

UPSC CSE General Studies Prelims 2023 Questions Reflection from Wiley's 3 Online Mock Tests

Highlighted section signifies the matching of Wiley's Test Questions / Topic / Explanation
with UPSC CSE General Studies Prelims 2023 Paper

OBSERVATIONS

- ▶ The paper was comparatively difficult in 2023. However, a few questions were easy as well. The elimination technique was not useful for the students to a large extent for this year's paper. Assertion-reason type questions were reintroduced this year.
- ▶ The UPSC paper was framed to link the static subjects to dynamic current issues of relevance.
- ▶ Sufficient questions were asked from the static portions of Science & Tech, Environment and Economics, Geography, International Relations. However, static subjects like Modern History declined compared to previous years.
- ▶ Importance of daily newsletters was reiterated by this year's paper.
- ▶ **Polity:** Political philosophy like Constitutionalism, principles of judicial review, related questions were asked from the Governance section. A significant number of questions were asked from topics like Prisons Act 1894, old-yet-important Acts, Constitutional bodies and non-constitutional bodies, etc.
- ▶ **History:** There was an increase in the number of questions from Ancient, Medieval and Art & Culture over the Modern Indian History.
- ▶ **Geography:** Map-based questions were dominating Geography section. Topics related to golden quadrilateral, mineral resources such as cobalt continues to dominate Economic Geography segment of the paper.
- ▶ **Environment & Ecology:** Pollution, climate change and species such as squirrels, orangutan, nocturnal animals were in focus from the Environment & Ecology section. New technologies such as green hydrogen, biofilters Etc. were also remain in focus.
- ▶ **Indian Economy:** Infra, mineral reserves (uranium & gold), ports, MSME, SHG, smaller farmer large field, MSP, trade, etc. were in focus from the Economic section. Intangible assets, capital markets were new introduction to the paper.
- ▶ **Science & Tech:** Astrophysics, space (pulsars), missile technology (ballistic missiles), navigation systems, operational technology (carbon fibres) and new discoveries such as aerial metagenomics were in focus in the Science & Tech section.
- ▶ **Suggestions to the students:**
 - The changing pattern of the paper does not affect to those who understands the concepts and apply them in different scenarios.
 - Students should read the newspapers to prepare current affairs increase their knowledge of static subjects.
 - Themes like sports and national days should not be ignored.
 - Standard textbooks and testing your knowledge using Mock Test remains the mantra to success.
- ▶ **How to read this document:**
 - **Difficulty Level**
 - E = Easy
 - M = Medium
 - D = Difficult

**15 Questions
Matched
from Wiley's 3 Online
Full Length Tests**

<p>Q1. Consider the following statements:</p> <ol style="list-style-type: none"> 1. Jhelum River passes through Wular Lake. 2. Krishna River directly feeds Kolleru Lake. 3. Meandering formed Kanwar Lake. <p>How many of the statements given above are correct?</p> <ol style="list-style-type: none"> (a) Only one (b) Only two (c) All three (d) None 		Geography (M)
<p>Q2. Consider the following pairs:</p> <p>Port Well known as</p> <ol style="list-style-type: none"> 1. Kamarajar Port: First major port in India registered as a company. 2. Mundra Port: Largest privately owned port in India 3. Visakhapatnam Port: Largest container port in India <p>How many of the above pairs are correctly matched?</p> <ol style="list-style-type: none"> 1. Only one pair 2. Only two pairs 3. All three pairs 4. None of the pairs 		Geography (M)
<p>Q3. Consider the following trees:</p> <ol style="list-style-type: none"> 1. Jackfruit (<i>Artocarpus heterophyllus</i>) 2. Mahua (<i>Madhuca indica</i>) 3. Teak (<i>Tectona grandis</i>) <p>How many of the above are deciduous trees?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Geography (D)
<p>Q4. Consider the following statements:</p> <ol style="list-style-type: none"> 1. India has more arable area than China. 2. The proportion of irrigated area is more in India as compared to China. 3. The average productivity per - hectare in Indian agriculture is higher than that in China. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Geography (M)
<p>Q5. Which one of the following is the best example of repeated falls in sea level, giving rise to present-day extensive marshland?</p> <ol style="list-style-type: none"> 1. Bhitarkanika Mangroves 2. Marakkanam Salt Pans 3. Naupada Swamp 4. Rann of Kutch 		Geography (E)
<p>Q6. Ilmenite and rutile, abundantly available in certain coastal tracts of India, are rich sources of which one of the following?</p> <ol style="list-style-type: none"> 1. Aluminium 2. Copper 3. Iron 4. Titanium 		Geography (E)

<p>Q7. About three-fourths world's cobalt, a metal required for the manufacture of batteries for electric motor vehicles, is produced by:</p> <ol style="list-style-type: none"> 1. Argentina 2. Botswana 3. the Democratic Republic of the Congo 4. Kazakhstan 		Geography (E)
<p>Q8. Which one of the following is a part of the Congo Basin?</p> <ol style="list-style-type: none"> 1. Cameroon 2. Nigeria 3. South Sudan 4. Uganda 		Geography (M)
<p>Q9. Consider the following statements:</p> <ol style="list-style-type: none"> 1. Amarkantak Hills are at the confluence of Vindhya and Sahyadri Ranges. 2. Biligirirangan Hills constitute the easternmost part of Satpura Range. 3. Seshachalam Hills constitute the southernmost part of Western Ghats. <p>How many of the statements given above are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Geography (M)
<p>Q10. With reference to India's projects on connectivity, consider the following statements:</p> <ol style="list-style-type: none"> 1. East-West Corridor under Golden Quadrilateral Project connects Dibrugarh and Surat. 2. Trilateral Highway connects Moreh in Manipur and Chiang Mai in Thailand via Myanmar. 3. Bangladesh – China -India – Myanmar Economic Corridor connects Varanasi in Uttar Pradesh with Kunming in China. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Geography (M)
<p>Q11. Consider the following statements:</p> <p>Statement-I: India, despite having uranium deposits, depends on coal for most of its electricity production.</p> <p>Statement-II: Uranium, enriched to the extent of at least 60%, is required for the production of electricity.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I 3. Statement-I is correct Statement-II is incorrect 4. Statement-I is incorrect Statement-II is correct 		Geography (E)
<p>Q12. Consider the following statements:</p> <p>Statement-I: Marsupials are not naturally found in India.</p> <p>Statement-II: Marsupials can thrive only in montane grasslands with no predators.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I 3. Statement-I is correct but Statement-II is incorrect 4. Statement-I is incorrect but Statement-II is correct 		Environment (M)

<p>Q13. Invasive Species Specialist Group' (that develops Global Invasive Species Database) belongs to which one of the following organizations?</p> <ol style="list-style-type: none"> 1. The International Union for Conservation of Nature 2. The United Nations Environment Programme 3. The United Nations World Commission for Environment and Development 4. The World Wide Fund for Nature 		Environment (M)
<p>Q14. Consider the following fauna:</p> <ol style="list-style-type: none"> 1. Lion-tailed Macaque 2. Malabar Civet 3. Sambar Deer <p>How many of the above are generally nocturnal or most active after sunset?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Environment (D)
<p>Q15. Which of the following organisms perform waggle dance for others of their kin to indicate the direction and the distance to a source of their food?</p> <ol style="list-style-type: none"> 1. Butterflies 2. Dragonflies 3. Honeybees 4. Wasps 		Environment (M)
<p>Q16. Consider the following statements:</p> <ol style="list-style-type: none"> 1. Some mushrooms have medicinal properties. 2. Some mushrooms have psycho-active properties. 3. Some mushrooms have insecticidal properties. 4. Some mushrooms have bioluminescent properties. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. Only three 4. All four 		Environment (E)
<p>Q17. Consider the following statements regarding the Indian squirrels:</p> <ol style="list-style-type: none"> 1. They build nests by making burrows in the ground. 2. They store their food materials like nuts and seeds in the ground. 3. They are omnivorous. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Environment (M)

Q18. Consider the following statements:

1. Some microorganisms can grow in environments with temperature above the boiling point of water.
2. Some microorganisms can grow in environments with temperature below the freezing point of water.
3. Some microorganisms can grow in highly acidic environments with a pH below 3.

How many of the above statements are correct?

1. Only one
2. Only two
3. All three
4. None

Question No. 58 Test 1

Microorganism statement can be inferred (Partially)

Q. Consider the following statements regarding Ocean Acidification:

1. It is the continuous decrease in the pH of the Earth's oceans caused by the uptake of carbon dioxide (CO₂) from the atmosphere.
2. It is one of the main causes is the burning of fossil fuels.
3. Change in pH of ocean give organism adequate time to adapt.

Which of the statement(s) given above is/ are correct?

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

Statement (1) is correct. An estimated 30–40% of the carbon dioxide from human activity released into the atmosphere dissolves into oceans, rivers, and lakes.

Statement (2) is correct. At least one-quarter of the carbon dioxide (CO₂) released by burning coal, oil and gas doesn't stay in the air, but instead dissolves into the ocean. It is one of the main causes of ocean acidification.

- Another main culprit behind the sharp rise in ocean acidification is deforestation. That is because when a forest is cut or burnt down, it releases all of the carbon that was stored into the air.

Statement (3) is not correct. Such a relatively quick change in PH in ocean chemistry doesn't give marine life (which evolved over millions of years) much time to adapt.

In fact, the shells of some animals are already dissolving in the more acidic seawater. Overall, it is having a negative impact on ocean ecosystems.

The Inside Story:**Why is Ocean Acidification harmful for Ocean?**

At first, it was thought that this might be a good thing because it leaves less carbon dioxide in the air to warm the planet. Later it was realized that this slowed warming has come at the cost of changing the ocean's ecology. When CO₂ dissolves in seawater, the water becomes more acidic, and the ocean's pH drops. CO₂ is dissolving into the ocean so quickly that this natural buffering hasn't been able to keep up, resulting in relatively rapidly dropping pH in surface waters. As those surface layers gradually mix into deep water, the entire ocean is affected.

How does pH change with depth?

The pH change differs from ocean to ocean.

- North Atlantic Ocean: The pH decreases rapidly in the first 500 m and then stays roughly constant as the depth increases.
- North Pacific Ocean: The pH decreases even more rapidly in the first 500 m, but then it increases gradually as the depth increases.

Environment
(M)

Q19. Which one of the following makes a tool with a stick to scrape insects from a hole in a tree or a log of wood?

