

10 PM Current Affairs Quiz Compilation

March, 2022

International Relations

Q.1) With reference to Ukraine, consider the following statements

1. Ukraine is the largest country in Europe after Russia.
2. India is Ukraine's largest export destination in the Asia Pacific region.

Which of the statements given above is/are correct?

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

Answer: C

Ukraine is the largest country in Europe after Russia, it is about 6% of the continent. India is Ukraine's largest export destination in the Asia Pacific region. The country's major export to India is sunflower oil, followed by inorganic chemicals, iron and steel, plastics, and chemicals. Ukraine's major import from India is pharmaceutical products.

Source: [IE](#)

Q.2) Which of the following is/are the advantage of Biogas?

1. Provides a stable fuel supply.
2. Increase India's oil import bill.
3. Act as a source of income for farmers.

Select the correct answer from the codes given below.

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

Answer: C

Statement 1 is correct: Biogas provides a stable fuel supply in the market for oil companies and accessible credit in the market through government schemes and banks for entrepreneurs.

Statement 2 is incorrect: Biogas increase self-reliance in energy utilized for cooking and lighting. So it will reduce India's oil import bill.

Statement 3 is correct: Biogas encourage farmers to consider dung and other waste not just as a waste but as a source of income.

Source: [PIB](#)

Q.3) Exercise Dharma Guardian is an annual bilateral exercise between India and which of the following country?

- a) Russia
- b) Iran
- c) The US
- d) Japan

Answer: D

Exercise DHARMA GUARDIAN is an annual joint military exercise conducted between India and Japan since 2018.

10 PM Compilation for the Month of March, 2022

Other exercises between India and Japan include

SHINYUU Maitri- It is a bilateral exercise between the Indian Air Force and the Japanese Air Self Defence Force (JASDF).

JIMEX- It is a bilateral maritime exercise between India and Japan.

Sahayog-Kaijin – Joint bilateral exercise between the Indian Coast Guard and the Japan Coast Guard.

Source: [Article](#)

Q.4) With reference to SWIFT, consider the following statements:

1. SWIFT facilitates funds transfer between banks and financial institutions globally.
2. SWIFT is overseen by G-10 central banks.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: SWIFT does not facilitate funds transfer: rather, it sends payment orders, which must be settled by correspondent accounts that the institutions have with each other.

Statement 2 is correct: SWIFT is overseen by G-10 central banks.

Source: [Indian Express](#)

Q.5) With reference to Bamboo plantations, consider the following statements:

1. Bamboo plantations can reduce deforestation.
2. Bamboo plantations can reclaim severely degraded sites and wastelands.

Which of the statements given above is/are correct?

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

Answer: C

Both the statements are correct.

Source: [PIB](#)

Q.6) With reference to Cheetah, Consider the following statements.

1. Cheetah reintroduction project aims to reintroduce cheetah in Madhav National Park, Madhya Pradesh.
2. Cheetah is the only large carnivore to have become extinct in Independent India.
3. Asiatic cheetah is classified as a “critically endangered” species by the IUCN Red List, and is believed to survive only in Iran.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: Cheetah reintroduction project aims to reintroduce cheetah in Kuno-Palpur Wildlife Sanctuary, Madhya Pradesh.

Statement 2 is correct: The cheetah was declared extinct from India in 1952. Currently there are no cheetahs in any National Park or Wildlife Sanctuary in the country. Cheetah is, in fact, the only large carnivore to have become extinct in Independent India.

Statement 3 is correct: The Asiatic cheetah is classified as a “critically endangered” species by the IUCN Red List, and is believed to survive only in Iran. African Cheetah is listed as vulnerable in IUCN red listed species.

Source: [TOI](#)

Q.7) Which of the following is/are part of Market Infrastructure Institutions (MII)?

1. Stock exchanges
2. Depositories
3. Mutual Fund distributors

Select the correct answer from the codes given below.

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

Answer: A

According to the Bimal Jalan Committee (2010), these institutions are systemically important for the country’s financial development and serve as the infrastructure necessary for the securities market.

For example, Stock exchanges, depositories and clearing houses.

Source: [The Hindu](#)

10 PM Compilation for the Month of March, 2022

Q.8) R. Narayana Murthy Committee was recently seen in news. The committee is related to which of the following?

- a) Higher Education reforms
- b) Corporate Governance
- c) Defence sector
- d) CSR Activities

Answer: B

R. Narayana Murthy Committee was set up by SEBI to review the performance of corporate governance in India and make appropriate recommendations.

Source: [TOI](#)

Q.9) With reference to co-location, consider the following statements:

1. Co-location allows brokers to operate closer to their servers upon payment of additional fees.
2. Co-location increases latency while executing trade.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: Co-location allows brokers to operate closer to their servers upon payment of additional fees.

Statement 2 is incorrect: It helps brokers secure an advantage over others due to proximity to exchange servers as data transmission takes less time. Hence, colocation reduce latency, or delay in computing terms, while executing trades.

Source: [The Hindu](#)

Q.10) Operation Ganga was recently seen in the news. The operation is related to which of the following?

- a) Reintroduction of salt water crocodile in India
- b) Evacuation of Indian Nationals from Ukraine
- c) Revamping river banks around the Ganga floodplain
- d) Protecting women passengers in Indian Railways

Answer: B

Operation Ganga was launched to help stranded Indian nationals come back to India from Ukraine through special flights amidst the Russian invasion of Ukraine.

Since Ukraine is currently a no-fly zone, citizens and students are being evacuated to nearby countries after which they are being flown to India.

Source: [Mint](#)

Environment

Q.1) Consider the following:

1. Ocean warming is slowing algae growth in shallow wetland areas.
2. Ocean warming is accelerating sea level rise which cause coastal flooding.

Which of the above is /are the impact that ocean warming is having on coastal wetlands?

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

Answer-b

Sea levels are rising because of the combination of melting ice and thermal expansion, resulting in flooding.

Ocean warming will accelerate the growth of many species of algae.

Source- [Article](#)

Q.2) Consider the following:

1. When an economy is experiencing a severe recession
2. When there is deflation

In Which of the above Situations is Crowding out effect most likely to occur?

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

Answer-d

When an economy is experiencing a severe recession, crowding out is the least likely to occur. During severe downturns, there is significantly less private investment spending. Less investment spending means there is less competition for funds if the government borrows to finance deficit spending.

Deflation usually occurs only during severe recessions. During severe downturns, there is significantly less private investment spending. Less investment spending means there is little competition for funds if the government borrows to finance deficit spending.

Source- [Article](#)

Q.3) Consider the following statements:

1. Magnesium, zinc and lead are some of the micro- nutrients essential for human health and immunity
2. Micronutrient deficiencies can occur when demand for vitamins and minerals increases during specific stages in life

Which of the statements given above is/are correct?

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

Answer-b

10 PM Compilation for the Month of March, 2022

Micronutrient deficiencies occur when either the food you eat does not provide the body with sufficient vitamins and minerals, or demand for the same increases during specific stages in life, such as during pregnancy and lactation.

Though lead is found frequently in our environment, it has no known purpose in our bodies. When lead gets inside the body, the body confuses it with calcium and other essential nutrients. This confusion can cause permanent damage to the health of both children and adults. **lead fulfils no essential function in the human body**, it can merely do harm after uptake from food, air or water.

Source- [Article](#)

Q.4) Among the following, which one is the largest exporter of Wheat in the world in the last five years?

- a) China
- b) India
- c) Russia
- d) USA

Answer-c

Russia is the world's largest exporter of wheat, accounting for more than 18 percent of International exports.

Source- [Article](#)

Q.5) With reference to Interest coverage ratio, consider the following statements:

1. Creditors often use this formula to determine a company's riskiness relative to its current debt or for future borrowing.
2. Generally, a Lower coverage ratio is better, although the ideal ratio may vary by industry.

Which of the statements given above is/are correct?

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

Answer-a

The interest coverage ratio is used to measure how well a firm can pay the interest due on outstanding debt.

The interest coverage ratio is calculated by dividing a company's earnings before interest and taxes (EBIT) by its interest expense during a given period.

Generally, a higher coverage ratio is better, although the ideal ratio may vary by industry.

Source- [Article](#)

10 PM Compilation for the Month of March, 2022

Q.6) Consider the following statements:

1. Cryptomining malware utilizes a computer's resources to mine for cryptocurrency.
2. The antivirus software can protect the computers entirely from all computer viruses.

Which of the statements given above is/are correct?

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

Answer-a

Cryptomining malware utilizes a computer's resources to mine for cryptocurrency. That allows the creators to earn cryptocurrency without needing to spend money on powering their own computers.

No antivirus software can protect a computer *entirely* from *all* computer viruses, since cyber criminals are constantly creating new viruses that escape detection.

Source- [Article](#)

Q.7) Consider the following:

1. Rajya Sabha
2. State legislative council
3. Vice president

Elections to Which of the above Posts is /are conducted by the Election Commission of India?

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

Answer-d

Election Commission of India administers elections to the Lok Sabha, Rajya Sabha, State Legislative Assemblies, State Legislative Councils and the offices of the President and Vice President of the country.

Source- [Article](#)

Q.8) With reference to Potentially Unwanted Programs (PUP), consider the following statements:

1. These are needless programs that take toll on device's performance.
2. Device manufacturers make money while introducing these programs into their devices.

Which of the statements given above is/are correct?

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

Answer: C

Both the statements are correct.

10 PM Compilation for the Month of March, 2022

Potentially Unwanted Programs (PUP), more popularly known as bloatware apps, are needless programs that take a toll on your device's performance.

Device manufacturers introduced these bloatware apps to provide users with additional programs that they might want to use, while making money on the way.

Source: [TOI](#)

Q.9) With reference to IPCC report, consider the following statements:

1. IPCC was set up by the World Meteorological Organisation (WMO) and the UN Environment Programme (UNEP)
2. The IPCC itself will engage in intense scientific research before publishing their reports.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: IPCC was set up in 1988 by the World Meteorological Organisation (WMO) and the UN Environment Programme (UNEP).

Statement 2 is incorrect: The IPCC does not itself engage in scientific research. Instead, it asks scientists from around the world to go through all the relevant scientific literature related to climate change and draw up logical conclusions.

Source: [PIB](#)

Q.10) With reference to Indian Grey Hornbill, consider the following statements:

1. After almost ninety years, they have been reintroduced in Bandipur National Park.
2. They are known to be arboreal.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: After almost ninety years, they have been reintroduced in Gir forest.

Statement 2 is correct: These birds are known to be arboreal, i.e., spend most of their time on tall trees but may descend for food and to collect mud pellets for nesting.

Source: [Hindustan Times](#)

10 PM Compilation for the Month of March, 2022

Q.11) Consider the following pairs, with respect to IPCC reports.

| | | |
|----------------------|---|---|
| Working group | - | Concerned climate research |
| 1. Working Group-I | - | Deals with the scientific basis for climate change |
| 2. Working Group-II | - | Deals with actions that can be taken to combat climate change. |
| 3. Working Group-III | - | Deals with the impacts, vulnerabilities, and adaptation issues. |

Select the correct answer from the codes given below.

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

Answer: C

The IPCC reports are created by **three working groups of scientists.**

| | |
|-------------------|---|
| Working Group | Concerned climate research |
| Working Group-I | Deals with the scientific basis for climate change |
| Working Group-II | Deals with the likely impacts, vulnerabilities, and adaptation issues |
| Working Group-III | Deals with actions that can be taken to combat climate change. |

Source: [PIB](#)

Economy

Q.1) Consider the following statements:

1. Russia and USA have been the largest and second largest arms supplier to India in the last five years.
2. India spends around 1.1 per cent of its Gross Domestic Product (GDP) on defence.

Which of the statements given above is/are correct?

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

Answer-d

India spends around 2.3 per cent of its Gross Domestic Product (GDP) on defence and accounts for 15 per cent of the global arms import. Russia is the largest arms supplier to India in both periods (2011-2015 and 2016-2020). However, Russia's share of Indian arms imports fell from 70% to 49%. France and Israel were the second and third largest arms suppliers in 2016–20.

Source- [Article](#)

Q.2) Consider the following statements:

1. Particulate matter (PM) is made up of tiny pieces of solids or liquids that are in the air.
2. PM₁₀ particles are more dangerous than PM_{2.5}.

Which of the statements given above is/are correct?

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

Answer-a

Particle pollution — also called particulate matter (PM) — is made up of particles (tiny pieces) of solids or liquids that are in the air.

Breathing in particle pollution can be harmful to your health. Coarse (bigger) particles, called PM₁₀, can irritate your eyes, nose, and throat. Dust from roads, farms, dry riverbeds, construction sites, and mines are types of PM₁₀.

Fine (smaller) particles, called PM_{2.5}, are more dangerous because they can get into the deep parts of your lungs — or even into your blood.

Source- [Article](#)

Q.3) With reference to climate change, Consider the following statements:

1. A warmer climate could cause a decrease in cloudiness and alter the amount of sunlight that reaches the surface of the Earth.
2. Ocean surface and sea ice both act as carbon sinks

Which of the statements given above is/are correct?

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

Answer-d

Clouds have an enormous impact on Earth's climate, reflecting about one-third of the total amount of sunlight that hits the Earth's atmosphere back into space. Even small changes in cloud amount, location and type could have large consequences. A warmer climate could cause more water to be held in the atmosphere, leading to an increase in cloudiness and altering the amount of sunlight that reaches the surface of the Earth. Less heat would get absorbed, which could slow the increased warming.

Ice is white and very reflective, in contrast to the ocean surface, which is dark and absorbs heat faster.

Source- [Article](#)

Q.4) Recently some studies have found that wind speed in major Indian cities has been slowing down consistently and significantly, which of the following Phenomenon will get affected by this?

1. Rainfall patterns
2. Plant Biodiversity
3. Transpiration in Plants

Which of the statements given above is/are correct?

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

Answer-d

A decrease in wind speeds may have severe implications. Small changes in average wind speeds can have a large influence on atmospheric parameters. For instance, slow winds cannot carry moisture for long, resulting in altered rainfall patterns. Agriculture depends crucially on transpiration (a plant's exhalation of water vapour), which in turn needs evaporation that is a function of wind speed. Connectedly, wind-dispersed plant species also depend on wind speeds for survival. There are studies showing the impact of wind speed on natural disasters and ocean dynamics.

Source- [Article](#)

Q.5) Consider the following statements:

1. World is not only getting hotter but also drier.
2. Humidity reduces the discomfort caused by rising temperature
3. A wet-bulb temperature or WBT of 35°C mark is considered the maximum limit that humans can handle.

Which of the statements given above is/are incorrect?

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

Answer-c

We usually consider the dry-bulb temperature to describe how hot or cold a place is. Scientists, however, have been stressing upon taking into account humidity and other factors to assess how weather conditions will affect human health and activity.

Humidity is measured as wet-bulb temperature. Factoring in the humidity along with the heat, called the heat index, helps us determine what the temperature actually 'feels like'. You may have noticed this in your mobile phones and apps as well. Humidity combined with heat is deadlier for human health and wellbeing. Currently, one phenomenon is severely testing the human tolerance of this heat-humidity balance. Climate Change!

Humans with their sweat-based cooling system, have been well-designed to beat the heat. But there is a limit to the level of heat and humidity we can cope with. A wet-bulb temperature or WBT of 35°C mark is considered the maximum limit of humidity that humans can handle. Beyond this, the body can no longer effectively cool itself via perspiration.

Q.6) Consider the following statements:

1. Bureau of Energy Efficiency (BEE) is a statutory body.
2. It comes under the Ministry of electronics Information technology

Which of the statements given above is/are correct?

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

Answer-a

Bureau of Energy Efficiency (BEE) is a statutory body under the (Ministry of Power, Government of India) established under provisions of the Energy Conservation Act 2001, to promote efficient use of energy and its conservation.

Source- [Article](#)

Q.7) In Which of the following judgements did the Supreme court of India declared privacy as an integral component of Part III of the Constitution of India?

- a) Navtej Singh Johar vs Union of India judgement
- b) Justice KS Puttaswamy vs Union of India
- c) Kumar Vs Central Bureau of Investigation
- d) Kush Kalra Vs Union Of India

Answer-b

On 24 August 2017, a nine-judge bench of the Supreme Court in *Justice KS Puttaswamy vs Union of India* passed a historic judgment affirming the constitutional right to privacy. It declared privacy as an integral component of Part III of the Constitution of India.

Source- [Article](#)

Q.8) With reference to Karakattam, consider the following statements:

- 1. It is a folk dance performed at festivals, conferences, roadshows and primarily at rain goddess festivals.
- 2. The dance is famous in regions around Karnataka and Andhra Pradesh.
- 3. The performers balance a pot on their head.

Which of the statements given above is/are correct?

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

Answer:D

Statement 1 is correct: Karakattam is a form of folk dance performed at festivals, conferences, roadshows and primarily at Mariamman (rain goddess) festivals.

Statement 2 is incorrect: Karakattam is mostly famous in Tamil Nadu, it's performed in different parts of Kerala as well.

Statement 3 is correct: Both men and women perform the dance on the muddy ground. The performers balance a pot on their head.

Source: [Indian Express](#)

Q.9) Hermetic Wiper was recently seen in the news. The term is related to which of the following?

- a) New bird species found in Western Ghats
- b) Data-wiper malware detected on computers in Ukraine.
- c) New supercomputer of Meta
- d) New digital currency that has the potential to replace bitcoins

Answer: B

Ukraine has found that hundreds of its computers have been attacked by a data-wiper malware named Hermetic Wiper. It is a data-wiper malware that was detected on hundreds of computers in Ukraine.

This malware when downloaded can erase all the data on a device it targets in a manner that renders the data irretrievable.

10 PM Compilation for the Month of March, 2022

The malware is also capable of attacking data recovery tools on a system and the rebooting system of a hard drive, making it difficult for the device to reboot into its operating system essentially making it inoperable.

Source: [The Hindu](#)

Q.10) Which of the following advantages are associated with 5g technology?

1. Enhance employment opportunities.
2. Low latency
3. Enhanced network coverage

Select the correct answer from the codes given below:

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

Answer: D

Major advantages of 5G technology includes,

Low latency: It is one of the most important features of 5G technology which is significant for autonomous driving and mission critical applications. 5G networks are capable of latency less than a millisecond. This help in logistics improvement and would reduce overall cost of goods and services.

Employment generation: 5G wireless technology will open greater opportunity for new device manufactures and application developers. New VoIP devices and smart devices will be introduced in the market and thus more job opportunities as well. This will help in inclusive growth reaping demographic dividend.

Enhanced network coverage: Device-to-device communication techniques will further enhance network performance and support during limited access or absence of mobile networks. This will help in reducing digital gap in India.

Enhanced Security: 5G wireless technology is one the best solution for security surveillance due to higher bandwidth and unlicensed spectrum. It will enhance better coordination among various agencies.

Logistics and shipping: Logistic and shipping industry can make use of smart 5G technology for goods tracking, fleet management, centralized database management, staff scheduling and real-time delivery tracking and reporting.

Source: [Livemint](#)

PRELIMS

Q.1) With reference to FSSAI Star rating system for packaged food products, consider the following statements:

1. This rating system for packaged food Products will be the first such in India.
2. It will be initially voluntary from 2023 with a transition period of four years.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- This Star Rating System for packaged food Products will be the **first such in India**. It is aimed at guiding consumers to opt for healthy food.
- This rating system will be similar to the one that is being used by the Bureau of Energy Efficiency for assessing the energy efficiency in electrical devices.
- Under this system, packaged foods will display the number of stars on the front of the pack, indicating how healthy or unhealthy it is depending upon the amount of salt, sugar and fat it has.
- However, milk and dairy products will be excluded from this proposed front-of-the-pack labelling.
- Moreover, this rating system will be **initially voluntary** from 2023 with a transition period of four years. After this, it would be made mandatory.

Source: [Article](#)

Q.2) With reference to Thermobaric weapons, consider the following statements:

1. They use oxygen from the air for a large, high-temperature blast.
2. Convention on Cluster Munitions (CCM) prohibits use, transfer, production and stockpiling of Thermobaric bombs.

Which of the statements given above is/are correct?

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

Answer: a

- **Statement 1 is correct:** Thermobaric weapons — also known as aerosol bombs, fuel air explosives, or vacuum bombs — use oxygen from the air for a large, high-temperature blast.
- **Statement 2 is incorrect:** Thermobaric Weapons are not prohibited by any international law or agreement, but their use against civilian populations in built-up areas, schools or hospitals, could attract action under The Hague Conventions of 1899 and 1907.

Source: [Article](#)

10 PM Compilation for the Month of March, 2022

Q.3) With reference to the Governor in India, consider the following statements:

1. A Governor can summon legislative assembly without consulting the Chief minister or the Speaker.
2. Punchhi Commission suggested ending the practice of burdening Governors with the office of Chancellor in universities.

Which of the statements given above is/are correct?

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

Answer: b

- **Statement 1 is incorrect:** In **Nabam Rebia vs Deputy Speaker And Ors (2016)**, the SC concluded that the Governor's discretion did not extend to the powers conferred under Article 174 and hence he could not summon the House, determine its legislative agenda or address the legislative assembly without consulting the Chief minister or the Speaker.
- **Statement 2 is correct:** M.M. Punchhi Commission suggested ending the practice of burdening Governors with the office of Chancellor in universities.

Source: [Article](#)

Q.4) With reference to Anti-Microbial Resistance (AMR), consider the following statements:

1. Antimicrobials include Antibiotics, antivirals, antifungals and antiparasitics.
2. AMR occurs naturally over time, usually through genetic changes.
3. Mass bathing in rivers as part of religious mass gathering occasions can also result in spread of AMR.

Which of the statements given above is/are correct?

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

Answer: d

Both statements are correct.

- Antimicrobials - including antibiotics, antivirals, antifungals and antiparasitics - are medicines used to prevent and treat infections in humans, animals and plants.
- AMR occurs naturally over time, usually through genetic changes. Antimicrobial resistant organisms are found in people, animals, food, plants and the environment (in water, soil and air). They can spread from person to person or between people and animals, including from food of animal origin.
- Cultural activities like mass bathing in rivers as part of religious mass gathering occasions can also cause a spread of the AMR.

Source: [Article](#)

10 PM Compilation for the Month of March, 2022

Q.5) With reference to Stree Manoraksha Project, consider the following statements:

1. The project aims to provide training and supervision in psychosocial and mental health care for staff and counsellors of all One Stop Centres (OSCs).
2. The project is launched by Ministry of Health and Family Welfare.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: The project aims to provide training and supervision in psychosocial and mental health care for staff and counsellors of all One Stop Centres (OSCs).

Statement 2 is incorrect: National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, with support and funding from the Ministry of Women and Child Development.

Source: [PIB](#)

Q.6) With reference to National Pension System, consider the following statements:

1. NPS accounts can be opened by the government employees alone.
2. All NPS accounts are non-withdrawable permanent retirement accounts.
3. NPS is implemented and regulated by Pension Fund Regulatory and Development Authority (PFRDA).

Select the correct answer from the codes given below:

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

Answer: B

Statement 1 is incorrect: NPS was made available to all Citizens of India from May 2009. Any individual citizen of India (both resident and Non-resident) in the age group of 18-65 years can join NPS. Overseas Citizen of India (OCIs) can also enrol to invest in NPS tier-1 accounts.

Statement 2 is incorrect: There are two tiers of NPS Accounts.

Tier-I account: This is the non-withdrawable permanent retirement account into which the accumulations are deposited and invested as per the option of the subscriber.

Tier-II account: This is a voluntary withdrawable account which is allowed only when there is an active Tier I account in the name of the subscriber.

