

10 PM Current Affairs Quiz Compilation

21st to 26th February, 2022

PRELIMS

Q.1) Consider the following:

1. Warm and Humid Environments
2. Use of Gypsum
3. Use of Hard water for irrigation

Which of the above will lead to an increase in alkalinity of soils?

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

Answer-b

Temperature and rainfall affect the intensity of leaching and the weathering of soil minerals. In warm, humid environments, soil pH decreases over time through acidification due to leaching from high amounts of rainfall. In dry environments where weathering and leaching are less intense, soil pH may be neutral or alkaline.

Gypsum (Calcium Sulphate, $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) is a sedimentary mineral. It is very important for the treatment of alkaline soil.

It's important to grasp that bicarbonate levels in your irrigation water—its hardness or softness—affects your growing media and crops. Bicarbonate level is also measured as alkalinity. Hard water has a high bicarbonate level and high alkalinity. Soft water has low amounts of dissolved bicarbonates and low alkalinity. With a hard water supply at your growing operation, the bicarbonates can react and make your growing media pH more alkaline over time. The extent and rate of change depends on how hard your water is and the volume of hard water applied to the crop.

Source- [Article](#)

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

1. Distributed generation is the term used when electricity is generated from centralized generation sources like power plants.
2. Although it can help support delivery of clean, reliable power to additional customers but it has huge amount of electricity losses along transmission and distribution lines.

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

Distributed generation is the term used when electricity is generated from sources, often renewable energy sources, near the point of use instead of centralized generation sources from power plants.

When connected to the electric utility's lower voltage distribution lines, distributed generation can help support delivery of clean, reliable power to additional customers and reduce electricity losses along transmission and distribution lines.

Source- [Article](#)

Q.3) Consider the following statements:

1. Decline in food and fuel prices will lead to more changes in the headline inflation than core inflation.
2. Headline inflation is more relevant for developing economies than developed economies.

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

Core inflation is the change in the costs of goods and services but does not include those from the food and energy sectors.

Since the prices of fuel and food items tend to fluctuate and create 'noise' in inflation computation, core inflation is less volatile than headline inflation.

Headline inflation refers to the change in value of all goods in the basket because In a developed economy, food & fuel account for 10-15% of the household consumption basket and in developing economies it forms 30-40% of the basket.

Source- [Article](#)

Q.4) Consider the following statements:

1. In India, the lavender crop is cultivated in almost all of the low rainfall regions except the hilly areas of Northern India.
2. Aroma Mission or "Lavender or Purple Revolution aims to transform the lives of farmers who are able to grow lavender, make lucrative profit and improve their lives.

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

In India, the lavender crop is cultivated in **low rainfall regions and on the slopes of hills of Himachal Pradesh(HP) and Uttar Pradesh(UP)**. The lavender crop is also successfully grown in the Kashmir valley region.

The Aroma Mission, also popularly referred as "Lavender or Purple Revolution", has started from J&K and transformed the lives of farmers who are able to grow lavender, make lucrative profit and improve their lives. The Aroma Mission is envisaged to bring transformative change in the aroma sector through desired interventions in the areas of agriculture, processing and product development for fuelling the growth of aroma industry and rural employment.

Source- [Article](#)

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Q.5) Consider the following statements:

1. Food grain production in India has seen a positive growth every year in the last five year.
2. Irrigated area accounts for nearly 20 per cent of the agricultural land 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

According to the Second Advance Estimates of Production of Foodgrains for 2021-22, released by the Ministry of Agriculture and Farmers Welfare, Foodgrains production has gone up from 252 million tonnes in 2015-16 to 316 million tonnes now; rising every single year.

About 80 per cent of the current water use is drawn by agriculture. Irrigated area accounts for nearly 48.8 per cent of the 140 million hectare (mha) of agricultural land in India. The remaining 51.2 per cent is rainfed.

Source- [Article](#)

Q.6) Which of the following are India's commitment to control climate change as announced in CoP 26, Glasgow Summit?

1. India will fulfil 90 per cent of its energy requirements from renewable energy sources by 2030.
 2. India will reduce its total projected carbon emissions by 1 billion tonnes by 2030.
- a) 1 only
 - b) 2 only
 - c) Both 1 and 2
 - d) Neither 1 nor 2

Answer-b

At the COP26 summit in Glasgow, Prime Minister [Narendra Modi](#) made significant announcements, including the bold pledge of India becoming net zero by 2070.

Besides the net zero target, Modi also raised India's Nationally Determined Contributions (NDCs) of achieving 450 giga watt non-fossil energy capacity to 500 giga watt by 2030.

"India will increase its non-fossil energy capacity to 500 giga watt by 2030; India will fulfil 50 per cent of its energy requirements from renewable energy sources by 2030. Between now and 2030, India will reduce its total projected carbon emissions by 1 billion tonnes and by 2030.