1. Fishing cat
2. Orangutan
3. Otter Sloth bear
4. Sloth bear

Environment
(D)

Q20. Consider the following:

1. Aerosols
2. Foam agents
3. Fire retardants
4. Lubricants

In the making of how many of the above are hydrofluorocarbons used?

1. Only one
2. Only two
3. Only three
4. All four

Q21. Consider the following statements:

Statement-I: Interest income from the deposits in Infrastructure Investment Trusts (InvITs) distributed to their investors is exempted from tax, but the dividend is taxable.

Statement-II: InvITs are recognized as borrowers under the 'Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest-Act, 2002'.

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

1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
3. Statement-I is correct but Statement-II is incorrect
4. Statement-I is incorrect but Statement-II is correct

Environment
(M)

Question No. 37 Test 2

Infrastructure Investment Trusts (InvITs) concept is explained

Consider the following statements regarding InvITs:

1. It is a hybrid between equity and debt investment.
2. It is similar to a mutual fund in nature.
3. They are regulated by the SEBI (Infrastructure Investment Trusts) Regulations, 2014.

Which of the statement(s) given above is/are correct?

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

Explanation:

Statement 1 is correct. It has features of both equity and debt. While the operating business model helps provide stable, predictable, and relatively low-risk cash flows like debt, there is growth potential like equity as the returns are not fixed with a scope of change in the unit price.

Statement 2 is correct. It is similar to a mutual fund, which enables direct investment of money from individual & institutional investors in infrastructure projects to earn a small portion of the income as return. These are long term contracts that provide a steady cash flow over the long-term depending on the underlying asset.

Statement 3 is correct. SEBI notified the SEBI (Infrastructure Investment Trusts) Regulations, 2014 providing for registration and regulation of InvITs in India. The Inside Story:

What is InvITs?

They are exchanging traded pooled investment vehicle like a mutual fund. While mutual funds invest the sum received in financial securities, an InvIT invests the same in real infrastructure assets like roads, power plants, transmission lines, pipelines etc. Public InvIT units can be listed and traded on a stock exchange like equity stocks. The objective of InvITs is to facilitate investment in the infrastructure sector. InvITs are like mutual funds in structure. InvITs can be established as a trust & registered with SEBI. An InvIT consists of 4 elements:

- 1) **Trustee:** The trustee, who inspects the performance of an InvIT is certified by Sebi and he cannot be an associate of the sponsor or manager.
- 2) **Sponsors:** 'Sponsors' are people who promote and refer to any organisation or a corporate entity with a capital of Rs 100 crore, which establishes the InvIT and is designated as such at the time of the application made to Sebi. Promoters/sponsor(s), jointly, have to hold a minimum of 25 per cent for three years (at least) in the InvIT, excluding the situations where an administrative requirement or concession agreement needs the sponsor to hold some minimum percent in the special purpose vehicle.
- 3) **Investment Manager:** Investment manager is an entity or limited liability partnership (LLP) or organisation that supervises assets and investments of the InvIT and guarantees activities of the InvIT.

Economy (D)

	<p>4) Project Manager: Project manager refers to the person who acts as the project manager and whose duty is to attain the execution of the project. It indicates that the entity is responsible for such execution and accomplishment of project landmark with respect to the agreement or other relevant project document.</p>	
<p>Q22. Consider the following statements. Statement-I: In the post-pandemic recent past, many Central Banks worldwide had carried out interest rate hikes. Statement-II: Central Banks generally assume that they have the ability to counteract the rising consumer prices via monetary policy means. Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I 3. Statement-I is correct but Statement II is incorrect 4. Statement-I is incorrect but Statement -II is correct 	<p>Question No. 8 Test 2 Central Banks (Federal Reserve) rate hike is discussed. Q) The United States Federal Reserve recently hiked its interest rates. Which of the following is not a probable consequence of rate hike?</p> <ol style="list-style-type: none"> a) Increased investments into the US economy. b) Appreciation of the US dollar. c) Increased Current Account Deficit (CAD) in net importing countries. d) Stronger currencies in net importing countries. <p>Explanation: The interest rate hike by the US Fed would lead to following probable outcomes:</p> <ul style="list-style-type: none"> • Option (a) is correct: Making the US economy more profitable due to higher interest rates. The capital investments would increase into the US markets. • Option (b) is correct: An increase of capital into the US economy would create a demand for dollar thus causing the US Dollar to appreciate against most currencies. • Depreciation of the currency implies that exports are expected to increase, while imports will take a hit. • Option (c) is correct: A higher value of dollar internationally would lead to the widening of the Current Account Deficits (CAD) of net importing countries (i.e., Imports more than exports) • Option (d) is not correct: Due to appreciation of US dollar internationally the net importing countries could face a negative international trade and higher inflationary pressures, thereby resulting in further weakening of currencies. 	<p>Economy (M)</p>

Q23. Consider the following statements:

Statement-I: Carbon markets are likely to be one of the most widespread tools in the fight against climate change.

Statement-II: Carbon markets transfer resources from the private sector to the State.

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

1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
3. Statement-I is correct but Statement-II is incorrect
4. Statement-I is incorrect but Statement-II is correct

Question No. 9 Test 2

Carbon Markets (Understanding)

Which of the following is not a key feature of the Energy Conservation (Amendment) Bill, 2022?

- a) It empowers the central government to specify a carbon credit trading scheme.
- b) Designated consumers may be required to meet a proportion of their energy needs from non-fossil sources.
- c) The Energy Conservation Code for buildings will also apply to all office and residential buildings.
- d) The Bill allows energy consumption standards to be specified for vehicles and ships.

Explanation: Key Features of the Energy Conservation (Amendment) Bill, 2022:

- **Obligation to use non-fossil sources of energy:** The Energy Conservation Act, 2001 empowers the central government to specify energy consumption standards. The Bill adds that the government may require designated consumers (sectors like mining, steel, cement, textile, chemicals, and petrochemicals) to meet a minimum share of energy consumption from non-fossil sources failing which a penalty of up to Rs10 lakh and an additional penalty of up to twice the price of oil equivalent of energy consumed above the prescribed norm would be added. **So, option (b) is correct**
- **Carbon trading:** The Bill empowers the central government to specify a carbon credit trading scheme. Carbon credit implies a tradeable permit to produce a specified amount of carbon emissions. The entities will be entitled to purchase or sell the certificate. Any other person may also purchase a carbon credit certificate on a voluntary basis. **So, option (a) is correct**
- **Energy conservation code for buildings:** The 2001 Act empowers the central government to specify energy conservation code for buildings. The Bill amends this to provide for an 'energy conservation and sustainable building code'. This new code will provide norms for energy efficiency and conservation, use of renewable energy, and other requirements for green buildings.
- **Applicability to residential buildings:** Under the 2001 Act, the energy conservation code applies to commercial buildings: (i) erected after the notification of the code, and (ii) having a minimum connected load of 100 kilo watts (kW) or contract load of 120 kilo volt ampere (kVA). Under the Bill, the new energy conservation and sustainable building code will also apply to the office and residential buildings meeting the above criteria only. **So, option (c) is not correct.**
- **Standards for vehicles and vessels:** Under the 2001 Act, the energy consumption standards may be specified for equipment and appliances which consume, generate, transmit, or supply energy. The Bill expands the scope to include vehicles (as defined under the Motor Vehicles Act, 1988), and vessels (includes ships and boats). **So, option (d) is correct.**
- **Regulatory powers of SERCs:** The Act empowers State Electricity Regulatory Commissions (SERCs) to adjudge penalties. The Bill adds that SERCs can also make regulations for discharging their functions.
- **Composition of the governing council of BEE:** The Act provides for the revamping of the Bureau of Energy Efficiency (BEE) by addition of more members to it. The Bill further increased the number of members between 31 to 37. It also provides for up to 7 members representing industries and consumers.

Environment (M)

Q24. Which one of the following activities of the Reserve Bank of India is considered to be part of 'sterilization'?

1. Conducting 'Open Market Operations'
2. Oversight of settlement and payment systems
3. Debt and cash management for the Central and State Governments
4. Regulating the functions of Non-banking Financial Institutions

Question No. 36 Test 2

Open Market Operations (Understanding/Elimination Method used for getting the answer))

Consider the following statements with respect to the Liquidity Adjustment Facility (LAF):

1. It is a tool used by RBI that allows banks to borrow money through repurchase agreements or to make loans to the RBI through reverse repo agreements.
2. The system liquidity be said to be in deficit if the banking system is a net lender to the RBI under the mechanism.

Which of the statement(s) given above is/are correct?

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

Explanation:

Statement 1 is correct.

A liquidity adjustment facility (LAF) is a tool used in monetary policy by RBI that allows banks to borrow money through repurchase agreements (repos) or to make loans to the RBI through reverse repo agreements. It refers to the operations of the RBI that inject or absorb the liquidity into or out of the banking system. This arrangement is effective in managing liquidity pressures and assuring basic stability in the financial markets. LAF's can manage inflation by increasing and reducing the money supply. The RBI can use it to manage high levels of inflation by increasing the repo rate, which raises the cost of servicing debt. This, in turn, reduces investment and money supply in India's economy. It was introduced by the RBI as a result of the Narasimham Committee on Banking Sector Reforms (1998).

Statement 2 is not correct.

Under the LAF mechanism if the banking system is a net borrower from the RBI the system liquidity be said to be in deficit.

If the banking system is a net lender to the RBI under the LAF the system liquidity be said to be in surplus.

Economy (M)

Q25. Consider the following markets:

1. Government Bond Market
2. Call Money Market
3. Treasury Bill Market
4. Stock Market

How many of the above are included in capital markets?

1. Only one
2. Only two
3. Only three
4. All four

Capital Markets are covered in following questions:

1. Question No. 46 Test 1
2. Question No. 51 Test 2
3. Question No. 55 Test 2
4. Question No. 68 Test 2
5. Question No. 45 Test 3

Subject: Indian Economy-Capital Market-Bonds and Stocks; Call and Put Option

LO: Student should recall the concept of bonds and the different types of bonds used in capital markets.

Level of Difficulty: Medium.

Which of the following is not correct about Additional Tier 1 bonds?

- a) They are a permanent part of the bank's capital.
- b) The bank issuing them has the discretion to either reduce or completely skip their interest pay-out.
- c) These bonds have a fixed maturity date.
- d) These bonds pay regular interest like other bonds.