Statement 3 is correct: NPS is implemented and regulated by Pension Fund Regulatory and Development Authority (PFRDA).

Source: [Business Standard](#)

10 PM Compilation for the Month of March, 2022

Q.7) With reference to Radio Frequency Identification tags, consider the following statements:

1. RFID is a type of passive wireless technology that allows for tracking or matching of an item or individual.
2. RFID tags can be read from up to several feet away.
3. RFID tags need to be within the direct line-of-sight of the reader to be tracked.

Select the correct answer from the codes given below:

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

Answer: A

Statement 1 is correct: RFID is a type of passive wireless technology that allows for tracking or matching of an item or individual.

Statement 2 is correct: RFID tags can be read from up to several feet away.

Statement 3 is incorrect: RFID tag is not required to be within the direct line-of-sight of the reader to be tracked.

Source: [PIB](#)

Q.8) Montreux Convention was recently seen in news. The convention is related to which of the following?

- a) With respect to alleged war crimes and crimes against humanity.
- b) Waivers against United Nations Sanctions.
- c) International convention on naval passage.
- d) Convention on protection of endangered species due to climate change.

Answer: C

Turkey is set to implement an international convention on naval passage through two of its strategic straits, which would allow them to limit the movement of Russian warships between the Mediterranean Sea and the Black Sea.

About Montreux Convention:

According to the 1936 Montreux Convention Regarding the Regime of the Straits, often referred to simply as the Montreux Convention, Turkey has control over both the Bosphorus and Dardanelles straits.

In the event of a war, the pact gives Turkey the right to regulate the transit of naval warships and to block the straits to warships belonging to the countries involved in the conflict.

Russia's location on the Black Sea complicates the situation. Article 19 of the treaty contains an exception for the countries on the Black Sea that can effectively undermine Turkey's power in blocking the Russian warships entering or exiting the Black Sea.

Source: [Indian Express](#)

10 PM Compilation for the Month of March, 2022

Q.9) With reference to Greenhouse Gas Emissions, consider the following statements:

1. In India, majority of the annual greenhouse gas emissions from farming is due to the Livestock sector.
2. Carbon credits can be claimed for regenerative agricultural practices such as not burning paddy straw, and conservation agriculture such as not ploughing land and laser levelling of land.

Which of the statements given above is/are correct?

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

Answer: c

- **Statement 1 is correct:** Farming contributes around 14% of the annual greenhouse gas emissions from India. Of this, 55% comes from the livestock sector alone
- **Statement 2 is correct:** Farmers can claim carbon credits for a host of regenerative agricultural practices such as not burning paddy straw, conservation agriculture such as not ploughing land and laser levelling of land.

Source: [Article](#)

Q.10) With reference to Palladium, Consider the following statements:

1. It is often used as an alternative to gold in making various devices.
2. Palladium is used in almost all electronic devices, as it is key to make chipsets and circuit boards.

Which of the statements given above is/are correct?

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

Answer: c

Both the statements are correct.

Palladium is often used as an alternative to gold in making various devices as the metal is highly malleable and resistant to corrosion.

The rare metal is considered to be softer than gold, but is still much harder and durable than the yellow metal.

Palladium is used in nearly all electronic devices, and the metal is a key to make chipsets and circuit boards. It is used to make Multi-Layer Ceramic Capacitors (MLCCs), which are important to make smartphone screens, stereo systems, and power circuit breakers.

Source: [The Hindu](#)

POLITY AND GOVERNANCE

Q.1) Consider the following statements:

1. Government controls the prices of petrol and diesel.
2. India has strategic reserve that can last up to 25 days

Which of the statements given above is/are correct?

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

Answer-d

In July 2010, government implemented the deregulation on petrol. In 2014, the government decontrol diesel.

India's SPR(Strategic petroleum reserve) is managed by the State-controlled Indian Strategic Petroleum Reserves Limited (ISPRL), which was set up in 2004 as a wholly owned subsidiary of Indian Oil and then handed over to Oil Industry Development Board (OIDB) in 2006. Under Phase I, ISPRL established petroleum storage facilities with total capacity of 5.33 million tonnes (MT) at 3 locations: (i) Vishakhapatnam (1.33 MT), (ii) Mangaluru (1.5 MT) and (iii) Padur (2.5 MT), all of which have been filled with crude oil. This will be sufficient to meet nine and a half days of India's crude requirement.

Source- [Article](#)

Q.2) With reference to Daylight Harvesting, consider the following statements:

1. It automatically dims or adjusts the brightness of light in response to the amount of natural light available in a space.
2. Higher energy consumption has been limiting its widescale use

Which of the statements given above is/are correct?

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

Answer-a

Daylight Harvesting is one of the most advanced techniques used in sustainable lighting designs for contemporary buildings. It automatically dims or adjusts the brightness of light in response to the amount of natural light available in a space. Utilizing natural daylight coming through the windows or skylights minimizes the amount of energy used in artificial lighting.

It increases energy savings by dimming or turning Off lights based on the natural daylight entering the space.

Source- [Article](#)

International Relations

Q.3) With reference to International Telecommunication Union (ITU), consider the following statements:

1. It is an intergovernmental organisation which facilitates international connectivity in communications networks.
2. It allocates Satellite orbits

Which of the statements given above is/are correct?

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

Answer-b

The International Telecommunication Union (ITU) is the United Nations specialized agency for information and communication technologies – ICTs. Founded in 1865 to facilitate international connectivity in communications networks, It allocates global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.

Source- [Article](#)

Q.4) With reference to Defence Acquisition Procedure (DAP) 2020, consider the following statements:

1. It is an effort by the Ministry of Defence to improve the capital procurement procedure.
2. It strives to provide incentives to MSMEs.

Which of the statements given above is/are correct?

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

Answer-c

The Defence Acquisition Procedure (DAP 2020), which supersedes the Defence Procurement Procedure 2016 (DPP 2016), is a sincere effort by the Ministry of Defence to improve the capital procurement procedure.

Through its many improved features, it hopes to provide a boost to the Make in India efforts in the field- especially to MSMEs. Projects under the Make II & II sub-categories, with procurement cost not exceeding ₹ 100 crore per year, will be earmarked for the MSMEs.

Source- [Article](#)

10 PM Compilation for the Month of March, 2022

Q.5) Consider the following statements:

1. Liquefied petroleum gas (LPG) is mainly composed of lighter methane and ethane.
2. LPG price in India can be calculated based on the import parity price (IPP).
3. IPP is a function of the LPG prices in the domestic market and is decided by the forces of demand and supply.

Which of the statements given above is/are incorrect?

- a) 1 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) None

Answer-b

LPG is composed mainly of **propane and butane**, while natural gas is composed of the lighter methane and ethane.

LPG price in India can be calculated **based on the import parity price (IPP)**. The IPP is based on the LPG price in the international market given that country imports the fuel.

Source- [Article](#)

Q.6) Following a recession in a country different parts of the economy are recovering at different rates, times, or magnitudes. Which of the following terms best describes the above scenario?

- a) V shaped recovery
- b) K- shaped recovery
- c) Z- shaped recovery
- d) W- shaped recovery

Answer-b

A K-shaped recovery occurs when, following a [recession](#), different parts of the economy recover at different rates, times, or magnitudes. This is in contrast to an even, uniform recovery across sectors, industries, or groups of people.

Source- [Article](#)

Q.7) With reference to Periodic labour force survey (PLFS), consider the following statements:

1. It is conducted by the National Statistical Office (NSO)
2. It provides labour market indicators for the entire nation annually and for rural India quarterly.

Which of the statements given above is/are correct?

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

Answer-a

10 PM Compilation for the Month of March, 2022

The key source of evidence on labour market developments comes from the Periodic Labour Force Survey (PLFS) conducted by the National Statistical Office (NSO). Based on it, NSO provides labour market indicators for the entire nation annually and for urban India quarterly. Source- [Article](#)

Q.8) Which of the following is/are a threat to Asiatic Lion population in India?

1. Habitat fragmentation
2. Linear infrastructure intrusions
3. Vulnerability to diseases

Select the correct answer from the codes given below:

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

Answer: d

All are threats to the Lion population.

- **Threats: a)** Poaching and Habitat Fragmentation **b)** vulnerability to diseases **c)** death from linear infrastructure such as road, rail and electric fences and **d)** man-animal conflict.

Source: [Article](#)

Q.9) With reference to Perini dance form, consider the following statements:

1. This dance form prospered during the Kakatiya dynasty.
2. It is performed by males in honor of Lord Shiva.
3. It is believed that in ancient times this dance form was performed before the soldiers were sent to war.

Which of the statements given above is/are correct?

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

Answer: d

All statements are correct.

- Perini is an ancient dance form from Telangana. This dance form prospered during the Kakatiya dynasty.
- This dance form is also called 'Dance of Warriors'. It is usually performed by males in honour of Lord Shiva.
- It is believed that in ancient times this dance form was performed before the soldiers were sent to war.

Source: [Article](#)

10 PM Compilation for the Month of March, 2022

Q.10) With reference to Radio Telescopes, consider the following statements:

1. Radio telescope is smaller as compared to an Optical Telescope.
2. The first radio telescope in India was set up before Independence.

Which of the statements given above is/are incorrect?

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

Answer: c

- **Statement 1 is incorrect:** Radio telescopes are bigger than Optical telescopes because the wavelengths of radio waves are so much larger than the wavelengths of visible light.
- **Statement 2 is incorrect:** First radio telescope in India was set up near Mumbai in 1965.

Source: [Article](#)

Environment

Q.1 Consider the following:

1. Interspecies interactions
2. Altitude
3. Precipitation.

Which of the above factor(s) contribute to the distribution of biodiversity on Earth?

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

Answer-d

The presence or absence of one species may directly impact other species. This can have an effect on the biodiversity in that area.

In general, the more precipitation an area receives, the more biodiverse it will be.

Changes in altitude (very high or very low elevation points) may affect biodiversity because this limits what type of species are able to live under those conditions.

Source- [Article](#)

Q.2) Which of the following is the most likely long-term impact of government deficits?

- a) Higher potential output
- b) More private investment
- c) Less government borrowing
- d) A smaller stock of capital

Answer-d

Deficit spending leads to lower potential output, not higher potential output. Deficit spending drives up interest rates, which lowers the rate of capital accumulation. Less capital means lower potential output.

Deficit spending leads to less private investment, not more.

Deficit spending leads to more government borrowing, not less government borrowing.

Deficit spending leads to higher interest rates and less spending on investment. Less investment spending means the rate of capital accumulation in an economy will slow down, which will lead to a slower rate of economic growth or even a decline in potential output.

Source- [Article](#)

Q.3) Which of the following best describes the opportunity cost of holding money?

- a) Interest rate on other assets
- b) Inflation
- c) Risk of other assets
- d) Liquidity of other assets

Answer-a

The opportunity cost of holding money is the value of the next best alternative to holding money. When you hold wealth in the form of money instead of some other interest-bearing

10 PM Compilation for the Month of March, 2022

asset, such as bonds, you are giving up interest that you could be earning on other forms of financial assets.

inflation is asset value lost due to changes in purchasing power. The opportunity cost of something is the value of the next best alternative, but risk is uncertainty about the value of an asset in the future.

Liquidity is the ability to convert the value of an asset into cash, not the value that is given up by holding wealth in the form of money rather than a different kind of financial asset.

Source- [Article](#)

Q.4) Which of the following conditions is/are essential for tea cultivation?

1. Rainfall between 150-250 cm
2. High Humidity
3. elevations ranging from 1000 - 2500 m

Select the correct answer using the code given below:

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

Answer-d

Tea needs heavy rainfall(150-250) in the form of frequent showers, without extended freezing periods in the winter. Moreover, the rain should be well-distributed throughout the year because tea does not tolerate drought (or extended dry periods) well.

Ideal relative humidity during the growing season is 70% to 90%. High humidity, morning fog, and heavy dew favor the growth of buds and young leaves.

Tea requires well drained soil with high amount of organic matter and pH 4.5 to 5.5. The performance of tea is excellent at elevations ranging from 1000 - 2500 m. Optimum temperature: 20 - 270 C.

Source- [Article](#)

Q.5) With reference to the Konark sun temple of Odisha, consider the following statements:

1. It was built by King Narasimhadeva I in the 13th century.
2. It is not a UNESCO world heritage site.

Which of the statements given above is/are correct?

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

Answer-a

Konark Sun Temple, located in the East Odisha near the sacred city of Puri. It was built in 13th century by **King Narasimhadeva I** (AD 1238-1264). Its scale, refinement and conception represent the strength and stability of the **Ganga Empire** as well as the value systems of the historic milieu.

It was declared a **UNESCO world heritage site in 1984**.

Source- [Article](#)

Q.6) “Emissions Gap report” is released by which of the following?

- a) IPCC(Intergovernmental Panel on Climate Change)
- b) UNEP(United Nations Environment Programme)
- c) Green watch
- d) UNFCCC(United Nations Framework Convention on Climate Change)

Answer-b

United Nations Environment Programme **(UNEP)’s Publishes** Emissions Gap Report

Source- [Article](#)

Q.7) Consider the following statements:

- 1. IPCC was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Development Programme(UNDP).
- 2. It conducts its original research to monitor climate change.

Which of the statements given above is/are correct?

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

Answer-d

The **Intergovernmental Panel on Climate Change (IPCC)** is an intergovernmental body of the United Nations responsible for advancing knowledge on human-induced climate change. It was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) It does not conduct original research nor monitor climate change, but rather undertakes a periodic, systematic review of all relevant published literature.

Source- [Article](#)

Q.8) Geneva convention was recently seen in the news. The convention is related to which of the following statements?

- a) Providing consular access during war.
- b) Limiting the barbarity of war.
- c) Rights regarding Asylum seekers and illegal immigrants.
- d) International convention on naval passage.

Answer: B

The Geneva Conventions (1949) and their Additional Protocols are international treaties that contain the most important rules limiting the barbarity of war.

- 1. The first Geneva Convention protects wounded and sick soldiers on land during war.
- 2. The second Geneva Convention protects wounded, sick and shipwrecked military personnel at sea during war.
- 3. The third Geneva Convention applies to prisoners of war.
- 4. The fourth Geneva Convention affords protection to civilians, including in occupied territory.

Source: [Indian Express](#)

10 PM Compilation for the Month of March, 2022

Q.9) With reference to **Kavach System of Indian Railways**, consider the following statements:

1. It is an indigenously developed Automatic Train Protection (ATP) System.
2. It is designed to bring a train to a halt automatically when it notices another train on the same line within a prescribed distance.

Which of the statements given above is/are correct?

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

Answer: c

Both the statements are correct.

KAVACH is an indigenously developed **Automatic Train Protection (ATP)** System for Indian Railways.

Main Function of Kavach: It is designed to bring a train to a halt automatically when it notices another train on the same line within a prescribed distance.

Developed by: Research Design and Standards Organisation (RDSO) of the Ministry of Railways in collaboration with Indian industry.

Source: [PIB](#)

Q.10) With reference to **Konark Sun Temple**, consider the following statements:

1. It is a classic example of the Vesara style of architecture.
2. It was also called Black Pagoda because it was used as a navigational landmark by ancient sailors to Odisha.

Which of the statements given above is/are correct?

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

Answer: b

- **Statement 1 is incorrect:** Konark Sun temple is a perfect blend of Kalinga architecture, heritage, exotic beach and salient natural beauty.
- **Statement 2 is correct:** Konark Sun temple was also known as '**BLACK PAGODA**' due to its dark color and used as a navigational landmark by ancient sailors to Odisha. Similarly, the Jagannath Temple in Puri was called the "**White Pagoda**".

Source: [Article](#)

ENVIRONMENT

Q.1) It is an ecological phenomenon triggered by the addition or removal of top Predators and involving reciprocal changes in the relative Populations of predator and Prey through a Food chain. Which of the following term describes this phenomenon most appropriately?

- a) Trophic Cascade
- b) Regeneration
- c) Ecological succession
- d) Biomagnification

Answer-a

Trophic cascade, an ecological phenomenon triggered by the addition or removal of top predators and involving reciprocal changes in the relative populations of predator and prey through a food chain, which often results in dramatic changes in ecosystem structure and nutrient cycling.

Source- [Article](#)

Q.2) Consider the following statements:

1. In India about 15 per cent of domestic surface transport takes place via Inland Waterways.
2. There are more than 10 operational inland waterways in India

Which of the statements given above is/are correct?

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

Answer-d

There are 111 officially notified Inland National Waterways (NWs) in India identified for the purposes of inland water transport, as per The National Waterways Act, 2016. Out of the 111 NWs, 106 were created in 2016. The NW network covers around 20,275.5 km. NW-1, 2, & 3 are already operational.

“In several countries, IWT accounts for a substantial share as a percentage of the total: 32 per cent in Bangladesh, 20 in Germany, 14 in the U.S. and 9 in China. In China, much of the increase has occurred in recent decades, in tandem with its phenomenal industrial-agricultural growth. By contrast, in **India only 0.15 per cent of domestic surface transport is accounted for by IWT**, compared with 68 per cent for road and 30 per cent for rail.”

Source- [Article](#)

Q.3) With reference to the Northern River terrapin, consider the following statements:

1. It is found in the Western Ghats area of peninsular India
2. They are listed as Endangered on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species.

Which of the statements given above is/are correct?

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

Answer-d

The River terrapin is found in India and Bangladesh (Sundarbans), Myanmar, Malaysia (peninsular), Indonesia (Sumatra), Thailand, and Cambodia (Stuart et al., 2001). It is regionally extinct in Myanmar, Singapore, Thailand and Vietnam.

IUCN Status: Critically Endangered.

Source- [Article](#)

Q.4) Consider the below given terms and Choose which of the following is a paper claim that entitles the buyer of that claim to future income from the seller?

- a) Money
- b) Physical asset
- c) Financial asset
- d) Liability

Answer-c

Money is an asset that can act as a medium of exchange, a store of value, or a unit of account. However, it does not provide future income as described in this definition.

A physical asset is a claim on a tangible asset, such as a house or a factory. It gives the owner the right to rent or sell that asset, but it does not guarantee future income.

A financial asset is a claim to future income that is not a claim to a tangible object. Stocks and bonds are examples of financial assets.

A liability is a requirement to *pay* money in the future, not to *receive* money in the future.

Source- [Article](#)

Q.5) With reference to the Karewas, consider the following statements:

1. karewas are mainly devoted to the cultivation of saffron.
2. Absence of fossils is one of their major Characteristic.

Which of the statements given above is/are correct?

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

Answer-a

10 PM Compilation for the Month of March, 2022

Karewas are lacustrine deposits [deposits in lake] in the Valley of Kashmir and Jammu Division. They are characterized by the presence of fossils of mammals and at places by peat. They are used for the cultivation of saffron, almond, walnut, apple and orchards.

Source- [Article](#)

Q.6) Which of the following recognizes the rights of forest-dwelling tribal communities and other traditional forest dwellers to forest resources?

- Fifth Schedule of the Indian constitution
- Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act of 2006.
- Protection of Civil Rights Act, 1955
- Forest Conservation Act, 1980

Answer-b

FRA enacted in 2006 recognises the rights of forest-dwelling tribal communities and other traditional forest dwellers to forest resources on which these communities were dependent for a variety of needs, including livelihood, habitation and other sociocultural needs.

Source- [Article](#)

Q.7) Which of the following is/are possible benefit(s) of a forest fire?

- Increase in soil fertility
- Aid and move along life-cycle of several plants
- Getting rid of invasive species

Select the correct answer from the codes given below:

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Answer: d

All are advantages of a forest fire.

- As dead or decaying plants begin to build up on the ground, they may prevent organisms within the soil from accessing nutrients or block animals on the land from accessing the soil. This coating of dead organic matter can also choke outgrowth of smaller or new plants. When humans perform a prescribed burn, the goal is to remove that layer of decay in a controlled manner, allowing the other, healthy parts of the ecosystem to thrive. Moreover, nutrients released from the burned material, which includes dead plants and animals, return more quickly into the soil than if they had slowly decayed over time. In this way, **fire increases soil fertility**—a benefit that has been exploited by farmers for centuries.
- Several plants actually **require fire to move along their life cycles**. For example, seeds from many pine tree species are enclosed in pine cones that are covered in pitch, which must be melted by fire for the seeds to be released.
- Fires can **help rid an ecosystem of invasive species** that have not adapted to regular wildland fires

Source: [Article](#)

Q.8) With reference to Waterways in India, consider the following statements:

1. As per constitutional provisions, only those waterways which are declared as National Waterways come under the purview of the Central Government.
2. Inland waterways have low transport speed thus not suitable where time is an important factor.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- **Statement 1 is correct:** As per constitutional provisions, only those waterways which are declared as National Waterways come under the purview of Central Government while rest of waterways remain in the purview of respective State Government.
- **Statement 2 is correct:** Inland waterways have low transport speed thus not suitable where time is an important factor. It has a limited area of operation, depending on the infrastructural premises and depth of the waterways. There are only very few cases in which Inland water transport (IWT) can offer door-to-door transport of cargo.

Source: [Article](#)

Q.9) HANSA-NG was recently seen in the news. It is related to which of the following?

- a) New Generation Anti Tank Missile tested by DRDO.
- b) New parasite species identified in Eastern Ghats.
- c) India's first indigenous Flying Trainer aircraft.
- d) Newly inaugurated Nuclear power plant in Sri Lanka donated by India.

Answer: C

HANSA-NG is India's first indigenous Flying Trainer aircraft.

Developed by: CSIR-National Aerospace Laboratories, Bangalore under the aegis of Council of Scientific and Industrial Research

Features: The aircraft is powered by Rotax Digital Control Engine with unique features like Just-In-Time Prepreg (JIPREG) Composite lightweight Airframe, Glass Cockpit, Bubble Canopy with wide panoramic view, electrically operated flap among others.

Significance: The aircraft is designed to meet the Indian flying club needs, and it is an ideal aircraft for Commercial Pilot Licensing (CPL) due to its low cost and low fuel consumption.

Source: [PIB](#)

10 PM Compilation for the Month of March, 2022

Q.10) With reference to Pumped storage hydro (PSH) plants, consider the following statements:

1. These are storage systems based on hydropower operations between two or more reservoirs with an elevation difference.
2. So far, no PSH Plants has been installed in India.
3. PSH projects have high investment costs and long gestation periods.

Which of the statements given above is/are correct?

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

Answer: C

Statement 1 is correct: Pumped storage hydro (PSH) plants are storage systems based on hydropower operations between two or more reservoirs (upper and lower) with an elevation difference. At the time of demand, downward water flow generates electricity with a hydraulic turbine, and water is pumped back to the upper reservoir using power from grid or RE sources, with an overall efficiency of 75-80%.

Statement 2 is incorrect: In India, the PSH potential of about 120GW has been identified at about 120 sites. Only nine plants with an installed capacity of 4,785MW have been commissioned so far, and three with a capacity of 2.7GW are under construction.

Statement 3 is correct: With High investment costs and long gestation for a PSH project, private participation has been low in India.

Source: [Livemint](https://www.livemint.com)

POLITY AND GOVERNANCE

Q.1) Consider the following statements:

1. A formal education or minimum educational is not necessary to be considered literate according to definition of literacy as used in census operations in India.
2. According to the census 2011 figures, female literacy rate in India is less than 60 percent.

Which of the statements given above is/are correct?

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

Answer-a

Literacy, as defined in Census operations, is **the ability to read and write with understanding in any language**. A person who can merely read but cannot write is not classified as literate. Any formal education or minimum educational standard is not necessary to be considered literate.