Source- [Article](#)

Q.7) The Tribal Fair of Medaram Jatara is held in which of the following Indian state

- a) Jharkhand
- b) Madhya Pradesh
- c) Telangana
- d) Maharashtra

Answer-c

Medaram Jatara is the second-largest fair of India, after the Kumbh Mela, celebrated by the second-largest Tribal Community of Telangana- the Koya tribe for four days.

Source- [Article](#)

Science and Technology

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

1. He was the first Asian to win a Nobel prize in the field of science.
2. Raman Spectroscopy can help identify pharmaceutical chemicals and discover counterfeit drugs.

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.

- C.V. Raman was the first Asian to win a Nobel Prize in the field of science in 1930.
- Raman Spectroscopy can help in determining chemical bonding structures, characterise materials, determine temperature, find out crystalline orientation, identify pharmaceutical chemicals, discover counterfeit drugs, identify pigments in old paintings and historical documents, and detect explosives using lasers from a distance.

Source: [Article](#)

ECONOMY

Q.9) Recently, India's first water taxi service has been inaugurated in which of the following state?

- a) Assam
- b) Tamil Nadu
- c) Maharashtra
- d) Karnataka

Answer: C

India's first water taxi service was recently inaugurated in Maharashtra. It will connect the Navi Mumbai area to mainland Mumbai.

Source: [The Hindu](#)

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Q.10) With reference to Distributed Renewable Energy (DRE), consider the following statements:

1. In this, electricity is generated from renewable energy sources near the point of energy utilization.
2. DRE Technologies offer better consumer affordability than centralised Renewable Energy systems.

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: Distributed Renewable Energy(DRE) is the term used when electricity is generated from renewable energy sources near the point of use instead of centralized generation sources from power plants.

Statement 2 is incorrect: Lack of proper financing channels, consumer awareness, consumer affordability and quality products/standards are some of the major challenges facing DRE in India.

Source: [DTE](#)

INTERNATIONAL RELATION

Q.11) Normandy format sometimes seen in news is an informal forum set up by which of the following countries?

1. Germany
2. USA
3. France
4. Russia
5. Ukraine

Select the correct answer from the codes given below:

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

Answer: a

- **Normandy Format:** It is a diplomatic grouping created in June 2014 to find a peaceful resolution to the conflict in Ukraine due to Russia's military aggression. It is an informal forum that was set up by France, Germany, Russia, and Ukraine.

Source: [Article](#)

ECONOMY

Q.1) With reference to the Credit- deposit Ratio, consider the following statements:

1. It indicates how much of a bank's core funds are being used for lending.
2. A higher credit-deposit ratio may prevent banks from reducing deposit rates despite a rate cut from the central bank.

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

It is the ratio of how much a bank lends out of the deposits it has mobilised. It indicates how much of a bank's core funds are being used for lending, the main banking activity. A higher ratio indicates more reliance on deposits for lending and vice-versa.

Banks may not reduce deposit rates despite the rate cut due to high credit-deposit ratio.

Source- [Article](#)

Q.2) Consider the following statements:

1. The Indian Manufacturing sector currently contributes 25% to GDP
2. India has very high labour and capital productivity as compared to most of the Asian countries.

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 Indian Manufacturing sector currently contributes 16-17% to GDP and gives employment to around 12% of the country's.

To become globally competitive, India's manufacturing value chains must lift their productivity—in GVA output per full-time-equivalent worker—closer to global standards. They have a long way to go in this regard: their labor productivity and capital productivity are both low. Compared with India, manufacturing productivity in Indonesia is twice as high; in China and South Korea, productivity is four times higher.

Source- [Article](#)

POLITY AND GOVERNANCE

Q.3) Consider the following statements:

1. Central Ground water Board(CGWB), is the National apex agency entrusted with the responsibilities of providing scientific inputs for management of ground water resources of the country.
2. CGWB was constituted under Environment protection act, 1986

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

Central Ground water Board(CGWB), is the National apex agency entrusted with the responsibilities of providing scientific inputs for management, exploration, monitoring, assessment , augmentation and regulation of ground water resources of the country. It was constituted under Environment protection act, 1986.

Source- [Article](#)

ENVIRONMENT

Q.4) Consider the following statements:

- 1.Forest fires are a natural phenomenon.
- 2.Wildfires do not occur in humid tropical forests.

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

Wildfires are a natural phenomenon, but are becoming more dangerous and affecting larger areas. The UN report has attributed this to climate change and human activities.

Wildfires seldom spread to humid tropical forests in the past. But these forests are now more vulnerable due to deforestation and forest fragmentation.

Source- [Article](#)

INTERNATIONAL RELATION

Q.5) Consider the following statements:

1. International Seabed Authority was created under the United Nations Convention on the Law of the Sea (UNCLOS)
2. UNCLOS is the only international convention which stipulates a framework for state jurisdiction in maritime spaces.