Explanation:

Option (c) is the answer: AT1 bonds do not have a maturity date, as they are a permanent part of the bank's capital, akin to equity.

The Inside Story:

- AT1 bonds, short for Additional Tier 1 bonds, are a class of bonds issued by banks. After the global financial crisis of 2007-08, it was felt that banks ought to operate with a higher proportion of their own, permanent capital as opposed to borrowed capital. This permanent capital is termed as Tier 1 capital.
- To shore up their Tier 1 capital, banks were allowed to raise a special class of bonds known as AT1 bonds from investors. AT1 bonds, like other bonds, pay regular interest.
- Though these bonds never mature, they are issued with a call option. The call option gives the issuers of AT1 bonds, usually banks, the right (but not an obligation) to buy these bonds back from investors by paying the principal amount to investors.
 - o The issuer of such bonds may call or redeem the bonds if it is getting money at a cheaper rate, especially when interest rates are falling.
- Also, the holders of AT1 bonds do not have a put option, which means, investors cannot return these bonds to the issuing bank and get back the principal amount.
- The bank issuing them has the discretion to either reduce or completely skip their interest pay-out if it is making losses or at risk of falling short of capital needs.
- If the RBI believes that the bank is becoming short of capital or unviable to operate, it can direct the principal on these bonds to be written off too. This makes AT1 bonds far risky and unsuitable for retail investors. SEBI had ruled that AT1 bonds should be sold only in minimum ticket sizes of • 1 crore and above, to institutional investors.

(Stock market understanding from this question)

Consider the following statements regarding Follow-on public offer (FPO):

1. It allows companies to raise 'additional capital' to pay off debt.
2. It is be used to increase the shareholdings of a promoter.
3. It may increase the number of shares available to the investor.

Which of the statement(s) given above are correct?

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

Economy (D)

Explanation:

An FPO is a process through which companies that are publicly listed on the stock market, issue additional shares to investors. During an FPO, a company could decide to issue fresh shares to investors, or existing shareholders in the company could decide to sell their shares to other investors.

Statement 1 is correct: FPO is a further issue while IPO is the first issue. The FPO is raised to reduce the debt which is existing in a company and to raise additional capital for a company.

Statement 2 is not correct: FPO can also be used to decrease the shareholdings of a promoter.

Statement 3 is correct: FPO also allows investors to increase their stake in a company. It also provides an opportunity to new investors to buy stakes in a company.

The Inside Story:**What is an FPO?**

FPO is a follow up to the IPO. A follow-on public offer is the issuance of shares after the company is listed on a stock exchange. In other words, an FPO is an additional issue whereas an IPO is an initial or first issue.

What does it mean for the company?

An FPO is done to raise additional capital or to reduce existing debt and a company does it in two ways:

- Dilutive FPO: In dilutive FPO, the company issues an additional number of shares in the market for the public to buy, however the value of the company remains the same. This reduces the price of shares and automatically reduces the earnings per share also.
- Non-dilutive FPO: Non-dilutive IPO takes place when the larger shareholders of the company like the board of directors or founders sell their privately held shares in the market. This technique does not increase the number of shares for the company, just the number of shares available for the public increases. Unlike dilutive FPO, since this method does not do anything to the number of shares of the company, it does not do anything to the company's EPS (Earnings per share).

(Bond understanding from this question)

Consider the following statements regarding **"Zero Coupon Zero Principal" Bond:**

1. It is a security instrument issued by a not-for-profit organization registered with the social stock exchange.
2. The not-for-profit organization has to pay interest not principal.

Which of the statement(s) given above is/are correct?

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

Explanation:

Statement 1 is correct: "Zero Coupon Zero Principal instrument" is issued by a not-for-profit organization (NPO) that will be registered with the social stock exchange segment of a recognised stock exchange under the regulatory ambit of SEBI regulations.

Statement 2 is not correct: It resembles a debt security like a bond. When an entity takes a loan by issuing regular debt security like a bond, it has to make interest payments and the principal when the bond matures.

- This new financial instrument, when an entity issues these securities and raises money, it is not a loan but a donation. So, the borrowing entity does not have to pay interest—therefore zero coupon—and it does not have to pay the principal (zero principal) either.

The Inside Story:

Zero Coupon Zero Principal (ZCZP) Bonds

- The notification also declared the inclusion of ZCZP in the list of securities under Securities Contracts (Regulation) Act, 1956. As on date, this list included shares, scrips, stocks, bonds, debentures, debenture stock or other marketable securities, derivative etc.
- The SEBI declared the called zero-coupon, zero-principal instruments as securities that can be listed on particular exchanges.
- These are financial instruments that any non-profit organisation can use to raise funds.
- Usually, such organisations raise money through donations from individuals or corporates. Now, they can issue a zero-coupon, zero-principal security through a social stock exchange (SSE) and those willing to donate money to their cause can buy these securities.
- Social stock exchanges were first cleared by SEBI in September 2021. They are meant to be exchanges-like the NSE and BSE-except they will list only securities that raise money for non-profit or for-profit social enterprises.

(Bond understanding from this question)

Consider the following statements regarding "Bonds":

1. Rising bond yields may increase the interest rates.
2. It comes with a Coupon rate that remains constant until maturity.

Which of the statement(s) given above is/are correct?

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

Explanation:

Statement 1 is correct: Rising bond yields put immense pressure on the prevailing interest rates, forcing the lending rates to go higher. The RBI tries to regulate the bond yields and aims to keep them lower to reduce the borrowing costs for the government and limit the rise in the lending rates. Hence, the implications of rising bond yields in India may increase the rate of borrowing for the government and the citizens.

- Bond yields are directly proportional to interest rates.

Statement 2 is correct: Like an interest rate on a Fixed Deposit, bonds, too, come with a fixed interest rate known as a Coupon rate which is declared on the face value of the bonds that remains constant until maturity.

The Inside Story:**What are bonds?**

- Bond is a fixed-income instrument that represents a loan from an investor to a borrower.
- It is a contract between the investor and the borrower, where the borrower uses the money to fund its operation and the investors receive interest on the investment.
- Bonds are high-security debt instruments that fall under the fixed income asset class.
- Borrowers issue bonds to raise money from investors willing to lend them money for a certain amount of time.

Correlation between bond price movement and the stock market: Bonds prices and stock prices have an inverse relationship with each other. If a company is doing well financially, the demand is high, the cash flow is good along with the economy, the company's stock can provide good returns to the investor. Hence, the investor will buy stocks over bonds. However, if the economy is slow and people are left with less disposable income, the company's sales may suffer, prompting the stock price to fall. In this case, investors may buy bonds for regular interest rather than invest in volatile stocks.

	<p>(Stock exchange understanding from this question)</p> <p>Q) Consider the following statements regarding Exchange Traded Fund (ETF):</p> <ol style="list-style-type: none"> 1. They are priced at the close of the trading day based on the Net Asset Value of the underlying securities. 2. It can be traded in stocks only, not in other asset classes. <p>Which of the statement(s) given above are correct?</p> <ol style="list-style-type: none"> a) 1 only b) 2 only c) Both 1 and 2 d) Neither 1 nor 2 <p>Explanation:</p> <p>Statement 1 is not correct: Index funds operate in the way all mutual funds do, in that they are priced at the close of the trading day based on the Net Asset Value (NAV) of the underlying securities, whereas ETFs are priced to the market throughout the trading day.</p> <p>Statement 2 is not correct: Any asset class that has a published index and is liquid enough to be traded daily can be made into an Exchange Traded Fund. Bonds, commodities, currencies and multi-asset funds are all available in an ETF format.</p> <p>The Inside Story: Exchange Traded Funds</p> <p>It is a marketable security that tracks an index, a commodity, Bonds or a basket of assets like an index fund. ETFs are funds that track indexes such as Nifty or BSE Sensex etc. When you buy shares/units of an ETF, you are buying shares/units of a portfolio that tracks the yield and return of its native index.</p> <p>Difference between Index Funds and ETFs</p> <p>The main difference between ETFs and other types of index funds is that ETFs don't try to outperform their corresponding index, but simply replicate the performance of the index. They don't try to beat the market; they try to be the market. Unlike regular mutual funds, an ETF trades like a common stock on a stock exchange. The traded price of an ETF changes throughout the day like any other stock, as it is bought and sold on the stock exchange. ETFs typically have higher daily liquidity and lower fees than mutual fund schemes, making them an attractive alternative for individual investors.</p>	
<p>Q26. Which one of the following best describes the concept of 'Small Farmer Large Field'?</p> <ol style="list-style-type: none"> 1. Resettlement of a large number of people, uprooted from their countries due to war, by giving them a large cultivable land which they cultivate collectively and share the produce. 2. Many marginal farmers in an area organize themselves into groups and synchronize and harmonize selected agricultural operations. 3. Many marginal farmers in an area together make a contract with a corporate body and surrender their land to the corporate body for a fixed term for which the corporate body makes a payment of agreed amount to the farmers. 4. A company extends loans, technical knowledge, and material inputs to a number of small farmers in an area so that they produce the agricultural commodity required by the company for its manufacturing process and commercial production 		<p>Economy (E)</p>

<p>Q27. Consider the following statements:</p> <ol style="list-style-type: none"> 1. The Government of India provides Minimum Support Price for niger (Guizotia abyssinica) seeds. 2. Niger is cultivated as a Kharif crop. 3. Some tribal people in India use niger seed oil for cooking. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Economy (M)
<p>Q28. Consider the investments in the following assets:</p> <ol style="list-style-type: none"> 1. Brand recognition 2. Inventory 3. Intellectual property 4. Mailing list of clients <p>How many of the above intangible investments?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. Only three 4. All four 	<p>Question No. 90 Test 2 (Intangible Investments definition inferred from meaning of word intangible)</p> <p>Consider the following statements regarding Intangible Cultural Heritage:</p> <ol style="list-style-type: none"> 1. Sangeet Natak Akademi is a nodal office for matters relating to the intangible cultural heritage. 2. It includes traditions like performing arts, rituals and even oral traditions. 3. Garba is part of UNESCO's intangible cultural heritage list. <p>Which of the statements given above are correct?</p> <ol style="list-style-type: none"> a) 1 and 2 only b) 2 and 3 only c) 1 and 3 only d) 1, 2 and 3 <p>Explanation</p> <p>Statement 1 is correct: The Ministry of Culture has appointed the Sangeet Natak Academy, an autonomous organization under the Ministry of Culture, as nodal office for matters relating to the intangible cultural heritage including for preparation of the nomination dossiers for the Representative List of UNESCO.</p> <p>Statement 2 is correct: The term 'cultural heritage' has changed content considerably in recent decades, partially owing to the instruments developed by UNESCO. Cultural heritage does not end at monuments and collections of objects. It also includes traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts.</p> <p>Statement 3 is not correct: Gujarat's famed traditional dance form Garba has been nominated by India for inclusion in UNESCO's intangible cultural heritage list. It is not yet part of the list. (Intangible assets are those assets that is not physical in nature)</p>	Economy (M)
<p>Q29. Consider the following:</p> <ol style="list-style-type: none"> 1. Demographic performance 2. Forest and ecology 3. Governance reforms 4. Stable government 5. Tax and fiscal efforts <p>For the horizontal tax devolution, the Fifteenth Finance Commission used how many of the above as criteria other than population area and income distance?</p> <ol style="list-style-type: none"> 1. Only two 2. Only three 3. Only four 4. All five 		Economy (M)

Q30. Consider the following infrastructure sectors:

1. Affordable housing
2. Mass rapid transport
3. Health care
4. Renewable energy

On how many of the above does **UNOPS Sustainable Investments in Infrastructure and Innovation (S3i)** initiative focus for its investments?