The results of 2011 census reveal that there has been an increase in literacy in the country. The literacy rate in the country is 74.04 per cent, 82.14 for males and **65.46 for females**.

Source-[Article](#)

Q.2) With reference to Plasma, consider the following statements:

1. It is also Fourth State of Matter, other than solid, liquid and gas.
2. when liquid boils, it changes into a gas, similarly heating a gas will lead to the formation of plasma.

Which of the statements given above is/are correct?

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

Answer-c

Plasma is often called “the fourth state of matter,” along with solid, liquid and gas. Just as a liquid will boil, changing into a gas when energy is added, heating a gas will form a plasma – a soup of positively charged particles (ions) and negatively charged particles (electrons). Because so much of the universe is made of plasma, its behavior and properties are of intense interest to scientists in many disciplines.

The fourth state of matter, Plasma, is the most natural and widely observed state of matter in the entire universe.

Source- [Article](#)

Q.3) Theyyam is a popular ritual form of dance worship, it belongs to which of the following state?

- a) Kerala
- b) Tamil Nadu
- c) Andhra Pradesh
- d) Odisha

Answer-a

Theyyam is a popular ritual form of dance worship in Kerala and Karnataka. Theyyam consists of thousand-year-old traditions, rituals and customs.

Source- [Article](#)

Q.4) Which one of the following is not a key Dimension of the World Economic Forum's Global Gender Gap Report?

- a) Educational Attainment
- b) Economic Participation and Opportunity
- c) Political Empowerment
- d) Reproductive health

Answer-d

Economic Participation and Opportunity, Educational Attainment, Health and Survival and, Political Empowerment are the four dimensions of Gender Gap report.

Source- [Article](#)

Q.5) Consider the following statements:

1. Out of the total energy capacity installed in India , more than 30 percent comes from renewable sources.
2. Out of the total solar power production taking place in India more than 90 percent is concentrated in the northern and central states.

Which of the statements given above is/are correct?

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

Answer-a

India is world's 3rd largest consumer of electricity and world's 3rd largest renewable energy producer with **38%** of energy capacity installed in the year 2020 (136 GW of 373 GW) coming from renewable sources.

Karnataka, Telangana, Rajasthan, Andhra Pradesh and Gujarat(in that order from highest capacity to lowest) are the leading states in terms of solar power production

Source- [Article](#)

10 PM Compilation for the Month of March, 2022

Q.6) Consider the following statements:

1. It has advisory jurisdiction in the matter of post-election disqualification.
2. It sets limits of campaign expenditure per candidate.
3. It issues the Model Code of Conduct in election.

Which of the above are the functions performed by the Election Commission of India?

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

Answer-d

Election Commission has following functions-It **grants recognition to political parties & allot election symbols** to them along with settling disputes related to it.

The Commission also has **advisory jurisdiction in the matter of post election disqualification** of sitting members of Parliament and State Legislatures.

It **issues the Model Code of Conduct in election** for political parties and candidates so that the no one indulges in unfair practice or there is no arbitrary abuse of powers by those in power.

Source- [Article](#)

Q7 With reference to Savitribai Phule and Jyotirao Phule, consider the following statements:

1. They started a school for girls, Shudras and Ati-Shudras.
2. Ideas of Widow remarriage and inter-caste marriages were advocated by them.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- Together, by 1848, the Phules started a school for girls, Shudras and Ati-Shudras in Poona. The historic work was started by Jyotirao when he was just 21 years old, ably supported by his 18-year-old wife.
- The Satyashodhak Samaj (The Truth-Seeker's Society) was established on September 24, 1873 by Jyotirao-Savitribai and other like-minded people. The Samaj advocated for social changes that went against prevalent traditions, including economical weddings, inter-caste marriages, eradication of child marriages, and widow remarriage.

Source: [Article](#)

Q.8) With which of the following countries India has a Comprehensive Economic Partnership Agreement (CEPA)?

1. Japan
2. UAE
3. Canada

Select the correct answer from the codes given below:

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

Answer: d

- India has a Comprehensive Economic Partnership Agreement (CEPA) with Japan and UAE. Negotiations are still ongoing with Canada.

Source: [Article](#)

Q.9) With reference to Humanitarian Corridors, consider the following statements:

1. These are specific demilitarised zones, in an area of conflict and both sides of an armed conflict agree to them.
2. All UN members can access the Humanitarian corridors.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: These are demilitarised zones, in a specific area and for a specific time and both sides of an armed conflict agree to them.

Statement 2 is incorrect: Access to humanitarian corridors is determined by the parties to the conflict. It's usually limited to neutral actors, the UN or aid organisations such as the Red Cross.

Source: [Indian Express](#)

10 PM Compilation for the Month of March, 2022

Q.10) With reference to **Side-Channel Attacks (SCAs)**, consider the following statements:

1. It is a security exploit that aims to gather information from a system by exploiting the indirect effects of the system or its hardware.
2. It can be used on smartwatch to extract ECG and heart rate signals.

Which of the statements given above is/are correct?

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

Answer: C

Both the statements are correct.

An SCA may also be referred to as a sidebar attack or an implementation attack. It is a security exploit that aims to gather information from a system by measuring or exploiting the indirect effects of the system or its hardware.

It can be applied to any data that one want to keep secret. For example, it can be used on smartwatch to extract ECG and heart rate signal.”

Source: [Indian Express](#)

GEOGRAPHY

Q.1) Which of the following states share border with both Nepal and Bhutan?

1. Bihar
2. West Bengal
3. Sikkim

Select the correct answer using the code given below:

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

Answer-a

Nepal shares a border of about 1850 km with five Indian States - **Uttarakhand, Uttar Pradesh, Bihar, West Bengal and Sikkim.**

Bhutan shares borders with the Indian states of **Arunachal Pradesh in its east, Sikkim in the west and Assam and West Bengal in the south.**

Source- [Article](#)

Q.2) Suppose the Government increases taxes and this leads to a decline in the disposable income. What happens to household savings and the real interest rate in the short run, and potential output in the long run?

1. Household saving decreases
2. real interest rate increases
3. Potential output decreases

Select the correct answer using the code given below:

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

Answer-d

Less income after tax income decreases the ability to save, decreasing the supply of loanable funds and increasing the interest rate. Higher interest rates reduce the incentive for firms to create new capital, so as the existing stock of capital depreciates, the stock of capital decreases which decreases potential output.

Source- [Article](#)

Q.3) Which of the following is most likely to lead to higher levels of economic growth?

- a) An increase in inflows of foreign savings.
- b) A decrease in labor force participation rates.
- c) High government deficits
- d) Less retirement savings.

Answer-a

When foreign countries send their savings to a country, this increases the supply of loanable funds which makes it easier for firms to invest in plant and equipment and thus leads to economic growth.

10 PM Compilation for the Month of March, 2022

If the stock of labor increases, potential output increases. So a decrease will not lead to Growth.

High government borrowing raises the interest rate which discourages investment in capital. High savings rates and not low savings encourages economic growth.

Source- [Article](#)

Q.4) Consider the following statements:

1. Electronic nicotine delivery systems (ENDS) commonly known as e-cigarettes do not contain tobacco.
2. They are not harmful to health and are completely safe.

Which of the statements given above is/are correct?

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

Answer-a

According to WHO , Electronic nicotine delivery systems (ENDS) and electronic non-nicotine delivery systems (ENNDS), commonly known as e-cigarettes, do not contain tobacco and may or may not contain nicotine, but are harmful to health and undoubtedly unsafe.

Source- [Article](#)

Q.5) Pochampalli Saree is a craft heritage of which one of the following states?

- a) Andhra Pradesh
- b) Tamil Nadu
- c) Kerala
- d) Karnataka

Answer-a

These are Silk and cotton sarees with intricate motifs from state of Andhra Pradesh

Source- [Article](#)

Q.6) Which of the following suggests and identifies the public sector enterprises for strategic disinvestment to the Cabinet?

- a) Niti Aayog
- b) Department of Public Enterprises (DPE)
- c) Ministry of Finance
- d) Cabinet Committee on economic affairs

Answer-a

NITI Aayog to identifies CPSEs for strategic disinvestment and advice on the mode of sale, percentage of shares to be sold of the CPSE and method for valuation of the CPSE to the cabinet.

Source- [Article](#)

10 PM Compilation for the Month of March, 2022

Q.7) With reference to Supercomputers, consider the following statements:

1. Param Shivay is India's first indigenously assembled Supercomputer.
2. Computational chemistry and Molecular Dynamics are two important application areas of supercomputing technology.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- India's **first supercomputer was PARAM 8000.**
- **PARAM Shivay, the first supercomputer assembled indigenously**, was installed in IIT (BHU), followed by **PARAM Shakti, PARAM Brahma, PARAM Yukti, PARAM Sanganak** at IIT-Kharagpur, IISER, Pune, JNCASR, Bengaluru and IIT Kanpur respectively.
- **Application areas:** Climate Modelling, Weather Prediction, Aerospace Engineering including CFD, CSM, CEM, Computational Biology, **Molecular Dynamics**, Atomic Energy Simulations, National Security/ Defence Applications, Seismic Analysis, Disaster Simulations and Management, **Computational Chemistry**, Computational Material Science and Nanomaterials, Discoveries beyond Earth (Astrophysics), Large Complex Systems Simulations and Cyber Physical Systems, Big Data Analytics, Finance, Information repositories/ Government Information Systems.

Source: [Article](#)

Q.8) Which of the following is/are correctly matched?

| Term | Explanation |
|-----------------------|------------------------------------|
| 1. Creeping inflation | Rate of inflation is high |
| 2. Stagflation | Recession |
| 3. Disinflation | Reduction in the rate of inflation |

Select the correct answer from the codes given below:

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

Answer: c

- Creeping inflation: If the rate of inflation is low (up to 3%).
- Stagflation: Inflation + recession (Unemployment)
- Disinflation: Reduction in the rate of inflation

Source: [Article](#)

10 PM Compilation for the Month of March, 2022

Q.9) With reference to **Boltzman medal**, consider the following statements:

1. This medal is awarded every three years by the Commission on Statistical Physics of the International Union of Pure and Applied Physics (IUPAP).
2. It is given only once to a person and on the condition that that person has not won the Nobel prize so far.

Which of the statements given above is/are correct?

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

Answer: C

Both the statements are correct.

This medal is awarded every three years by the Commission on Statistical Physics of the International Union of Pure and Applied Physics (IUPAP) at the Statphys Conference. The IUPAP was established in 1922 in Brussels with 13 Member countries and the first General Assembly was held in 1923 in Paris. It currently has 60 country members. India joined it in 1948.

It is the only international physics organisation that is organised and run by the physics community itself.

It is given only once to a person and on the condition that that person has not won the Nobel prize so far.

Source: [Indian Express](#)

Q.10) Which of the following benefit is/are directly associated with Smart grids?

1. Reduction of T&D losses.
2. Improved quality of Service.
3. Improved power production.

Select the correct answer from the codes given below:

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

Answer: A

Statement 1 and 2 are correct: Smart grid can contribute to a reduction of T&D losses, Peak-load management, improved quality of Service, increased reliability, better asset management, renewable integration, better accessibility to electricity and also lead to self-healing grids.

Statement 3 is incorrect: Smart grid does not increase power production.

Source: [PIB](#)

ECONOMY

Q.1) With reference to the Balance of Payment (BOP), consider the following statements:

1. Only imports and exports are included in the balance of payments
2. It means the sum of all credit entries is greater than the sum of all debit entries

Which of the statements given above is/are incorrect with respect to BOP?

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

Answer-c

Any transaction that causes money to flow into or out of a country is counted in the balance of payments not just export and imports.

The balance of payments is always balanced. That means the sum of all credit entries should match the sum of all debit entries.

Source- [Article](#)

Q.2) It is a traditional system of medicine practised in the Himalayan belt of India. Although originated in Tibet but is also widely practised in North and North east India. Majority of its theory and practice is similar to Ayurveda. Which of the following traditional medicine system best fits the description.

- a) Unani
- b) Siddha
- c) Homoeopathy
- d) Sowa Rigpa

Answer-d

Sowa-Rigpa (the science of healing) is a traditional system of medicine practised in the Himalayan belt of India. It originated in Tibet. It is widely practised in Sikkim, Arunachal Pradesh, West Bengal's Darjeeling, Himachal Pradesh and the Union Territory of Ladakh. It is similar to "Ayurveda".

Source- [Article](#)

Q.3) Consider the following statements, Which of the following best describes a depreciated currency?

- a) It takes more of another currency to buy that currency
- b) The depreciated currency can buy fewer domestic goods and services
- c) The depreciated currency can buy more domestic goods and services
- d) It takes less of another currency to buy that currency

Answer-d

Lets call our currency that is depreciating as X, Depreciation means that a currency has become less valuable relative to another currency. Less valuable means that its price, in terms of another currency, has gone down.

If it takes more of another currency to buy currency X that means X has appreciated and not depreciated.

10 PM Compilation for the Month of March, 2022

Statement b and c are related to inflation and deflation ,not depreciation.

Inflation decreases the domestic purchasing power of an individual unit of a currency.

Depreciation is when a currency becomes less valuable relative to another currency.

Deflation increases the domestic purchasing power of an individual unit of a currency.

Source- [Article](#)

Q.4) With reference to Hydrocarbon Exploration and Licensing Policy(HELP), consider the following statements:

1. It unifies the authority to grant licenses for exploration and production (E&P) of conventional and unconventional oil and gas resources
2. It will allow companies to approach the government at any time and seek permission to explore any block.

Which of the statements given above is/are correct?

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

Answer-c

A new exploration and licensing policy was passed in March 2016 known as the Hydrocarbon Exploration and Licensing Policy (HELP).HELP unifies the authority to grant licenses for exploration and production (E&P) of conventional and unconventional oil and gas resources, including oil, gas, coal bed methane, shale gas/oil, tight gas, and gas hydrates. HELP introduces an Open Acreage Licensing Policy (OALP) that will allow companies to approach the government at any time and seek permission to explore any block.

Source- [Article](#)

Q.5) With reference to Amazon Forest, consider the following statements:

1. It is a moist broadleaf tropical rainforest in the Amazon biome.
2. It is located entirely in Brazil

Which of the statements given above is/are correct?

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

Answer-a

The **Amazon rainforest**, alternatively, the **Amazon jungle** or **Amazonia**, is a [moist broadleaf](#) tropical rainforest in the Amazon biome that covers most of the Amazon basin of South America.

The majority of the forest is contained within Brazil, with 60% of the rainforest, followed by Peru with 13%, Colombia with 10%, and with minor amounts in Bolivia, Ecuador, French Guiana, Guyana, Suriname and Venezuela

Source- [Article](#)

10 PM Compilation for the Month of March, 2022

Q.6) Consider the following statements:

1. Indian Depository receipts enable foreign companies to raise funds from the Indian securities Markets.
2. American Depository receipts lists shares of a foreign country in the U.S. markets.

Which of the statements given above is/are correct?

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

Answer-c

A foreign company can access Indian securities market for raising funds through issue of Indian Depository Receipts (IDRs). An IDR is an instrument denominated in Indian Rupees in the form of a depository receipt created by a Domestic Depository (custodian of securities registered with the Securities and Exchange Board of India) against the underlying equity of issuing company to enable foreign companies to raise funds from the Indian securities Markets.

American Depository Receipt (ADR) is **a depository receipt which is issued by a US depository bank against a certain number of shares owned by a non-US based company.**

Source- [Article](#)

Q.7) With reference to Urea production and Urea Electrolysis, consider the following statements:

1. In terms of energy requirement for production of Hydrogen, Urea Electrolysis is more energy intensive than Water Electrolysis.
2. Nano Urea Liquid is a nutrient to provide nitrogen to plants as an alternative to conventional urea.

Which of the statements given above is/are correct?

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

Answer: b

- **Statement 1 is incorrect:** The energy requirement for production of hydrogen through water electrolysis can be reduced by 70 % through urea electrolysis
- **Statement 2 is correct: Nano Urea Liquid** is a nutrient to provide nitrogen to plants as an alternative to conventional urea. It has been developed indigenously through proprietary technology at IFFCO's Nano Biotechnology Research Centre (NBRC) in Gujarat.

Source: [Article](#)

Q.8) With reference to Lunar North and South Pole, consider the following statements:

1. Lunar surface area that remains in shadow at the Lunar South Pole is much larger than that at the North Pole.
2. The South Pole region contain a fossil record of the early Solar System.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- The Lunar South pole is especially interesting because of the lunar surface area that remains in shadow is much larger than that at the North Pole. There could be a possibility of presence of water in permanently shadowed areas around it.
- In addition, South Pole region has craters that are cold traps and contain a fossil record of the early Solar System.

Source: [Article](#)

Q.9) With reference to Noble gas, consider the following statements:

1. Noble gases are colourless, odourless, tasteless, nonflammable gases.
2. The abundances of the noble gases increase as their atomic numbers increase.

Which of the statements given above is/are correct?

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

Answer: A

Noble gases are a group of the seven chemical elements that make up Group 18 (VIIIa) of the periodic table.

The elements are helium (He), neon (Ne), argon (Ar), krypton (Kr), xenon (Xe), radon (Rn), and oganesson (Og).

Statement 1 is correct: The noble gases are colourless, odourless, tasteless, nonflammable gases.

Statement 2 is incorrect: The abundances of the noble gases decrease as their atomic numbers increase. Helium is the most plentiful element in the universe after hydrogen.

Source: [The Hindu](#)

10 PM Compilation for the Month of March, 2022

Q.10) mCessation Programme was recently seen in the news. The programme is related to which of the following?

- a) A programme to end photography in sensitive locations.
- b) A Programme to Control Tobacco Consumption.
- c) To protect wildlife by not geotagging the locations.
- d) Programme to achieve the swachh bharat by not putting litters in public places.

Answer: B

mCessation Programme is an initiative which uses mobile technology for tobacco cessation. It was launched in 2016 as part of the government's Digital India initiative.

It uses two-way messaging between the individual seeking to quit tobacco use and programme specialists providing them dynamic support.

The programme can deliver content through SMS or interactive voice response in 12 languages.

Source: [Times Now](#)

SCHEME

Q.1) With reference to Open Government Data (OGD) Platform in India, consider the following statements:

1. Open Government Data (OGD) Platform India has been setup by the NITI Aayog in compliance with the Open Data Policy (NDSAP) of India.
2. Providing proactive access to Government owned shareable data is one of the core policy objectives.

Which of the statements given above is/are correct?

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

Answer- b

The Open Government Data (OGD) Platform India has been setup by the National Informatics Centre (NIC) in compliance with the Open Data Policy (NDSAP) of India. The objective of the policy is to provide proactive access to Government owned shareable data along with its usage information in open/machine readable format.

Source- [Article](#)

Q.2) Freshwater lakes have distinct zones of biological communities. These zones are based on the availability of resources linked to the structure of the lake. Which of the following best characterizes the benthic zone of a lake?

- a) It is below the thermohaline and has cold, dense water.
- b) It receives enough sunlight and nutrients to support large communities of rooted plants.
- c) It contains organisms that are able to survive in low-oxygen concentrations.
- d) It is composed of open water and dominated by plankton.

Answer-c

The thermohaline is a zone of water in which temperature changes quickly. The benthic zone can be located above or below the thermohaline.

The benthic zone can be near shore or in open water. However, it is dominated by decomposers and detritus feeders, not plankton.

The benthic zone can support some rooted plants but is dominated by decomposers and detritus feeders.

The benthic zone contains invertebrates such as worms, insects, larva, and clams, which can survive in low-oxygen environments.

Source- [Article](#)

Q.3) Which of the following actions by a large-scale farming operation are most likely to result in severe soil erosion?

1. The farmer sprays an ultra fine mist of powdered herbicides on crop fields.
2. The farmer irrigates their cropland by flooding the ground, and allowing gravity to distribute the water.
3. The farmer removes native vegetation and ploughs bare acres of topsoil months before the planting season.

Which of the statements given above is/are correct?

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

Answer-c

Erosion removes soil particles, and spraying a powdered mist herbicide is not likely to cause erosion.

As gravity carries irrigation water it also carries large amounts of topsoil away from the land. This is erosion.

Removing plants and turning over soils (i.e., ploughing) leave soils loose and vulnerable to erosion

Source- [Article](#)

Q.4) What fiscal and monetary measures can be taken in response to the depreciation of a currency?

1. The quantity of currency supplied would decrease
2. The Nation whose currency is depreciating would buy more foreign financial assets

Which of the statements given above is/are correct?

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

Answer-a

If currency depreciates, its purchasing power in other countries would depreciate. That means other countries goods are now more expensive relative to goods in that particular country, so residents of the country would buy more domestic goods and fewer foreign goods. Buying fewer foreign goods means less of other countries' currencies are needed, so country won't need to supply as much of its own currency in the foreign exchange market for its domestic currency.

If a currency depreciates, foreign financial assets would be relatively more expensive than financial assets in the domestic market. A higher price of a financial asset means a lower return, so the country(whose currency is depreciating)would buy fewer foreign financial assets.

Source- [Article](#)

Q.5) Which of the following appropriately describes the structural make-up of a gene?

- a) A gene is a sequence of amino acids found within a larger protein molecule.
- b) A gene is a sequence of proteins found within a larger DNA molecule.
- c) A gene is a sequence of nucleotides found within a larger DNA molecule.
- d) None

Answer-c

A gene is a stretch of nucleotides within a larger DNA molecule.

A gene is **the basic physical and functional unit of heredity**. Genes are made up of DNA. Some genes act as instructions to make molecules called proteins. However, many genes do not code for proteins. In humans, genes vary in size from a few hundred DNA bases to more than 2 million bases.

Source- [Article](#)

Q.6) Which of the following are the members of Indian Ocean Rim Association (IORA)?

- 1. Myanmar
- 2. India
- 3. Pakistan

Which of the statements given above is/are correct?

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

Answer-b

IORA has 22 member states, including Australia, Bangladesh, Comoros, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, UAE, and Yemen.

Source- [Article](#)

Q.7) With reference to Unified Payments Interface (UPI), consider the following statements:

- 1. It supports both pay request and collect request financial transactions.
- 2. An end-user can directly raise a complaint regarding a UPI transaction with the Banking Ombudsman.

Which of the statements given above is/are correct?

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

Answer: a

- **Statement 1 is correct:** UPI supports the following financial transactions – **a) Pay Request:** A Pay Request is a transaction where the initiating customer is pushing funds to the intended beneficiary. **b) Collect Request:** A Collect Request is a transaction where the customer is pulling funds from the intended remitter by using Virtual ID.

10 PM Compilation for the Month of March, 2022

- **Statement 2 is incorrect:** A complaint is first raised with the relevant TPAP (Third Party Application Providers) in respect to all UPI related grievances / complaints of the end-user customers on-boarded by the PSP (**payment Service Provider**) Bank / TPAP (if the UPI transaction is made through TPAP app). In case the complaint / grievance remains unresolved, the next level for escalation will be the PSP Bank, followed by the bank (where the end-user customer maintains its account) and NPCI, in the same order. **After exercising these options**, the end-user customer can approach the Banking Ombudsman and / or the Ombudsman for Digital Complaints, as the case may be.

Source: [Article](#)

Q.8) The Carbon Dioxide (CO₂) captured through the Carbon Capture Utilization and Storage (CCUS) technology can have which of the following potential application areas?