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

UNCLOS was adopted and signed in 1982. UNCLOS is the only international convention which stipulates a framework for state jurisdiction in maritime spaces. It provides a different legal status to different maritime zones.

The International Seabed Authority was constituted under the convention.

Source- [Article](#)

ECONOMY

Q.6) Consider the following statements:

1. Credit rating agencies(CRA) provide information on the relative creditworthiness of an issuer or instrument.
2. The CRA Regulations in India currently recognise only the issuer-pays model.

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

Credit rating agencies provide retail and institutional investors with information that assists them in determining if debtor will be able to meet their obligations. They help investors, customers etc. to get an overall idea of the strength and stability of an organization and enable them to make informed decisions.

The CRA Regulations in India currently recognise only the issuer-pays model, under which, the rating agencies charge issuers of bond and debt instruments a fee for providing a ratings opinion. Thus, this model has an inbuilt conflict of interest.

Source- [Article](#)

Q.7) Which of the following will be included in the current account of India?

1. Exports from India to Japan
2. Remittances from workers in Saudi Arabia sent back to family members in India
3. Imports to India from China

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

Exports are counted in the current account because they represent the movement of funds internationally, but do not represent a transaction that creates a future obligation. Exports create a current account credit.

Imports are counted in the current account because they represent the movement of funds internationally but do not represent a transaction that creates a future obligation. Imports create a current account debit.

Remittances are counted in the current account because they do not represent a transaction that has a future obligation tied to it. Remittances are simply a transfer of funds from one country to another that is not in exchange for anything.

Source- [Article](#)

Science and Technology

Q8) With reference to Phishing and Phishing attacks, consider the following statements:

1. Spear phishing targets specific individuals instead of a wide group of people.
2. Phone-based phishing scams are referred to as Vishing.

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:** Spear phishing targets specific individuals instead of a wide group of people. Attackers often research their victims on social media and other sites. That way, they can customize their communications and appear more authentic. Spear phishing is often the first step used to penetrate a company's defenses and carry out a targeted attack.
- **Statement 2 is correct:** Vishing is a type of phishing scam that happens on the phone. The word vishing is a combination of 'voice' and 'phishing'. To do this, they are looking for your personal details, such as your card, PIN, passwords or card reader codes.

Source: [Article](#)

HISTORY

Q.9) Consider the following statements.

1. He described the battle of Plassey and the arrival of British rule in India as “A Night of Eternal Gloom”.
2. His autobiography, Aamar Jiban-My Life is an important document highlighted the politics and social aspirations of the Bengali literates.
3. His novel Bhanumati and memoir of his travels 'Prabaser Patra' brought him fame.

Which of the following personalities is defined in the statement above?

- a) Shyamlal Gupta
- b) Makhanlal Chaturvedi
- c) Nabin Chandra Sen
- d) Mahadevi Varma

Answer: C

Source: [All India Radio](#)

Science and Technology

Q.10) With reference to Obstructive Sleep Apnoea (OSA), consider the following statements:

1. It is a disorder in which a person’s breathing stops and starts repeatedly in their sleep.
2. The OSA leads to a lot of road traffic accidents.
3. There is no treatment for OSA.

Which of the statements given above is/are correct?

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

Answer: B

OSA is a disorder in which a person’s breathing stops and starts repeatedly in their sleep. When a person is obese, they develop extra fat on their larynx and pharynx (muscles in the throat) that can close off their airway in sleep.

Although the condition doesn’t kill by itself, it can lead to heart attacks and strokes due to the low oxygen level. In the long run, it can also result in increasing blood pressure, abnormal heart rhythms, and other metabolic disorders.

OSA also leads to a lot of road traffic accidents as people with OSA tend to doze off while driving. OSA is the most common cause of road accident in the US.

For treatment, the best method is to use a CPAP (Continuous Positive Airway Pressure) therapy.

Source: [Indian Express](#)

INTERNATIONAL RELATIONS

Q.11) With reference to UN Security Council (UNSC), consider the following statements:

1. One of the functions of the UNSC is to exercise the trusteeship functions of the United Nations in strategic areas.
2. The UN Peacebuilding Commission (PBC) is a subsidiary organ of the General Assembly and the Security Council.

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:** One of its many functions is to exercise the trusteeship functions of the United Nations in strategic areas.
- **Statement 2 is correct:** The Peacebuilding Commission (PBC) is a subsidiary organ of both the GA and the Security Council. It was jointly established by the General Assembly and the Security Council in 2005 as a new intergovernmental advisory body of the United Nations that supported peace efforts in countries emerging from conflict. Its aim is to propose integrated strategies for post-conflict peacebuilding and recovery, bring together all of the relevant actors and marshal resources.

Source: [Article](#)

ECONOMY

Q.1) Consider the following statements:

1. Financial Stability and Development Council(FSDC) is a Statutory body.
2. It is chaired by Governor of Reserve Bank of India
3. One of the objectives of the council is to enhance inter-regulatory coordination.

