upon suspension. The funds simply remain frozen in the NGO's account. Even in the event of the final cancellation of the certificate, the unspent foreign contributions and related assets vest with a prescribed government authority (not directly to the Consolidated Fund) to be managed in accordance with the law.
- Option D is Incorrect: The FCRA strictly governs only foreign contributions. The suspension or cancellation of an FCRA license has zero legal bearing on the NGO's domestic bank accounts. The organization is fully legally permitted to continue receiving and utilizing domestic donations and carrying out its operations using Indian funds.

44) Consider the following statements:

1. The WTO's Most-Favoured-Nation (MFN) principle allows exceptions for regional trade agreements (RTAs) provided they eliminate substantially all tariffs between members.
2. An RTA that discriminates in favour of members but maintains high external tariffs violates the WTO unless it forms a customs union.
3. Preferential trade arrangements for developing countries are exempt from MFN obligations.

Which are correct?

a) 1 and 2 only

b) 2 and 3 only

c) 1 and 3 only

d) All three

Exp:

1 and 2 are correct; special preferential schemes exist but must meet WTO conditions; blanket MFN exemptions do not apply.

45) Which of the following best explains why some middle-income countries fail to transition to high income?

a) Lack of natural resources

b) Weak institutions that fail to reallocate rents toward productive investment and human capital

c) Excessive openness to trade

d) Low population density

Exp:

Weak institutions and capture of policy by vested interests block the reforms and investments needed for sustained productivity gains

46) Which of the following best captures the trade-off when PLI schemes mandate higher local value addition?

a) Localisation always reduces costs and improves competitiveness.

b) Localisation can build domestic capabilities but may raise input costs and slow scaling if local suppliers are immature.

c) Global sourcing is always superior for rapid scale-up.

d) Localisation has no impact on export competitiveness

Exp:

Mandates foster supplier development but require sequencing and support (clusters, credit, standards) to avoid cost penalties that undermine exports.

47) With reference to the Cold Desert Biosphere Reserve, consider the following statements:

1. It is located in the Western Himalayas in the Union Territory of Ladakh.
2. It is India's first high-altitude cold desert biosphere reserve to be included in UNESCO's World Network of Biosphere Reserves.
3. It is predominantly characterised by the Taiga biome.

Which of the statements given above is/are correct?

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

Exp:

- Statement 1 is Incorrect: The Cold Desert Biosphere Reserve is located in the Western Himalayas, but it falls entirely within the state of Himachal Pradesh (specifically covering the Lahaul-Spiti district), not the Union Territory of Ladakh. The reserve encompasses the Pin Valley National Park, Chandratat Wildlife Sanctuary, Kibber Wildlife Sanctuary, and Sarchu.
- Statement 2 is Correct: In a major recent development in September 2025, the Cold Desert Biosphere Reserve was officially added to UNESCO's World Network of Biosphere Reserves (WNBR) during the 5th World Congress of Biosphere Reserves. This makes it India's 13th UNESCO Biosphere Reserve and the country's first high-altitude cold desert biosphere reserve to achieve this global status.
- Statement 3 is Incorrect: The reserve is predominantly characterized by a cold desert / alpine tundra biome, not a Taiga biome. A Taiga biome refers to boreal coniferous forests (like those found in the subarctic regions of Russia or Canada). Because the Cold Desert lies in the rain shadow of the Himalayas, it receives very little rainfall and features a harsh, dry climate with sparse vegetation consisting mainly of hardy alpine grasses,

medicinal herbs, and scattered shrubs like sea-buckthorn—far removed from the dense forest structure of a Taiga.

48) Consider the following statements regarding 'Chlorpyrifos', recently seen in the news:

- 1) It is a widely used broad-spectrum fungicide deployed extensively in Indian agriculture.
- 2) India strongly opposed its immediate elimination under Annex A of the Stockholm Convention.
- 3) It is a highly toxic organophosphate known to cause severe neurological damage.

How many of the above statements are correct?

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

Exp:

- Statement 1 is Incorrect: The Commission loves swapping pesticide categories. Chlorpyrifos is an insecticide, not a fungicide. It is used to kill insect pests like locusts and stem borers, but it does nothing to combat fungal diseases.
- Statement 2 is Correct: At the recent 2025 COP, the Stockholm Convention moved to list Chlorpyrifos in Annex A (which mandates global elimination). However, India blocked an outright, immediate ban, securing a five-year exemption to protect domestic food security.
- Statement 3 is Correct: This is the fundamental reason over 40 countries have banned it. Chlorpyrifos is an organophosphate. While it effectively kills pests, there is overwhelming scientific evidence that it bioaccumulates and causes severe neuro-developmental damage (brain and nerve damage) in humans, particularly children.

49) Which of the following correctly describes the RhoDIS India Programme?

- a) A satellite-based monitoring system for tracking rhino movement
- b) A DNA-based wildlife forensics tool used to investigate rhino poaching**

- c) A captive-breeding programme for the endangered rhino species
- d) An international treaty for rhino conservation

Exp:

The RhoDIS India Programme (Rhino DNA Index System) is a genetic database initiative that uses DNA profiling to help identify individual rhinos and support wildlife law enforcement in cases of poaching and illegal trade.

50) Situated in the Bhabar and Terai tracts at the foothills of the Himalayas, this protected area is culturally intertwined with the indigenous Tharu community. It forms a vital transboundary conservation landscape with Nepal's Chitwan National Park. Recently, the state government established a dedicated task force here to boost the reintroduction and conservation of the Greater One-Horned Rhinoceros. The Gandak River heavily influences its western boundary.

The above description refers to which one of the following protected areas?

- a) Dudhwa Tiger Reserve
- b) Valmiki Tiger Reserve**
- c) Pilibhit Tiger Reserve
- d) Jaldapara National Park

Exp:

- Option B is Correct: The description precisely matches Valmiki Tiger Reserve (VTR) in Bihar. VTR is situated in the Terai-Bhabar tract and forms a contiguous transboundary landscape with Nepal's Chitwan National Park. The Gandak River serves as its western boundary. The region is deeply tied to the indigenous Tharu community, and the Bihar state government established a 'Rhino Task Force' to reintroduce and conserve the Greater One-Horned Rhinoceros in this habitat.
- Option A is Incorrect: Dudhwa Tiger Reserve is located in the Terai region of Uttar Pradesh. While it is a crucial tiger habitat and is also home to the Tharu tribe, it shares its international border with Nepal's Shuklaphanta National Park, not Chitwan. Additionally, the Gandak River does not flow along its boundary.
- Option C is Incorrect: Pilibhit Tiger Reserve is located in the Terai landscape of Uttar Pradesh. It does not share a transboundary landscape with Chitwan National Park, nor is the Gandak River associated with its geographical boundaries.
- Option D is Incorrect: Jaldapara National Park is located in the Dooars region of West Bengal at the foothills of the Eastern Himalayas. Although it is globally renowned for its high

population of the Greater One-Horned Rhinoceros, it does not share a border with Nepal and is located far east of the Gandak River ecosystem.