1. Only one
2. Only two
3. Only three
4. All four

Question No. 46 Test 2

UNOPS (Understanding)

Other than mass rapid transport all of them are sustainable in nature. So, elimination method can be used.

Q) With reference to the Jal Jeevan Mission, consider the following statements:

1. Its goal is to provide 55 litres of water per person per day to every rural household through Functional Household Tap Connections (FHTC) by 2024.
2. The fund sharing between the Centre and states is 90:10 for all States.
3. It is implemented by Ministry of Rural Development.

Which of the statement(s) given above is/are correct?

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

Explanation:

Statement 1 is correct: It is launched in 2019 to provide every single rural household with functional household tap connections (FHTC)- 'Har GharNal Se Jal' by 2024.

- Its goal is to provide 55 litres of water per person per day to every rural household through FHTC.

Statement 2 is not correct: The fund allocation pattern between Centre & states is 90:10 for Himalayan and North-Eastern States, 50:50 for other states, and 100% for UTs.

Statement 3 is not correct: It was implemented by the Ministry of Jal Shakti which is a nodal Ministry.

The Inside Story:

The government of India in 2019 started the Jal Jeevan Mission to provide adequate, safe and reliable drinking water to all rural households in India by 2024, through the installation of functional household tap connections.

United Nations Office for Project Services (UNOPS) joined hands with the government of Denmark to support the Jal Jeevan Mission in India – providing strategic technical and training support.

- At the State level, Goa, Telangana and Haryana have achieved 100% tap connectivity to all households in the State.
- UTs like Puducherry, Andaman and Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu have also provided 100 % of their households with tap water connections.

Paani Samitis

- JJM is managed by Paani samitis to plan, implement, operate, manage, and maintain village water supply systems.
- Local people and Gram Sabhas and other institutions of local governance have been given an unprecedented role in the campaign.
- Local women are trained for water testing and are members of 'Paani Samitis' (village water and sanitation committees under JJM).

Economy (E)

Q31. In essence, what does 'Due Process of Law' means?

1. The principle of natural Justice
2. The procedure established by law
3. Fair application of law
4. Equality before law

Polity (E)

<p>Q32. Consider the following statements:</p> <p>Statement-I: In India, prisons are managed by State Governments with their own rules and regulations for the day-to-day administration of prisons.</p> <p>Statement-II: In India, prisons are governed by the Prisons Act, 1894 which expressly kept the subject of prisons in the control of Provincial Governments.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I Statement-I is correct but Statement-II is incorrect Statement-I is incorrect but Statement-II is correct 		Polity (M)
<p>Q33. Which one of the following statements best reflects the Chief purpose of the 'Constitution' of a country?</p> <ol style="list-style-type: none"> It determines the objective for the making of necessary laws. It enables the creation of political offices and a government. It defines and limits the powers of the government. It secures social justice, social equality and social security. 		Polity (E)
<p>Q34. In India, which one of the following Constitutional Amendments was widely believed to be enacted to overcome the judicial interpretations of the Fundamental Rights?</p> <ol style="list-style-type: none"> 1st Amendment 42nd Amendment 44th Amendment 86th Amendment 		Polity (D)
<p>Q35. Consider the following organization/bodies in India:</p> <ol style="list-style-type: none"> The National Commission for Backward Classes The National Human Rights Commission The National Law Commission The National Consumer Disputes Redressal Commission <p>How many of the above are constitutional bodies?</p> <ol style="list-style-type: none"> Only one Only two Only three All four 		Polity (E)
<p>Q36. Consider the following statements:</p> <ol style="list-style-type: none"> If the election of the President of India is declared void by the Supreme Court of India, all acts done by him/her in the performance of duties of his/her office of President before the date of decision become invalid. Election for the post of the President of India can be postponed on the ground that some legislative Assemblies have been dissolved and elections are yet to take place. When a Bill is presented to the President of India, the Constitution prescribes time limits within which he/she has to declare his/her assent. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> Only one Only two All three None 		Polity (M)

<p>Q37. With reference to Finance Bill and Money Bill in the Indian Parliament, consider the following statements:</p> <ol style="list-style-type: none"> 1. When the Lok Sabha transmits Finance Bill to the Rajya Sabha, it can amend or reject the Bill. 2. When the Lok Sabha transmits Money Bill to the Rajya Sabha, it cannot amend or reject the Bill, it can only make recommendations. 3. In the case of disagreement between the Lok Sabha and the Rajya Sabha, there is no joint sitting for Money Bill, but a joint sitting becomes necessary for Finance Bill. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Polity (M)
<p>Q38. Consider the following statements:</p> <p>Once the Central Government notifies an area as a 'Community Reserve'</p> <ol style="list-style-type: none"> 1. the Chief Wildlife Warden of the State becomes the governing authority of such forest 2. hunting is not allowed in such area 3. people of such area are allowed to collect non-timber forest produce 4. people of such area are allowed traditional agricultural practices <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. Only three 4. All four 		Environment (M)
<p>Q39. With reference to 'Scheduled Areas' in India, consider the following statements:</p> <ol style="list-style-type: none"> 1. Within a State, the notification of an area as Scheduled Area takes place through an Order of the President. 2. The largest administrative unit forming the Scheduled Area is the District and the lowest is the cluster of villages in the Block. 3. The Chief Ministers of the concerned States are required to submit annual reports to the Union Home Ministry on the administration of Scheduled Areas in the States. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Polity (E)
<p>Q40. Consider the following statements:</p> <p>Statement-I: The Supreme Court of India has held in some judgements that the reservation policies made under Article 16(4) of the Constitution of India would be limited by Article 335 for maintenance of efficiency of administration.</p> <p>Statement-II: Article 335 of the Constitution of India defines the term 'efficiency of administration'.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I 3. Statement-I is correct but Statement-II is incorrect 4. Statement-I is incorrect but Statement-II is correct 		Polity (D)

<p>Q41. In which one of the following regions was Dhanyakataka, which flourished as a prominent Buddhist centre under the Mahasanghikas, located?</p> <ol style="list-style-type: none"> 1. Andhra 2. Gandhara 3. Kalinga 4. Magadha 		Art and Culture (M)										
<p>Q42. With reference to ancient India, consider the following statements:</p> <ol style="list-style-type: none"> 1. The concept of the Stupa is Buddhist in origin. 2. Stupa was generally a repository of relics. 3. Stupa was a votive and commemorative structure in the Buddhist tradition. <p>How many of the statements given above are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		History (M)										
<p>Q43. With reference to ancient South India, Korkai, Poompohar and Muchiri were well known as</p> <ol style="list-style-type: none"> 1. capital cities 2. ports 3. centres of iron-and-steel making 4. Shrines of Jain Tirthankaras 		History (M)										
<p>Q44. Which one of the following explains the practice of 'Vattakirutal' as mentioned in Sangam poems?</p> <ol style="list-style-type: none"> 1. Kings employing women bodyguards 2. Learned persons assembling in royal courts to discuss religious and philosophical matters 3. Young girls keeping watch over agricultural fields and driving away birds and animals 4. A king defeated in a battle committing ritual suicide by starving himself to death 		History (D)										
<p>Q45. Consider the following dynasties:</p> <ol style="list-style-type: none"> 1. Hoysala 2. Gahadavala 3. Kakatiya 4. Yadava <p>How many of the above dynasties established their kingdoms in early eighth century AD?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. Only three 4. None 		History (D)										
<p>Q46. With reference to ancient Indian History, consider the following parts:</p> <table border="0"> <tr> <td>Literary work</td> <td>Author</td> </tr> <tr> <td>1. Devichandragupta:</td> <td>Bilhana</td> </tr> <tr> <td>2. Hammira-Mahakavya:</td> <td>Nayachandra Suri</td> </tr> <tr> <td>3. Milinda-panha:</td> <td>Nagarjuna</td> </tr> <tr> <td>4. Nitivakyamrita:</td> <td>Somadeva Suri</td> </tr> </table> <p>How many of the above pairs are correctly matched?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. Only three 4. All four 	Literary work	Author	1. Devichandragupta:	Bilhana	2. Hammira-Mahakavya:	Nayachandra Suri	3. Milinda-panha:	Nagarjuna	4. Nitivakyamrita:	Somadeva Suri		History (D)
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<p>Q47. "Souls are not only the property of animal and plant life, but also of rocks, running water and many other natural objects not looked on as living by other religious sects."</p> <p>The above statement reflects one of the core beliefs of which one of the following religious sects of ancients India.</p> <ol style="list-style-type: none"> 1. Buddhism 2. Jainism 3. Shaivism 4. Vaishnavism 		History (E)
<p>Q48. Who among the following rulers of the Vijayanagara Empire constructed a large dam across Tungabhadra River and a canal-cum-aqueduct several kilometres long from the river to the capital city?</p> <ol style="list-style-type: none"> 1. Devaraya I 2. Mallikarjuna 3. Vira Vijaya 4. Virupaksha 		History (M)
<p>Q49. Who among the following rulers of medieval Gujarat surrendered Diu to Portuguese?</p> <ol style="list-style-type: none"> 1. Ahmad Shah 2. Mahmud Begarha 3. Bahadur Shah 4. Muhammad Shah 		History (E)
<p>Q50. By which one of the following Acts was the Governor General of Bengal designated as the Governor General of India?</p> <ol style="list-style-type: none"> 1. The Regulating Act 2. The Pitt's India Act 3. The Charter Act of 1793 4. The Charter Act of 1833 		Polity (E)
<p>Q51. Consider the following statements in relation to Janani Suraksha Yojana:</p> <ol style="list-style-type: none"> 1. It is a safe motherhood intervention of the State Health Departments. 2. Its objective is reducing maternal and neonatal mortality among poor pregnant women. 3. It aims to promote institutional delivery among poor pregnant women. 4. Its objective includes providing public health facilities to sick infants up one year of age. <p>How many of the statements given above are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Social (M)
<p>Q52. Consider the following statements in the context of intervention being undertaken under Anaemia Mukt Bharat Strategy:</p> <ol style="list-style-type: none"> 1. It provides prophylactic calcium supplementation for pre-school children, adolescents and pregnant women. 2. It runs a campaign for delayed cord clamping at the time of child birth. 3. It provides for periodic deworming to children and adolescents. 4. It addresses non-nutritional causes of anaemia in endemic pockets with special focus on malaria, hemoglobinopathies and fluorosis. <p>How many of the statements given above are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. Only three 4. All four 		Social (D)