Which of the statements given above is/are incorrect?

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

Answer-a

With a view to strengthening and institutionalizing the mechanism for maintaining financial stability, enhancing inter-regulatory coordination and promoting financial sector development, the Financial Stability and Development Council (FSDC) was set up by the Government as the apex level forum in December 2010.

The Chairman of the Council is the Finance Minister and its members include the heads of financial sector Regulators (RBI, SEBI, PFRDA, IRDA & FMC) Finance Secretary and/or Secretary, Department of Economic Affairs, Secretary, Department of Financial Services, and Chief Economic Adviser.

It is non-**statutory** apex **council** under the Ministry of **Finance** constituted by the Executive Order in 2010.

Source- [Article](#)

POLITY AND GOVERNANCE

Q.2) With reference to the Public Interest Litigation (PILs), consider the following statements:

1. PILs can be filed either before the Supreme Court of India or any High Court.
2. Supreme court has in its various judgements ruled that a letter or a postcard addressed to the Chief Justice of India cannot be converted to a PIL

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

PILs are extensions of Writ Jurisdiction. Therefore, PILs may be filed either before the Hon'ble Supreme Court of India under Article 32 of the Indian Constitution or any High Court under Article 226 of the Indian Constitution.

However, even a simple letter or a postcard addressed to the Chief Justice of India or the Chief Justice of a High Court may suffice. The court may then choose to take cognizance of the letter and convert it into a PIL.

Source- [Article](#)

ENVIRONMENT

Q.3) Consider the following statements:

1. Endemic species are those that are only found in a particular geographical area and do not occur naturally in any other part of the world.
2. Namdapha Flying Squirrel and lion-tailed macaque are endemic to Western Ghats.

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

Endemic species are those that are restricted to a geographical area and do not occur naturally in any other part of the world.

Namdapha Flying Squirrel is endemic to the state of Arunachal Pradesh.

Many species such as the Nilgiri tahr (*Hemitragus hylocrius*) and the lion-tailed macaque (*Macaca silenus*) are endemic to Western Ghats. In fact, 50 per cent of India's amphibians and 67 per cent of fish species are endemic to this region.

Source- [Article](#)

ECONOMY

Q.4) With reference to National Agriculture Market (e-NAM), consider the following statements:

1. It is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.
2. All states and some Union territories are integrated into the e-NAM network.
3. Small Farmers Agribusiness Consortium (SFAC) is the lead agency for its implementation.

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) All of the above

Answer-a

National Agriculture Market (eNAM) is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.

Small Farmers Agribusiness Consortium (SFAC) is the lead agency for implementing eNAM under the aegis of Ministry of Agriculture and Farmers' Welfare, Government of India.

Currently, 1,000 markets located in 21 states and three union territories (UTs) are integrated into the e-NAM network.

Source- [Article](#)

Science and Technology

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

1. It can be defined as the information that describes other information.
2. It Complicates the process of data management and makes it cumbersome and unmanageable.
3. Government has been focusing on it to enhance Inter-departmental information exchange.

Which of the statements given above is/are correct?

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

Answer-d

The most common definition of the term 'metadata' is structured data about data, information that describes other information. A metadata record is a label, like the label we might find on an everyday product in a supermarket. The label describes the product, and quite often contains information that is useful both to consumers and to the electronic systems that control the store.

With the use of this Inter-departmental information exchange becomes easier. Hence, metadata increases the visibility and accessibility of Government services over the Internet Modernizing Government calls for better use of official information, joined-up systems and policies, and services designed around the needs of citizens. Metadata makes it easier to manage or find information be it in the form of web pages, electronic documents, paper files, databases, anything.

Source- [Article](#)

INTERNATIONAL RELATIONS

Q.6) With reference to the Trade-Related Aspects of Intellectual Property Rights agreement(TRIPS), consider the following statements:

1. TRIPS Agreement require all member's rules on protection of intellectual property to be identical.
2. It does not allow compulsory licensing of patents.

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

TRIPS Agreement does not require all member's rules on protection of intellectual property to be identical, in only requires members to comply with certain minimum standards for the protection of intellectual property rights covered in it.

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It allows compulsory licensing and government use of a patent without the authorization of its owner.

Source- [article](#)

ENVIRONMENT

Q.7) Which of the following have launched the initiative 'Forum for Decarbonizing Transport in India'?

- NITI Aayog
- Ministry of heavy Industries
- Ministry of environment , forests and climate change
- Central pollution control board

Answer-a

NITI Aayog and World Resources Institute(WRI), India, jointly launched the 'Forum for Decarbonizing Transport' in India as part of the NDC-Transport Initiative for Asia (NDC-TIA) project.

Source- [Article](#)

SCIENCE AND TECHNOLOGY

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

- The magnetic field of a typical neutron star is many times stronger than that of a Magnetar.
- Scientists have found them to be one of the possible sources of Fast Radio Bursts (FRBs).