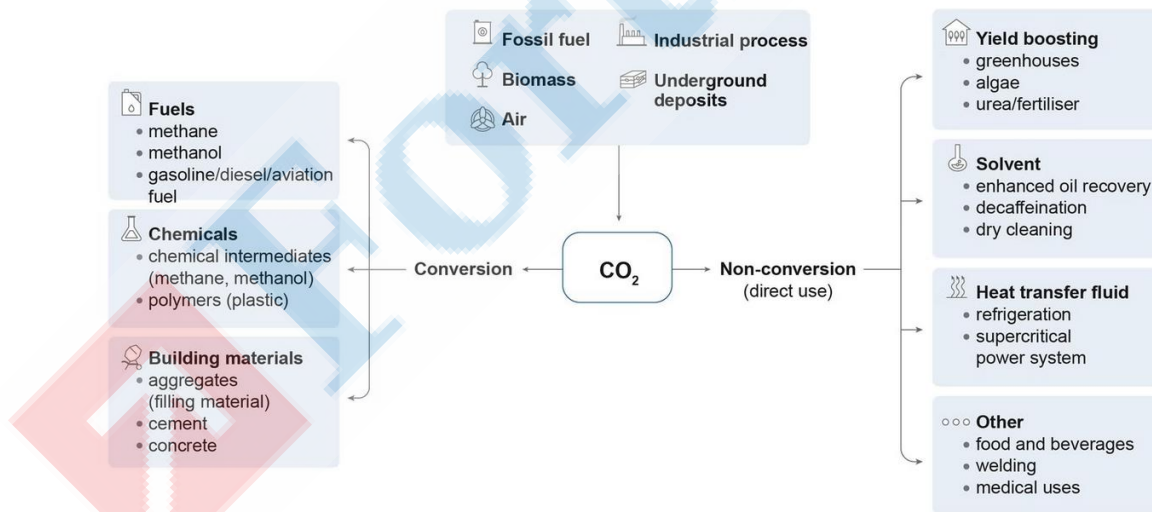
1. As a solvent for enhanced oil recovery
2. Heat Transfer fluid in refrigeration
3. Boosting yields in fertilizer industry

Select the correct answer from the codes given below:

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

Answer: d

All given options are potential application areas for the Carbon Dioxide captured via CCUS technology.



Carbon capture, utilization and storage (CCUS) refers to a suite of technologies that can play an important and diverse role in meeting global energy and climate goals. CCUS involves the capture of CO₂ from large point sources, including power generation or industrial facilities that use either fossil fuels or biomass for fuel. The CO₂ can also be captured directly from the atmosphere.

Source: [Article](#)

10 PM Compilation for the Month of March, 2022

Q.9) With reference to **Ukrainian Foreign Legion**, consider the following statements:

1. It is a volunteer foreign legion military unit created by the United Nations.
2. Indian domestic law clearly states joining foreign legion is punishable.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: It is a volunteer foreign legion military unit created by the Government of Ukraine.

Statement 2 is correct: Indian domestic law clearly states such an act is punishable under Chapter VI, Section 121-130 of the Indian Penal Code (offences against the state). They are punished under the section "Committing depredation on territories of power at peace with the Government of India".

The law is invoked when the foreign Army in which India nationals joining is doing inimical things or is an adversary of India.

Source: [The Hindu](#)

Q.10) Which of the following countries is/are member of Colombo Security Conclave?

1. India
2. Bangladesh
3. Sri Lanka

Select the correct answer from the codes given below

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

Answer: B

India, Maldives, and Sri Lanka began a National Security Advisor (NSA)-level trilateral meeting on maritime security cooperation named Colombo Security Conclave in 2011.

Recently, Mauritius was included as a new member of the conclave.

Source: [The Hindu](#)

ECONOMY

Q.1) Consider the following statements:

1. Quinary sector activities are specialized activities in the Knowledge Sector.
2. Quaternary sector comprises the top decision-makers in industry, commerce, and other sectors.

Which of the statements given above is/are correct?

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

Answer-d

Quinary sector is the one which involves those taking Highest levels of decision making in an economy. While, Quaternary activities involve specialized tertiary activities in the 'Knowledge Sector'.

Quinary sector is the part of the economy where the top-level decisions are made. This includes the government which passes legislation. It also comprises the top decision-makers in industry, commerce and also the education sector.

Source- [Article](#)

Q.2) Which of the following belong(s) to the group of UN (United nations) specialized agencies?

1. UNESCO (United Nations Educational, Scientific and Cultural Organization)
2. WHO (World Health Organization)
3. IMF (International Monetary Fund)

Select the correct answer using the code given below:

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

Answer-d

All the three a belong to the 17 Specialized agencies of the United nations.

UN specialized agencies are international organizations working with the UN, in accordance with relationship agreements between each organization and the UN.

Source- [Article](#)

Q.3) It is the process by which new species form. It occurs when groups in a species become reproductively isolated and diverge.

Which of the following term describes the above given description most appropriately?

- a) Speciation
- b) Aneuploidy
- c) Phenotypic variation
- d) Regeneration

Answer-a

Speciation is the process by which new species form. It occurs when groups in a species become reproductively isolated and diverge.

Source- [Article](#)

Q.4) Which of the following are true regarding the environmental problems most directly associated with atmospheric warming?

- 1. Disease vectors can spread from the tropics towards the poles
- 2. Spreading diseases may lead to human population movements

Select the correct answer using the code given below:

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

Answer-c

Atmospheric warming leads to expanded ranges in which disease-carrying organisms can spread.

This may lead to human populations moving to avoid areas with higher disease-carrying organisms.

Source- [Article](#)

Q.5) With reference to the Santhal Tribe, consider the following statements:

- 1. They inhabit and are mainly based in the states of Gujarat and Rajasthan
- 2. Sohrai Murals is an indigenous art form is practiced by the women of Santhal Community.

Which of the statements given above is/are correct?

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

Answer-b

Santal or Santhal, are a Munda ethnic group native to India. Santals are the largest tribe in the Jharkhand state of India in terms of population and are also found in the states of Assam, Tripura, Bihar, Chhattisgarh, Odisha and West Bengal.

Sohrai Mural is an indigenous art form is practised by the women of Santhal Community.

Source- [Article](#)

Q.6) With reference to International Energy Agency, consider the following statements:

10 PM Compilation for the Month of March, 2022

1. It is an autonomous non-governmental organization.
2. It was established in the wake of Asian crisis of 1999

Which of the statements given above is/are correct?

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

Answer-d

The International Energy Agency is a Paris-based autonomous intergovernmental organisation established in the framework of the Organisation for Economic Co-operation and Development in 1974 in the wake of the 1973 oil crisis.

Source- [Article](#)

Q.7) With reference to **Hague Convention**, consider the following:

1. It is the first and the most comprehensive multilateral treaty dedicated exclusively to the protection of cultural heritage in times of peace and armed conflict.
2. India is not a party to Hague Convention 1954.
3. Blue Shield Emblem is associated with it.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is correct: 1954 Hague Convention is the first and the most comprehensive multilateral treaty dedicated exclusively to the protection of cultural heritage in times of peace as well as during an armed conflict.

Statement 2 is incorrect: India is party to Hague Convention 1954.

Statement 3 is correct: To avoid deliberate or accidental damages, UNESCO will mark cultural sites and monuments with the distinctive “Blue Shield” of the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict.

Source: [Indian Express](#)

Q.8) With reference to Indian Exports, consider the following statements:

1. Almost 40% of India's exports is limited to just seven countries.
2. Signing FTAs with foreign nation will help India to diversify exports.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

India is gearing up to finalize FTAs with the UK, Australia, EU, Canada and other major economies.

10 PM Compilation for the Month of March, 2022

The Economic Survey highlighted India's need for FTAs as it will help it to diversify exports and explore new shores for the promotion of its products. According to survey, 40% of India's exports is limited to just seven countries. This indicates that India needs to do a lot more on widening its export basket and give a further push to promoting exports to new shores.

Source: [PIB](#)

Q.9) With reference to Biological and Toxin Weapons Convention (BTWC), consider the following statements:

1. It is the first multilateral disarmament treaty banning an entire category of weapons of mass destruction (WMD).
2. The BWC does not explicitly ban the use of biological and toxin weapons.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- **Statement 1 is correct:** The BWC does not ban the use of biological and toxin weapons but reaffirms the 1925 Geneva Protocol, which prohibits such use.
- **Statement 2 is correct:** Although the BWC (in its title and in Article I) **does not explicitly prohibit "use" of biological weapons**, the Final Declaration of the 1996 Treaty Review Conference reaffirmed that, although "use" is not explicitly prohibited under Article I of the BWC, it is still considered to be a violation of the Convention.

Source: [Article](#)

Q.10) Uranium is the most widely used fuel by nuclear power plants for nuclear fission.

Consider the following statements:

1. After being used up in a nuclear power plant, the Uranium is still radioactive.
2. Nuclear power is a bigger source of low-carbon electricity as compared to hydropower.

Which of the statements given above is/are incorrect?

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

Answer: b

- **Statement 1 is correct:** To make natural uranium more likely to undergo fission, it is necessary to increase the amount of uranium-235 in a given sample through a process called uranium enrichment. Once the uranium is enriched, it can be used effectively as nuclear fuel in power plants for three to five years, after which it is still radioactive and has to be disposed of following stringent guidelines to protect people and the environment.
- **Statement 2 is incorrect:** Nuclear power is the second-largest source of low carbon energy used today to produce electricity, following hydropower.

Source: [Article](#)

PRELIMS

Q.1) - Consider the following statements about Gallium Nitride (GaN) technology:

1. Gallium Nitride Technology is of strategic importance with its application to 5G, space and defense applications.
2. It can play a key role in enabling LEDs, e-vehicles and wireless communication.
3. Its benefits are compounded by its low cost of production.

Which of the statements given above is/are correct?

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

Answer - a

Explanation - Gallium nitride (GaN) is a semiconductor commonly used in light-emitting diodes since the 1990s. Gallium Nitride Technology is of strategic importance with its application to **5G, space and defense applications**. Gallium Nitride (GaN) is set to play a key role in enabling **e-vehicles and wireless communication**.

Concerns with GaN - One of the problems with GaN, like any other new technology, has been **the high cost**. While the costs are not as prohibitive as they used to be a few years ago—as per Lux Research, GaN would cost \$1,900 for a two-inch substrate whereas silicon would cost \$25-50 for a six-inch substrate—they are still high as compared to silicon.

More important, **company processes are more attuned to silicon products**; a switch to GaN would require more research and development and surety that the products would not fail.

News: Gallium Nitride Ecosystem Enabling Center and Incubator (GEECI) facility at the prestigious Indian Institute of Sciences (IISc), Bengaluru has been jointly set up by the Ministry of Electronics and Information Technology and IISc Bengaluru aimed at establishing GaN based Development Line Foundry facility, especially for RF and power applications, including strategic applications.

Source: [Article](#)

Q.2) Which of the following statements is/are correct about the Halari breed of donkey found in India?

1. These are found in the region of Saurashtra and are currently in a threatened state and require immediate steps towards conservation.
2. These donkeys live in the wild and cannot be domesticated.

Select the answer using the codes given below?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: a

10 PM Compilation for the Month of March, 2022

Explanation: Halari Donkey is one of the important **livestock** in the semi-arid landscape of **Saurashtra's Jamnagar and Dwarka district of the state of Gujarat**. The Bharwad and Rabari pastoralists are the main communities which use this donkey as a pack animal to carry luggage during migration with small ruminants. The Kumbhar (potter) community also uses this animal for pottery work in Dwarka in the Jamnagar region. These breeds are very special, being on the one hand very alert, resilient, hardy and independent, but also bonded to their herders in a symbiotic relationship.

This elegant donkey from the Halar region of Saurashtra is currently in a **threatened state** and requires immediate steps towards conservation to reverse the declining trend in the population. Recent survey conducted in 2021-22 the number dwindled to 439 individuals in its native tract.

Q.3) Recently tribals in Gujarat are protesting the Par-Tapi-Narmada river linking project. In this regard consider the following statements:

1. Narmada river originates from Maikal range near Amarkantak in Chhattisgarh.
2. Narmada and Tapi are west flowing rivers, whereas Par is an east flowing river.
3. This project spreads through the state of Gujarat and Maharashtra only

Which of the statements given above is/are correct?

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

Answer: a

Explanation: Narmada rises from Amarkantak Plateau in Anuppur district **Madhya Pradesh**. The River flows through Gujarat, Chhattisgarh, Madhya Pradesh, and Maharashtra. Narmada, Tapi, and Par are **all west flowing rivers**. The project of the Par-Tapi-Narmada link generally falls in the state of Gujarat except for the Jheri reservoir which falls in Maharashtra state. Jheri dam is located in the Nasik district of Maharashtra while remaining dams viz. Mohankavchali, Paikhed, Chasmandva, Chikkar, Dabdar, and Kelwan dams are located in the Valsad and Dang districts of Gujarat.

Q.4) Consider the following statements regarding Medical Devices sector in India:

1. India is the 4th largest exporter of Medical devices after China, Japan, South Korea.
2. Medical devices in India are governed by Drugs and Cosmetics Act, 1940.

Which of the following statements are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: b

Explanation: Medical devices sector in India is very small in size. India currently **imports 80-90% of medical devices**. It is the **4th largest market** in Asia after Japan, China, and South Korea.

Medical devices continue to be under the **Drugs and Cosmetics Act 1940** and industry representatives are pushing for a comprehensive regulation that views medical devices separately.

Recently, the Department of Pharmaceuticals has released an Approach Paper for the Draft National Policy for the Medical Devices, 2022.

Q.5) The term “*Syllipsimopodi Bideni*”, recently seen in news, is mentioned, in reference to:

- a) Fossil of a kind of dinosaur
- b) A gecko found in Nilgiri hills of Western Ghats
- c) A geological period in history in Indian subcontinent
- d) Primordial octopus with ten arms.

Answer: d

Explanation:

<https://epaper.thehindu.com/Home/ShareArticle?OrgId=G6S9JEUPF.1&imageview=0>

Q.6) *Syllipsimopodi Bideni* was recently seen in news. The term is related to which of the following?

- a) New indigenous bamboo species that grow shortest.
- b) Newly found Gallium cave in Andhra Pradesh
- c) A fossil related to octopus having 10 arms.
- d) A Nuclear facility in Ukraine damaged by Russia.

Answer: C

Scientists said a fossil unearthed in central Montana of a species named *Syllipsimopodi bideni* represents the oldest-known relative of today's octopuses and boasts 10 arms, with two being twice as long as the other eight.

10 PM Compilation for the Month of March, 2022

Syllipsimopodi pushes back by 82 million years the origins of a group called vampyropods that includes today's octopuses.

Syllipsimopodi represents the only member of the octopus lineage with 10 arms, meaning two were lost in later evolution.

Source: [The Hindu](#)

Q.8) With reference to International Space Station (ISS), consider the following statements:

1. The ISS was taken into space piece-by-piece and gradually built-in orbit.
2. The ISS tends to sink from its orbit at a height of about 250 miles above the Earth.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

The ISS is the most complex international scientific and engineering project in history and the largest structure humans have ever put into space.

This high-flying satellite is a laboratory for new technologies and an observation platform for astronomical, environmental and geological research.

The International Space Station was taken into space piece-by-piece and gradually built in orbit. It consists of modules and connecting nodes that contain living quarters and laboratories, as well as exterior trusses that provide structural support, and solar panels that provide power.

Due to its enormous weight and the ensuing drag, the ISS tends to sink from its orbit at a height of about 250 miles above the Earth. It has to be pushed up to its original line of motion every now and then.

Source: [The Hindu](#)

Q.9) With reference to Nutraceuticals, consider the following statements:

1. A nutraceutical product provides protection against chronic diseases.
2. Nutraceuticals provide specific biological therapies.

Which of the statements given above is/are correct?

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

Answer: A

- **Statement 1 is correct:** A nutraceutical product may be defined as a substance, which has physiological benefit or provides protection against chronic disease.
- **Statement 2 is incorrect:** They are considered as a non-specific biological therapy used to promote general well-being, control symptoms and prevent malignant processes.

Source: [The Hindu](#)

ECONOMY

Q.1) With reference to **Microfinance Institutions**, consider the following statements:

1. MFIs are financial companies that provide small loans to people who do not have any access to banking facilities.
2. NBFC-MFIs in India are regulated by Ministry of Finance.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: MFIs are financial companies that provide small loans to people who do not have any access to banking facilities.

Statement 2 is incorrect: NBFC-MFIs in India are regulated by the Non-Banking Financial Company -Micro Finance Institutions (Reserve Bank) Directions, 2011 of the Reserve Bank of India (RBI).

Source: [The Hindu](#)

Q.2) With reference to **Flood Plain Zoning**, consider the following statements:

1. It is an effective non-structural measure for flood management.
2. The objective of zoning is to regulate land use in the flood plains.
3. Zoning can remedy any existing flood management issues.

Which of the statements given above is/are correct?

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

Answer: C

Statement 1 is correct: Flood Plain Zoning has been recognized as an effective non-structural measure for flood management.

Statement 2 is correct: The basic concept of flood plain zoning is to regulate land use in the flood plains to restrict the damage caused by floods.

Statement 3 is incorrect: Zoning cannot remedy existing situations, although, it will help in minimising flood damage in new developments.

Source: [PIB](#)

Q.3) With reference to Fuel Cell Electric Vehicle(FCEV), consider the following statements:

1. FCEVs do not need to be plugged in for charging, like battery-powered EVs.
2. It functions based on energy storage and does not rely on a constant supply of fuel and oxygen.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: FCEVs do not need to be plugged in for charging, like battery-powered EVs.

Statement 2 is incorrect: Unlike a battery-electricity vehicle, FCEVs does not store energy and, instead, relies on a constant supply of fuel and oxygen.

Source: [PIB](#)

Q.4) Consider the following statements regarding Hydrogen as a fuel;

1. Hydrogen is clean fuel - no emission of carbon monoxide, hydrocarbons and particulate matter is there.
2. The investment required in storing and dispensing Hydrogen Fuel Cell vehicles is very low.
3. The Ministry of Science and Technology has notified standards for the safety evaluation of [Hydrogen Fuel Cell-Based Vehicles](#).

Which of the statements given above is/are correct?

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

Answer: A

Explanation: Transportation powered by Green hydrogen is going to be a key technology option of the future with significant application, especially **across bigger cars, buses, trucks, ships and trains and best suited for medium to long distances**.

The investment required in storing and dispensing Hydrogen Fuel Cell vehicles is **expectedly high**. Hydrogen is highly inflammable the production, transport, storage of fuel is a challenge.

The Ministry of Road Transport and Highways has notified standards for the safety evaluation of [Hydrogen Fuel Cell-Based Vehicles](#).

Q.5) “3D Printing” has applications in which of the following:

1. Preparation of confectionary items
2. Manufacture of bionic ears
3. Automotive industries
4. Data processing technologies
5. Bunkers and parking facilities for military vehicles

Which of the statements given above is/are correct?

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

Answer: D

Explanation: 3D Printing is used in a wide range of industries from construction to medical technology.

Recently, 3D printing is being used by the army to make housing, bunkers, and parking facilities for vehicles in border areas where the construction is challenging due to harsh weather conditions and there is short supply of labour due to threat from hostile neighbours.

Q.6) Consider the following statements regarding ‘**Flood Plain Zoning**’:

1. Flood Plain Zoning has been recognized as an effective structural measure for flood management.
2. At present, all states of India have enacted legislation for floodplain zoning, in accordance with the guidelines of the National Disaster Response Force.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer D

Explanation: Flood Plain Zoning has been recognized as an **effective non-structural measure** for flood management. Flood-plain zoning measures aim at demarcating zones or areas likely to be affected by floods of different magnitude or frequencies and probability levels, and specify the types of permissible developments in these zones, so that whenever floods actually occur, the damage can be minimized.

The Ministry of Jal Shakti has continuously impressed upon the States the need to adopt flood plain zoning approach. A model draft bill for flood plain zoning legislation was also circulated by the Union Government to all the States. This bill envisages zoning of flood plain of a river according to flood frequencies and defines the type of use of flood plain. The states of **Manipur, Rajasthan, Uttarakhand and erstwhile State of Jammu & Kashmir** had enacted the legislation. However, **delineation and demarcation of flood plains is yet to be undertaken.**

10 PM Compilation for the Month of March, 2022

Q.7) Consider the following statements about classical dances in India:

1. Kathak is the only form of classical dance wedded to Hindustani or the North Indian music.
2. The Gopurams of Chidambaram temple display the poses of Kathakali.

Which of the statements given above is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: b. 2 only

Explanation: The Gopurams of Chidambaram temple display the poses of Bharatnatyam. Brihadeshwara temple was also a major centre for Bharatnatyam since 1000 CE.

Q.8) Consider the following statements regarding Semiconductor chips:

1. These chips are now an integral part of contemporary automobiles, household gadgets and essential medical devices.
2. India currently imports all of its semiconductor chips requirements.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer C

Explanation: Semiconductors are materials which have a **conductivity between conductors and insulators**. They can be **pure elements**, silicon or germanium or **compounds**; gallium, arsenide or cadmium selenide.

These chips are now an integral part of contemporary **automobiles, household gadgets and essential medical devices such as ECG machines**.

India currently **imports all chips** and the market is estimated to touch \$100 billion by 2025 from \$24 billion now. India has also launched the **Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPecs)** under which a budget outlay of Rs 3,285 crore is spread over a period of **eight years** for manufacturing of electronics components and semiconductors.

POLITY AND GOVERNANCE

Q.1) With reference to National e-Vidhan application, consider the following statements:

1. It is a mission-mode project for Digital Legislatures to make the functioning of all Legislative Houses in the country paperless.
2. Bihar Legislative Council is the first House in the country to transit to NeVA platform completely.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- **Statement 1 is correct:** “National eVidhan Application (NeVA)”, a Mission Mode Project for Digital Legislatures to make the functioning of all Legislative Houses in the country paperless has been developed on the theme of ‘One Nation – One Application’.
- **Statement 2 is correct:** Bihar Legislative Council became the first House in the country to transit to NeVA platform completely on 25th Nov, 2021 and conducted Winter Session, 2021 on the NeVA platform in paperless mode.

Source: [Article](#)

Q.2) Which of the following pair(s) is/are correctly matched?

| Color of Hydrogen | Production method |
|--------------------------|-------------------------------|
| 1. Grey | Pyrolysis |
| 2. Turquoise | Steam Methane Reforming (SMR) |
| 3. Green | Electrolysis |

Select the correct code from the answers given below:

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

Answer: c

- Grey Hydrogen – SMR or Gasification
- Turquoise Hydrogen – Pyrolysis
- Green Hydrogen – Electrolysis

Source: [Article](#)

10 PM Compilation for the Month of March, 2022

Q.3) Koshiyari Committee was seen in news recently. The committee is related to which of the following?

- a) Promotion of fuel cell research in India.
- b) Regarding One Rank One Pension scheme.
- c) Demarcation of state boundaries.
- d) Increasing the old age pension for citizens above 80 years.

Answer: B

Ex-servicemen demanded OROP to correct the discrepancy. Over the decades, several committees looked into it.

The Brig K P Singh Deo committee in 1983 recommended a system similar to the Standard Rate of Pension, as did Parliament's standing committees on defence.

In 2011, the Rajya Sabha Committee on Petitions (Koshiyari Committee) recommended the implementation of OROP

In 2015, the government notified the current OROP scheme and it was made applicable from July 1, 2014.

Source: [Indian Express](#)

Q.4) With reference to **Sealed Cover Jurisprudence**, consider the following statements:

- 1. The Sealed Cover Jurisprudence is practiced in the Supreme Court and lower courts.
- 2. Sealed covers can be accessed only by Judges and the accused parties.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: The Sealed Cover Jurisprudence is practiced in the Supreme Court and lower courts.

Statement 2 is incorrect: The sealed envelopes can only be accessed by judges not even to the accused parties thereby obstructs the passage of fair trial and adjudication.