51) The 'Cali Fund', officially launched in early 2025 under the Convention on Biological Diversity (CBD), is primarily designed to:

- a) Provide a multilateral insurance mechanism for farmers in developing nations to compensate for crop losses caused by invasive alien species.
- b) **Channel a portion of private sector profits derived from Digital Sequence Information (DSI) back into global biodiversity conservation.**
- c) Establish a sovereign wealth fund for Latin American nations to manage the sustainable extraction of 'green minerals' like Lithium and Cobalt.
- d) Act as the primary financial vehicle for the 'High Seas Treaty' to manage the fair sharing of marine genetic resources found in international waters.

Exp:

Option B is Correct: This is a historic "win" for equity. The Cali Fund is the financial arm of the new global mechanism for Digital Sequence Information (DSI). It asks large companies (in sectors like Pharma, Cosmetics, and Ag-tech) that profit from using genetic data of plants/animals to contribute 1% of their profits or 0.1% of their revenue to the fund.

Option A is Incorrect: While COP 16 discussed invasive species, there is no "Cali Fund" for crop insurance. This distractor plays on the user's knowledge of agricultural risks.

Option C is Incorrect: Because the fund is named after a Colombian city, students might think it's a regional Latin American fund for minerals. It is, in fact, a global fund under the UN.

Option D is Incorrect: This is the most dangerous distractor. The High Seas Treaty (BBNJ) also has a benefit-sharing mechanism for genetic resources, but the Cali Fund is specifically an instrument of the Convention on Biological Diversity (CBD) for genetic data (DSI) across all biomes, not just the High Seas.

52) Consider the following statements regarding the Indian Grey Wolf:

- 1) It primarily inhabits the high-altitude regions of the Himalayas.
- 2) It is accorded the highest level of legal protection under Schedule I of the Wildlife (Protection) Act, 1972.
- 3) The Bankapur Wolf Sanctuary in Karnataka is the only protected area dedicated exclusively to wolves in India.
- 4) It is primarily a diurnal species which actively hunts from dawn to dusk.

Which of the statements given above is/are correct?

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

EXP:

- Statement 1 is Incorrect: The Indian Grey Wolf (*Canis lupus pallipes*) does not live in the Himalayas. It is uniquely adapted to the hot, semi-arid plains, grasslands, scrub forests, and agro-pastoral landscapes of peninsular and western India (Gujarat, Rajasthan, Maharashtra, Karnataka, etc.). The wolf found in the high-altitude trans-Himalayan regions is a completely different evolutionary lineage known as the Himalayan Wolf (*Canis lupus chanco*).
- Statement 2 is Correct: Given its heavily fragmented habitat and severe threats from retaliatory killings (due to livestock depredation) and habitat conversion, the Indian Grey Wolf is accorded the highest legal protection. It is listed under Schedule I of the Wildlife (Protection) Act, 1972, placing it on par with the tiger and the elephant.
- Statement 3 is Correct: The Bankapur Wolf Sanctuary, located in the Koppal district of Karnataka, is famously recognized as the first and only wildlife sanctuary in India dedicated exclusively to the conservation of the Indian Grey Wolf and its arid grassland ecosystem.
- Statement 4 is Incorrect: Indian Grey Wolves are primarily nocturnal (active at night) or crepuscular (active at dawn and dusk). Because they share heavily populated landscapes with humans and shepherds, they have adapted to hunt and move at night to minimize conflict and human encounters.

53) **Statement-I:** Climate change has increased the frequency of extreme rainfall events during the Indian monsoon.

Statement-II: IMD's forecast models now incorporate climate drivers like El Niño, IOD, and Eurasian snow cover.

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 incorrect
- d) Statement-I is incorrect, but Statement-II is correct

exp:

Both statements are correct, but Statement-II does not directly explain Statement-I. Climate change drives extreme rainfall events, while IMD models incorporate multiple climate drivers for forecasting accuracy

54) Consider the following statements:

1. The 2024 eruption of Mount Ruang in Indonesia highlighted the role of the Pacific “Ring of Fire” as the most seismically active region in the world.
2. The Himalayan region is prone to earthquakes primarily due to the ongoing collision between the Indian Plate and the Eurasian Plate.
3. Scientific studies suggest that large-scale volcanic eruptions can temporarily cool global climate by injecting aerosols into the stratosphere.

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

- a) Both Statement 1 and Statement 2 are correct and both of them explain Statement 3
- b) Both Statement 1 and Statement 2 are correct but only one of them explains Statement 3
- c) Only one of the Statements 1 and 2 is correct and that explains Statement 3
- d) All three Statements are correct but they explain different phenomena**

Exp: SELF EXPLANATORY

55) Statement-I: The 2023 Turkey-Syria earthquake was caused by strike-slip faulting along the East Anatolian Fault.

Statement-II: Strike-slip faults involve horizontal movement of tectonic plates relative to each other.

Which one of the following is correct?

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

Exp:

Both are correct — the Turkey-Syria quake was due to strike-slip faulting, and the definition explains the cause

56) Statement I: Strict export restrictions on raw critical minerals improve long-term domestic value addition.

Statement II: Overly rigid resource nationalism can deter upstream investment and slow development of processing ecosystems.

Which is correct?

a) Both I and II are correct and II explains I

b) Both I and II are correct but II does not explain I

c) Only I is correct

d) Only II is correct

Exp:

Both statements are true; export controls can incentivise local processing but may also reduce investor appetite unless paired with clear incentives and regulatory certainty

57) Consider the following statements:

1. FPOs that aggregate produce can reduce transaction costs for smallholders and improve price discovery.
2. Large scale aggregation by FPOs always leads to higher farmer incomes because it eliminates all intermediaries.
3. Effective market access through FPOs requires complementary investments in grading, packaging, and market intelligence.

Which of the statements given above are correct?

a) 1 and 2 only

b) 2 and 3 only

c) 1 and 3 only

d) All three

Exp:

Aggregation lowers transaction costs and improves bargaining (1). However, aggregation alone does not guarantee higher incomes if value-adding functions (grading, packaging, market info) are missing or if intermediaries perform essential services (2 is false). Complementary investments are necessary (3).

58) Consider the following statements about scaling small producers in dairy and fisheries through collective organisations:

1. Cooperatives and FPOs can capture economies of scale in procurement, processing, and marketing for both dairy and fish producers.
2. The perishable nature of fish makes cold-chain investments relatively more critical than for milk, so identical aggregation models will yield similar outcomes in both sectors.
3. Successful scaling requires complementary public goods (cold storage, testing labs, transport corridors) and governance reforms to prevent elite capture.

Which of the statements given above are correct?

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

Exp: 1 and 3 are correct: aggregation reduces transaction costs and public goods plus governance are essential. 2 is incorrect because fish's higher perishability and seasonality mean aggregation models must be adapted; identical models do not guarantee similar outcomes.

59) Statement-I: The blockage of the Suez Canal in 2021 highlighted the importance of ocean currents in determining alternative shipping routes around the Cape of Good Hope.

Statement-II: The Agulhas Current along the southeast coast of Africa influences shipping safety and fuel efficiency for vessels rerouted around the Cape.

Which one of the following is correct?

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

Exp:

Both are correct — rerouting around Africa requires navigating the Agulhas Current, which directly affects shipping safety and efficiency.