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer: b

- Statement 1 is incorrect:** As per NASA, a magnetar is a neutron star, "the crushed, city-size remains of a star many times more massive than our Sun." The magnetic field of such a star is very powerful, which can be over 10 trillion times stronger than a refrigerator magnet and up to a thousand times stronger than a typical neutron star's.
- Statement 2 is correct:** As per a study in 2020, some Magnetars have been found to emit Fast Radio Bursts.

Source: [Article](#)

INTERNATIONAL RELATIONS

Q.9) With reference to Munich Security Conference, Consider the following statements:

1. It is an annual conference on international security policy.
2. It is organised by the European Union.
3. India participated in the conference in 2022.

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: The Munich Security Conference is an annual conference on international security policy that has been held in Munich, Bavaria, Germany since 1963.

(Statement 2 is incorrect) Statement 3 is correct: The Munich Security Conference is being organised by Germany. India is taking part in it.

Source: [DW](#)

ENVIRONMENT

Q.10) The term ‘Euphlyctis Jaladhara’ sometimes seen in news, is associated with which of the following species?

- a) Skittering frog
- b) Jumping spider
- c) Slender Gecko
- d) Wood snake

Answer: a

- A new frog species was recently discovered from the freshwater bodies of the western coastal plains of India.
- The frog had been scientifically named Euphlyctis Jaladhara with a common name “Jaladhara skittering frog”, suggestive of the frog’s habitat - a small body of water or reservoir. Initially, it was first spotted in fresh water bodies around the Thattekad Bird Sanctuary in Ernakulam, and then multiple populations were identified all along the western coastal plains from Kerala to Gujarat.

Source: [Article](#)

ECONOMY

Q.1) With reference to Practice of Mulching in agriculture, Consider the following statements:

1. It refers to the process of covering the plants with a layer of dried straw or fallen leaves.
2. It is one of the key components of Zero Budget Natural Farming (ZBNF).
3. Although helpful in conserving soil moisture, it also increases the temperature of soil which affects soil microorganisms negatively.

Which of the statements given above is/are correct?

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

Answer-b

Mulching, or covering the plants with a layer of dried straw or fallen leaves, is meant to conserve soil moisture and keep the temperature around the roots at 25-32 degrees Celsius, which allows the microorganisms to do their job.

Mulching is one of the four wheels” of ZBNF.

Source- [Article](#)

POLITY AND GOVERNANCE

Q.2) Which of the following statements best describes “Limited government”?

- a) It is an agreement between the government and citizens, defining the rights and duties of each.
- b) It is a political system in which there are certain restrictions placed on the government to protect individual rights and liberties.
- c) It is an Opportunity available to all the citizens of the state to develop themselves fully.
- d) It refers to constitutionally allocated distribution of powers between two or more levels of government.

Answer- b

Statement a defines social contract.

Statement c refers to the term liberty, Positive liberty is the possibility of acting — or the fact of acting — in such a way as to take control of one’s life and realize one’s fundamental purposes. One may surmise that the purpose of ensuring that one has no obstacles is to realize one’s full potential.

Statement d refers to the term ‘federalism’, it refers to the constitutionally allocated distribution of powers between two or more levels of government in the modern nation-state system—one, at the national level and the other, at the provincial, state or local level.

Source- [Article](#)

SCIENCE AND TECHNOLOGY

Q.3) To Which of the following areas, the “Quantum key distribution” is most closely interlinked?

- a) Internet of things
- b) Secure communication model
- c) Virtual reality
- d) Blockchain technology

Answer- b

Quantum key distribution (QKD) is a secure communication method which implements a cryptographic protocol involving components of quantum mechanics.

Source- [article](#)

ECONOMY

Q.4) Consider the following statements:

1. In the last five years, India has emerged as one among the top five arms exporting nations of the world.
2. Increasing the Foreign Direct Investment (FDI) limit in defense production will help India achieve self-reliance in defence manufacturing.
3. A Negative import list of weapons systems will harm the domestic arms production efforts in the country.

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) 1 only

Answer-a

India emerged as the second-largest importer of arms transferred between 2016-20, with a share of 9.5% of global arms imports. It is not among the top 5 arms exporting nations.

From creating a new “Buy (Global — Manufacture in India)” procurement category to implementing a negative import list of 101 weapons systems and increasing the Foreign Direct Investment (FDI) limit in defence production to 74% through the automatic route, India’s defence establishment has introduced several measures to achieve self-reliance in defence manufacturing.

Source- [Article](#)

INTERNATIONAL RELATIONS

Q.5) Which one of the following group of countries is member of NATO?

1. Spain, Turkey, United kingdom.
2. Spain, United kingdom, Ukraine
3. Turkey, Ukraine, United states
4. Germany, France, Sweden

Answer-a

Ukraine is not currently a member of **NATO**, but it is a partner country.