Source: [The Hindu](#)

Q.5) With reference to **Green Bonds**, consider the following statement:

- 1. A green bond is a type of fixed-income instrument that is specifically earmarked to raise money for climate and environmental projects.
- 2. The World Bank is a major issuer of green bonds.
- 3. The functioning of green bonds is completely different from corporate or government bond.

Which of the statements given above is/are correct?

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

Answer: C

10 PM Compilation for the Month of March, 2022

Statement 1 is correct: A green bond is a type of fixed-income instrument that is specifically earmarked to raise money for climate and environmental projects.

Statement 2 is correct: The World Bank is a major issuer of green bonds. It has issued 164 such bonds since 2008, worth a combined \$14.4 billion. In 2020, the total issuance of green bonds was worth almost \$270 billion, according to the Climate Bond Initiative.

Statement 3 is incorrect: Green bonds work just like any other corporate or government bond.

- Borrowers issue these securities in order to secure financing for projects that will have a positive environmental impact, such as ecosystem restoration or reducing pollution.
- Investors who purchase these bonds can expect to make as the bond matures.
- In addition, there are often tax benefits for investing in green bonds.

Source: [Business Standard](#)

Q.6) Consider the following statements regarding Financial Action Task Force (FATF):

1. It is an intergovernmental body that deals with policies to combat money laundering and terrorist financing.
2. It is a specialized agency of the United Nations, formed under the aegis of the UN Economic and Social Council.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: A

The Financial Action Task Force (FATF) is an **inter-governmental body** established in 1989 on the **initiative of the G7**. The FATF Secretariat is housed at the **OECD headquarters in Paris**. It is a **“policy-making body”** which works to generate the necessary political will to bring about national legislative and regulatory reforms in various areas. It is not a specialized agency of the UN.

Q.7) Consider the following statements regarding the National Rail Plan (NRP) for India – 2030:

1. The NRP is aimed to formulate strategies to increase the modal share of the Railways in freight to 45%.
2. Presently, around 64% of overall freight transportation being carried out by waterways.

Which of the statements given above is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 3

Answer: B

Presently, the modal share is skewed in favor of roadways with 64% of overall freight transportation being carried out by roads.

10 PM Compilation for the Month of March, 2022

The objective of the National Rail Plan is to create capacity ahead of demand, which in turn would also cater to future growth in demand right up to 2050 and also increase the modal share of Railways to 45 per cent in freight traffic and to continue to sustain it.

Further info - <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1806617>

Q.8) Consider the following statements regarding Hydrogen as a fuel:

1. Blue hydrogen is sourced from fossil fuels. It releases by-products like Carbon monoxide and Carbon dioxide.
2. Green hydrogen is generated from renewable energy. The by-products include water and water vapor.
3. Grey hydrogen constitutes India's bulk production. It is extracted from hydrocarbons.

Which of the statements given above is/are correct?

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

Answer: D

Grey hydrogen constitutes India's bulk production. It is extracted from hydrocarbons (fossil fuels and natural gas). By product: CO₂.

Blue hydrogen is sourced from fossil fuels. It releases by-products like Carbon monoxide and Carbon dioxide. However, the **by-products are captured and stored**, so it is better than grey hydrogen.

Q.9) Consider the following statements regarding fertilizer consumption in India:

1. The MRPs of urea fertilizers are decontrolled or fixed by the companies.
2. India follows a Nutrient Based Subsidy regime for Non-urea fertilizers.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: B

India's fertiliser consumption consists of approx. 55% urea.

Since **non-urea varieties** cost higher, many **farmers prefer to use more urea** than actually needed.

Subsidy on Urea: The Centre **pays subsidy on urea to fertilizer manufacturers on the basis of cost of production** at each plant and the units are required to sell the fertiliser at the government-set Maximum Retail Price (MRP).

Subsidy on Non-Urea Fertilisers: The MRPs of non-urea fertilisers are **decontrolled or fixed by the companies**.

10 PM Compilation for the Month of March, 2022

However, under the NBS regime the government decides the rates for nutrients like Nitrogen (N), Phosphorous (P), Potassium (K), Sulphur (S) etc. which then are used for calculating a flat per ton rate.

Q.10) Consider the following statements about “National eVidhan Application (NeVA)”:

1. It is a Mission Mode Project for Digital Legislatures to make the functioning of all Legislative Houses in the country paperless.
2. Recently, Bihar Legislative Council became the first House in the country to transit to NeVA platform completely.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: C

“National eVidhan Application (NeVA)”, a **Mission Mode Project** for Digital Legislatures to make the functioning of all Legislative Houses in the country paperless has been developed on the theme of ‘*One Nation – One Application*’.

NeVA is transforming all State Legislatures into ‘DIGITAL HOUSES’ so as to enable them to transact entire Government Business on digital platform including information exchange with the State Government Departments in digital mode.

As a special achievement, **Bihar Legislative Council** became the first House in the country to transit to NeVA platform completely on 25th Nov, 2021 and conducted Winter Session, 2021 on the NeVA platform in paperless mode. To adopt National e-Vidhan Application (NeVA), Memorandum of Understanding (MoU) have been signed with 18 States.

ENVIRONMENT

Q.1) Which of the following factors is/are responsible for the extinction of Asiatic Cheetahs in India?

1. Reduced levels of genetic heterogeneity
2. Inability to breed in captivity
3. Sport hunting and bounty killings

Select the correct answer from the codes given below:

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

Answer: d

- The consistent and widespread capture of cheetahs from the wild (both male and female) over centuries, its reduced levels of genetic heterogeneity due to a historical genetic bottleneck resulting in reduced fecundity and high infant mortality in the wild, its inability to breed in captivity, 'sport' hunting and finally the bounty killings are the major reasons for the extinction of the Asiatic cheetah in India.

Source: [Article](#)

GEOGRAPHY

Q.2) With reference to Arctic and the Antarctic regions, consider the following statements:

1. Canada has the world's longest Arctic coastline.
2. The Arctic region has no treaty-based mechanism like the Antarctic.

Which of the statements given above is/are correct?

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

Answer: b

- **Statement 1 is incorrect:** Russia has the world's longest Arctic coastline.
- **Statement 2 is correct:** Unlike the Antarctic Treaty, which was signed in 1959, there is no Arctic Treaty yet.

Source: [Article](#)

INTERNATIONAL RELATIONS

Q.3) With reference to Extinction Rebellion, consider the following statements:

1. It is a decentralized movement using non-violent and civil disobedience to persuade governments to act on the Climate Emergency.
2. The rebellion was launched in the United Kingdom.
3. So far, the rebellion has no presence in India.

Which of the statements given above is/are correct?

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

Answer: C

Statement 1 is correct: Extinction Rebellion is a decentralised, international and politically non-partisan movement using non-violent direct action and civil disobedience to persuade governments to act justly on the Climate and Ecological Emergency.

The group has “three core demands” of governments around the world. It wants governments to “Tell the Truth”, to “Act Now”, and to “Go Beyond Politics” in order to confront the climate and ecological emergency that the world is faced with.

Statement 2 is correct: Initially, launched in the United Kingdom on October 31, 2018, as a response to a report by the United Nations Intergovernmental Panel on Climate Change (IPCC). Now, it is a global movement which seeks to “rebel”, and asks groups to “self-organise”, without the need for anyone’s permission, to come up with collective action plans as long as they adhere to the group’s core principles and values.

Statement 3 is incorrect: The movement claims to have been inspired by 15 major civil disobedience movements around the world, including, apart from Women’s Suffrage and the Arab Spring, India’s struggle for Independence. It refers to Mahatma Gandhi’s Salt March in 1930.

XR’s website says there are 19 groups in India, including in the cities of Mumbai, Pune, Delhi, Hyderabad, Bengaluru, Kolkata, and Chennai.

Source: [The Guardian](#)

ECONOMY

Q.4) Recently, India’s first Regional Rapid Transit System has been unveiled in which of the following corridor?

- a) Mumbai-Ahmedabad Corridor
- b) Chennai- Bengaluru Corridor
- c) Delhi-Meerut corridor
- d) Hyderabad-Bangalore Corridor

Answer: C

India’s first rapid rail for the Delhi to Meerut corridor was unveiled by the National Capital Regional Transport Corporation (NCRTC) recently. The Regional Rapid Transit System (RRTS) train will run on the Delhi-Ghaziabad-Meerut corridor and cover a distance of 82 km in just 55 minutes.

10 PM Compilation for the Month of March, 2022

It will also be the first in the country to have a business or 'premium' coach on a regional corridor.

Source: [India Today](#)

ENVIRONMENT

Q.5) Mukundara Hills Tiger Reserve is located in which of the following states?

- a) Rajasthan
- b) Kerala
- c) Gujarat
- d) Tamil Nadu

Answer: a

- The Mukundra *Tiger Reserve* (TR) is located near Kota, Rajasthan. It is located on the eastern bank of the Chambal River and is drained by its tributaries.

POLITY

Q.1) With reference to the Constitution of India, consider the following statements:

1. Any Indian national can translate the Constitution in his own language.
2. Permission from the Ministry of Home Affairs is required if one wants to generate income by selling their translation of the Constitution.

Which of the statements given above is/are correct?

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

Answer: a

- **Statement 1 is correct:** Any Indian national can translate the Constitution in their own language.
- **Statement 2 is incorrect:** The individual has the right to generate income by selling their translation of the Constitution.

Source: [Article](#)

SCIENCE AND TECHNOLOGY

Q.2) With reference to Martian atmosphere, consider the following statements:

1. It is largely composed of Carbon Dioxide.
2. One of the aims of the India's Mars Orbiter Mission was to scan the Martian atmosphere for Methane.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- Martian Atmosphere is mainly composed of Carbon Dioxide.
- India's Mars Orbiter Mission was launched with aim of studying Martian surface and mineral composition as well as scan its atmosphere for methane (an indicator of life on Mars).

Source: [Article](#)

ENVIRONMENT

Q.3) With reference to Himalayan Griffons, consider the following statements:

1. This vulture has a bald white head, very broad wings, and short tail feathers.
2. It is endemic to the Himalayas.
3. It is listed as Near Threatened in IUCN Red list.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: This vulture is a typical vulture, with a bald white head, very broad wings, and short tail feathers.

Statement 2 is incorrect: The Himalayan vulture mostly lives in the Himalayas on the Tibetan plateau (India, Nepal and Bhutan, central China and Mongolia). It is also found in the Central Asian mountains (from Kazakhstan and Afghanistan in the west to western China and Mongolia in the east).

Occasionally it migrates to northern India but migration usually only occurs altitudinally.

Statement 3 is correct: It is listed as Near Threatened in IUCN Red list.

Source: [DTE](#)

ECONOMY

Q.4) With reference to Parsi community, consider the following statements:

1. Jiyo Parsi Scheme aims to enhance the skills of Parsi Community in trading.
2. The population of the Parsi community increased from 2001 Census to 2011 Census .

Which of the statements given above is/are correct?

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

Answer: D

Both statements are incorrect.

Jiyo Parsi Scheme aims to contain the population decline of Parsis in India by adopting a scientific protocol and structured interventions, to stabilize their population and increase the population of Parsis in India.

As per the Census 2011, the population of the Parsi (Zoroastrian) community decreased from 69,601 in the Census 2001 to 57,264 in the Census 2011.

Source: [PIB](#)

10 PM Compilation for the Month of March, 2022

Q.5) Consider the following statements regarding Central University Entrance Test (CUET):

1. It will be conducted by the University Grants Commission (UGC).
2. It is compulsory for both undergraduate and postgraduate programs in Central Universities.

Which of the above statements is/are correct?

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

Answer: d

Explanation: National Testing Agency (NTA), which conducts entrance tests such as JEE (Main) and UGC-NET, will also conduct CUET. It is a computer-based test that will be held in two shifts and can be taken in 13 languages — Hindi, Marathi, Gujarati, Tamil, Telegu, Kannada, Malayalam, Urdu, Assamese, Bengali, Punjabi, Odia and English.

At this moment, **CUET is compulsory for central universities** but the government is open to other institutions, including private universities, adopting this examination instead of conducting their own.

Unlike undergraduate studies, conducting admissions to **postgraduate programmes through CUET is not compulsory** for central universities.

Q.6) Consider the following statements regarding 'Lamitiye':

1. It is a military exercise conducted between Indian Army and Seychelles Defence Forces (SDF).
2. It is a biannual training event.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: a

Explanation: The 9th Joint Military Exercise LAMITIYE-2022 between the Indian Army and Seychelles Defence Forces (SDF) is being conducted at Seychelles Defence Academy (SDA), Seychelles from 22 March to 31 March 22.

Exercise LAMITIYE-2022 is a **biennial training** event which is being conducted in Seychelles since 2001.

10 PM Compilation for the Month of March, 2022

Q.7) Consider the following statements about 'ExoMars Mission 2022'

1. It is being led collaboratively by NASA and the European Space Agency.
2. In the first phase of the mission Perseverance Rover was sent on Mars in 2020.

Which of the above statements is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer c

Explanation: ExoMars mission 2022 is led collaboratively by **Roscosmos and the ESA**, the mission aims to study past life on Mars. The European Space Agency's ExoMars 2022 mission won't launch in September as planned after the agency suspended all cooperation with Russia's space program Roscosmos.

ExoMars has two parts. The first part launched an orbiter and a lander in 2016, but the lander crashed. The September 2022 launch would have been a second installment to deliver a Mars rover to the planet.

NASA's Perseverance rover landed on Mars in 2020 as a part of **Mars 2020 Mission**.

Q.8) Consider the following statements regarding 'National Mission on Manuscripts':

1. It includes a National Electronic Database to document each and every manuscript.
2. Mission aims to train the next generation of scholars in various aspects of Manuscript Studies.
3. It is a scheme administered by the Ministry of Tribal Affairs.

Which of the above statements is/are correct?

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

Answer: a

Explanation: National Mission on Manuscripts:

- To locate manuscripts through national level Survey and Post-Survey.
- Document each and every manuscript and manuscript repository, for a **National Electronic Database** that currently contains information on four million manuscripts making this the largest database on Indian manuscripts in the world.

10 PM Compilation for the Month of March, 2022

- Conserve manuscripts **incorporating both modern and indigenous methods** of conservation and training a new generation of manuscript conservators.
- To **train the next generation of scholars** in various aspects of Manuscript Studies like languages, scripts and critical editing and cataloguing of texts and conservation of manuscripts.
- To promote access to manuscripts by **digitizing the rarest and most endangered manuscripts**.
- To **promote access** to manuscripts through publication of critical editions of unpublished manuscripts and catalogues.
- To **facilitate public's engagement** with manuscripts through lectures, seminars, publications and other outreach programmes.

It is administered by the **Ministry of Culture**.

Q.9) Consider the following statements regarding “New India Literacy Programme (NILP)” :

1. It is a Centrally Sponsored Scheme.
2. It has the aim to support the States and Union Territories in promoting literacy among non-literates in the age group of 15 and above.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: c

Explanation: The **Ministry of Education** has approved a **Centrally Sponsored Scheme**, namely, “New India Literacy Programme (NILP)” with the aim to support the States and Union Territories in promoting literacy among **non-literates in the age group of 15 and above**, across the country covering 5 crore non-literates during the implementation period from 2022-23 to 2026-27.

The scheme has **five components** namely, Foundational Literacy and Numeracy, Critical Life Skills, Vocational Skills Development, Basic Education and Continuing Education.

PRELIMS

Q.1) Consider the following statements regarding Hypersonic technology:

1. Hypersonic speed ranges from Mach 1.2 to Mach 5, which is faster than the speed of sound.
2. India has become the fifth country to demonstrate this technology after the USA, Russia, France, and China.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: D

Explanation: Hypersonic speeds are **5 or more** times the Mach or speed of sound. Whereas supersonic speeds range from Mach 1.2 to Mach 5.

There are two types of Hypersonic weapons:

1. Hypersonic cruise missiles: These are the ones that use rocket or jet propellant through their flight and are regarded as being just faster versions of existing cruise missiles.

2. Hypersonic Glide Vehicle (HGV): These missiles first go up into the atmosphere on a conventional rocket before being launched towards their target.

Technology Used: Most hypersonic vehicles primarily use the **scramjet technology**, which is a type of Air Breathing propulsion System.

Recently, the **DRDO** successfully tested the **Hypersonic Technology Demonstrator Vehicle (HSTDV)**. India became the **fourth country** to have demonstrated this technology after the USA, Russia, and China.

Q.2) Consider the following statements regarding BRICS:

1. The Fortaleza Declaration proposed the establishment of the New Development Bank.
2. The Johannesburg Declaration proposed the establishment of BRICS Vaccine R&D Centre.
3. The New Delhi Declaration led to the signing of the BRICS Contingent Reserve Agreement.

Select the correct code from the options given below:

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

Answer: A

Explanation: During the Sixth BRICS Summit in *Fortaleza* (Brazil) in 2014, the leaders signed the Agreement establishing the *New Development Bank* (NDB - Shanghai, China). They also signed the *BRICS Contingent Reserve Arrangement* to provide short-term liquidity support to the members.

BRICS Vaccine R&D Centre was proposed to be established in the 2018 *Johannesburg Declaration*. Over the years and especially throughout the pandemic, this process was

expedited and finally in the *New Delhi Declaration* of XIII BRICS Summit, leaders reiterated their commitment towards the early launch of BRICS Vaccine R&D Centre in virtual format.

Q.3) Consider the following statements regarding International Seabed Authority:

1. It was established under the UN convention on Law of the Seas.
2. It regulates the exploration and exploitation of marine living resources of oceans in international waters.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Answer: A

Explanation: The ISA was established in 1982 by UNCLOS (United Nations Convention on the 'Law of the Sea') and is an **autonomous intergovernmental body** with 167 members. It is a **UN body** set up to regulate the exploration and exploitation of marine **non-living** resources of oceans in international waters.

Activities of ISA: The main activity of ISA is to regulate the **exploration of poly-metallic nodules**. The ISA considers applications for exploration and exploitation of deep-sea resources from contractors, assesses **environmental impact assessments** and supervises mining activities in the 'Area'.

Q.4) Consider the following statements regarding UN Convention on Law of the Seas:

1. UNCLOS is the only international convention which stipulates a framework for state jurisdiction in maritime spaces.
2. The Exclusive Economic Zone is considered "the common heritage of all mankind" and is beyond any national jurisdiction.
3. UNLCOS contains no provisions for protection and preservation of marine environment.

Which of the above statements is/are incorrect?

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

Answer: C

Explanation: UNCLOS is an international agreement that establishes the legal framework for marine and maritime activities. It is also known as Law of the Sea. It divides marine areas into five main zones namely- **Internal Waters, Territorial Sea, Contiguous Zone, Exclusive Economic Zone (EEZ) and the High Seas**. UNCLOS is the **only international convention** which stipulates a framework for state jurisdiction in maritime spaces.

The **Exclusive Economic Zone** beyond and adjacent to its territorial sea and extends seaward up to **200 nm from its baselines**. Within its EEZ, a coastal state has '**Sovereign rights**' for

10 PM Compilation for the Month of March, 2022

the purpose of exploring, exploiting, conserving, and managing natural resources, whether living or nonliving, of the seabed and subsoil. Rights to carry out activities like the production of energy from the water, currents and wind.

The **High Seas** are considered “the common heritage of all mankind” and is beyond any national jurisdiction. States can conduct activities in these areas as long as they are for peaceful purposes, such as transit, marine science, and undersea exploration.

Part XII of the UNCLOS contains specific provisions for the protection and preservation of the marine environment. Still, the United Nations members are negotiating instrument under the UN Convention on Law of the Sea to conserve, sustainably use marine biological diversity of areas beyond national jurisdiction.

Q.5) Consider the following statements regarding the International Court of Justice:

1. It is the principal judicial organs of the United Nations.
2. It has jurisdiction to try individuals accused of war crimes or crimes against humanity.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 or 2

Answer: A

Explanation: The Court is the **principal judicial organ of the United Nations**. It was established by the United Nations Charter.

Only States are eligible to appear before the Court in contentious cases. The Court has no jurisdiction to deal with applications from individuals, non-governmental organizations, corporations or any other private entity. It cannot provide them with legal advice or help them in their dealings with national authorities.

Judgments delivered by the Court (or by one of its Chambers) in disputes between States are binding upon the parties concerned. Judgments are final and without appeal.

The International Court of Justice has no jurisdiction to try individuals accused of war crimes or crimes against humanity. As it is not a criminal court, it does not have a prosecutor able to initiate proceedings.

The **International Criminal Court (ICC) set up by Rome Statute** has jurisdiction to try war crimes.

SCIENCE AND TECHNOLOGY

Q6 With reference to Fuel Cells, consider the following statements:

1. Fuel cells do not need to be periodically recharged like batteries.
2. Including electricity, a Hydrogen fuel cell also produces water and heat.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- **Statement 1 is correct:** Fuel cells do not need to be periodically recharged like batteries, but instead continue to produce electricity as long as a fuel source is provided.
- **Statement 2 is correct:** A fuel cell uses the chemical energy of hydrogen or other fuels to cleanly and efficiently produce electricity. If hydrogen is the fuel, the only products are electricity, water, and heat.

Source: [Article](#)

INTERNATIONAL RELATIONS

Q.7) With reference to Genocide convention, consider the following statements:

1. As per the convention, genocide is a crime that can take place both in time of war as well as in time of peace.
2. Obligation to prevent genocide is binding on all states, whether or not they have ratified the Genocide Convention.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- **Statement 1 is correct:** The Genocide Convention was the first human rights treaty adopted by the General Assembly of the United Nations on 9 December 1948. According to the Genocide Convention, genocide is a crime that can take place both in time of war as well as in time of peace.

10 PM Compilation for the Month of March, 2022

- **Statement 2 is correct:** the Convention establishes on State Parties the obligation to take measures to prevent and to punish the crime of genocide. That obligation is considered as a norm of international customary law and therefore, binding on all States, whether or not they have ratified the Genocide Convention.

Source: [Article](#)

SCIENCE AND TECHNOLOGY

Q.8) Gennova was recently seen in news. It is related to which of the following?

- International Research station being developed by the United Nations.
- World's first-of-a-kind mRNA vaccine that has been developed indigenously.
- Newly found bacteria that shown enormous potential to reduce marine litter.
- New hypersonic missile technology used in Russia – Ukraine crisis.

Answer: B

India has also so far approved nine vaccines for COVID-19 emergency use, of which five are indigenous. This also involves the world's first-of-a-kind mRNA vaccine Gennova which has been developed indigenously.

Source: [PIB](#)

SCIENCE AND TECHNOLOGY

Q.9) With reference to National Drug De-Addiction Programme, consider the following statements:

1. The programme is operated by Ministry of Health & Family Welfare.
2. The programme provide affordable, easily accessible and evidence-based treatment for all substance use disorders.

Which of the statements given above is/are incorrect?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer: D

Both the statements are correct.

Operated by: Ministry of Health & Family Welfare.

Aim: a) To provide affordable, easily accessible and evidence-based treatment for all substance use disorders through the government health care facilities, **b)** To build the capacities of health care staff in recognition and management of substance use disorders.

The programme is implemented through the health facilities namely: AIIMS, New Delhi; PGIMER, Chandigarh; NIMHANS, Bengaluru among others.

National / Nodal centre: National Drug Dependence Treatment Centre (NDDTC), AIIMS.

Source: [PIB](#)

ECONOMY

Q.1) With reference to Remission of Duties and Taxes on Exported Products (RoDTEP) scheme, consider the following statements:

1. The scheme was announced as a replacement of the Merchandise Exports from India Scheme (MEIS).
2. It was announced by the Ministry of Finance.
3. The scheme would refund to exporters the embedded central, state and local duties or taxes that were so far not being rebated or refunded.