60) Consider the following statements:

1. Melting Arctic ice is altering the thermohaline circulation by adding freshwater to the North Atlantic.
2. Changes in thermohaline circulation can disrupt the Gulf Stream, impacting Europe's climate.
3. The 2025 IPCC report warned that weakening of the Atlantic Meridional Overturning Circulation (AMOC) could have severe global consequences.

Which of the statements given above are correct?

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

Exp:

- Arctic melt adds freshwater → disrupts density-driven currents.
- Gulf Stream weakening affects Europe's climate.
- IPCC 2025 highlighted risks of AMOC slowdown (sea-level rise, monsoon shifts, extreme weather).

61) Consider the following statements about climate impacts on fisheries and dairy systems:

1. Ocean warming and changing currents shift fish stocks spatially, requiring dynamic management and cross-jurisdictional cooperation.
2. Heat stress in dairy animals reduces milk yield and quality, making climate-resilient breeds and cooling technologies central to adaptation.
3. A single national policy instrument (for example, a uniform subsidy) is sufficient to address both marine stock shifts and livestock heat stress.

Which of the statements given above are correct?

- a) 1 and 2 only**
- b) 2 and 3 only
- c) 1 and 3 only

d) All three

Exp:

Both sectors face distinct climate risks requiring tailored, multi-level responses. **3** is incorrect because diverse ecological and technological solutions are needed rather than a one-size-fits-all instrument

62) Statement-I: Marine heat waves are prolonged periods of abnormally high sea surface temperatures.

Statement-II: In 2025, the Bay of Bengal and Arabian Sea recorded marine heat waves, impacting monsoon circulation and cyclone intensity.

Which one of the following is correct?

a) Both Statement-I and Statement-II are correct and II explains I

b) Both Statement-I and Statement-II are correct but II does not explain I

c) Statement-I is correct but Statement-II is incorrect

d) Statement-I is incorrect but Statement-II is correct

Exp:

Both are correct, but Statement-II is an outcome of marine heat waves, not an explanation of their definition

63) Consider the following statements:

1. India supports freedom of navigation in international waters under UNCLOS.
2. India's regional policies emphasize strategic partnerships with ASEAN nations, many of whom are South China Sea claimants.
3. India has no economic or strategic interest in the South China Sea disputes.

Which of the statements given above are correct?

a) 1 and 2 only

b) 2 and 3 only

c) 1 and 3 only

d) All three

Exp:

Statements 1 and 2 are correct — India supports UNCLOS and engages ASEAN strategically. Statement 3 is incorrect — India has economic and strategic interests in the region.

64) With reference to the New Collective Quantified Goal (NCQG) on climate finance adopted at COP29, consider the following statements and select the incorrect statement:

- a) It officially replaces the previous global climate finance target of \$100 billion per year, which was originally established at the 2009 Copenhagen Climate Summit.
- b) The core provision of the agreement mandates developed countries to take the lead in mobilizing at least \$300 billion annually by 2035 for developing nations.
- c) **Under the finalized framework, large emerging economies and high-emitting developing countries are now legally mandated to contribute to this core climate finance target.**
- d) The broader, overarching ambition of the NCQG calls for scaling up total climate finance from all public and private sources to \$1.3 trillion per year by 2035.

Exp:

- Option C is Incorrect: This was the most contentious issue at COP29 in Baku. While developed nations heavily pushed for large emerging economies (like China, India, and wealthy Gulf states) to be legally obligated to pay into the fund, the final NCQG text explicitly rejected a legal mandate for developing countries. Instead, the agreement preserves the core UN principle of Common But Differentiated Responsibilities (CBDR). It states that developing countries are only encouraged to make voluntary contributions, and these will not be counted towards the core \$300 billion developed-country obligation.
- Option A is Correct: The primary mandate of the NCQG was to officially succeed and replace the outdated \$100 billion annual climate finance target, which was first pledged by developed nations at COP15 (Copenhagen) in 2009.
- Option B is Correct: This is the core, legally binding figure agreed upon in Baku. The text states that developed countries will take the lead in mobilizing "at least \$300 billion per year by 2035" to support developing countries in their climate transition and adaptation efforts.
- Option D is Correct: While the core obligation for developed countries is \$300 billion, the broader, overarching ambition recognized by the summit is to scale up global climate investments from all sources (public, private, domestic, and international) to reach \$1.3 trillion annually by 2035 to meet the actual needs of the developing world.

65) With reference to 'Geostationary' and 'Geosynchronous' orbits, consider the following statements:

1. Every Geostationary orbit is a Geosynchronous orbit, but not every Geosynchronous orbit is Geostationary.
2. A satellite in a Geostationary orbit moves from East to West, opposite to the direction of Earth's rotation.
3. For a satellite to be in a Geosynchronous orbit, it must be placed at an altitude of approximately 36,000 km.

Which of the statements given above is/are correct?

- A) 1 only
B) 1 and 3 only
C) 2 and 3 only
D) 1, 2, and 3

Exp:

- **Statement 1 is correct:** GEO is a specific subset of GSO. All GEOs have the same period as Earth (making them Geosynchronous), but GSOs can be inclined, whereas GEOs must be over the equator.
- **Statement 2 is incorrect:** To appear stationary or stay in sync with Earth, the satellite must move in the **same direction** as Earth's rotation (West to East).
- **Statement 3 is correct:** Both GSO and GEO require a specific altitude (approx. 35,786 km) to ensure the orbital period matches the Earth's sidereal rotation period.

66) **Statement-I:** Earth's axis has been drifting eastward since the 1990s, partly due to accelerated Arctic ice melt.

Statement-II: Such axis drift has no measurable impact on Earth's climate systems.

Which one of the following is correct?

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

Exp:

Statement-I is correct — studies confirm eastward drift linked to Arctic melt. Statement-II is incorrect — axis drift influences climate circulation and hydrological cycles.

67) **Statement-I:** The Sinai Peninsula connects the Mediterranean Sea with the Red Sea via the Suez Canal.

Statement-II: Control over the Sinai and adjacent waterways directly influences global trade and naval strategy.

Which one of the following is correct?

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

Exp:

Both are correct — Sinai's geography explains its strategic role, and control over it influences global trade routes.

68) **Consider the following statements:**

1. Melting Arctic ice opens new shipping routes such as the Northern Sea Route, reducing transit time between Europe and Asia.
2. Shifts in Earth's axis due to Arctic melt have no geopolitical implications.
3. In 2025, Arctic Council discussions highlighted both environmental risks and strategic opportunities from polar changes.

Which of the statements given above are correct?

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

Exp:

Statements 1 and 3 are correct — Arctic melt opens routes and is a geopolitical issue. Statement 2 is incorrect because axis shifts have indirect geopolitical implications (navigation, climate).

69) **Consider the following statements:**

1. Solar maximum increases ultraviolet radiation, which enhances ozone formation in the stratosphere.
2. Geomagnetic storms during solar maximum can heat the upper atmosphere, increasing satellite drag.
3. The 2025–2026 solar maximum is expected to test global preparedness for space weather events.

How many of the statements given above are correct?

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

Exp:

All are correct — UV radiation affects ozone, geomagnetic storms heat the atmosphere, and preparedness is a key current affairs issue.