Source- [Article](#)

SCIENCE AND TECHNOLOGY

Q.6) Which of the following is India's first indigenously-built aircraft carrier?

- a) INS Viraaaz
- b) INS Vikramaditya
- c) INS Vikrant
- d) INS Viraat

Answer-c

The indigenously-built aircraft carrier (IAC) Vikrant, the first of its kind and a symbol of India's atmanirbharta in defence, is expected to be commissioned later this year.

Source- [Article](#)

Q.7) Consider the following statements:

1. Wular lake is fed by Jhelum river
2. Char Chinar is an island on Wular lake

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

A famous landmark in Srinagar is an island on Dal called Island of Char Chinar.

Source- [Article](#)

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

1. Multiple users are capable of accessing the supercomputer at same time.
2. They do not require water cooling to bring down 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: A

Statement 1 is correct: These types of computers are able to solve large amounts of calculations, and complicated calculations as well. Multiple users are capable of accessing the supercomputer at same time.

Statement 2 is incorrect: A supercomputer produces more heat during processing time so they need water cooling in addition to an A/C system.

Source: [The Hindu](#)

ECONOMY

Q.9) What is/are the advantages of shifting to natural farming?

1. Reduce the dependence on credit.
2. Less flexible than organic farming.
3. Higher carbon fixation into the soil.

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: A panel survey of 260 farm households which were surveyed in 2018-19 and 2019-20, found that natural farming reduced the dependence on credit, freeing many farmers from exploitative and interlinked input and credit markets.

Statement 2 is incorrect: Organic farming is more about certification, while natural farming is a gradual process. But there is relative flexibility in natural farming for adoption. This makes it easier for small farmers to transition.

Statement 3 is correct: Natural farming not just creates cost savings for farmers, but also ensures higher carbon fixation into the soil, which can mitigate climate change.

Source: [Indian Express](#)

SCIENCE AND TECHNOLOGY

Q.10) With reference to **gravitational lensing**, consider the following statements:

1. Gravitational lensing is an effect of Einstein's theory of general relativity, I.e., mass bends light.
2. It is directly sensitive to the amount and distribution of dark matter.

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

Gravitational lensing is an effect of Einstein's theory of general relativity – simply put, mass bends light.

The more massive the object, the stronger its gravitational field and hence the greater the bending of light rays – just like using denser materials to make optical lenses results in a greater amount of refraction.

Gravitational lensing is useful to cosmologists because it is directly sensitive to the amount and distribution of dark matter.

Source: [The Hindu](#)

SCIENCE AND TECHNOLOGY

Q.1) With reference to the CERT-IN, consider the following statements:

1. It is the national nodal agency for responding to computer security incidents as and when they occur.
2. It is under the Ministry of Electronics and 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-c

CERT-In is operational since January 2004. The constituency of CERT-In is the Indian Cyber Community. CERT-In is the national nodal agency for responding to computer security incidents as and when they occur. It is under the Ministry of Electronics and Information Technology.

Source- [Article](#)

POLITY

Q.2) Which of the following are the functions performed by the Central Drugs Standard Control Organisation (CDSCO):

1. Regulatory control over the import of drugs
2. Approval of new drugs
3. Controlling the Prices of Pharmaceutical drugs

Which of the statements given above is/are correct?

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

Answer-a

National Pharmaceutical Pricing Authority (NPPA) is a government regulatory agency that controls the prices of pharmaceutical drugs in India.

CDSCO has regulatory control over the import of drugs, approval of new drugs and clinical trials.

Source- [Article](#)

ENVIRONMENT

Q.3) With reference to the Saltwater crocodile, consider the following statements:

1. Apart from the eastern coast of India, the saltwater crocodile is extremely rare on the Indian subcontinent.
2. They are in the critically endangered category of the IUCN Red list.

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

Apart from the eastern coast of India, the saltwater crocodile is extremely rare on the Indian subcontinent (de Vos, 1984). The saltwater crocodile is also found in Bangladesh. A large population is present within the Bhitarkanika Wildlife Sanctuary of Odisha while smaller populations occur throughout the Sundarbans.

IUCN status- Least concern

Source- [Article](#)

SCIENCE AND TECHNOLOGY

Q.4) With reference to the 3D Printing technology, consider the following statements:

1. It is a technology that is Produces objects layer by layer.
2. Subtractive manufacturing is a more advanced version of this technology that is going to play a pivotal role in Industrial revolution 4.0

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

Subtractive manufacturing or Machining (traditional method) is an umbrella term for various controlled machining and material removal processes that start with solid blocks, bars, rods of plastic, metal, or other materials that are shaped by removing material through cutting, boring, drilling, and grinding.

In contrast to the subtractive process of removing material from a larger piece, additive manufacturing or 3D printing processes build objects by adding material one layer at a time, with each successive layer bonding to the preceding layer until the part is complete.

Source- [Article](#)

Q.5) Which of the following Principle is behind the working of wireless chargers?