<p>Q53. Consider the following statements:</p> <ol style="list-style-type: none"> Carbon fibres are used in the manufacture of components used in automobiles and aircrafts. Carbon fibres once used cannot be recycled. <p>Which of the statements given above is/are correct?</p> <ol style="list-style-type: none"> 1 only 2 only Both 1 and 2 Neither 1 nor 2 		Science (E)								
<p>Q54. Consider the following action:</p> <ol style="list-style-type: none"> Detection of car crash/collision which results in the deployment of airbags almost instantaneously. Detection of accidental free fall of a laptop towards the ground which results in the immediate turning off of the hard drive. Detection of the tilt of the smartphone which results in the rotation of display between portrait and landscape mode. <p>In how many of the above actions is the function of accelerometer required?</p> <ol style="list-style-type: none"> Only one Only two All three None 		Science (M)								
<p>Q55. With reference to the role of biofilters in Recirculating Aquaculture System, consider the following statements:</p> <ol style="list-style-type: none"> Biofilters provide waste treatment by removing uneaten fish feed. Biofilters convert ammonia present in fish waste to nitrate. Biofilters increase phosphorus as nutrient for fish in water. <p>How many of the statements given above are correct?</p> <ol style="list-style-type: none"> Only one Only two All three None 		Science (D)								
<p>Q56. Consider the following pairs:</p> <table border="0"> <thead> <tr> <th>Object in space</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1 Cepheids</td> <td>Giant clouds of dust and gas in space</td> </tr> <tr> <td>2. Nebulae</td> <td>Stars which brighten and dim periodically</td> </tr> <tr> <td>3. Pulsars</td> <td>Neutron stars that, are formed when massive stars run out of fuel and collapse</td> </tr> </tbody> </table> <p>How many of the above pairs are correctly matched?</p> <ol style="list-style-type: none"> Only one Only two All three None 	Object in space	Description	1 Cepheids	Giant clouds of dust and gas in space	2. Nebulae	Stars which brighten and dim periodically	3. Pulsars	Neutron stars that, are formed when massive stars run out of fuel and collapse		Science (D)
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<p>Q57. Which one of the following countries has its own Satellite Navigation System?</p> <ol style="list-style-type: none"> Australia Canada Israel Japan 		Science (M)								

Q58. Consider the following statements:

1. Ballistic missiles are jet-propelled at subsonic speeds throughout their flights, while cruise missiles are rocket-powered only in the initial phase of flight.
2. Agni-V is a medium-range supersonic cruise missile, while BrahMos is a solid-fuelled intercontinental ballistic missile.

Which of the statements given above is/are correct?

1. 1 only
2. 2 only
3. Both 1 and 2
4. Neither 1 nor 2

Science (M)

Q59. Consider the following statements regarding mercury pollution:

1. Gold mining activity is a source of mercury pollution in the world.
2. Coal-based thermal power plants cause mercury pollution.
3. There is no known safe level of exposure to mercury.

How many of the above statements are correct?

1. Only one
2. Only two
3. All three
4. None

Environment (M)

Q60. With reference to green hydrogen, consider the following statements:

1. It can be used directly as a fuel for internal combustion.
2. It can be blended with natural gas and used as fuel for heat or power generation.
3. It can be used in the hydrogen fuel cell to run vehicles.

How many of the above statements are correct?

1. Only one
2. Only two
3. All three
4. None

Environment (M)

Question 53 Test 2**Green Hydrogen (Understanding)**

With reference to Hydrogen, consider the following pairs:

Type	Generation process
1. Green Hydrogen	--- Electrolysis using renewable sources of energy.
2. Grey Hydrogen	--- Fossil fuels such as coal and gas.
3. Blue Hydrogen	--- Electricity by burning fossil fuels with carbon capture & storage.

How many pairs above are correctly matched?

- a) None of the pairs
- b) One pair
- c) Two pairs
- d) Three pairs

Explanation:

Statement 1 is correct: Hydrogen generated using electrolyzers powered by renewable power sources is called green hydrogen. The electrolysis process splits water into hydrogen and oxygen, and the hydrogen produced can be used as a clean and renewable fuel.

Statement 2 is correct: Hydrogen produced from fossil fuels is called grey hydrogen, which constitutes the bulk of the hydrogen generated today. It currently accounts for 95% of the total production in South Asia.

- Pink/ Red/ Purple hydrogen: Generated through electrolysis powered by nuclear energy.
- Yellow hydrogen: Made through electrolysis using solar power.
- White hydrogen: Naturally occurring geological hydrogen found in underground deposits and created through fracking. There are no strategies to exploit this hydrogen at present.
- Turquoise hydrogen: Its Production has yet to be proven at scale. It is made using a process called methane pyrolysis to produce hydrogen and solid carbon

Statement 3 is correct: Hydrogen generated from fossil fuels with **carbon capture and storage (CCS)** options is called blue hydrogen. It uses technology which prevents the carbon released in the process from entering the atmosphere.

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The Inside Story:

How vehicles run on hydrogen works?

- Hydrogen fuel is transformed into electricity using a fuel cell stack before it is used to power a vehicle.
- A fuel cell converts chemical energy into electrical energy using oxidising agents via an oxidation-reduction reaction.
- Fuel cell-based vehicles combine hydrogen and oxygen to produce electricity to power the electric motor on board.
- Fuel cell vehicles use electricity to run. Therefore, they are called as electric vehicles (EVs).

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Q61. Consider the following countries:

1. Bulgaria
2. Hungary
3. Latvia
4. Czech Republic
5. Lithuania
6. Romania

How many of the above-mentioned countries share a land border with Ukraine?

1. Only two
2. Only three
3. Only four
4. Only five

Question No. 89 Test 2
Ukraine Border from the map provided.

Consider the following statements about Black Sea:

1. Bosphorus and Dardanelles are together known as the Turkish Straits.
2. Bosphorus strait connects the Black Sea to sea of Marmara.
3. Dardanelles strait connects the Sea of Marmara to the Aegean Sea.
4. Black Sea is also connected to the Sea of Azov by the Strait of Kerch.

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, 3 and 4

Explanation

Statement 1 is correct: The Turkish Straits are among the most important maritime trade corridors in the world. Both the Bosphorus and Dardanelles Straits comprise the Turkish Straits, which together enable tens of thousands of vessels to pass through them each year.

Statement 2 and 3 are correct: The straits, also known as the Turkish Straits or the Black Sea Straits, connect the Aegean Sea and the Black Sea via the Sea of Marmara. The Bosphorus connects the Black Sea with the Sea of Marmara, while the Dardanelles connects the Aegean Sea with the Sea of Marmara.

Statement 4 is correct: Black sea is connected to Sea of Azov by the Strait of Kerch

International Relations (M)v



<p>Q62. With reference to the Earth's atmosphere, which one of the following statements is correct?</p> <ol style="list-style-type: none"> 1. The total amount of insolation received at the equator is roughly about 10 times of that received at the poles. 2. Infrared rays constitute roughly two-thirds of insolation. 3. Infrared waves are largely absorbed by water vapour that is concentrated in the lower atmosphere. 4. Infrared waves are a part of visible spectrum of electromagnetic waves of solar radiation. 		Geography (E)
<p>Q63. Consider the following statements:</p> <p>Statements-I: The soil in tropical rain forests is rich in nutrients.</p> <p>Statements-II: The high temperature and moisture of tropical rain forests cause dead organic matter in the soil to decompose quickly.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I 3. Statement-I is correct but Statement-II is incorrect 4. Statement-I is incorrect but Statement-II is correct 		Geography (M)
<p>Q64. Consider the following statements:</p> <p>Statements-I: The temperature contrast between continents and oceans is greater during summer than in winter.</p> <p>Statements-II: The specific heat of water is more than that of land surface.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I 3. Statement-I is correct but Statement-II is incorrect 4. Statement-I is incorrect but Statement-II is correct 		Geography (E)
<p>Q65. Consider the following statements:</p> <ol style="list-style-type: none"> 1. In a seismograph, P waves are recorded earlier than S waves. 2. In P waves, the individual particles vibrate to and fro in the direction of wave propagation whereas in S waves, the particles vibrate up and down at right angles to the direction of wave propagation. <p>Which of the statements given above is/are correct?</p> <ol style="list-style-type: none"> 1. 1 only 2. 2 only 3. Both 1 and 2 4. Neither 1 nor 2 		Geography (E)
<p>Q66. With reference to coal-based thermal power plants in India, consider the following statements:</p> <ol style="list-style-type: none"> 1. None of them uses seawater. 2. None of them is set up in water-stressed district. 3. None of them is privately owned. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Geography (M)