70) **Which of the following best explains the strategic importance of equatorial seas in current affairs?**

- a) They are irrelevant to global shipping.
- b) Equatorial seas host major shipping lanes like the Strait of Malacca and Gulf of Guinea, critical for global trade.**
- c) Equatorial seas are only important for fishing.
- d) Equatorial seas are unaffected by climate change.

Exp:

Equatorial seas are vital for trade (Malacca Strait, Gulf of Guinea) and are climate-sensitive.

71) **Which of the following best captures the policy trade-off when promoting micro-irrigation at scale?**

- a) Micro-irrigation always increases farmer incomes and is therefore unambiguously desirable.

b) Micro-irrigation raises water productivity per unit crop but may reduce resilience if it encourages monoculture and dependence on groundwater.

c) Micro-irrigation eliminates the need for institutional reforms in groundwater governance.

d) Micro-irrigation is irrelevant to cropping choices and market linkages.

Exp:

Equatorial seas are vital for trade (Malacca Strait, Gulf of Guinea) and are climate-sensitive.

72) Consider the following statements:

1. A nutrient-based subsidy (NBS) that pays per unit of nutrient supplied reduces distortions among different fertilizer types compared with blanket price subsidies.
2. If NBS is not accompanied by robust monitoring and digital invoicing, it can still lead to diversion and leakages that inflate the fiscal bill.
3. Targeting subsidies to small and marginal farmers while phasing out universal price support is administratively straightforward and costless.

Which of the statements given above are correct?

a) 1 and 2 only

b) 2 and 3 only

c) 1 and 3 only

d) All three

Exp:

1 is correct — NBS aligns incentives across nutrients. **2** is correct — weak monitoring undermines targeting. **3** is incorrect — targeting involves complex identification, political economy resistance, and administrative costs.

73) Consider the following statements:

1. Bab-el-Mandeb connects the Red Sea with the Gulf of Aden and is a critical chokepoint for global oil and container trade.
2. Disruptions in Bab-el-Mandeb directly affect Europe's energy security because most Gulf oil shipments pass through this route before entering the Suez Canal.
3. The Cape of Good Hope route is a viable alternative but increases shipping time and costs significantly.

Which of the statements given above are correct?

a) 1 and 2 only

b) 2 and 3 only

c) 1 and 3 only

d) All three

Exp:

Bab-el-Mandeb is vital for Gulf–Europe trade; disruptions impact energy security; rerouting via Cape of Good Hope increases costs and time.

74) Consider the following statements:

1. Continental drift alters the position of landmasses, which in turn reshapes ocean currents.
2. The opening of the Drake Passage between South America and Antarctica allowed the formation of the Antarctic Circumpolar Current, influencing global climate.
3. Recent studies suggest that tectonic shifts in the Indian Ocean region could impact monsoon circulation.

Which of the statements given above are correct?

a) 1 and 2 only

b) 2 and 3 only

c) 1 and 3 only

d) All three

Exp:

All are correct — continental drift reshapes currents; Drake Passage enabled ACC; tectonic shifts influence monsoon circulation.

75) With reference to ISRO's 'SE-2000' Semi-Cryogenic Engine, which has seen significant testing milestones in 2025-2026, consider the following statements:

1. It utilizes a combination of Liquid Oxygen (LOX) and Refined Kerosene (RP-1) as propellants, making the fuel more stable and easier to store than liquid hydrogen.
2. The engine operates on an 'Oxidizer-Rich Staged Combustion' cycle, which is technically more complex but provides higher efficiency than the gas generator cycle.
3. Once operational, the SE-2000 is intended to replace the solid rocket boosters of the LVM3 to increase its payload capacity to Low Earth Orbit.

4. The density of the propellants used in the SE-2000 allows for smaller fuel tanks compared to those used in the liquid hydrogen-based CE-20 engine.

Which of the statements given above are correct?

A) 1 and 2 only

B) 1, 2, and 4 only

C) 2, 3, and 4 only

D) 1, 2, 3, and 4

Exp:

- **Statement 1 is Correct:** Semi-cryogenic engines use \$RP-1\$ (Refined Kerosene). Unlike Liquid Hydrogen, which must be kept at -253°C , Kerosene is liquid at room temperature and much easier to handle and store.
- **Statement 2 is Correct:** The SE-2000 uses an **Oxidizer-Rich Staged Combustion Cycle**. In this cycle, the oxidizer and a small amount of fuel are burnt in a pre-burner to power the turbine, and the exhaust is then fed into the main combustion chamber. This eliminates fuel waste, making it highly efficient.
- **Statement 3 is Incorrect:** This is a common point of confusion. The SE-2000 is intended to replace the **L110 liquid core stage** (which uses Earth-storable hypergolic fuels like \$UDMH\$ and \$N_2O_4\$) of the LVM3, not the solid boosters. This swap will boost the LVM3's payload capacity to GTO from 4 tonnes to approximately 6 tonnes.
- **Statement 4 is Correct:** Liquid Hydrogen has a very low density, requiring massive, bulky tanks. Kerosene is much denser, meaning the SE-2000 can carry a larger mass of fuel in a smaller, more aerodynamic structural volume.

76) Consider the following measures

- A. Deploying satellite and sensor networks for early warning and adaptive irrigation scheduling.
- B. Subsidising precision inputs for all farmers irrespective of agro-ecological vulnerability.
- C. Integrating agri-tech with crop insurance and extension to support climate-smart cropping decisions.

Which combination best enhances climate resilience while minimising fiscal and distributional risks?

a) A and B only

b) A and C only

c) B and C only

d) A, B and C

Exp:

Targeted deployment (A) plus integration with insurance and extension (C) builds resilience and ensures support reaches vulnerable farmers. Universal subsidies (B) risk fiscal strain and misallocation.

77) Consider the following reform options:

A. Gradual rationalisation of MSP rates with compensatory direct transfers to small and marginal farmers.

B. Immediate abolition of MSP and full reliance on market prices.

C. Strengthening procurement transparency, digital records, and targeted procurement for food security stocks only.

Which sequencing best balances political feasibility, fiscal prudence, and protection of vulnerable farmers?

a) B then C then A

b) A then C then B

c) C then B then A

d) A and C simultaneously, B never as first step

Exp:

- **A first** (gradual rationalisation with compensatory transfers) preserves political feasibility by protecting vulnerable farmers while beginning fiscal consolidation.
- **C next** (strengthen transparency and targeted procurement) builds institutional capacity and reduces leakages, making further reforms credible.
- **B** (immediate abolition) is politically risky and likely to cause disruption; sequencing A then C creates conditions to consider deeper reforms later if needed.

78) Consider the following statements:

1. Sovereign green bonds trade on the same credit risk as conventional sovereign bonds but may carry a different yield because of investor preference for green assets.
2. If inflation expectations rise while the central bank maintains policy rates, the yield on sovereign green bonds will necessarily fall due to their green label.

3. A persistent greenium implies a structural demand shift that can lower the sovereign's effective cost of financing green projects.

Which are correct?