Which of the above statements is/are correct:

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

Answer: B

Explanation: The scheme was announced in 2020 as a replacement for the **Merchandise Export from India Scheme (MEIS)**, which was not compliant with the rules of the World Trade Organization.

The scheme would **refund to exporters the embedded central, state and local duties or taxes** that were so far not being rebated or refunded and were, therefore, placing India's exports at a disadvantage.

It was announced by the **Ministry of Commerce & Industry**.

Q.2) With reference to international trade of India, which of the following statements are correct:

1. The Top 3 export destinations of India are – USA, UAE, China.
2. The Top 3 exports from India include – Petroleum Products, Drug Formulations, Agricultural Products.
3. Agricultural exports have consistently risen from 2016-17 to 2021-22.
4. India's merchandise exports are less than its merchandise imports.

Select the correct code from the options given below:

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

Answer: A

Explanation: The Top 3 export destinations of India are – **USA, UAE, China**.

Top 3 importers – **China, UAE, USA**

The Top 3 exports from India include – **Petroleum Products, Drug Formulations, and Pearl, precious, semi-precious stone**.

Top 3 import – **Crude oil, petroleum product and gold**.

Agricultural exports have consistently risen from 2016-17 to 2018-19 and fell in 2019-20 before growing again.

10 PM Compilation for the Month of March, 2022

Merchandise exports from India have crossed \$400 billion in the current financial year, which is a key milestone. But the merchandise imports are still higher than exports.

Q.3) With reference to Tuberculosis (TB), consider the following statements:

1. It is caused by a virus and most often affects the lungs.
2. TrueNat is an indigenous molecular diagnostic tool for TB, based on polymerase chain reaction (PCR) test.
3. India has the highest burden of TB patients in the world.

Select the correct code from the statements given below:

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

Answer: C

Explanation: It is caused by **Mycobacterium tuberculosis (bacteria)** and it most often affects the lungs. India has **30 percent of the world's TB cases**, which is the **highest in the world**, followed by **Indonesia and China**.

TrueNat is an **indigenous molecular diagnostic tool** for TB. It is a **polymerase chain reaction (PCR)-based test** that, by assaying the genes present in the TB bacteria, can not only detect the presence of the bacteria but can **also detect drug resistance** with the use of chips.

SCIENCE AND TECHNOLOGY

Q.4) Match the following lists and choose the correct answer from the codes given below:

List 1

- A. Artemis Mission
- B. Luna 1 Mission
- C. Apollo 11 Mission
- D. Chang'e 5 Mission

List 2

1. First rover to visit the moon
2. Collected first sample of rock from the moon
3. first-ever on-site evidence of water on surface of the moon
4. plans to send the next man and first woman to the moon

Select the correct code from the options given below

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

Answer: C

Explanation: Artemis program of NASA **plans to send the next man and first woman** to the lunar surface by the year 2024.

In 1959, the Soviet Union's uncrewed **Luna 1 and 2 became the first rover to visit the Moon.**

The **first samples of rocks from the Moon were collected during the Apollo 11** mission of the US.

10 PM Compilation for the Month of March, 2022

China's **Chang'e 5 lunar lander** found the **first-ever on-site evidence of water on the surface** of the moon. The presence of water had been confirmed by remote observation, but the lander has now detected signs of water in rocks and soil.

GS 3 – Environment and Climate Change

Q.5) Which of the following organizations brings out the publication known as 'State of Global Climate'?

- a) Intergovernmental Panel on Climate Change (IPCC)
- b) United Nations Sustainable Development Solutions Network
- c) German Watch
- d) World Meteorological Organization (WMO)

Answer: D

Explanation: State of Global Climate – World Meteorological Organization

IPCC releases Assessment Reports on climate change periodically. Recently, **6th Assessment Report** was released.

German Watch is an international environmental think-tank which releases **Global Climate Risk Index**.

United Nations Sustainable Development Solutions Network releases **World Happiness Report**.

SCIENCE AND TECHNOLOGY

Q.6) With reference to Rheumatoid Arthritis (RA), consider the following statements:

- 1. People born with specific genes are more likely to develop this disease.
- 2. There is no cure for Rheumatoid Arthritis.

Which of the statements given above is/are incorrect?

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

Answer: d

- **Statement 1 is correct:** People born with specific genes are more likely to develop RA.
- **Statement 2 is correct:** Although **there's no cure for rheumatoid arthritis**, early treatment and support (including medicine, lifestyle changes, supportive treatments and surgery) can reduce the risk of joint damage and limit the impact of the condition.

Source: [Article](#)

10 PM Compilation for the Month of March, 2022

Q.7) Based on the usage, which of the following are segments of Technical Textiles?

1. Oekotech
2. Geotech
3. Mobitech

Select the correct answer from the codes given below:

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

Answer: d

- Based on usage, there are 12 technical textile segments; Agrotech, Meditech, Buildtech, Mobiltech, Clothtech, Oekotech, Geotech, Packtech, Hometech, Protech, Indutech and Sportech.

Source: [Article](#)

ECONOMY

Q.8) Mission 25 Tonne was recently seen in the news. The mission is related to which of the following?

- a) Building indigenous ferry service capable of carrying goods through inland waterways.
- b) Developing a space capsule capable of carrying Indian Scientists for Gaganyaan mission.
- c) Newly designed wagons which increases the carrying capacity of Railways.
- d) Reducing the release of CO₂ in urban areas to minimize urban heat island effect.

Answer: C

Three new wagons have been designed with 25T axle load, which are having approximately 12% to 17% increase in carrying capacity over equivalent lesser axle load (22/22.9T) wagons.

Source: [PIB](#)

GEOGRAPHY

Q.9) With reference to ground water, consider the following statements:

1. Asia-Pacific region is the largest groundwater abstractor in the world.
2. Most of the freshwater in the world is in the form of ground water.

Which of the above statements is/are correct?

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

Answer. a

Statement 1 is correct: As per the UN World Water Development Report 2022, the Asia-Pacific region is the largest groundwater abstractor in the world, containing seven out of the ten countries that extract most groundwater (Bangladesh, China, India, Indonesia, Iran, Pakistan

10 PM Compilation for the Month of March, 2022

and Turkey). These countries alone account for roughly 60% of the world's total groundwater withdrawal.

Statement 2 is incorrect: On the planet earth, most of the freshwater exists as ice caps and glaciers. Out of the remaining freshwater, the largest proportion exists as groundwater. But, the Groundwater accounts for 99% of all liquid freshwater.

Source: [Indian Express](#)

SCHEMES AND PROGRAMS

Q.10) With reference to Mekedatu project, consider the following statements:

1. Mekedatu is a deep gorge situated at the confluence of the rivers Cauvery and its tributary Arkavathi.
2. The project is contented between Tamil Nadu and Kerala.

Which of the above statements is/are correct?

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

Answer a

Statement 1 is correct: Mekedatu is a deep gorge situated at the confluence of the rivers Cauvery and its tributary Arkavathi.

Statement 2 is incorrect: The project is contented between Tamil Nadu and Karnataka.

Source: [The Hindu](#)

PRELIMS

Q.1) With reference to Bhoomi Rashi portal, consider the following statements:

1. The portal is mandatory for all Project implementing agencies.
2. It has been developed by the Department of Land Resources.

Which of the statements given above is/are correct?

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

Answer: a

- **Statement 1 is correct:** The portal is mandatory for all project implementing agencies since 2018.
- **Statement 2 is incorrect:** The portal has been developed by the Min of Road Transport & Highways. Department of Land resources is under Min of Rural Development.

Source: [Article](#)

SCIENCE AND TECHNOLOGY

Q.2) With reference to Mange skin disease in animals, consider the following statements:

1. The disease is caused by parasitic mites.
2. It can be transmitted from animals to humans.

Which of the statements given above is/are incorrect?

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

Answer: d

Both statements are correct.

- **Statement 1 is correct:** The disease is caused by parasitic mites.
- **Statement 2 is correct:** Mange is zoonotic ie. it can be transmitted from animals to humans.

Source: [Article](#)

SCHEMES AND PROGRAMS

Q.3) With reference to NIPUN- BHARAT Mission, consider the following statements:

1. One of its aims is to enable every child to achieve the desired learning competencies in reading, writing and numeracy by the end of Grade 3 by 2026-27.
2. Funding requirements of the mission will be fulfilled from the Samagra Shiksha Scheme.
3. The mission stresses the importance of using a child's mother tongue in teaching.

Which of the statements given above is/are correct?

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

Answer: d

- **Statement 1 is correct:** Its aim is to create an enabling environment to ensure the universal acquisition of foundational literacy and numeracy. It will enable every child to achieve the desired learning competencies in reading, writing and numeracy by the end of Grade 3 by 2026-27.
- **Statement 2 is correct:** No additional funding is being allocated for the mission. Instead, money is being allocated from the Samagra Shiksha scheme, which saw a 20% drop in its budget in 2021.
- **Statement 3 is correct:** The mission also emphasizes the importance of using a child's mother tongue in teaching, a principle of the National Education Policy 2020.

Source: [Article](#)

ENVIRONMENT

Q.4) With reference to PM 2.5 (Fine particulate matter), consider the following statements:

1. These are most harmful to human health due to its prevalence in the environment and a broad range of health effects.
2. PM2.5 particles are generated through chemical process only.
3. PM2.5 particles vary in chemical composition and physical characteristics.

Which of the statements given above is/are correct?

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

Answer: C

Statement 1 is correct: PM2.5 particles are most harmful to human health due to its prevalence in the environment and a broad range of health effects.

Statement 2 is incorrect: The most common human-made sources include internal combustion engines, power generation, industrial processes, agricultural processes,

10 PM Compilation for the Month of March, 2022

construction, and residential wood and coal burning. The most common natural sources for PM2.5 are dust storms, sandstorms, and wildfires.

Statement 3 is correct: PM2.5 is generated from many sources and can vary in chemical composition and physical characteristics. Common chemical constituents of PM2.5 include sulfates, nitrates, black carbon, and ammonium.

Source: [Indian Express](#)

Q.5) RePORT India initiative was recently seen in the news. The initiative is related to which of the following?

- a) Reporting corruption in public offices through an unified portal.
- b) Lodging complaints against banks through RBI's Ombudsman.
- c) Bilateral initiative to advance tuberculosis(TB) research in India.
- d) Revamping the inland ports in strategic locations.

Answer: C

Regional Prospective Observational Research in Tuberculosis (RePORT) India initiative is a bilateral, multi-organizational, collaborative research effort established in 2013 under the Indo-US Vaccine Action Program(VAP). It aims to advance tuberculosis(TB) research in India.

Source: [PIB](#)

PRELIMS

Q.1) The polarimetry technique is recently in news is related to which of the following?

- a) Optical activity
- b) Measurement of Electricity
- c) Pollen carbon dating method
- d) Measuring Ozone

Answer: a

Explanation

Polarimetry is a sensitive, nondestructive technique for measuring the optical activity exhibited by inorganic and organic compounds.

- A compound is considered to be optically active if linearly polarized light is rotated when passing through it.
- A team of astronomers has discovered that the closest known brown dwarf, Luhman 16A, shows signs of cloud bands similar to those seen on Jupiter and Saturn.
- The researchers used an instrument on the Very Large Telescope in Chile to study polarised light from the Luhman 16 system.
- Polarisation is a property of light that represents the direction that the light wave oscillates.
- The polarimetry technique is not limited to brown dwarfs. It can also be applied to exoplanets orbiting distant stars. The atmospheres of hot, gas giant exoplanets are similar to those of brown dwarfs.

Q.2) With reference to Pay As You Go (PAYG) and National Pension Scheme (NPS) in India, consider the following statements:

1. Under PAYG, the entire pension amount is borne by the government.
2. NPS is mandatory for central government and state government employees.

Which of the statements given above is/are correct?

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

Answer: a

Statement 1 is correct: Under PAYG, the entire pension amount was borne by the government while fixed returns were guaranteed for employee contribution to the General Provident Fund (GPF). Governments paid 50% of the last drawn salary plus DA as pension to employees after retiring, and half of that to their eligible dependent family members in case of death. Minimum pension was Rs 9,000.

Statement 2 is incorrect: NPS was **introduced in 2004** and **made mandatory** for central government employees as well as staff of those state governments which adopted this scheme.

Source: [Article](#)

ECONOMY

Q.3) With reference to Kala Namak rice, consider the following statements:

1. This rice variety grow predominantly in the regions of Punjab and Rajasthan.
2. It is a scented rice variety which is generally offered better price as compared to other rice varieties to the farmers.

Which of the above statements is/are correct?

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

Ans: B

Statement 1 is incorrect: Kala Namak rice is grown in the tarai area of Siddharth Nagar and ten neighboring districts of eastern Uttar Pradesh.

Statement 2 is correct: It is a scented rice variety which is generally offered better price as compared to other rice varieties to the farmers.

The Government of Uttar Pradesh is promoting Kala Namak rice under One District One Product (ODOP) and has sanctioned a project of Rs. 12.00 crore for promotion of Kala Namak rice.

The Government of India, through APEDA, has taken various initiatives to promote Kala Namak rice viz; capacity building programme for farmers and stakeholders, agri-export farming, organizing 'Kala Namak Mahotsav', coordination with Farmer Producers Organizations (FPOs), exporters and farmers. Indian Council of Agricultural Research (ICAR) and its research Institutes.

Source: [PIB](#)

ENVIRONMENT

Q.4) With reference to Lead Poisoning, consider the following statements:

1. Children are more vulnerable to lead poisoning.
2. Even the smallest level of exposure to lead has harmful effects.
3. Human exposure to lead is usually assessed through the measurement of lead in bone.

Which of the above statements is/are correct?

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

Answer: C

Recently, high levels of lead were found in the blood of thousands of children living around the Kabwe mine in Zambia.

10 PM Compilation for the Month of March, 2022

Statement 1 is correct: Children younger than 6 years are especially vulnerable to lead poisoning. It can severely affect mental and physical development. At very high levels, lead poisoning can be fatal.

Statement 2 is correct: Lead is a naturally occurring toxic metal found in the Earth's crust. Lead in the body is distributed to the brain, liver, kidney and bones. It is stored in the teeth and bones, where it accumulates over time.

Lead in bone is released into blood during pregnancy and becomes a source of exposure to the developing foetus.

There is no level of exposure to lead that is known to be without harmful effects.

Statement 3 is incorrect: Human exposure is usually assessed through the measurement of lead in blood.

Source: [DTE](#)

Q.5) With reference to project goods, consider the following statements:

1. The import of project goods may act as an indicator of the pace of public and private infrastructure creation in the country.
2. India is a net importer of such goods.

Which of the statements given above is/are incorrect?

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

Answer: d

Both statements are correct.

- Project goods are the input materials required in the construction of civil and private infrastructure projects. The import of project goods may act as a barometer for the pace of infrastructure creation, both public and private, in the country.
- India is a net importer of such goods and, historically, has had a higher inflow during periods of growing infrastructure activities.

Source: [Article](#)

Q.6) With reference to Dolphins in India, consider the following statements:

1. Gangetic and Indus water dolphins are both freshwater dolphins.
2. Project Dolphin will work towards conservation of only riverine dolphins.

Which of the statements given above is/are correct?

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

Answer: a

- **Statement 1 is correct:** Both dolphin species are freshwater dolphins

10 PM Compilation for the Month of March, 2022

- **Statement 2 is incorrect:** The project is aimed at the conservation of the Gangetic Dolphins — both riverine as well as the oceanic dolphins in India.

Source: [Article](#)

Q.7) Which of the following is/are advantages of Zero Budget Natural Farming (ZBNF)?

1. Reduction of Ocean acidification
2. Increase in soil fertility
3. Decrease the leaching of nitrogen & phosphorous from the soil into groundwater

Select the correct answer from the codes given below:

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

Answer: d

All are advantages of ZBNF.

- **Reduce Ocean acidification**– Zero budget natural farming eliminates chemical fertilisers and pesticides, and would help reduce ocean acidification and marine pollution from land-based activities. High concentration of ammonium nitrate in fertilisers, and hazardous chemical pollutants from pesticides which run-off into rivers and oceans can severely impact aquatic life. The use of natural concoctions in ZBNF will help to reduce the contamination and degradation of rivers and oceans.
- **Soil fertility:** It utilises only natural resources as inputs. Thus increases the fertility of the soil. Fertilisers and pesticides have been shown to have adverse impacts on farmers as well as consumers. Farmers are exposed to contaminants when applying chemical inputs to their crops. By replacing such external inputs with locally made natural concoctions, the project could help in reducing the incidence of non-communicable diseases.
- ZBNF can help prevent over-extraction of groundwater, enable aquifer recharge, and eventually contribute to increasing water table levels. Zero budget natural farming **requires only 10% water and 10% electricity** than what is required under chemical and organic farming. It might help to reduce the leaching of nitrogen and phosphorous from the soil into groundwater or surface water, and eventually into rivers and oceans.

Source: [Article](#)

PRELIMS

Q.1) With reference to Medium Range Surface to Air Missile (MRSAM), consider the following statements:

1. It is being developed jointly by DRDO and Israel Aerospace Industries (IAI).
2. It is a part of Integrated Guided Missile Development Program (IGMDP).

Which of the above statements is/are correct?

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

Answer: A

Explanation: MRSAM version is a **Surface-to-Air Missile developed jointly by DRDO and Israel Aerospace Industries (IAI)**, Israel for use by the **Indian Army**. The MRSAM Army weapon system comprises multi-function radar, mobile launcher system and other vehicles. The flight tests were carried out with the weapon system in deliverable configuration.

IGMDP was launched in 1982-83 by the Indian Government which saw the projects of:

1. **Prithvi** (Short range surface to surface missile)
2. **Trishul** (Short range surface to air missile)
3. **Aakash** (Medium range surface to air missile)
4. **Nag** (Third generation anti tank missile)
5. **Agni 1** (Agni missile was later separated from the IGMDP due to its strategic importance).

Q.2) The word “Bucharest Nine” (B9) sometimes mentioned in news is in reference to:

- a) An informal club that has been instrumental in holding back reforms to the United Nations Security Council.
- b) Group of Land-locked and Geographically Disadvantaged States under UN Convention on Law of the Seas.
- c) group of NATO countries in Eastern Europe that became part of the US-led military alliance after the end of the Cold War.
- d) Group of countries in the World Trade Organization (WTO) opposing demand for greater fisheries subsidies.

Answer: C

Explanation: The “Bucharest Nine” is a group of nine [NATO](#) countries in Eastern Europe that became part of the US-led military alliance after the end of the Cold War.

The B9 are, apart from Romania and Poland, Hungary, Bulgaria, the Czech Republic, Slovakia, and the three Baltic republics of Estonia, Latvia, and Lithuania. All nine countries were once closely associated with the now dissolved Soviet Union, but later chose the path of democracy.

10 PM Compilation for the Month of March, 2022

Romania, Poland, Hungary, and Bulgaria are former signatories of the now dissolved Warsaw Pact military alliance led by the Soviet Union.

Q.3) With reference to the subjects “betting and gambling”, consider the following statements:

1. It is a part of the State list in the Seventh Schedule of the Constitution.
2. ‘Lotteries’ are not considered under ‘betting and gambling’ and hence, cannot be taxed by the State.

Select the correct code from the options given below:

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

Answer: A

Explanation: The Supreme Court recently held that a State legislature has the right to impose tax on lotteries conducted by other States within its jurisdiction. It observed that ‘lotteries’ is a “species of gambling activity”. The court said ‘betting and gambling’ is part of the State List in the Seventh Schedule of the Constitution.

Q.4) With reference to the Space Economy of India, consider the following statements:

1. Indian National Space Promotion and Authorisation Centre (IN-SPACe) was formed to open up new avenues for private players in space exploration.
2. The space sector in India accounts for 13% share in the global space market.
3. In relation to GDP, India’s spending is more than that of China.

Which of the above statements is/are correct?

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

Answer: B

Explanation: The space sector in India accounts for **3% share** in the global space market. A recent study has found that the space budget as a percentage of the GDP slipped from 0.09% in 2000-01 to 0.05% in 2011-12, and has remained more or less at that level since then. In relation to GDP, India’s spending is more than that of China, Germany, Italy and Japan, but less than of the U.S. and Russia.

10 PM Compilation for the Month of March, 2022

Q.5) With reference to Public Distribution System (PDS), consider the following statements:

1. It is an Indian food Security System established under the Ministry of Agriculture and Farmers Welfare.
2. PM Garib Kalyan Anna Yojana was aimed at providing migrant laborers 5 Kg of grains for free through PDS.

Which of the above statements is/are correct?

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

Answer: D

Explanation: It is an Indian food Security System established under the Ministry of Consumer Affairs, Food, and Public Distribution.

PM Garib Kalyan Anna Yojana was aimed at **providing each person who is covered under the National Food Security Act 2013** with an additional 5 kg of grains (wheat or rice) for free, in addition to the 5 Kg of subsidized food grain already provided through the PDS.

INTERNATIONAL RELATIONS

Q.6) Which of the following countries are part of both South Asian Association for Regional Cooperation (SAARC) and Bay of Bengal Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)?

1. Myanmar
2. Nepal
3. Bhutan

Select the correct answer from the codes given below:

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

Answer: B

- **SAARC:** Bangladesh, Bhutan, India, Nepal, Sri Lanka, Maldives, Pakistan, Afghanistan.
- **BIMSTEC:** Bangladesh, Bhutan, India, Nepal, Sri Lanka, Thailand, Myanmar.

Source: [Article](#)

POLITY

Q7 With reference to lotteries in India, consider the following statements:

1. Lotteries come within the ambit of betting and gambling activity.
2. A State legislature has the right to impose tax on lotteries conducted by other States within its jurisdiction.

Which of the statements given above is/are incorrect?

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

Answer: d

Both statements are correct.

- Lottery is a type of gambling activity. Hence, lotteries are within the ambit of 'betting and gambling' as appearing in Entry 34 List II.
- The Supreme Court recently held that a state legislature has the right to impose tax on lotteries conducted by other States within its jurisdiction.

Source: [Article](#)

HISTORY

Q.8) With reference to Tobacco, consider the following statements:

1. Christopher Columbus introduced Tobacco to Europe.
2. The Portuguese introduced the Tobacco cultivation in UP, Bihar and Bengal.

Which of the statements given above is/are correct?

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

Answer: a

- **Statement 1 is correct:** It was Columbus who introduced tobacco to Europe, and their colonies in India and South Asia.
- **Statement 2 is incorrect:** The Portuguese introduced tobacco cultivation in the north western districts of Gujarat, and the British colonials did the same in U. P., Bihar and Bengal.

Source: [Article](#)

INTERNATIONAL RELATIONS

Q.9) With reference to Bucharest Nine, consider the following statements:

1. All members of the B9 are part of the European Union (EU) and NATO.
2. Three Seas Initiative (3SI) is launched by Bucharest Nine.

Which of the statements given above is/are correct?

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

Answer: a

Statement 1 is correct: The B 9 is a group of nine NATO countries in Eastern Europe that became part of the US-led military alliance after the end of the Cold War.

The members of B9 are Romania and Poland, Hungary, Bulgaria, the Czech Republic, Slovakia, and the three Baltic republics of Estonia, Latvia, and Lithuania. All nine countries were once closely associated with the now dissolved Soviet Union, but later chose the path of democracy. All members of the B9 are part of the European Union (EU) and NATO.