<p>Q67. 'Wolbachia method' is sometimes talked about with reference to which one of the following?</p> <ol style="list-style-type: none"> Controlling the viral diseases spread by mosquitoes. Converting crop residues into packing material Producing biodegradable plastics Producing biochar from thermo-chemical conversion of biomass 		Science and Tech (Easy)												
<p>Q68. Consider the following activities:</p> <ol style="list-style-type: none"> Spreading finely ground basalt rock on farmlands extensively Increasing the alkalinity of oceans by adding lime Capturing carbon dioxide released by various industries and pumping it into abandoned subterranean mines in the form of carbonated waters. <p>How many of the above activities are often considered and discussed for carbon capture and sequestration?</p> <ol style="list-style-type: none"> Only one Only two All three None 	<p>Question No. 53 Test 2 CCUS (Understanding)</p> <p>With reference to Hydrogen, consider the following pairs:</p> <table border="0"> <tr> <td>Type</td> <td>---</td> <td>Generation process</td> </tr> <tr> <td>1. Green Hydrogen</td> <td>---</td> <td>Electrolysis using renewable sources of energy.</td> </tr> <tr> <td>2. Grey Hydrogen</td> <td>---</td> <td>Fossil fuels such as coal and gas.</td> </tr> <tr> <td>3. Blue Hydrogen</td> <td>---</td> <td>Electricity by burning fossil fuels with carbon capture & storage.</td> </tr> </table> <p>How many pairs above are correctly matched?</p> <ol style="list-style-type: none"> None of the pairs One pair Two pairs Three pairs <p>Explanation:</p> <p>Statement 1 is correct: Hydrogen generated using electrolyzers powered by renewable power sources is called green hydrogen. The electrolysis process splits water into hydrogen and oxygen, and the hydrogen produced can be used as a clean and renewable fuel.</p> <p>Statement 2 is correct: Hydrogen produced from fossil fuels is called grey hydrogen, which constitutes the bulk of the hydrogen generated today. It currently accounts for 95% of the total production in South Asia.</p> <p>Statement 3 is correct: Hydrogen generated from fossil fuels with carbon capture and storage (CCS) options is called blue hydrogen. It uses technology which prevents the carbon released in the process from entering the atmosphere.</p> <ul style="list-style-type: none"> Pink/ Red/ Purple hydrogen: Generated through electrolysis powered by nuclear energy. Yellow hydrogen: Made through electrolysis using solar power. White hydrogen: Naturally occurring geological hydrogen found in underground deposits and created through fracking. There are no strategies to exploit this hydrogen at present. Turquoise hydrogen: Its Production has yet to be proven at scale. It is made using a process called methane pyrolysis to produce hydrogen and solid carbon <p>The Inside Story:</p> <p>How vehicles run on hydrogen works?</p> <ul style="list-style-type: none"> Hydrogen fuel is transformed into electricity using a fuel cell stack before it is used to power a vehicle. A fuel cell converts chemical energy into electrical energy using oxidising agents via an oxidation-reduction reaction. Fuel cell-based vehicles combine hydrogen and oxygen to produce electricity to power the electric motor on board. Fuel cell vehicles use electricity to run. Therefore, they are called as electric vehicles (EVs). 	Type	---	Generation process	1. Green Hydrogen	---	Electrolysis using renewable sources of energy.	2. Grey Hydrogen	---	Fossil fuels such as coal and gas.	3. Blue Hydrogen	---	Electricity by burning fossil fuels with carbon capture & storage.	Environment (M)
Type	---	Generation process												
1. Green Hydrogen	---	Electrolysis using renewable sources of energy.												
2. Grey Hydrogen	---	Fossil fuels such as coal and gas.												
3. Blue Hydrogen	---	Electricity by burning fossil fuels with carbon capture & storage.												

<p>Q69. 'Aerial metagenomics' best refers to which one of the following situations?</p> <ol style="list-style-type: none"> 1. Collecting DNA samples from air in a habitat at one go 2. Understanding the genetic makeup of avian species of a habitat 3. Using air-borne devices to collect blood samples from moving animals. 4. Sending drones to inaccessible areas to collect plant and animal samples from land surfaces and water bodies 		Science and Tech (M)
<p>Q70. 'Microsatellite DNA' is used in the case of which one of the following?</p> <ol style="list-style-type: none"> 1. Studying the evolutionary relationships among various species of fauna 2. Stimulating 'stem cells' to transform into diverse functional tissues. 3. Promoting clonal propagation of horticultural plants 4. Assessing the efficacy of drugs by conducting series of drug trials in a population 		Science and Tech (M)
<p>Q71. Consider the following statements with reference to India:</p> <ol style="list-style-type: none"> 1. According to the 'Micro, Small and Medium Enterprises Development (MSMED) Act, 2006', the 'medium enterprises' are those with investments in plant and machinery between Rs. 15 crore and Rs. 25 crore. 2. All bank loans to the Micro, Small and Medium Enterprises qualify under the priority sector. <p>Which of the statements given above is/are correct?</p> <ol style="list-style-type: none"> 1. 1 only 2. 2 only 3. Both 1 and 2 4. Neither 1 nor 2 		Economy (E)
<p>Q72. With reference to Central Bank digital currencies, consider the following statements:</p> <ol style="list-style-type: none"> 1. It is possible to make payments in a digital currency without using US dollar or SWIFT system. 2. A digital currency can be distributed with a condition programmed into it such as a time-frame for spending it. <p>With of the statements given above is/are correct?</p> <ol style="list-style-type: none"> 1. 1 only 2. 2 only 3. Both 1 and 2 4. Neither 1 nor 2 	<p>Question No. 70 test 1</p> <p>Digital Currency understanding and moreover the terms possible/can are very broadly scoped.</p> <p>Q) Reserve Bank of India (RBI) recently launched its Central Bank Digital Currency (CBDC). With reference to CBDC consider the following statements:</p> <ol style="list-style-type: none"> 1. It is a legal tender issued by the RBI in digital form. 2. It is a fiat currency which can be exchanged one-to-one with government-issued paper money. 3. UPI transfers as well as e-rupee transfers involve intermediation of banks. 4. The degree of anonymity is higher in case of digital e-rupee transactions than the current digital transactions. <p>Which of the statement(s) given above is/are correct?</p> <ol style="list-style-type: none"> a) 1, 2 and 4 only b) 1 and 4 only c) 3 only d) 1 only <p>Explanation:</p> <p>Statement 1 is correct: A central bank digital currency (CBDC) is a legal tender issued by a central bank in digital form.</p> <p>Statement 2 is correct: CBDC is the same as a fiat currency and it is exchangeable one-to-one with government-issued money. In a nutshell, digital rupee is the same as a banknote or coin, only it is in a digital form.</p>	Economy (E)

	<p>Statement 3 is not correct: Any UPI transaction involves intermediation of the bank.</p> <ul style="list-style-type: none"> • CBDC will be distributed through intermediaries, i.e., banks. It is, however, different from deposits held in a bank. Unlike deposits which earn interest, the digital rupees in the wallet will not earn any interest by the central bank. Deposits held in banks can be converted into digital rupees and vice-versa. • In CBDC, just as in case of paper currency an individual goes to a bank, draws currency and keeps it in their purse, goes to a shop and pays from the wallet. Similarly, here also one can draw digital currency and keep it in their digital wallet in their mobile phone. • While making a digital payment through CBDC the e-rupee will move from one wallet to another wallet, therefore, there is no routing or intermediation of the bank. <p>Statement 4 is correct: In the case of the digital rupee, even though the transactions are recorded in the centralised ledger, it is fairly anonymous as the owners of the wallets are not known to the government or intermediaries in the ecosystem. The transactions via digital rupee are more anonymous than the current digital transactions including UPI, NEFT and RTGS etc.</p> <p>The Inside Story:</p> <ul style="list-style-type: none"> • The retail digital rupee is a digital token issued by the RBI. • RBI has identified 8 banks for the phase-wise pilot launch of the retail digital rupee. Four banks including SBI, ICICI Bank, YES Bank, and IDFC First Bank are taking part in the first phase of the pilot programme. • Bank of Baroda, Union Bank of India, HDFC Bank, and Kotak Mahindra Bank will join the pilot in the second phase. • CBDC has been issued in the same denominations as paper currency and coins currently in circulation. • At present, customers will be able to transact using the digital rupee through a digital wallet offered by the participating banks in the pilot programme. The digital wallet can be saved on an Android smartphone. • As per RBI's e-rupee pilot program, the digital currency has two forms: Retail (CBDC-R) and Wholesale (CBDC-W). • CBDC-W is used for interbank and other wholesale transactions (settlement of secondary market transactions in government securities), whereas the CBDC-R will be used for retail transactions. 	
<p>Q73. In the context of finance, the term 'beta' refers to</p> <ol style="list-style-type: none"> 1. the process of simultaneous buying and selling of an asset from different platforms 2. an investment strategy of a portfolio manager to balance risk versus reward 3. a type of systemic risk that arises where perfect hedging is not possible 4. a numeric value that measures the fluctuations of a stock to changes in the overall stock market 		Economy (M)
<p>Q74. Consider the following statements:</p> <ol style="list-style-type: none"> 1. The Self-Help Group (SHG) programme was originally initiated by the State Bank of India by providing microcredit to the financially deprived. 2. In an SHG, all members of a group take responsibility for a loan that an individual member takes. 3. The Regional Rural Banks and Scheduled Commercial Banks support SHGs. <p>How many of the above statements are correct</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Economy (M)

Q75. Consider the following statements:
Statement-I: India's public sector health care system largely focuses on curative care with limited preventive, promotive and rehabilitative care.
Statement-II: Under India's decentralized approach to health care delivery, the States are primarily responsible for organizing health services.
Which one of the following is correct in respect of the above statements?
 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
 3. Statement-I is correct but Statement-II is incorrect
 4. Statement-I is incorrect but Statement-II is correct

Social (M)

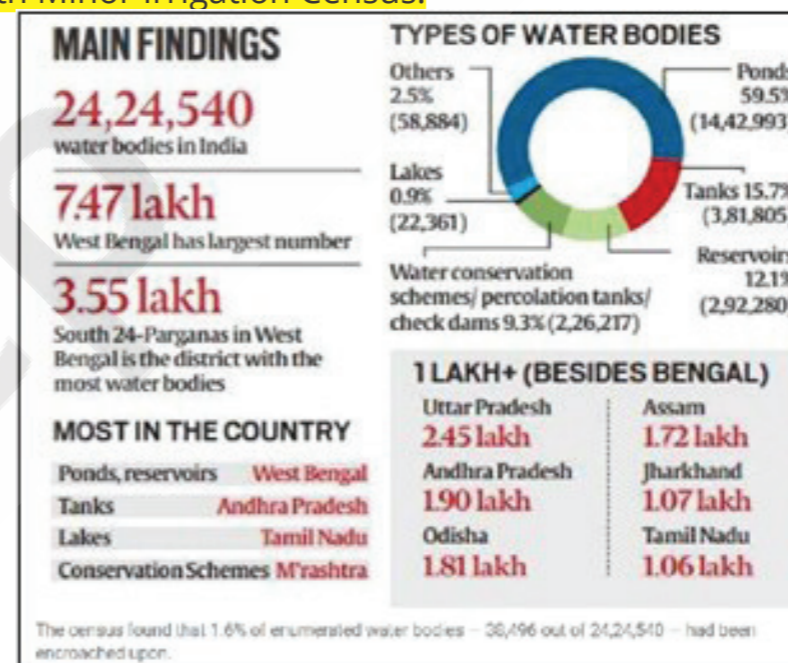
Q76. Consider the following statements:
Statement-I: According to the United Nations 'World Water Development Report, 2022', India extracts more than quarter of the world's groundwater withdrawal each year.
Statement-II: India needs to extract more than a quarter of the World's groundwater each year to satisfy the drinking water and sanitation needs of almost 18% of world's population living in its territory.
Which one of the following is correct in respect of the above statements?
 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
 3. Statement-I is correct but Statement-II is incorrect
 4. Statement-I is incorrect but Statement-II is correct

Geography (E)

Question No. 99 Test 3
 Partial Understanding that most of India's ground water is used for irrigation and not for drinking and sanitation.