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

Exp:

- **Statement 1 is correct.** Sovereign green bonds carry the same sovereign credit risk as conventional government bonds because both are obligations of the same issuer; the difference in yield arises from investor preferences and market segmentation, not from a different default probability.
- **Statement 2 is incorrect.** Rising inflation expectations normally push **nominal** yields up (not down) because investors demand higher compensation for expected loss of purchasing power. A green label does not immunise a bond from macro forces; any green-related yield concession (greenium) is applied on top of the macro-driven yield.
- **Statement 3 is correct.** A persistent **greenium** (investors accepting a lower yield for green issuance) signals structural demand for green assets and can reduce the sovereign's effective financing cost for green projects, all else equal.

79) Consider the following statements regarding the 'PM E-DRIVE' (PM Electric Drive Revolution in Innovative Vehicle Enhancement) Scheme:

- 1) It provides direct upfront demand incentives (subsidies) for the purchase of electric two-wheelers, three-wheelers, and private electric passenger cars.
- 2) It introduces a mandatory Aadhaar-authenticated e-voucher system generated at the time of vehicle purchase to seamlessly transfer the demand incentives.
- 3) The Ministry of Heavy Industries recently extended the scheme's tenure to March 2028 uniformly across all supported vehicle categories.

How many of the above statements are correct?

- a) **Only one**
- b) Only two
- c) All three

d) None

Exp:

- Statement 1 is Incorrect: The PM E-DRIVE scheme (which replaces the FAME-II scheme) provides subsidies with an outlay of ₹10,900 crore. However, it completely excludes electric cars (e-4W) and hybrid cars from the demand incentive pool. The subsidies are strictly limited to e-2Ws, e-3Ws, e-ambulances, e-trucks, and e-buses. (Note: The scheme does fund public charging infrastructure that electric cars can use, but it does not subsidize the purchase of the cars themselves).
- Statement 2 is Correct: To plug leakages and ensure transparency, the scheme introduces a novel e-voucher mechanism. At the time of purchase, the PM E-DRIVE portal generates an Aadhaar-authenticated e-voucher sent to the buyer's mobile. Both the buyer and the dealer must digitally sign and upload this voucher to the portal to successfully claim the government reimbursement.
- Statement 3 is Incorrect: In August 2025, the government did extend the PM E-DRIVE scheme to March 2028, but it is not uniform. The extension applies only to e-buses, e-trucks, e-ambulances, and testing agencies because their procurement and deployment cycles take much longer. The terminal deadline to claim subsidies for retail electric two-wheelers (e-2W) and three-wheelers (e-3W) remains strictly March 31, 2026.

80) Consider the following pairs of Islands and their corresponding geographical locations:

Island — Location / State

1. Bitra Island - Lakshadweep
2. Kariyachalli Island - Kerala
3. Baratang Island - Andaman and Nicobar Islands

How many of the above pairs are correctly matched?

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

Exp:

- Pair 1 is Correctly Matched: Bitra Island is the smallest inhabited island in the Lakshadweep archipelago. It is highly relevant because the government recently initiated land acquisition here to set up a strategic naval detachment, complementing the existing bases at Kavaratti (INS Dweepakshak) and Minicoy (INS Jatayu).
- Pair 2 is Incorrectly Matched: Kariyachalli Island is located in the Gulf of Mannar Marine National Park in Tamil Nadu, not Kerala. This uninhabited coral island is in the news because it is rapidly "sinking" due to climate change and erosion. The Tamil Nadu government

recently launched a massive restoration project under the TNSHORE initiative, deploying thousands of artificial reef modules to save it from disappearing entirely.

- Pair 3 is Correctly Matched: Baratang Island is located in the Middle and South Andaman administrative district of the Andaman and Nicobar Islands. It is globally famous as the only place in India where you can find active Mud Volcanoes (locally called Jalki), alongside dense mangrove creeks and limestone caves.

81) Consider the following statements regarding the 'TREM' (Tractor Emission) Norms:

1. They are global benchmark standards formulated by the International Energy Agency (IEA) to regulate greenhouse gas emissions from agricultural machinery.
2. The current operational standard is TREM Stage IV.
3. The latest phase of these emission norms specifically exempts low-horsepower tractors below 50 HP.

How many of the above statements are correct?

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

Exp:

- Statement 1 is Incorrect: TREM norms are not international standards set by the IEA. They are entirely domestic emission standards established by the Government of India (specifically notified by the Ministry of Road Transport and Highways - MoRTH). They function as the agricultural and construction equipment equivalent of the Bharat Stage (BS) norms used for passenger vehicles.
- Statement 2 is correct: India is definitely not at TREM-VI. The country recently transitioned to TREM Stage-IV (not VI). The rollout of the next phase, TREM Stage-V, is scheduled for the coming years, meaning the highest current operational standard is Stage IV.
- Statement 3 is Correct: This is the most crucial socio-political aspect of the policy. The transition to TREM-IV requires significant technological upgrades (like advanced fuel injection and electronic control units), which makes the tractors much more expensive. Since the vast majority of Indian farmers are small or marginal and rely on tractors with less than 50 HP, the government entirely exempted <50 HP tractors from the TREM-IV mandate. They continue to be manufactured under the older, cheaper TREM III-A norms. The Indian government proposes to enforce TREM V emission norms for tractors above 75 HP and below 25 HP starting October 2026.

82) Consider the following statements regarding the 'Global Forest Resources Assessment (GFRA) 2025':

- 1) It is a comprehensive global report published every five years by the Food and Agriculture Organization (FAO).
- 2) According to the latest data, India currently ranks fifth globally in terms of total forest area.
- 3) The Russian Federation holds the largest total forest area in the world.

How many of the above statements are correct?

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

Exp:

Statement 1 is Correct: The GFRA is the most authoritative assessment of the world's forests. It is released periodically (every five years) by the Food and Agriculture Organization (FAO) of the United Nations, not by UNEP or the World Bank (a very common UPSC institutional trap).

Statement 2 is Incorrect (The Rank Trap): India does not rank 5th. In the landmark 2025 assessment, India improved its standing to rank 9th globally in total forest area (moving up from 10th place in the previous report). India also maintained its 3rd position worldwide in terms of net annual forest area gain.

Statement 3 is Correct: The Russian Federation accounts for the absolute highest forest area globally (over 800 million hectares). It is followed by Brazil, Canada, the United States, and China. Together, these five nations hold more than half of the world's entire forest cover.

83) Consider the following statements:

1. Category I AIFs are designed to promote socially desirable or economically important sectors and therefore face lighter regulatory constraints than Category III AIFs.
2. Category III AIFs, which pursue complex trading strategies and leverage, require stricter disclosure and leverage limits to protect retail and non-sophisticated investors.
3. Allowing unrestricted retail access to all AIF categories without enhanced disclosure and suitability checks improves market efficiency and investor welfare.

Which of the statements given above are correct?

- a) 1 and 2 only**

b) 2 and 3 only

c) 1 and 3 only

d) All three

Exp:

- **Statement 1** is correct: Category I AIFs typically target priority sectors and are encouraged by policy, so regulatory focus is on enabling deployment rather than restricting strategy.
- **Statement 2** is correct: Category III strategies often use leverage and complex derivatives, so stricter disclosure, leverage caps, and investor suitability norms are warranted.
- **Statement 3** is incorrect: Unrestricted retail access without safeguards raises moral hazard and suitability concerns and can harm non-sophisticated investors.