- a) Electromagnetic Induction
- b) Hooke's law
- c) Wien's Law
- d) Kirchhoff's law

Answer-a

Wireless charging is based on the principle of electromagnetic induction. When an electric current is sent through a coil (a wound-up cable), it creates a magnetic field whose action generates another electric current in a second coil that's some distance away.

Source- [Article](#)

INTERNATIONAL RELATION

Q.6) Which of the following publishes the Global competitiveness report?

- a) World economic forum
- b) United Nations Conference on Trade and Development
- c) World Intellectual Property Organization
- d) International Monetary Fund

Answer-a

World economic forum Publishes Global competitiveness report.

Source- [Article](#)

SCIENCE AND TECHNOLOGY

Q.7) Terms like Gothic Panda, Stone Panda, Red Echo have been in news in the recent years, to which of the following areas are they related to?

- a) Cyber security
- b) Civil society organizations
- c) Wildlife species conservation
- d) Mini satellites

Answer-a

These are names of some hacker groups so these terms are related to the cyber security area.

Source- [Article](#)

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

1. Wireless charging produces less heat than wired charging.
2. Wireless charging is less efficient and more power-consuming than wired charging.

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

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Answer: B

Statement 1 is incorrect: Wireless charging produce more heat than wired charging.

Statement 2 is correct: Wireless charging is less efficient and more power-consuming than wired charging. Studies have found that wireless charging averagely uses 47 per cent more power than wired charging. The extra power consumption by a single wireless charger won't significantly increase your energy bill, but all smartphone users in the world switching to wireless charging would have a critical impact on the environment.

Source: [TOI](#)

ENVIRONMENT

Q.9) With reference to **Net Zero Carbon Cities' mission**, consider the following statements:

1. It aims to create an enabling environment for clean electrification and circularity, resulting in urban decarbonization and resilience.
2. It is an initiative of the World Economic Forum.

Which of the statements given above is/are correct?

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

Answer: C

The World Economic Forum's Net Zero Carbon Cities' mission is to create an enabling environment for clean electrification and circularity, resulting in urban decarbonization and resilience. The program aims to do this by fostering public-private collaboration to bridge the gap across the energy, built environment and transport sectors.

Source: [PIB](#)

Q.10) What are the applications of Carbon Capture, Utilization, and Storage (CCUS) technologies?

1. Reduce the rate of CO₂ emissions.
2. Enhance Oil Recovery.
3. Cheaper way to capture CO₂.

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: CCUS can reduce the rate of CO₂ emissions. Thereby mitigating Climate Change.

Statement 2 is correct: Oil and Natural Gas Corporation signed a MoU with Indian Oil Corporation Limited (IOCL) for Enhanced Oil Recovery (EOR) by injecting CO₂.

Statement 3 is incorrect: Carbon capture involves the development of sorbents that can effectively bind to the CO₂ present in flue gas or the atmosphere, which is expensive.

Source: [DTE](#) PIB

INTERNATIONAL RELATIONS

Q.1) Which of the following states has publicly announced the successful detonation test of nuclear weapons?

1. Israel
2. North Korea
3. Ukraine

Select the correct answer using the code given below:

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

Answer-b

Eight States have publicly announced successful detonation of nuclear weapons. Five are considered to be nuclear-weapon states (NWS) under the terms of the Treaty on the Non-Proliferation of Nuclear Weapons(NPT). In order of acquisition of nuclear weapons these are the United States, Russia , United kingdom, France, and China .

Since the NPT entered into force in 1970, three states that were not parties to the Treaty have conducted overt nuclear tests , namely India, Pakistan , and North Korea. North Korea had been a party to the NPT but withdrew in 2003.

Israel is also generally understood to have nuclear weapons, but does not acknowledge it.

States that formerly possessed nuclear weapons are South Africa (developed nuclear weapons but then disassembled its arsenal before joining the NPT) and the former Soviet republics of Belarus, Kazakhstan, and Ukraine, whose weapons were repatriated to Russia.

Source- [Article](#)

POLITY AND GOVERNANCE

Q.2) Consider the following statements:

1. Constitutional bodies can only be created or changed by passing a regular, government or Private bill.
2. Central Bureau of Investigation (CBI) is a statutory body
3. Securities and Exchange Board of India (SEBI) is a statutory body that regulates both the securities and commodity market in India.

Which of the statements given above is/are incorrect?

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

Answer-b

In India, a constitutional body is a body or institute established by the Constitution of India. They can only be created or changed by passing a Constitution amendment bill, rather than by a regular, government or private bill.

The Securities and Exchange Board of India is the regulatory body for securities and commodity market in India under the ownership of Ministry of Finance, Government of India. It

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was established on 12 April 1988 and given Statutory Powers on 30 January 1992 through the SEBI Act, 1992.

The CBI is not a statutory body although it derives its powers from the Delhi Special Police Establishment (DSPE) Act, 1946, which was passed in British India.