Q) With reference to the first-ever census of water bodies in India, which of the following statements is not correct?
 a) It was launched by the Union Ministry of Jal Shakti.
 b) The objective of the census is to develop a national database for all water bodies in rural and urban areas.
 c) Andhra Pradesh accounts for the most and Sikkim the least number of water bodies.
 d) Tamil Nadu has the highest number of lakes and Maharashtra is the leading state with water conservation schemes.

Explanation:
 Option c is not correct: The Union Ministry of Jal Shakti has launched the first-ever census of water bodies.
 • The Census of Minor Irrigation Schemes is being conducted once in 5 years throughout the country under the central scheme Rationalization of Minor Irrigation Statistics (RMIS).
 • The first-ever census of water bodies has been conducted in convergence with the 6th Minor Irrigation Census.



Water bodies census
 • The objective of the census is to develop a national database for all water bodies in rural and urban areas.
 • West Bengal accounts for the most and Sikkim the least number of water bodies.
 • Tamil Nadu has the highest number of lakes and Maharashtra is the leading state with water conservation schemes.

	<p>The inside Story:</p> <p>How is a 'water body' defined?</p> <ul style="list-style-type: none"> • The census defines a water body as all natural or man-made units bounded on all sides with some or no masonry work used for storing water for • Irrigation or • Other purposes (example industrial, pisciculture, domestic/drinking, recreation, religious, groundwater recharge, etc). • Water bodies are usually of various types known by different names like tank, reservoirs, ponds etc. • A structure where water from ice-melt, streams, springs, rain or drainage of water from residential or other areas is accumulated will also be treated as a waterbody. • Water stored by diversion from a stream, nala or river will also be treated as water body. <p>Did the census cover all water bodies that fit this definition?</p> <ul style="list-style-type: none"> • Seven specific types of water bodies were excluded from the count: • Oceans and lagoons. • Rivers, streams, springs, waterfalls, canals, etc. which are free flowing, without any bounded storage of water. • Swimming pools. • Covered water tanks created for a specific purpose by a family or household for their own consumption. • A water tank constructed by a factory owner for consumption of water as raw material or consumable. • Temporary water bodies created by digging for mining, brick kilns, and construction activities, which may get filled during the rainy season; and • Pucca open water tanks created only for cattle to drink water. 	
<p>Q77. Consider the following statements:</p> <ol style="list-style-type: none"> 1. According to the Constitution of India, the Central Government has a duty to protect States from internal disturbances. 2. The Constitution of India exempts the States from providing legal counsel to a person being held for preventive detention. 3. According to the Prevention of Terrorism Act, 2002, confession of the accused before the police cannot be used as evidence. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 		Polity (M)
<p>Q78. Which one of the following countries has been suffering from decades of civil strife and food shortages and was in news in the recent past for its very severe famine?</p> <ol style="list-style-type: none"> 1. Angola 2. Costa Rice 3. Ecuador 4. Somalia 		International Relations (E)

<p>Q79. Consider the following statements:</p> <ol style="list-style-type: none"> 1. In India, the Biodiversity Management Committees are key to the realization of the objectives of the Nagoya Protocol. 2. The Biodiversity Management Committees have important functions in determining access and benefit sharing, including the power to levy collection fees on the access of biological resources within its jurisdiction. <p>Which of the statements given above is/are correct?</p> <ol style="list-style-type: none"> 1. 1 only 2. 2 only 3. Both 1 and 2 4. Neither 1 nor 2 		<p>Environment (E)</p>								
<p>Q80. Consider the following statements in respect of election to the President of India:</p> <ol style="list-style-type: none"> 1. The members nominated to either House of the Parliament or the Legislative Assemblies of States are also eligible to be included in the Electoral College. 2. Higher the number of elective Assembly seats, higher is the value of vote of each MLA of that State. 3. The value of vote of each MLA of Madhya Pradesh is greater than that of Kerala. 4. The value of vote of each MLA of Puducherry is higher than that of Arunachal Pradesh because the ratio of total population to total number of elective seats in Puducherry is greater as compared to Arunachal Pradesh. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. Only three 4. All four 		<p>Polity (D)</p>								
<p>Q81. With reference to the Indian History, Alexander Rea, A. H. Longhurst, Robert Sewell, James Burgess and Walter Elliot were associated with</p> <ol style="list-style-type: none"> 1. archaeological excavations 2. establishment of English Press in Colonial India] 3. establishment of Churches in Princely States 4. construction of railways in Colonial India 		<p>History (D)</p>								
<p>Q82. Consider the following pairs:</p> <table border="0"> <tr> <td>State</td> <td>Well known for</td> </tr> <tr> <td>Besnagar:</td> <td>Shaivite cave shrine</td> </tr> <tr> <td>Bhaja:</td> <td>Buddhist cave shrine</td> </tr> <tr> <td>Sittanavasal:</td> <td>Jain cave shrine</td> </tr> </table> <p>How many of the above pairs are correctly matched?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 	State	Well known for	Besnagar:	Shaivite cave shrine	Bhaja:	Buddhist cave shrine	Sittanavasal:	Jain cave shrine		<p>History (M)</p>
State	Well known for									
Besnagar:	Shaivite cave shrine									
Bhaja:	Buddhist cave shrine									
Sittanavasal:	Jain cave shrine									
<p>Q83. Consider the following statements:</p> <p>Statement-I: 7th August is declared as the National Handloom Day.</p> <p>Statement-II: It was in 1905 that the Swadeshi Movement was launched on the same day.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> 1. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I 2. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I 3. Statement-I is correct but Statement-II is incorrect 4. Statement-I is incorrect but Statement-II is correct 		<p>History (M)</p>								

<p>Q84. Consider the following statements in respect of the National Flag of India according to the Flag Code of India, 2002:</p> <p>Statement-I: One of the standard sizes of the National Flag of India is 600 mm * 400 mm.</p> <p>Statement-II: The ratio of the length to the height (width) of the Flag shall be 3:2. Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I Statement-I is correct but Statement-II is incorrect Statement-I is incorrect but Statement-II is correct 		Polity (M)
<p>Q85. Consider the following statements in respect of the Constitution Day:</p> <p>Statement-I: The Constitution Day is celebrated on 26th November every year to promote constitutional values among citizens.</p> <p>Statement-II: On 26th November, 1949, the constituent Assembly of India set up a Drafting Committee under the Chairmanship of Dr. B. R. Ambedkar to prepare a Draft Constitution of India.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I Statement-I is correct but Statement-II is incorrect Statement-I is incorrect but Statement-II is correct 		Polity (M)
<p>Q86. Consider the following statements:</p> <p>Statement – I: Switzerland is one of the leading exporters of gold in terms of value.</p> <p>Statement – II: Switzerland has the second largest gold reserves in the world.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> Both statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I Statement-I is correct but Statement-II is incorrect. Statement-I- is incorrect but Statement-II is correct. 		Geography (D)
<p>Q87. Consider the following statements:</p> <p>Statement-I: Recently, the United States of America (USA) and the European Union (EU) have launched the Trade and technology council.</p> <p>Statement-II: The USA and the EU claim that through this they are trying to bring technological progress and physical productivity under their control.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> Both statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I Statement-I is correct but Statement-II is incorrect. Statement-I- is incorrect but Statement-II is correct. 		International Relations (M)

<p>Q88. Consider the following statement:</p> <p>Statement – I: India accounts for 3.2% of global export of goods.</p> <p>Statement-II: Many local companies and some foreign companies operating in India have taken advantage of India's 'Production-linked Incentive' scheme.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> Both statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I Statement-I is correct but Statement-II is incorrect. Statement-I- is incorrect but Statement-II is correct. 		Economy (E)
<p>Q89. Consider the following statements:</p> <p>The 'Stability and Growth Pact' of the European Union is a treaty that</p> <ol style="list-style-type: none"> Limits the levels of budgetary deficit of the countries of the European Union. Makes the countries of the European Union to share their infrastructure facilities. Enables the countries of the European Union to share their technologies. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> Only one Only two All three None 		International Relations (M)
<p>Q90. Consider the following statements:</p> <ol style="list-style-type: none"> Recently, all the countries of the United Nations have adopted the first-ever compact for international migration, the 'Global Compact for Safe, Orderly and Regular Migration (GCM)'. The objective and commitments stated in the GCM are binding on the UN member countries. The GCM address internal migration or internally displaced people also in its objectives and commitments. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> Only one Only two All three None 		International Relations (D)
<p>Q91. With reference to Home Guards, consider the following statements:</p> <ol style="list-style-type: none"> Home Guards are raised under the Home Guards Act and Rules of the Central Government. The role of the Home Guards is to serve as an auxiliary force to the police in maintenance of the internal security To prevent infiltration on the international border/coastal areas, the Border Wings Home Guards Battalions have been raised in some States. <p>How many of the above statements are correct?</p> <ol style="list-style-type: none"> Only one Only two All three None 		Defence and Security (D)