84) Consider the following statements:

1. Rapid growth in instant retail payment systems increases systemic risk only if the underlying settlement infrastructure is not backed by central-bank settlement finality.
2. A high share of digital payments routed through a few private payment service providers concentrates operational and cyber risk even when settlement is centralised.
3. Mandating interoperability among payment providers eliminates concentration risk and therefore removes the need for prudential oversight of large private players.

Which of the statements given above are correct?

a) **1 and 2 only**

b) 2 and 3 only

c) 1 and 3 only

d) All three

Exp:

- **Statement 1** is correct: settlement finality at the central bank reduces settlement risk; without it, liquidity and credit exposures can amplify systemic stress.
- **Statement 2** is correct: operational concentration creates single-point failures and cyber-attack vectors even when settlement is centralised.

- **Statement 3** is incorrect: interoperability reduces some concentration effects but does not remove the need for prudential oversight, operational resilience standards, and contingency planning.

85) **Consider the following measures:**

- A. Large, frequent FX intervention financed by short-term domestic debt issuance.
- B. Clear rule-based communication on intervention thresholds and reserve targets.
- C. Using FX reserves to smooth temporary volatility while simultaneously issuing long-dated domestic debt to finance structural fiscal needs.

Which combination best minimises rollover risk, preserves market confidence, and keeps exchange-rate expectations anchored?

- a) A only
- b) B only
- c) B and C only**
- d) A and C only

Exp:

- **A** is risky: financing intervention with short-term domestic debt raises rollover and interest-rate risk and can undermine confidence.
- **B** is essential: transparent, rule-based communication reduces uncertainty and speculative pressures.
- **C** is prudent: using reserves for temporary smoothing while matching fiscal financing with long-dated debt reduces rollover risk and aligns financing with structural needs. Together B and C balance market signalling, fiscal prudence, and exchange-rate stability.

86) The government taxes transfers of VDAs at a flat rate with limited deductions and imposes TDS on payments for transfers. Which of the following is the most likely unintended consequence?

- a) Complete elimination of speculative trading.
- b) Shift of transactions to unregulated OTC or foreign platforms to avoid TDS and tax.**
- c) Immediate formalisation of all VDA activity into regulated exchanges.

d) Uniform compliance across all investor classes.

Exp:

High flat rates plus upfront TDS create compliance costs and cash-flow friction, incentivising migration to unreported OTC channels or foreign platforms. This undermines tax base and reporting objectives

87) Consider the following statements regarding the 'Extended Bulk Waste Generator Responsibility' (EBWGR) introduced under the Solid Waste Management Rules, 2026:

- 1) It is exclusively applicable to entities that generate a minimum of 500 kg of solid waste per day.
- 2) Entities unable to process their wet waste on-site are legally mandated to purchase equivalent EBWGR certificates.
- 3) It officially enforces the 'Polluter Pays' principle by shifting the financial burden of waste processing away from Urban Local Bodies.

How many of the above statements are correct?

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

Exp:

- Statement 1 is Incorrect: The Commission loves to test numerical definitions. The new rules define a Bulk Waste Generator much more strictly. EBWGR applies to any entity generating just 100 kg or more of waste per day (not 500 kg). It also includes alternative triggers: consuming 40,000 liters of water daily or having a floor area of 20,000 square meters.
- Statement 2 is Correct: This is the operational core of EBWGR. Bulk generators (like tech parks or large apartments) must set up on-site composting/bio-methanation. If they lack the space to do so, they cannot just dump it; they must buy EBWGR certificates from registered waste processors through a centralized portal to offset their footprint.
- Statement 3 is Correct: This is the underlying philosophy of the policy. For decades, municipalities (Urban Local Bodies) spent massive amounts of public money managing waste from massive private complexes. EBWGR legally enforces the 'Polluter Pays' principle, making the bulk generators financially responsible for their own waste processing

88) Which of the following statements best describes the concept of "Cellular Agriculture"?

- a) The targeted manipulation of plant and animal DNA at the cellular level to breed high-yielding, climate-resilient agricultural varieties.
- b) The highly automated, indoor cultivation of crops where nutrient solutions are delivered directly to root cells in a soil-less medium.
- c) **The production of animal-sourced foods and materials directly from cell cultures in controlled bioreactors without rearing whole animals.**
- d) The large-scale application of engineered microorganisms and cellular bio-fertilizers to artificially restore the nutrient cycle of degraded soils.

Exp:

- Option C is Correct: Cellular agriculture is exactly what it sounds like: farming cells, not animals. It involves taking a small stem cell biopsy from a live animal (like a cow or chicken) and multiplying those cells in massive cultivators (bioreactors) to create real meat, milk, or leather, completely eliminating the need to breed, feed, and slaughter livestock.
- Option A is Incorrect: This describes Genetic Engineering (GM Crops / CRISPR). While it happens at the cellular level, the end goal is still to grow a traditional, whole plant or animal in a field.
- Option B is Incorrect: This describes Hydroponics / Aeroponics (often used in Vertical Farming). It focuses on how nutrients are delivered to traditional plant cells, but it still involves growing a whole plant.
- Option D is Incorrect: This describes Microbial Agriculture / Synthetic Bio-fertilizers. It uses microbes to fix soil health, but again, the end product is still a traditionally grown crop.

89) **With reference to ISRO's plans for utilizing nuclear energy in space exploration (2025-2026), consider the following statements:**

1. ISRO, in collaboration with BARC, is developing Radioisotope Thermoelectric Generators (RTGs) specifically to overcome the limitations of solar power during the 'Lunar Night'.
2. The primary fuel being utilized for India's indigenous nuclear batteries is Americium-241, as it is more abundant in India's thorium-based nuclear cycle.
3. Nuclear Thermal Propulsion (NTP), unlike RTGs, uses a fission reactor to heat a propellant to provide thrust, offering nearly double the efficiency of conventional chemical rockets.

4. The upcoming Chandrayaan-4 mission is expected to be the first Indian mission to carry an indigenous nuclear heating unit to maintain the thermal balance of its lunar modules.

Which of the statements given above are correct?

- A) 1 and 3 only
B) 1, 2, and 4 only
C) 1, 3, and 4 only
D) 1, 2, 3, and 4

Exp:

- **Statement 1 is Correct:** RTGs are critical for lunar missions because solar panels cannot generate power during the 14-day lunar night. Nuclear energy provides continuous heat and electricity.
- **Statement 2 is Incorrect:** While some European agencies are exploring Americium-241, ISRO's current program relies on **Plutonium-238** (^{238}Pu). It is the gold standard for RTGs due to its high power density and manageable radiation shielding requirements.
- **Statement 3 is Correct:** NTP is a propulsion system (not just a power source). By using a nuclear reactor to expand gases, it provides a much higher **Specific Impulse** (I_{sp}) than chemical engines, making it the preferred choice for future crewed Mars missions.
- **Statement 4 is Correct:** **Chandrayaan-4** (planned for the late 2020s) and its preceding technology demonstrators in 2026 are designed to use **Radioisotope Heater Units (RHUs)** and RTGs to ensure survival and operation through the lunar night, marking India's shift away from purely solar-dependent lunar craft.