Source- [Article](#)

SCIENCE AND TECHNOLOGY

Q.3) Recently terms like Sandes and Samvad have been in news, with reference to these, consider the following statements:

1. These are two communication apps
2. They are being developed through a joint collaboration between the India and USA.
3. They have set of unique features to enhance its usability for official communication/meeting.

Which of the statements given above is/are correct?

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

Answer-a

Sandes and Samvad are two apps that have been built by different departments of the government and are currently being tested before a final rollout happens. Sandes is being developed by the National Informatics Centre, the technology infrastructure arm of the government under the Ministry of Electronics and Information Technology (MeitY). Samvad is being developed by the Centre for Development of Telematics (C-DoT), under the Ministry of Communications.

Source- [Article](#)

POLITY AND GOVERNANCE

Q.4) Consider the following:

1. Education
2. Public health and sanitation
3. Agriculture, including agricultural education and research.

Which of the above is/are the part of the State list under the seventh schedule of the Indian constitution?

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

Answer-c

By an amendment in 1976 and education became a concurrent list subject which enables the central government to legislate it in the manner suited to it.

Public health and sanitation and Agriculture, including agricultural education and research are in the state list.

Source- [Article](#)

INTERNATIONAL RELATIONS

Q.5) Which of the following statements best describes the objective of the “Minsk agreement”?

- (a) It is a collaborative effort to certify infrastructure projects that meet robust international quality standards.
- (b) The agreement ensures that space exploration is conducted in a safe, sustainable and transparent manner and in full compliance with international law.
- (c) They are a set of agreements designed to end a separatist war
- (d) It is an agreement with the objective to develop a worldwide grid through which clean energy can be transmitted.

Answer-c

The Minsk agreements were a series of international agreements which sought to end the war in the Donbas region of Ukraine.

Source- [Article](#)

SCIENCE AND TECHNOLOGY

Q.6) Consider the following:

1. Coking coal
2. Iron ore scrap
3. Limestone

Which of the above is/are the key raw materials to manufacture steel?

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

Answer-d

For the production of steel, there is a need for iron raw material in the form of iron ore or scrap metal, together with alloying elements so that the material acquires the desired properties. In the production of ore-based steel, coal is also needed as a reducing agent and limestone as a slag former.

Source- [Article](#)

GEOGRAPHY

Q.7) Consider the following:

1. Palk bay
2. Gulf of Mannar
3. Palk strait

Arrange the above locations/features from North to South?

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

Answer-c

Source- [Article](#)

SCHEMES AND PROGRAMS

Q.8) With reference to Bhasha Sangam Initiative, consider the following statements:

1. It aims to teach basic sentences of everyday usage in 22 Indian languages.
2. It is an initiative of the Ministry of Culture.

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 aims to teach school students basic sentences of everyday usage in 22 Indian languages.

Statement 2 is incorrect: It is an initiative of the Ministry of Education under Ek Bharat Shreshtha Bharat.

Source: [PIB](#)

GEOGRAPHY

Q.9) Razzaza Lake was recently seen in the news. It was located in which of the following country?

- a) Turkey
- b) Iraq
- c) Russia
- d) Ukraine

Answer: B

Iraq's Razzaza Lake was once a tourist attraction known for its beautiful scenery and an abundance of fish that locals depended on. Now, dead fish litter its shores and the once-fertile lands around it have turned into a barren desert.

About the Razzaza Lake

Razzaza Lake, also known as Lake Milh, Arabic for Salt Lake, is located in Iraq. It is the second-largest lake in Iraq and is part of a wide valley that includes the lakes of Habbaniyah, Tharthar and Bahr al-Najaf.

The lake was constructed as a measure to control floods in the Euphrates and to be used as a huge reservoir for irrigation purposes.

Source: [Indian Express](#)

ART AND CULTURE

Q.10) Consider the following pairs.

Indian Mathematicians - Contributions

1. Sulbasutras - Pythagorean theorem
2. Aryabhata - Introduced the profound 'bhavana' law
3. Madhava - Discovered the infinite series for pi

Which of the above pair is/are matched correctly?

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

Answer: C

Indian Mathematicians - Contributions

1. Sulbasutras - Pythagorean theorem
2. Aryabhata - Described algorithms for extracting square root and cube root
3. Brahmagupta - Introduced the profound 'bhavana' law of composition for solving quadratic indeterminate equations.
4. Madhava - Discovered the infinite series for pi

Source: [PIB](#)

ENVIRONMENT

Q.11) Consider the following:

1. Saline formations
2. Unmineable coal seams
3. Basalt formations

Which of the above can serve as viable options for Carbon capture and storage?

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

Answer-d

Saline formations, Oil and natural gas reservoirs, Unmineable coal seams, Organic-rich shales, Basalt formations have the potential to serve as Carbon capture and storage sites.

Source- [Article](#)