Statement 2 is incorrect: The Three Seas Initiative (3SI) is a regional effort in Europe to expand cross-border energy, transportation, and digital infrastructure and boost economic development in the area between the Adriatic Sea, Baltic Sea, and Black Sea.

Twelve countries participate in the 3SI.

Source: [IE](#)

Q.10) With reference to variable refresh rates (VRR), consider the following statements:

1. Refresh rate is the number of times a display is capable of refreshing in a second.
2. It is measured in Ampere(A).
3. It is designed to eliminate syncing issues that arise when the refresh rate does not match with the frames-per-second (FPS) of the content.

Which of the statements given above is/are correct?

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

Answer: C

Statement 1 is correct: Refresh rate is the number of times a display is capable of refreshing in a second.

Statement 2 is incorrect: It is measured in hertz (Hz). So, a 30 Hz or a 60 Hz display can refresh 30 or 60 times per second, respectively. The higher the refresh rate, the better the quality of viewing experience.

Statement 3 is correct: VRR is designed to eliminate syncing issues that arise when the refresh rate of a display does not match with the FPS of the content from a source device. Issues such as screen-tearing, judder (wobbling effect) and lag are common when refresh rate and FPS are not synchronised.

Source: [The Hindu](#)

GEOGRAPHY

Q.1) Arrange the following locations from North to South

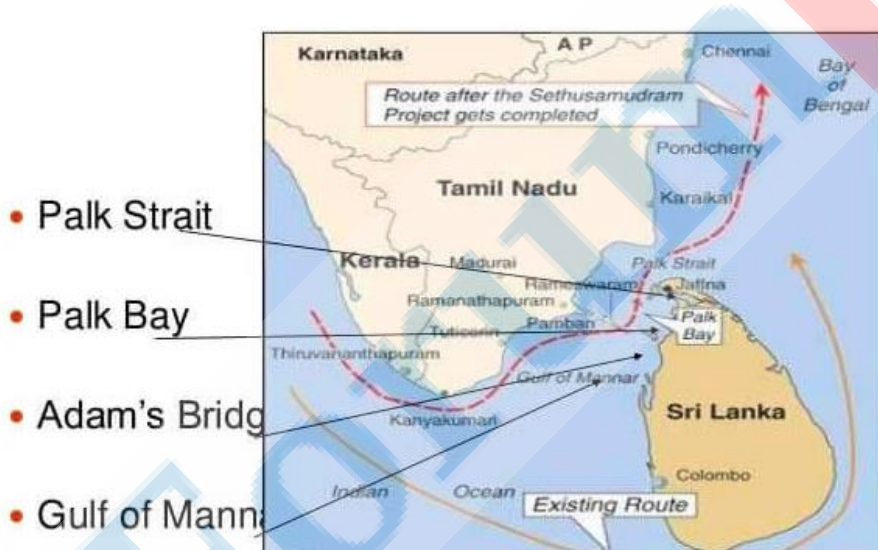
1. Colombo
2. Gulf of Mannar
3. Palk Bay
4. Palk Strait

Select the correct code from the options given below:

- a) 3-4-1-2
- b) 2-4-3-1
- c) 3-4-2-1
- d) 4-3-2-1

Answer: D

Explanation:



Q.2) Arrange the following mountain passes from South to North

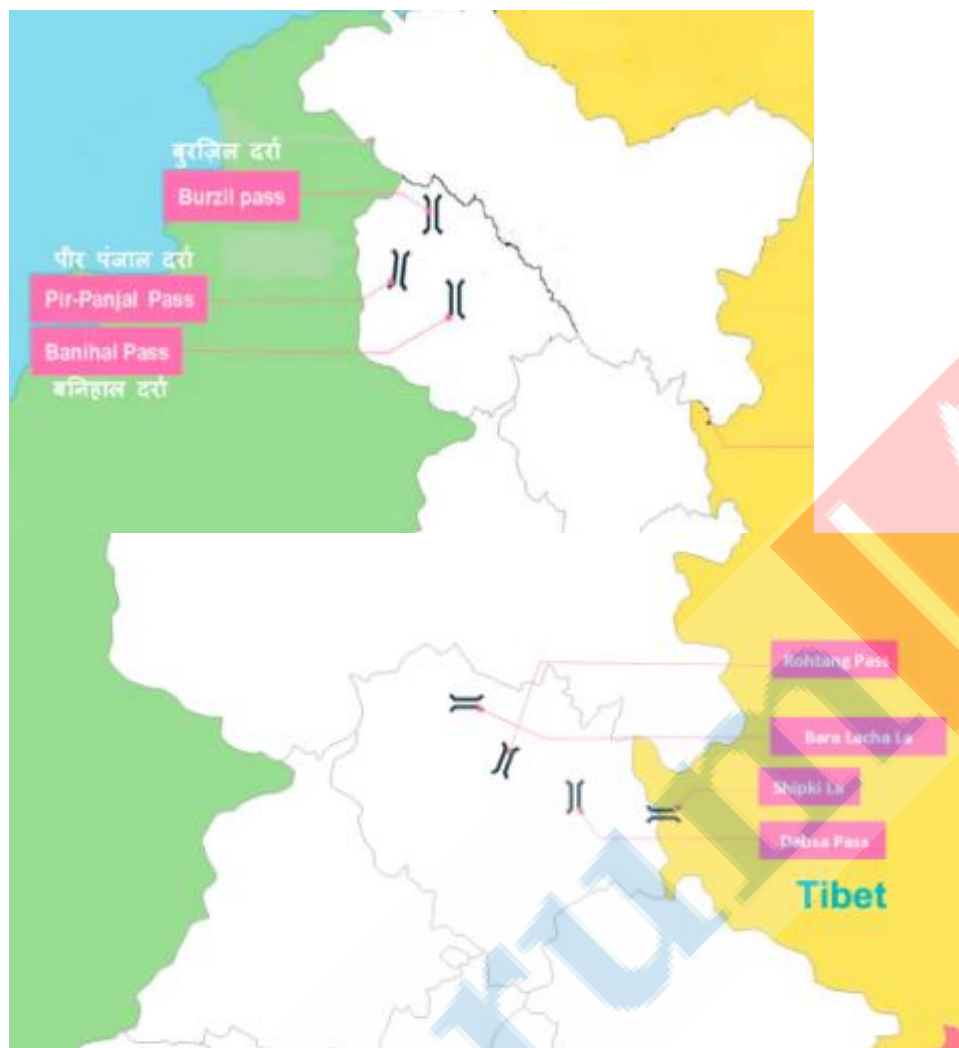
1. Pir Panjal
2. Zoji La
3. Bara Lacha La
4. Banihal Pass

Select the correct code from the options given below:

- a) 3-1-4-2
- b) 3-4-1-2
- c) 2-1-4-3
- d) 2-4-1-3

Answer: B

Explanation:



INTERNATIONAL RELATIONS

Q.3) With reference to Bay of Bengal Initiative for Multi Sectoral Technical and Economic Cooperation (BIMSTEC), consider the following statements:

1. It is a sub-regional organization that came into being from Bangkok Declaration.
2. All Bay of Bengal littoral countries are part of the BIMSTEC.

Which of the statements given above is/are correct?

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

Answer: A

10 PM Compilation for the Month of March, 2022

Explanation: The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional multilateral organization. This sub-regional organization came into being in 1997 through the **Bangkok Declaration**.

It consists of **7 members** from South and South-east Asia. Its members are **India, Nepal, Bhutan, Sri Lanka, Bangladesh, Myanmar, Thailand**.



Indonesia, Malaysia are also littoral countries of Bay of Bengal but are not part of the BIMSTEC.

Q.4) With reference to Food and Agriculture Organization (FAO), consider the following statements:

1. It is the world's largest humanitarian organization addressing hunger and promoting food security.
2. It is a specialized agency of the United Nations (UN).
3. It started the Globally Important Agricultural Heritage Systems (GIAHS).

Which of the statements given above is/are correct?

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

Answer: C

10 PM Compilation for the Month of March, 2022

Explanation – World Food Program is the world's largest humanitarian organization addressing hunger and promoting food security.

FAO is a **specialized agency of the United Nations** that leads international efforts to defeat hunger. It started the **Globally Important Agricultural Heritage Systems (GIAHS)** to safeguard and support the world's agricultural heritage systems. Other initiatives taken are:

1. Monitors the **Desert Locusts** situation throughout the world.
2. **Codex Alimentarius Commission or CAC** is the body responsible for all matters regarding the implementation of the Joint FAO/WHO Food Standards Programme.
3. The **International Treaty on Plant Genetic Resources for Food and Agriculture** was adopted by the Thirty-First Session of the Conference of the Food and Agriculture Organization in 2001.

Q.5) With reference to the expression 'minorities', consider the following statements:

1. The definition of 'minorities' is provided by the Constitution.
2. The Directive Principles provides that citizens having a distinct language, script, or culture of their own shall have the right to conserve the same.

Which of the statements given above is/are correct?

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

Answer: D

Explanation: The expression "minorities" appears in some Articles of the Constitution but **is not defined anywhere**. Currently, only those communities notified under section **2(c) of the National Minorities Commission Act, 1992, by the central government** are regarded as minorities. Presently, 6 groups are notified as 'minority' - Muslims, Christians, Sikhs, Buddhists and Parsis, Jains.

Article 29 (Fundamental Right) - provides that citizens having a distinct language, script, or culture of their own shall have the right to conserve the same.

Q.6) With reference to Corals and Coral Bleaching, consider the following statements:

1. Under stressed conditions, the zooxanthellae start producing reactive oxygen species.
2. A coral bleaching event can occur both during a La Nina or an El Nino weather pattern.

Which of the statements given above is/are correct?

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

Answer: c

10 PM Compilation for the Month of March, 2022

Both statements are correct.

- **Statement 1 is correct:** Under stressed conditions, the zooxanthellae start producing reactive oxygen species, which are not beneficial to the corals. So, the corals expel the colour-giving zooxanthellae from their polyps, which exposes their pale white exoskeleton, giving the corals a bleached appearance. This also ends the symbiotic relationship that helps the corals to survive and grow
- **Statement 2 is correct:** The first mass bleaching event had occurred in 1998 when the **El Niño** weather pattern caused sea surfaces in the Pacific Ocean to heat up. This event caused 8% of the world's coral to die.
 - Recently, it was the first time that the current bleaching event is happening during a **La Niña weather pattern**. It is occurring in the Great Barrier reef in Australia.

Source: [Article](#)

Q.7) With reference to UNESCO's City of Literature program, consider the following statements:

1. The program is a part of Creative Cities Network.
2. No India city has been designated as a City of Literature under the program till now.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- UNESCO's City of Literature program is part of a wider Creative Cities Network which was launched in 2004 and is currently made up of 246 UNESCO Creative Cities globally.
- Till now there is no Indian city on the city of literature program. Kozhikode, in Kerala, has been proposed to be included in the list.

Source: [Article](#)

Q.8) Somb river is a tributary of?

- a) Brahmaputra
- b) Yamuna
- c) Narmada
- d) Sutlej

Answer: b

10 PM Compilation for the Month of March, 2022

- As per a recent news, water from Somb river, a tributary of the Yamuna that originates in the Shivalik hills, will be stored to flow into Saraswati.

Source: [Article](#)

Q.9) With reference to **Minorities**, consider the following statements:

1. The Constitution does not mention the word “minorities” anywhere.
2. Only those communities notified the National Minorities Commission Act are regarded as minorities.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: The Constitution does not define the term “minorities” anywhere, but only mentions it in some Articles.

For instance, 1) Article 29 deals with the “Protection of interests of minorities”, 2) Article 30 deals with the “right of minorities to establish and administer educational institutions”, 3) Article 350(A) says there shall be a Special Officer for linguistic minorities to be appointed by the President.

Statement 2 is correct: Currently, only those communities notified under Section 2(c) of the National Minorities Commission Act, 1992 by the central government are regarded as minorities.

Hence, in the exercise of its powers, the Centre has notified six groups — Muslims, Christians, Sikhs, Buddhists, Parsis and Jains— as ‘minority’ communities.

Source: [Indian Express](#)

Q.10) With reference to **Seagrasses**, consider the following statements:

1. Seagrasses are flowering plants which are found in sea beds and ocean floors.
2. Seagrasses exist only in the west coast of India.
3. They support marine mammals such as sea cows or dugongs.

Which of the statements given above is/are correct?

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

Answer: C

10 PM Compilation for the Month of March, 2022

Statement 1 is correct: Seagrasses are flowering plants which are found in sea beds and ocean floors.

Statement 2 is incorrect: The major seagrass beds exist along our coastline of Gulf of Mannar and Palk Bay regions on the east coast, Gulf of Kachchh region on the west coast, the lagoons of islands in Lakshadweep in the Arabian Sea and Andaman and Nicobar Islands in the Bay of Bengal.

Statement 3 is correct: Seagrass ecosystems are recognized globally for their ability to sequester carbon, nurture fish communities and support marine mammals such as sea cows or dugongs.

The National Centre for Sustainable Coastal Management has estimated the total extent of seagrass ecosystem in India to be 516.59 km². The CO₂ sequestration rate of seagrass ecosystem is estimated to be up to 434.9 tonnes/km²/year with an annual net CO₂ sink of 0.75 million tonnes for an area of 517 km².

Source: [PIB](#)

PRELIMS

Q.1) With reference to One-Horned Rhino, consider the following statements:

1. It is characterized as 'Endangered' in the IUCN Red List.
2. It is the only species of Rhino found in India.

Which of the statements given above is/are correct?

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

Answer: B

Explanation: It is characterized as '**Vulnerable**' in the IUCN Red List. Only the Great One-Horned Rhino is found in India. Also known as Indian rhino, it is the largest of the rhino species.

Habitat: The species is restricted to small habitats in Indo-Nepal terai and northern West Bengal and Assam. In India, rhinos are mainly found in Assam, West Bengal and Uttar Pradesh.

Q.2) Which of the following organization releases 'World Energy Transitions Outlook' Report?

- a) International Energy Agency
- b) Organization for Economic Co-operation and Development
- c) World Economic Forum
- d) International Renewable Energy Agency

Answer: D

Explanation: The report was released by the **International Renewable Energy Agency (IRENA)**. It is an intergovernmental organisation mandated to facilitate cooperation, advance knowledge, and promote the adoption and sustainable use of renewable energy. It is **the first international organisation** to focus **exclusively on renewable energy**, addressing needs in both industrialized and developing countries.

The Outlook sees investment needs of \$5.7 trillion per year until 2030 including the imperative to redirect \$0.7 trillion annually away from fossil fuels to avoid stranded assets. Renewables will have to scale-up massively across all sectors from 14 per cent of total energy today to around 40 per cent in 2030. The Outlook sees electrification and efficiency as key drivers of the energy transition, enabled by renewables, hydrogen, and sustainable biomass.

10 PM Compilation for the Month of March, 2022

Q.3) With reference for National Commission of Women, consider the following statements:

1. It was established to review the constitutional and legal safeguards for women, via an executive order.
2. It is devoid of Suo moto powers to inquire into any incident.

Which of the statements given above is/are incorrect?

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

Answer: C

Explanation: Under the **National Commission for Women Act, 1990**, the NCW was set up as a **statutory body** in January 1992.

It can take Suo moto cognizance of cases/instances of violation/deprivation of the rights of women and constituting Inquiry Committees/Fact Finding Teams, facilitating their visits, processing Report of such Committees/teams and all follow up action.

Q.4) With reference to exports of value-added meat products, consider the following statements:

1. Agricultural and Processed Food Products Export Development Authority (APEDA) promotes exports of agriculture and animal fresh and processed products.
2. It functions under the Ministry of Animal Husbandry, Dairying and Fisheries.

Which of the statements given above is/are correct?

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

Answer: A

Explanation: The **Agricultural and Processed Food Products Export Development Authority (APEDA)** was established by the Government of India under the **Agricultural and Processed Food Products Export Development Authority Act, 1985**. It functions under the **Ministry of Commerce and Industry**. The Authority has its headquarters in New Delhi.

Q.5) Consider the following statements regarding disease affecting livestock:

1. Foot and mouth Disease is a viral disease, affecting cloven-hoofed animals.
2. Brucellosis is a bacterial disease, endemic in India.
3. Transmission of Foot and mouth Disease & Brucellosis to humans is not known.

Select the correct code from the options given below:

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

Answer: A

Explanation: About Foot-and-mouth disease:

It is an infectious and sometimes **fatal viral disease**. **Affects cloven-hoofed animals**, including domestic and wild bovinds.

Symptoms: The virus causes a high fever for two or three days, followed by blisters inside the mouth and on the feet that may rupture and cause lameness.

About Brucellosis:

It is a **bacterial disease** caused by various Brucella species, which infect cattle, swine, goats, sheep and dogs. It is also known as **Malta fever or Mediterranean fever**. Brucellosis is endemic in India causing huge economic losses to dairy industry due to infertility, abortion, birth of weak off springs, and reduced productivity.

Both can be transmitted to humans through contact with infected animals, but this is extremely rare.

ECONOMY

Q.6) With reference to National Land Monetization Corporation, consider the following statements:

1. It will be set up under the administrative jurisdiction of the Department of Public Enterprise, Ministry of Finance.
2. It undertakes monetization of Land assets only.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: It will be set up under the administrative jurisdiction of the Department of Public Enterprise, Ministry of Finance.

10 PM Compilation for the Month of March, 2022

Statement 2 is incorrect: It will undertake professional and orderly monetization of land and other non-core assets referred to it.

Source: [PIB](#)

Q.7) Matua community was recently seen in the news. The community is predominant in which of the following state?

- a) Kerala
- b) Assam
- c) West Bengal
- d) Gujarat

Answer: C

Shree Shree Harichand Thakur devoted his life for the cause of betterment of the oppressed, downtrodden and deprived persons in undivided Bengal during the pre-independence era. The social and religious movement started by him originated from Orakandi which is now in Bangladesh in 1860 and led to the formation of the Matua Dharma.

The Matua community has members on either side of the Bengal border. Today, Matuas constitute the second largest SC population of West Bengal. Government sources put their number at around 17% of the state's electorate.

Source : [All India Radio](#)

Q.8) Ex Dustlik is a joint military exercise between India and which other country?

- a) Mongolia
- b) Uzbekistan
- c) Oman
- d) Kyrgyzstan

Answer: b

- It is a joint military training exercise between India and Uzbekistan. The 3rd edition of the exercise was concluded at Yangiarik, Uzbekistan on 29th Mar 22/

Source: [Article](#)

Q.9) With reference to free legal aid in India, consider the following statements:

1. Constitution of India explicitly provides for free legal aid to the poor and weaker sections of society.
2. A woman is entitled for free legal aid by the National Legal Services Authority (NALSA) irrespective of her income or financial status.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- Article 39A of the Constitution of India provides for free legal aid to the poor and weaker sections of the society and ensures justice for all.
- A woman is entitled for free legal aid irrespective of her income or financial status. A woman is eligible to apply for free legal aid by virtue of Section 12(c) of the Legal Services Authorities Act, 1987.

Source: [Article](#)

Q.10) Which of the following are the reasons behind increasing frequency of heat waves in India?

1. Urbanization
2. Erratic monsoon
3. Greenhouse Gas Emissions

Select the correct code from the answers given below:

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

Answer: d

Reasons for increasing heat waves:

- **Greenhouse Gas Emissions:** The primary driver is rising greenhouse gas emissions and the consequent change in the entire climate system. Due to enhanced global warming, scientists expect greater occurrence of heat waves which would have a more significant impact on Arctic and Antarctic ecosystems.

10 PM Compilation for the Month of March, 2022

- **Erratic Nature of Monsoon:** Many experts have deduced that rising instances of unusually long dry phases during Monsoons mean that soil moisture drops to a remarkably low level. This reinforces the heat waves.
- **Urbanization:** The urban centres are full of concrete structures that **enhance the occurrence of heat waves and create an urban heat island effect.** The materials used to build cities like asphalt, concrete, bricks and other supplies are very dense in their composition. Further the darker colors used to paint the buildings also absorb and retain short-wave radiation from the sun.
- Similarly, the configuration of buildings in cities also results in heat waves. When big buildings are amassed along a waterway, like in Mumbai and other coastal cities, the wind coming off the waterway can get blocked. Also, when buildings are placed close together, they reduce the convective movement of air which makes it to stagnate and heat.
- **Demand for Air Conditioning:** With a rise in temperature and an enhancement of per capita income of masses, a rise in installation and usage of air conditioners is witnessed in residential and commercial spaces. This provides temporary cooling inside but enhances the outside temperature thereby increasing occurrence of heat waves.

PRELIMS

Q.1) With reference to Indian Ocean Naval Symposium (IONS), consider the following statements:

1. It is an intergovernmental body created to protect the interests of the Western Indian Ocean islands.
2. It serves to develop an effective response mechanism and humanitarian assistance and disaster relief (HADR) against natural disasters.
3. India has been accepted as an observer of the Indian Ocean Naval Symposium (IONS).

Which of the statements given above is/are correct?

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

Answer: B

Explanation:

Statement 1 is incorrect: The **Indian Ocean Commission (IOC)** is an intergovernmental body created in 1984 to protect the interests of the Western Indian Ocean islands. India is an observer.

The **IONS is a voluntary and inclusive initiative** that brings together navies of Indian Ocean Region (IOR) littoral states to increase maritime co-operation and enhance regional security.

Statement 2 is correct: It also serves to develop an effective response mechanism and humanitarian assistance and disaster relief (HADR) against natural disasters. IONS includes **25 member nations that touch or lie within the IOR**, and 8 observer nations.

Statement 3 is incorrect: India is a member of IONS.

Q.2) The Maritime Exercise “IMEX 2022” is conducted by which organization:

- a) Indian Ocean Rim Association
- b) Indian Ocean Commission
- c) Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)
- d) Indian Ocean Naval Symposium

Answer: D

Explanation: The maiden edition of the Indian Ocean Naval Symposium (IONS) Maritime Exercise 2022 (IMEX-22) was conducted in Goa in March 2022. The aim of the exercise was to enhance interoperability in Humanitarian Assistance and Disaster Relief (HADR) operations among member navies.

10 PM Compilation for the Month of March, 2022

Q.3) Which one of the following statements correctly describe the term “Shrinkflation”?

- a) A type of inflation which takes place due to downsizing a product while keeping its price the same.
- b) A type of inflation in which the inflation rate is high, the economic growth rate slows, and unemployment remains steadily high.
- c) A type of inflation that takes place when supply falls drastically due to supply-side accidents or mismanagement, but demand remains at the same level.
- d) A type of inflation in which the prices of a single commodity or a set of commodities rise while the overall price level remains stable.

Answer: A

Explanation: Shrinkflation: Downsizing a product while keeping its price the same is sometimes called “shrinkflation”—a combination of the words shrink and inflation. Companies face higher prices for their supplies and may try to pass that onto the consumer. Downsizing a product reduces costs for manufacturers.

Stagflation: A type of inflation in which the inflation rate is high, the economic growth rate slows, and unemployment remains steadily high.

Bottleneck inflation: A type of inflation that takes place when supply falls drastically due to supply-side accidents or mismanagement, but demand remains at the same level.

Skewed inflation: A type of inflation in which the prices of a single commodity or a set of commodities rise while the overall price level remains stable.

Q.4) With reference to space debris, consider the following statements:

- 1. Space debris encompasses both natural meteoroid and artificial (human-made) orbital debris.
- 2. Elsa-d mission was launched by the Russian Space Agency (Roscosmos) for the demonstration of the space debris removal system.
- 3. Project NETRA is an initiative by the Indian Space Research Organization (ISRO) to detect debris and hazards to Indian satellites.

Which of the statements given above is/are correct?