90) Directions: In the following question, a statement of Assertion (A) is followed by a statement of Inference/Reason (R). Mark the correct choice as:

Assertion (A): The Vera C. Rubin Observatory is often described as a "discovery machine" that will create a 10-year time-lapse movie of the Southern Hemisphere sky.

Reason (R): The observatory utilizes a wide-field, rapid-scanning telescope and the world's largest digital camera to detect transient celestial events and map the large-scale structure of the universe.

- (A) Both A and R are true, and R is the correct explanation of A.
(B) Both A and R are true, but R is not the correct explanation of A.
(C) A is true, but R is false.
(D) A is false, but R is true.

Exp:

- **Assertion (A) is True:** The primary objective of the Rubin Observatory is the **Legacy Survey of Space and Time (LSST)**. By scanning the same areas of the southern sky repeatedly for 10 years, it effectively creates a "movie" showing how the universe changes over time (transient events).
- **Reason (R) is True and Corrects the Assertion:** The "discovery machine" label comes specifically from its hardware. It features the **Simonyi Survey Telescope** and a **3.2-gigapixel camera** (about the size of a small car). This setup allows it to scan the entire visible sky every few nights, generating nearly **10 million alerts nightly** (as seen in the 2026 milestones) for objects that change position or brightness

91) Consider the following pairs of Wildlife Sanctuaries and the States they are located in:

Wildlife Sanctuary	State
1. Mhadei Wildlife Sanctuary	Goa
2. Thattekad Bird Sanctuary	Karnataka
3. Gandhi Sagar Sanctuary	Madhya Pradesh
4. Pobitora Wildlife Sanctuary	West Bengal

How many pairs given above are correctly matched?

- Only one pair
- Only two pairs**
- Only three pairs
- All four pairs

Exp:

- **Pair 1 is Correctly Matched:** The Mhadei Wildlife Sanctuary is located in the Western Ghats of Goa. It is highly relevant for the Prelims because the Bombay High Court recently directed the Goa government to notify Mhadei and its surrounding areas as a Tiger Reserve, sparking major state-level debates.
- **Pair 2 is Incorrectly Matched:** The Thattekad Bird Sanctuary is located in Kerala, not Karnataka. It was described by the legendary ornithologist Salim Ali as the richest bird habitat in peninsular India. Aspirants often confuse it with Karnataka's Dandeli or Ranganathittu.

- Pair 3 is Correctly Matched: The Gandhi Sagar Sanctuary is located in Madhya Pradesh (situated on the northern boundary bordering Rajasthan, around the Chambal river). This is a massive high-yield topic. It is being developed as the second home for African Cheetahs in India to ease the spatial pressure on Kuno National Park.
- Pair 4 is Incorrectly Matched: Pobitora Wildlife Sanctuary is located in the floodplains of the Brahmaputra in Assam, not West Bengal. While West Bengal does have rhinos (in Jaldapara and Gorumara), Pobitora is famous for having the highest density of the Great Indian One-Horned Rhinoceros in the world (often confused with Kaziranga, which has the highest absolute population, but Pobitora has the highest density).

92) Which of the following statements best describes the recently discovered phenomenon known as 'Plasticrust'?

- A newly evolved marine microbial ecosystem that actively colonizes and thrives on floating microplastic debris.
- A novel rock-like formation where melted plastic fuses with sand, shells, and wood, typically triggered by coastal campfires.
- A hardened layer of degraded plastic debris that has been physically encrusted onto coastal rocks by persistent wave action.**
- A highly concentrated, continuous film of buoyant nanoplastics trapped just below the ocean's surface that inhibits atmospheric gas exchange.

Exp:

- Option C is Correct: Plasticrust is a novel form of coastal pollution first discovered on the volcanic island of Madeira, Portugal. It occurs when large plastic debris (like ocean fishing gear or bottles) is continuously smashed against rocky shores by violent wave action. Over time, the plastic breaks down and permanently encrusts itself onto the rocks, looking almost like a synthetic lichen.
- Option A is Incorrect: This is the exact definition of the Plasticsphere. It is a major UPSC concept referring to the unique, artificial ecosystems of bacteria, algae, and viruses that have adapted to live exclusively on floating plastic trash in the open ocean.
- Option B is Incorrect: This describes a Plastiglomerate. While similar in concept, Plastiglomerates are formed by heat (usually human campfires on beaches melting plastic into the sand and rocks), whereas Plasticrust is formed by mechanical wave action encrusting plastic directly onto existing cliff faces.
- Option D is Incorrect: This describes the broader physical accumulation of microplastics in the Sea Surface Microlayer (SML), a real phenomenon that disrupts the carbon cycle, but it is not referred to as a crust.

93) With reference to 'Mucormycosis' (Black Fungus), which has been in the news recently, consider the following statements:

1. It is a rare but serious infection caused by a group of molds called mucormycetes, which are omnipresent in the environment, particularly in soil and decaying organic matter.
2. The infection primarily affects individuals with compromised immune systems or those whose bodies have a reduced ability to fight environmental pathogens.
3. A key factor in the surge of cases during the COVID-19 pandemic was the excessive use of steroids, which suppressed immunity and raised blood sugar levels.
4. The fungus is contagious and can easily spread from an infected person to a healthy individual through respiratory droplets.

Which of the statements given above are correct?

A) 1, 2, and 3 only

B) 2 and 3 only

C) 1 and 4 only

D) 1, 2, 3, and 4

Exp:

- **Statement 1 is Correct:** Mucormycosis is caused by mucormycetes. These molds are found throughout the environment, especially in soil, air, and even in the noses and mucus of healthy people.
- **Statement 2 is Correct:** It is an **opportunistic infection**. It rarely affects healthy people; instead, it targets those with underlying health issues (like uncontrolled diabetes or HIV) or those taking medicines that lower the body's ability to fight germs.
- **Statement 3 is Correct:** During COVID-19, steroids were used to reduce lung inflammation. However, steroids also increase blood sugar levels and suppress the immune system, creating an ideal "opportunity" for the fungus to grow, especially in diabetic patients.
- **Statement 4 is Incorrect:** This is a crucial distinction. Mucormycosis is **not contagious**. It cannot spread between people or between people and animals. Humans usually contract it by inhaling fungal spores from the air or through skin contact via a cut or burn.

94) With reference to 'Polyunsaturated Fatty Acids' (PUFAs), consider the following statements:

1. They are called 'unsaturated' because they contain multiple double bonds between carbon atoms, which prevents them from being saturated with hydrogen.

2. Unlike saturated fats, most polyunsaturated fats remain liquid at room temperature but may start to turn solid when chilled.
3. Essential PUFAs like Omega-3 and Omega-6 cannot be synthesized by the human body and must be obtained through diet.
4. Consumption of PUFAs is generally associated with an increase in LDL (Low-Density Lipoprotein) cholesterol, thereby increasing the risk of heart disease.

Which of the statements given above are correct?