<p>Q92. With reference to India, consider the following pairs:</p> <table border="0"> <tr> <td>Action</td> <td>The Act under which it is covered</td> </tr> <tr> <td>1. Unauthorized wearing of : police or military uniforms</td> <td>The Official Secrets Act, 1923</td> </tr> <tr> <td>2. Knowingly misleading or otherwise interfering with a police officer or military officer when engaged in their duties</td> <td>The Indian Evidence Act, 1872</td> </tr> <tr> <td>3. Celebratory gunfire which can endanger the personal safety of others</td> <td>The Arms (Amendment) Act, 2019</td> </tr> </table> <p>How many of the above pairs are correctly matched?</p> <ol style="list-style-type: none"> Only one Only two All three None 	Action	The Act under which it is covered	1. Unauthorized wearing of : police or military uniforms	The Official Secrets Act, 1923	2. Knowingly misleading or otherwise interfering with a police officer or military officer when engaged in their duties	The Indian Evidence Act, 1872	3. Celebratory gunfire which can endanger the personal safety of others	The Arms (Amendment) Act, 2019		Polity (D)
Action	The Act under which it is covered									
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<p>Q93. Consider the following pairs:</p> <table border="0"> <tr> <td>Regions often mentioned in news</td> <td>Reason for being in news</td> </tr> <tr> <td>1. North Kivu and Ituri</td> <td>War between Armenia and Azerbaijan</td> </tr> <tr> <td>2. Nagorno-Karabakh</td> <td>Insurgency in Mozambique</td> </tr> <tr> <td>3. Kherson and aporizhzhia</td> <td>Dispute between Israel and Lebanon</td> </tr> </table> <p>How many of the above pairs are correctly matched?</p> <ol style="list-style-type: none"> Only one Only two All three None 	Regions often mentioned in news	Reason for being in news	1. North Kivu and Ituri	War between Armenia and Azerbaijan	2. Nagorno-Karabakh	Insurgency in Mozambique	3. Kherson and aporizhzhia	Dispute between Israel and Lebanon		International Relations (M)
Regions often mentioned in news	Reason for being in news									
1. North Kivu and Ituri	War between Armenia and Azerbaijan									
2. Nagorno-Karabakh	Insurgency in Mozambique									
3. Kherson and aporizhzhia	Dispute between Israel and Lebanon									
<p>Q94. Consider the following statements:</p> <p>Statement-I: Israel has established diplomatic relations with some Arab States.</p> <p>Statement-II: The 'Arab Peace Initiative' mediated by Saudi Arabia was signed by Israel and Arab League.</p> <p>Which one of the following is correct in respect of the above statements?</p> <ol style="list-style-type: none"> Both statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I Statement-I is correct but Statement-II is incorrect. Statement-I- is incorrect but Statement-II is correct. 		International Relations (D)								
<p>Q95. Consider the following pairs with regard to sports awards:</p> <ol style="list-style-type: none"> Major Dhyan Chand Khel Ratna Award : For the most spectacular and outstanding performance by a sportsperson over period of last four years Arjuna Award : For the lifetime achievement by a sportsperson Dronocharya Award: To honour eminent coaches who have successfully trained sportsperson or teams Rashtriya Khel Protsahan Puraskar : To recognize the contribution made by sportspersons even after their retirement <p>How many of the above pairs are correctly matched?</p> <ol style="list-style-type: none"> Only one Only two All three All four 		Current Affairs (M)								

<p>Q96. Consider the following statements in respect of the 44th Chess Olympiad, 2022:</p> <ol style="list-style-type: none"> 1. It was the first time that Chess Olympiad was held in India. 2. The official mascot was named 'Thambi'. 3. The trophy for the winning team in the open section is the Vera Menchik Cup. 4. The trophy for the winning team in the women's section is the Hamilton-Russell Cup. <p>How many of the statements given above are correct?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. Only three 4. All four 		Current Affairs (D)								
<p>Q97. Consider the following pairs:</p> <table border="0"> <tr> <td>Area of conflict mentioned in news</td> <td>Country where it is located</td> </tr> <tr> <td>1. Donbas :</td> <td>Syria</td> </tr> <tr> <td>2. Kachin :</td> <td>Ethiopia</td> </tr> <tr> <td>3. Tigray :</td> <td>North Yemen</td> </tr> </table> <p>How many of the above pairs are correctly matched?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 	Area of conflict mentioned in news	Country where it is located	1. Donbas :	Syria	2. Kachin :	Ethiopia	3. Tigray :	North Yemen		International Relations (D)
Area of conflict mentioned in news	Country where it is located									
1. Donbas :	Syria									
2. Kachin :	Ethiopia									
3. Tigray :	North Yemen									
<p>Q98. In the recent years Chad, Guinea, Mali and Sudan caught the international attention for which one of the following reason common to all the them?</p> <ol style="list-style-type: none"> 1. Discovery of rich deposits of rare earth elements 2. Establishment of Chinese military bases 3. Southward expansion of Sahara Desert 4. Successful coups 		International Relations (M)								
<p>Q99. Consider the following heavy industries:</p> <ol style="list-style-type: none"> 1. Fertilizer plants 2. Oil refineries 3. Steel Plants <p>Green hydrogen is expected to play a significant role in decarbonizing how many of the above industries?</p> <ol style="list-style-type: none"> 1. Only one 2. Only two 3. All three 4. None 	<p>Question No. 53 Test 2</p> <p>Green Hydrogen generation process discussed. Since it is a clean and renewable fuel, so can be utilized in plants/refineries.</p> <p>Q) With reference to Hydrogen, consider the following pairs:</p> <table border="0"> <tr> <td>Type</td> <td>Generation process</td> </tr> <tr> <td>1. Green Hydrogen ---</td> <td>Electrolysis using renewable sources of energy.</td> </tr> <tr> <td>2. Grey Hydrogen ---</td> <td>Fossil fuels such as coal and gas.</td> </tr> <tr> <td>3. Blue Hydrogen ---</td> <td>Electricity by burning fossil fuels with carbon capture & storage.</td> </tr> </table> <p>How many pairs above are correctly matched?</p> <ol style="list-style-type: none"> a) None of the pairs b) One pair c) Two pairs d) Three pairs <p>Explanation:</p> <p>Statement 1 is correct: Hydrogen generated using electrolyzers powered by renewable power sources is called green hydrogen. The electrolysis process splits water into hydrogen and oxygen, and the hydrogen produced can be used as a clean and renewable fuel.</p>	Type	Generation process	1. Green Hydrogen ---	Electrolysis using renewable sources of energy.	2. Grey Hydrogen ---	Fossil fuels such as coal and gas.	3. Blue Hydrogen ---	Electricity by burning fossil fuels with carbon capture & storage.	Environment (E)
Type	Generation process									
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2. Grey Hydrogen ---	Fossil fuels such as coal and gas.									
3. Blue Hydrogen ---	Electricity by burning fossil fuels with carbon capture & storage.									

	<p>Statement 2 is correct: Hydrogen produced from fossil fuels is called grey hydrogen, which constitutes the bulk of the hydrogen generated today. It currently accounts for 95% of the total production in South Asia.</p> <p>Statement 3 is correct: Hydrogen generated from fossil fuels with carbon capture and storage (CCS) options is called blue hydrogen. It uses technology which prevents the carbon released in the process from entering the atmosphere.</p> <ul style="list-style-type: none"> • Pink/ Red/ Purple hydrogen: Generated through electrolysis powered by nuclear energy. • Yellow hydrogen: Made through electrolysis using solar power. • White hydrogen: Naturally-occurring geological hydrogen found in underground deposits and created through fracking. There are no strategies to exploit this hydrogen at present. • Turquoise hydrogen: Its Production has yet to be proven at scale. It is made using a process called methane pyrolysis to produce hydrogen and solid carbon <p>The Inside Story:</p> <p>How vehicles run on hydrogen works?</p> <ul style="list-style-type: none"> • Hydrogen fuel is transformed into electricity using a fuel cell stack before it is used to power a vehicle. • A fuel cell converts chemical energy into electrical energy using oxidising agents via an oxidation-reduction reaction. • Fuel cell-based vehicles combine hydrogen and oxygen to produce electricity to power the electric motor on board. • Fuel cell vehicles use electricity to run. Therefore, they are called as electric vehicles (EVs). 	
<p>Q100. Consider the following statements about G-20:</p> <ol style="list-style-type: none"> 1. The G-20 group was originally established as platform for the Finance Ministers and Central Bank Governors to discuss the international economic and financial issues. 2. Digital public infrastructure is one of India's G-20 priorities. <p>Which of the statements given above is/are correct?</p> <ol style="list-style-type: none"> 1. 1 only 2. 2 only 3. Both 1 and 2 4. Neither 1 nor 2 	<p>Question No. 16 Test 3</p> <p>G 20 concept and formation explained</p> <p>Q) Consider the following statements about G20.</p> <ol style="list-style-type: none"> 1. It was formed in 1999 as a group of Heads of State/Government in the wake of the global Asian Financial Crisis. 2. In wake of global financial crisis of 2008, Finance Track was started for the Finance Ministers and Central Bank Governors. 3. G20 does not have a permanent secretariat. <p>Which of the statement(s) given above is/are correct?</p> <ol style="list-style-type: none"> a) 1 only b) 1 and 2 only c) 3 only d) 1, 2 and 3 <p>Explanation:</p> <p>Statement 1 is not correct: The G20 was founded in 1999 after the Asian financial crisis as a forum for the Finance Ministers and Central Bank Governors to discuss global economic and financial issues.</p> <p>Statement 2 is not correct: The G20 was upgraded to the level of Heads of State/Government in the wake of the global economic and financial crisis of 2007, and, in 2009, was designated the "premier forum for international economic cooperation".</p> <p>Statement 3 is correct: The Group does not have a permanent secretariat. The Presidency is supported by the Troika – previous, current and incoming Presidency. During India's Presidency, the troika will comprise Indonesia, India and Brazil, respectively.</p> <p>The Inside Story: Two parallel tracks in G20</p> <p>The G20 Presidency steers the G20 agenda for one year and hosts the Summit. The G20 consists of two parallel tracks: the Finance Track and the Sherpa Track. Finance Ministers and Central Bank Governors lead the Finance Track while Sherpas, emissaries of the national leaders/heads of states, lead the Sherpa Track after Finance Track.</p>	<p>International Relations (M)</p>