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

Answer: B

Explanation:

Statement 1 is correct: Space debris encompasses **both natural meteoroid and artificial (human-made) orbital debris**. Meteoroids are in orbit about the sun, while most artificial debris is in orbit about the Earth (hence the term “orbital” debris). **Orbital debris is any human-made object** in orbit about the Earth that no longer serves a useful function. Such debris includes nonfunctional spacecraft, abandoned launch vehicle stages, mission-related debris, and fragmentation debris.

10 PM Compilation for the Month of March, 2022

Statement 2 is incorrect: Space startup **Astroscale** has launched ELSA-d, the demonstration mission for its **End-of-Life Services by Astroscale (ELSA) technology**, which aims to dock with, and then safely remove, orbital debris. ELSA-d the world's first commercial mission to demonstrate a space debris removal system.

Statement 3 is correct: Project NETRA is an initiative by the **Indian Space Research Organisation (ISRO)** which **is an early warning system in space** to detect debris and hazards to the Indian satellites.

Under this project, the ISRO plans to put up many **observational facilities like telescopes, connected radars, data processing units, and a control center**. With this project, India aims at gaining its own capability of **Space Situational Awareness (SSA)**. Current India gets its information about the space debris from **North American Aerospace Defence Command (NORAD), which is an initiative by the U.S. and Canada**.

Q.5) What is the position of the Right against self-incrimination in India?

- a) Legal right available to citizens only
- b) Fundamental Right available to citizens only
- c) Fundamental Right available to any person
- d) Neither fundamental Right nor legal right

Answer: C

Explanation: Article 20(3) states that “No person accused of any offence shall be compelled to be a witness against himself.” This is stated under **Part 3 – Fundamental Rights**.

ENVIRONMENT

Q.6) With reference to Plastic waste, consider the following statements:

- 1. Cosmetics and personal care products are the major sources of macroplastics.
- 2. PET Bottles as plastic waste can be imported in India.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: Cosmetics and personal care products are the major sources of microplastics.

Statement 2 is correct: PET Bottles as plastic waste can be imported in India.

- The government banned the import of plastic waste in 2019 to promote the management of locally generated plastic waste.

10 PM Compilation for the Month of March, 2022

- However, several plastic waste industries have requested the Government to revoke the plan as there was too little waste available for them in India and this was causing them financial losses.
- After this, an expert committee was set up by the Ministry of Environment. This committee recommended that firms who had applied for permission could import PET Flakes/Bottles up to 50% of their production capacity.

Source: [The Hindu](#)

SCIENCE AND TECHNOLOGY

Q.7) Wright Mons was recently seen in the news. It is related to which of the following?

- a) It is a newly found volcano underneath the Indian Plate.
- b) It is a mountainous feature found on Pluto.
- c) It is a migration pattern of Albatross.
- d) Newly found snake species in Western Ghats.

Answer: B

A mountainous feature named Wright Mons was found on Pluto, which rises 4-5km above its surroundings. It is about 150km across its base and has a central depression (a hole) 40-50km wide, with a floor at least as low as the surrounding terrain.

Wright Mons, was informally named by the New Horizons team in honour of the Wright brothers.

Scientists claim that Wright Mons is a volcano, and cite the lack of impact craters as evidence that it is not likely to be older than 1-2 billion years.

An impact crater is formed when an object like an asteroid or meteorite crashes into the surface of a larger solid object like a planet or a moon.

Source: [DTE](#)

Q.8) With reference to orbital space debris, consider the following statements:

1. The higher the altitude, the longer the orbital debris will typically remain in Earth orbit.
2. Outer Space Treaty forms the basis of cooperation on all issues related to management of space debris.

Which of the statements given above is/are correct?

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

Answer: a

- **Statement 1 is correct:** The higher the altitude, the longer the orbital debris will typically remain in Earth orbit. Debris left in orbits below 600 km normally fall back to Earth within several years. At altitudes of 800 km, the time for orbital decay is often

10 PM Compilation for the Month of March, 2022

measured in centuries. Above 1,000 km, orbital debris will normally continue circling the Earth for a thousand years or more.

- **Statement 2 is incorrect:** There is no international treaty on orbital space debris till now.

Source: [Article](#)

Q.9) Which of the following statements is/are correct regarding effects of Inflation?

1. Redistribution of wealth from creditors to debtors.
2. Negative impact on people with fixed salaries.
3. Will benefit a bondholder.

Select the correct answer from the codes given below:

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

Answer: d

- **Statement 1 is correct:** Inflation hurts lenders and benefits borrowers. Lenders suffer due to inflation. It is because the money they get paid back has less purchasing power than the money they loaned out.
- **Statement 2 is correct:** Inflation erodes the value of money. Thus, it will hurt people with a fixed income. People on fixed salaries, fixed pensions etc will be negatively impacted by inflation as they will be able to buy less.
- **Statement 3 is incorrect:** Inflation will hurt a bondholder as he is also a lender. A bondholder has lent money to a debtor. So, he will be at a loss.

Source: [Article](#)

Q.10) With reference to the Earth Hour, consider the following statements:

1. It is organized by the World Wide Fund for Nature (WWF)
2. The event is held in late March every year due to the availability of near coincidental sunset times in both Northern and Southern hemispheres.

Which of the statements given above is/are incorrect?

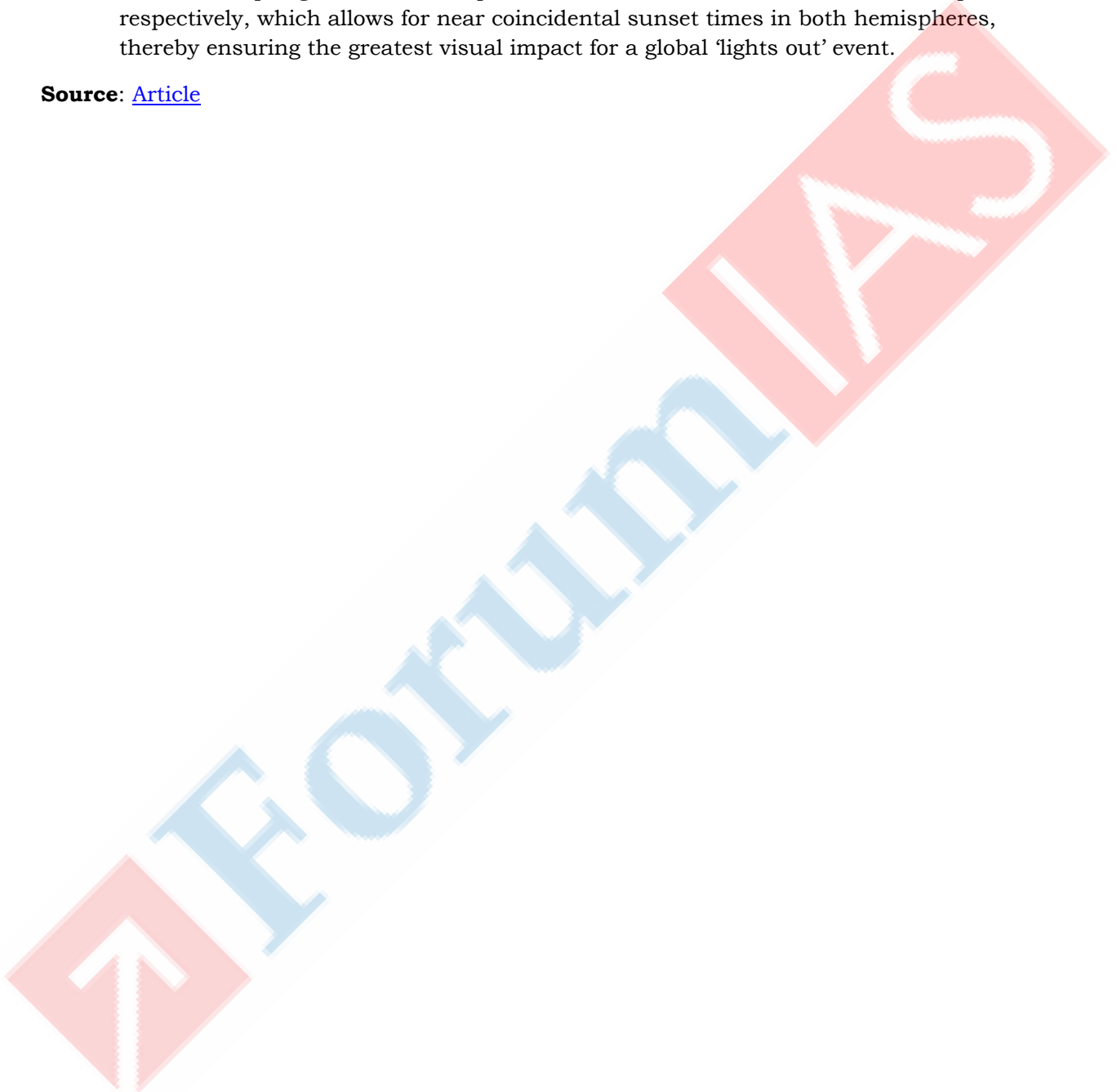
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: d

10 PM Compilation for the Month of March, 2022

- **Statement 1 is correct:** The event is organized by the World Wide Fund for Nature (WWF). Earth Hour was famously started as a lights out event in Sydney, Australia in 2007.
- **Statement 2 is correct:** The second-to-last and last weekend of March is around the time of the Spring and Autumn equinoxes in the northern and southern hemispheres respectively, which allows for near coincidental sunset times in both hemispheres, thereby ensuring the greatest visual impact for a global 'lights out' event.

Source: [Article](#)



ANCIENT HISTORY

Q.1) With reference to the Kushana empire, consider the following statements:

1. Gandhara school of art flourished in the Kushana period.
2. The coins issued exhibit the figures of many Dharmas including God Shiva.
3. Kanishka, a Kushana ruler, administered the third Buddhist Council in Kashmir

Select the correct code from the options given below:

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

Answer: A

Explanation:

Statement 1 is correct: Two schools, viz. **Mathura School of Art and Gandhara School of Art** flourished in the Kushana Era. Kushana had a cultural influence of the **Hellenistic Greeks** and this impact is seen these schools of arts as well.

Statement 2 is correct: Kujula Kadphises expanded and made the Kushan empire affluent into northwest India by trading with Romans. He issued coins that exhibit the figures of many Dharmas including God Shiva.

Kanishka: The coins issued in his period exhibit the **figures of Greek** had by some other countries deities, but later on, he was depicted as **a man in the long coat on those coins**. His **gold coins represented Buddha**.

Statement 3 is incorrect: Kanishka also administered the **fourth Buddhist Council at Kuldandana in Kashmir**, presided by **Vasumitra and Ashwaghosa** who were among the top scholars during Kanishka's rule. These things give an indication that he was a devotee of Lord Buddha.

Q.2) With reference to Chilika lake, consider the following statement:

1. It is a brackish water lagoon, spread over two districts in Odisha.
2. It was designated the first Indian wetland of international importance under the Ramsar Convention.
3. It is currently placed in the Montreux Record.

Select the correct code from the options given below:

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

Answer: B

10 PM Compilation for the Month of March, 2022

Explanation:

Statement 1 is incorrect: Chilika Lake is a **brackish water lagoon**, spread over the **Puri, Khurda and Ganjam districts of Odisha** state on the east coast of India, at the **mouth of the Daya River**, flowing into the Bay of Bengal.

Statement 2 is correct: In 1981, Chilika Lake was designated the **first Indian wetland** of international importance under the Ramsar Convention. **Chilika is Asia's largest and world's second-largest lagoon.**

Statement 3 is incorrect: Montreux Record under the **Ramsar Convention** is a register of wetland sites on the **List of Wetlands of International Importance where changes in ecological character** have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference. Currently, **two wetlands of India are in Montreux record: Keoladeo National Park (Rajasthan) and Loktak Lake (Manipur).** Chilika lake (Odisha) was placed in the record but was later removed from it.

Q.3) With reference to Irrawaddy dolphins, consider the following statements:

1. They are 'Critically Endangered' as per the IUCN Red List.
2. Dolphin distribution in Chilika is considered to be the highest single lagoon population.

Which of the statement given above is/are incorrect:

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

Answer: A

Explanation:

Statement 1 is incorrect: They are '**Endangered**' as per the IUCN Red List. Irrawaddy dolphins fall under **Schedule I of the Indian Wildlife (Protection) Act, 1972**

Statement 2 is correct: Dolphin distribution in Chilika is considered to be the highest single lagoon population. However, recently there has been a dip in Chilika lake dolphin population. Whereas, overall numbers in Odisha have increased.

Also found in coastal areas in South and Southeast Asia, and in three rivers: **the Irrawaddy (Myanmar), the Mahakam (Indonesian Borneo) and the Mekong (China).**

Q.4) Which of the following factors is/are responsible for coastal erosion:

1. Increase in frequency of Cyclones
2. Wake from fast ferries
3. Construction of seawalls
4. Beach mining
5. Building of dams

Select the correct code from the options given below:

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

Answer: C

Explanation: The reasons for coastal erosion include **an increase in the frequency of Cyclones and Sea level rise** and anthropogenic activities such as the construction of **harbours and seawalls, beach mining and building of dams**. Wakes from fast ferries cause shore degradation in sheltered coastal environments. They often break as plunging breakers.

Q.5) The term ‘cryovolcanism’ often seen in news, refers to the:

- a) Eruption of volcanoes in permafrost areas such as Antarctica
- b) Massive volcanic activities that took place during the Little Ice Age.
- c) Massive volcanoes which can lead to significant cooling of a planet.
- d) Erupting icy water rather than molten rock.

Answer: D

Explanation: “Cryovolcanism” — erupting icy water rather than molten rock.

Recently the Solar System of Pluto became even more interesting with a report that icy lava flows have covered substantial tracts of its surface.

ECONOMY

Q.6) With reference to Sunflower, consider the following statements:

1. Ukraine is the largest producer of sunflower in the world.
2. Yellow Revolution was launched to increase the production of sunflower oil alone.

Which of the statements given above is/are correct?

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

Answer: a

10 PM Compilation for the Month of March, 2022

- **Statement 1 is correct:** Ukraine is the largest producer of sunflower. (Ukraine and Russia together account for about 60% of the global sunflower oil production and exports).
India imports about 2.5 million tonnes of which 70% from Ukraine, 20% from Russia and remaining from other countries including Argentina.
- **Statement 2 is incorrect:** The revolution launched in 1986- 1987 to increase the production of edible oil, especially mustard and sesame seeds to achieve self-reliance is known as the Yellow Revolution. At present, Yellow Revolution targets nine oilseeds that are groundnut, mustard, soybean, safflower, sesame, sunflower, niger, linseed, and castor.

Source: [PIB](#)

GEOGRAPHY

Q.7) Which of the following factors is/are essential to determine the flow of the river?

1. Rainfall distribution pattern
2. Rainfall duration and intensity in the catchment
3. Health of catchment area

Select the correct answer from the codes given below:

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

Answer: C

Flow in the rivers is a dynamic parameter and depends on many sub-parameters such as rainfall, its distribution pattern, duration and intensity in the catchment, health of catchment area, vegetation and withdrawals/utilization of water.

Source: [PIB](#)

Q.8) Which of the following are the possible drawbacks of promotion of oil palm cultivation in the Northeast India?

1. Water stress
2. Invasive species
3. Decline in biodiversity

Select the correct answer from the codes given below:

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

Answer: d

10 PM Compilation for the Month of March, 2022

- **Water stress**– oil palm is a water-guzzling crop, which requires 300 liters of water per tree per day. Thus, it can lead to water stress in the region.
- **Invasive species**– The palm is an invasive species. It's not a natural forest product of northeastern India. Thus, its impact on biodiversity as well as on soil conditions has to be analyzed.
- **Destruction of rainforests and native biodiversity**- The focus areas of the mission are biodiversity hotspots and ecologically fragile. Oil palm plantations would denude forest cover and destroy the habitat of endangered wildlife, as witnessed in Southeast Asia.

Source: [Article](#)

Q.9) Which of the following is/are incorrectly matched?

| Sites | Planet |
|----------------------|--------|
| 1. Jezero crater | Moon |
| 2. Wright Mons | Mars |
| 3. Copernicus crater | Pluto |

Select the correct answer from the codes given below:

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

Answer: d

All are incorrectly matched.

- Jezero crater – Mars
- Wright Mons – Pluto
- Copernicus crater – Moon

Source: [Article](#)

Q10 Varuna is a joint naval exercise between India and which other country?

- a) United Kingdom
- b) France
- c) Australia
- d) Japan

Answer: b

- It is a naval exercise between India and France.

Source: [Article](#)

PRELIMS

Q.1) With reference to **S400 Triumph Air Defence System**, consider the following statements:

1. It is an anti-aircraft missile defense system developed by Israel.
2. It has the capability to destroy Unmanned Aerial Vehicles, aerial threats, ballistic and cruise missiles.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: S-400 Triumph Missile System is a mobile, surface-to-air missile system (SAM), designed by Russia

Statement 2 is correct: It can detect, track and destroy hostile strategic bombers, jets spy planes, missiles and drones at a range of 380-km.

- It can engage all types of aerial targets such as aircraft, ballistic and cruise missiles and unmanned aerial vehicles (UAV).
- It can track 100 airborne targets including super fighters such as the American built F-35 and engage six of them simultaneously.

Q.2) Which of the following is/are not as per the basic tenets of the Federalism?

1. All-India Services
2. Zonal councils
3. Emergency provisions

Select the correct answer from the codes given below:

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

Answer: c

- The members of the All-India Services are recruited and trained by the Centre which also possess ultimate control over them. Thus, these services violate the principle of federalism under the Constitution.
- Zonal councils aim at promoting cooperation and coordination between states, union territories and the Centre. Hence, they promote the spirit of Federalism.
- Under Emergency provisions, the Indian state acquires a unitary character.

10 PM Compilation for the Month of March, 2022

Q.3) With reference to Extra neutral alcohol (ENA), consider the following statements:

1. It is a byproduct of the sugar industry.
2. It is not a food-grade alcohol that contains many impurities.
3. It is an essential ingredient in the manufacture of cosmetics and personal care products such as perfumes, toiletries, hair spray, etc.

Which of the statements given above is/are correct?

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

Answer: b

Statement 1 is correct: It is a byproduct of the sugar industry.

Statement 2 is incorrect: It is colourless food-grade alcohol that does not have any impurities.

Statement 3 is correct: Applications of ENA are

- It is an essential ingredient in the manufacture of cosmetics and personal care products such as perfumes, toiletries, hair spray, etc.
- Utilized in the production of some lacquers, paints and ink for the printing industry, as well as in pharmaceutical products such as antiseptics, drugs, syrups, medicated sprays.

Source: [TOI](#)

Q.4) “Spreading like wildfire: The rising threat of extraordinary landscape fires” report is released by which of the following organisation?

- a) United Nations Office for Disaster Risk Reduction (UNDRR)
- b) World Wildlife Fund (WWF)
- c) United Nations Environment Programme (UNEP)
- d) SAARC Disaster Management Centre (SDMC)

Answer: C

United Nations Environment Programme has released a report titled Spreading like wildfire: The rising threat of extraordinary landscape fires. The report noted that “indigenous and traditional knowledge of land management in many regions — particularly the use of fire to manage fuel, including for wildfire mitigation — can be an effective way of reducing hazard.

Source: [DTE](#)

Q.5) With reference to look out circular (LOC), consider the following statements:

1. It is mostly used at immigration checkpoints at international airports and seaports by the immigration branch.
2. Only the Enforcement Directorate can issue look out circular (LOC) in India.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: An LOC is issued to make sure that an individual who is absconding or wanted by law enforcement agencies is not able to leave the country. It is mostly used at immigration checkpoints at international airports and seaports by the immigration branch.

Statement 2 is incorrect: An LOC can be initiated by a large number of authorised officers, including an officer not below the rank of deputy secretary, an officer not below the rank of joint secretary in the state government, a district magistrate or superintendent of police, designated officers of various law enforcing and security agencies, a designated officer of Interpol, an officer not below the rank of additional director in the Serious Fraud Investigation Office, and the Ministry of Corporate Affairs.

In 2018, the government also empowered the heads of public sector banks to directly request the authorities to issue an LOC against wilful defaulters to prevent them from leaving the country.

Source: [Indian Express](#)

Q.6) With reference to indigenous languages, consider the following statements:

1. A language is defined as vulnerable when the children are no longer learning the language as their mother tongue in their home.
2. India has the world's largest number of languages in danger of disappearing.

Which of the statements given above is/are correct?

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

Answer: B

Statement 1 is incorrect: According to UNESCO, a language is vulnerable when most children speak it but it may be restricted to certain domains (like the home), definitely endangered when children no longer learn the language as their mother tongue in the home, and critically endangered when the youngest speakers are grandparents and older, and they speak the language partially and infrequently.

Statement 2 is correct: According to UNESCO's "Atlas Of The World's Languages In Danger Of Disappearing", India has the world's largest number of languages in various states of

10 PM Compilation for the Month of March, 2022

danger. Nearly 200 languages in India are in various states of peril, the highest number in the world.

Source: [Livemint](#)

Q.7) Which of the following benefits will occur while implementing Fast and Secured Transmission of Electronic Records (FASTER) platform?

1. Ensure timely Release of Undertrials
2. Ensure Fundamental Rights of Prisoners
3. Prevent Unnecessary Arrests

Select the correct answer from the codes given below:

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

Answer: C

FASTER is a digital platform to communicate interim orders, stay orders, bail orders etc., of the Supreme Court to authorities concerned through a secured electronic communication channel. The benefits of FASTER Platform include,

- **Ensure timely Release of Undertrials:** Ensure that undertrials are not made to wait for days on end behind bars to be released because the certified hard copies of their bail orders took time to reach the prison.
- **Prevent Unnecessary Arrests:** It will help in preventing unnecessary arrests and custody of people even after the court had already granted them its protection.
- **Ensure Fundamental Rights of Prisoners:** Ensure fundamental rights of personal liberty, life and dignity of the prisoners which is given under Article 21 of Constitution of India.

Source: [Indian Express](#)

Q.8) Which of the following is/are correctly matched?

| Tribes | Region |
|---------------|---------------|
| 1. Xavante | Nigeria |
| 2. Maasai | Tanzania |
| 3. Pemón | Venezuela |

Select the correct answer from the codes given below:

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

Answer: b

- Xavante – Brazil

10 PM Compilation for the Month of March, 2022

- Maasai northern, central and southern Kenya and northern Tanzania.
- The Pemon or Pemón are indigenous people living in areas of Venezuela, Brazil, and Guyana.

Source: [Article](#)

Q.9) With reference to Human genome, consider the following statements:

1. Human genome is exactly the same in all people.
2. Naturally occurring human genes cannot be patented.

Which of the statements given above is/are correct?

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

Answer: b

- **Statement 1 is incorrect:** Human genome is mostly the same in all people, but a very small part of the DNA does vary between one individual and another.
- **Statement 2 is correct:** "Naturally occurring" human genes cannot be patented because they are a "product of nature," meaning that they cannot be claimed as a human invention. This is the position under the Indian Patents Act.

Source: [Article](#)

Q.10) With reference to Antarctica and the Antarctica Treaty, consider the following statements:

1. The region has no native population.
2. The treaty makes it mandatory for the 54 signatory countries to specify laws governing territories on which their stations are located.

Which of the statements given above is/are correct?

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

Answer: c

Both statements are correct.

- Antarctica is unique as it has no native population.
- The Antarctica Treaty, of which India is also a member, mandates that 54 signatory countries specify laws governing territories on which their stations are located.

Source: [Article](#)