A) 1, 2, and 3 only

B) 2 and 4 only

C) 1 and 3 only

D) 1, 2, 3, and 4

Exp:

- **Statement 1 is Correct:** Saturated fats have all single bonds and are "saturated" with hydrogen. Polyunsaturated fats have **two or more double bonds**, creating "kinks" in the chain that prevent the molecules from packing tightly together.
- **Statement 2 is Correct:** Because of their chemical structure, they typically have lower melting points than saturated fats, keeping them **liquid at room temperature** (e.g., sunflower oil, soybean oil).
- **Statement 3 is Correct:** Humans lack the enzymes to produce Omega-3 (Alpha-linolenic acid) and Omega-6 (Linoleic acid) from scratch. These are termed "**essential fatty acids**" and must come from food sources like fish, walnuts, and flaxseeds.
- **Statement 4 is Incorrect:** This is a common health-science trap. PUFAs are actually known to **lower LDL (bad) cholesterol** and provide nutrients that help develop and maintain your body's cells, reducing the overall risk of heart disease and stroke.

95) Which of the following is the apex body responsible for the appraisal of proposals relating to the release of genetically engineered (GE) organisms and products into the environment in India?

A) Indian Council of Agricultural Research (ICAR)

B) Genetic Engineering Appraisal Committee (GEAC)

C) Food Safety and Standards Authority of India (FSSAI)

D) Department of Biotechnology (DBT)

Exp:

- **GEAC:** This is the statutory body under the **Ministry of Environment, Forest and Climate Change (MoEFCC)**. It is responsible for assessing the biosafety and environmental impact of all Genetically Modified (GM) crops (like Bt Cotton, GM Mustard, etc.) before they are allowed for commercial or environmental release.
- **ICAR:** Focuses on agricultural research and education but is not the primary regulatory body for GM approvals.
- **FSSAI:** Deals with the safety of food products once they enter the market but does not handle the environmental release of the crop itself.
- **DBT:** Provides the scientific guidelines through the Review Committee on Genetic Manipulation (RCGM), which handles small-scale trials, but the final "green signal" for environmental release must come from the GEAC.

96) What is a major ethical concern specifically associated with 'Germline Editing' using CRISPR?

A. **Changes are heritable and will be passed down to future generations.**

B. It only works on adult cells and cannot affect children.

C. It requires the use of radioactive isotopes in the lab.

D. It can only be used on non-human animals.

Exp:

1. Understanding Germline Editing: Germline editing refers to the genetic modification of reproductive cells (sperm or eggs) or early-stage embryos. Unlike somatic editing (which targets non-reproductive cells like skin or blood), modifications made to the germline become a permanent part of the individual's genetic code.

2. Why Option A is the Correct Answer:

- **Heritability:** Because the changes are present in the reproductive cells, they will be passed on to all of that individual's biological descendants. This effectively "rewrites" the genetic future of a family line.
- **Irreversibility:** If an unintended error (an "off-target" mutation) is made during the process, that error is also passed down, potentially introducing new genetic disorders into the human gene pool that cannot be easily removed.
- **Lack of Consent:** A major ethical pillar is that the future generations who will inherit these traits cannot provide consent for the modifications.

3. Why the other options are incorrect:

- **Option B:** This describes **Somatic Gene Editing**. Somatic editing targets specific tissues (like the lungs in cystic fibrosis patients) and stays only with that patient; it does not affect their children.
- **Option C:** CRISPR technology is a biochemical tool utilizing the Cas9 protein and guide RNA. It does not require radioactive isotopes for the editing process.

- **Option D:** CRISPR is a universal tool. While it is used extensively in animal research and agriculture, it is technically capable of being used on human cells, which is exactly why the ethical debate exists.

Broader Ethical Implications

The debate over germline editing often extends to concerns about "**Designer Babies**" (using technology for enhancement rather than just curing diseases) and **Social Inequality** (where genetic advantages might only be accessible to the wealthy).

97) **With reference to 'Radiocarbon Dating' used in archaeological and geological studies, consider the following statements:**

1. The method relies on the radioactive decay of Carbon-14, an isotope that is continuously formed in the upper atmosphere by the interaction of cosmic rays with nitrogen.
2. Radiocarbon dating can be used to determine the age of inorganic materials like stone tools and metallic coins, provided they were found in an organic context.
3. The 'half-life' of Carbon-14 is approximately 5,730 years, which makes the technique effective for dating samples up to about 50,000 years old.
4. Once an organism dies, it stops absorbing carbon, and the ratio of Carbon-14 to Carbon-12 in its remains begins to increase over time.

Which of the statements given above are correct?

A) 1 and 2 only

B) 1 and 3 only

C) 2 and 4 only

D) 1, 3, and 4 only

Exp: self explanatory

98) **The Prototype Fast Breeder Reactor (PFBR), which recently achieved a major milestone in Kalpakkam, Tamil Nadu, is a key component of India's Three-Stage Nuclear Power Programme. Which of the following statements correctly describes a primary feature of this reactor?**

A) It uses heavy water as both a coolant and a moderator to slow down neutrons.

B) It is designed to produce more fissile fuel than it consumes during the power generation process.

C) It relies primarily on imported enriched uranium to sustain the nuclear chain reaction.

D) It is the first stage of India's nuclear programme, intended to replace old coal-based thermal plants.

Exp:

- **The "Breeder" Concept:** The word "Breeder" in PFBR means the reactor "breeds" (creates) fuel. It converts **Thorium-232** (which is not a fuel by itself) into **Uranium-233** (which is a high-quality fuel) while it generates electricity.
- **Why A is Incorrect:** Fast reactors like the PFBR do **not** use a moderator because they need "fast" neutrons to work. Also, it uses **Liquid Sodium** as a coolant, not heavy water.
- **Why C is Incorrect:** The PFBR is built to make India self-reliant. It uses Plutonium and Uranium recovered from our own first-stage reactors, eventually moving us toward using our massive domestic **Thorium** reserves.
- **Why D is Incorrect:** The PFBR is the **Second Stage**. The first stage consists of Pressurized Heavy Water Reactors (PHWRs).

99) NASA's 'Psyche' mission, which has been in the news recently, is primarily designed to study which of the following?

- A) The icy moons of Jupiter to search for signs of life.
- B) A metal-rich asteroid to understand the origin of planetary cores.**
- C) The sun's outermost atmosphere (corona) and solar winds.
- D) The atmosphere of Venus to detect the presence of phosphine.

Exp:

- **The Target:** Most asteroids are made of rock or ice. **16 Psyche** is unique because it is composed mostly of **iron and nickel**.
- **The Goal:** Scientists believe 16 Psyche is the "exposed heart" of a dead planet. By studying it, we can learn about the **Earth's own core**, which is impossible to visit because it is deep underground and under extreme pressure.
- **The Orbit:** It is located in the **Main Asteroid Belt** between Mars and Jupiter.

100) Consider the following

- i. Election of President and its manner.
- ii. Admission or establishment of new States.
- iii. Goods and Service Tax Council.
- iv. Representation of States in Parliament.
- v. Delimitation of Constituencies.

Which of the following statements is/are correct with respect to amendment of the constitution.

1. Three of the above provisions can be amended only by a Special Majority of Parliament along with ratification by at least half of the State Legislatures.
2. Two of the above provisions can be amended by a Simple Majority of Parliament.

Select the answer using the code given below:

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

Exp:

Provisions requiring Special Majority + State Ratification:

- Election of President and its manner
- GST Council
- Representation of States in Parliament

Provisions amendable by Simple Majority:

- Admission/establishment of new States
- Delimitation of constituencies . Both the statements are correct



