

10 PM Current Affairs Quiz Compilation

May, 2022

PRELIMS

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

1. They act as an indicator of a healthy ecosystem.
2. They are known for their loud, complex and species-specific acoustic signals or songs.

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

- Cicadas are **hemipteran insects**. They are known for their loud, complex and species-specific acoustic signals or songs.
- **Habitat:** Most cicadas are canopy dwellers and are **found in natural forests with large trees**. They act as **indicators of a healthy forest ecosystem**. They occur more in areas around undisturbed bamboo groves.

Q.2) 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 fewer of other countries' currencies are needed, so a 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

Q.3) Which of the following provisions of the Indian Constitution have not been borrowed from The Government of India Act 1935?

- a) Cabinet system
- b) Prerogative writs
- c) Seventh Schedule

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

- Cabinet system has been borrowed from the Constitution of the UK.
- Prerogative writs has been borrowed from the Constitution of US.
- The Seventh Schedule was inherited from the Government of India Act, 1935

Source: [Article](#)

Q.4) Which of the following is/are examples of Fiber crops?

- 1. Flax
- 2. Hemp
- 3. Coir

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

- Fibre crops or plant fibres are also called as the natural fibres as they are obtained naturally and directly from the different sources of plants and their products.
- Examples of Fiber crops: Jute, Cotton, Hemp, Coir, Flax etc

Source: [Article](#)

Q.5) With reference to Hallmarking of precious metals in India, consider the following statements:

- 1. In India, at present only two precious metals, namely gold and silver, have been brought under the purview of Hallmarking.
- 2. The hallmark is valid for the entire life-time of the hallmarked jewelry.

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 May, 2022

Both statements are correct.

- **Statement 1 is correct:** In India, at present two precious metals namely gold and silver have been brought under the purview of Hallmarking.
- **Statement 2 is correct:** The hallmark will be valid for the entire life-time of the hallmarked jewelry.

Source: [Article](#)

Q.6) With reference to the Localizer Performance with Vertical Guidance (LPV), consider the following statements;

1. It is a Satellite Based Procedure which has been used by aircraft for landing purposes.
2. LPV approaches make aircraft possible to land at airports not equipped with expensive Instrument Landing 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: C

Both the statements are correct.

It is a Satellite Based Procedure which has been used by aircraft for landing purposes.

LPV approaches make aircraft possible to land at airports not equipped with expensive Instrument Landing Systems. This includes many small regional and local airports.

LPV's will lower the decision height up to 250 ft, this provides a substantial operational benefit in poor weather and low visibility conditions.

Thus, any airport which hitherto would require higher visibility minima, will be able to accept aircraft benefiting remote airports which are devoid of precision approach capability equipment.

Source: [PIB](#)

Q.7) With reference to the rules regarding the resignation and reinstatement of IAS officers, consider the following statements:

1. The central government may permit an officer to withdraw his/her resignation "in the public interest".
2. An officer serving in a cadre (state) or central deputation is required to submit his/her resignation to the chief secretary of the state.

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: According to Rule 5(1A)(i) of the amended All India Services (Death-Retirement Benefits) Rules, 1958, the central government may permit an officer to withdraw his/her resignation "in the public interest".

10 PM Compilation for the Month of May, 2022

Statement 2 is incorrect: An officer serving in a cadre (state) must submit his/her resignation to the chief secretary of the state.

An officer who is on central deputation is required to submit his/her resignation to the secretary of the concerned Ministry or Department.

Source: [Indian Express](#)

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

1. India has not banned the sale of menthol cigarettes.
2. Menthol increases the irritation and harshness of smoking.
3. Menthol makes it more difficult for people to quit smoking.

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: India has not banned the sale of menthol cigarettes.

Statement 2 is incorrect: Menthol, with its minty taste and aroma, “reduces the irritation and harshness of smoking. This increases appeal and makes menthol cigarettes easier to use, particularly for youth and young adults.

Statement 3 is correct: Menthol also interacts with nicotine in the brain to enhance nicotine’s addictive effects, while making it more difficult for people to quit smoking.

Source: [Indian Express](#)

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

1. It is a mixture of proteins found in wheat, barley, rye, and oats..
2. Gluten causes both gastrointestinal and systemic problems in the human body.
3. Gluten proteins have high nutritional and biological value.

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: A

Statement 1 is correct: Gluten is a mixture of proteins found in wheat (and all of its species and hybrids, such as spelt, kamut, and triticale), as well as barley, rye, and oats.

Statement 2 is correct: Gluten may cause both gastrointestinal and systemic symptoms for those with gluten-related disorders, including coeliac disease (CD), non-coeliac gluten sensitivity (NCGS), gluten ataxia, dermatitis herpetiformis (DH), and wheat allergy.

Statement 3 is incorrect: Gluten proteins have low nutritional and biological value and the grains that contain gluten are not essential in the human diet.

Source: [All India Radio](#)

10 PM Compilation for the Month of May, 2022

Q.10) Which of the following is/are the impacts of anabolic steroids?

1. Cause acne and hairfall
2. Growth of breasts in men
3. Paranoia and impaired judgement

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

Anabolic steroids are essentially lab-made versions of the male hormone testosterone and have a similar effect of increasing muscle mass as the natural hormone does.

Potential impacts are;

Use of anabolic steroids in the short-term can cause acne and hairfall. Extended misuse of the substance can also lead to gynaecomastia (growth of breasts in men) and erectile dysfunction.

In women, it can lead to growth of facial hair. It may also cause extreme anger, paranoia, and impaired judgement

Source: [Indian Express](#)

PRELIMS

Q.1) With reference to anabolic steroids, consider the following statements:

1. These are essentially lab-made versions of the male hormone testosterone.
2. They are similar to corticosteroids.

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:** Anabolic steroids are essentially lab-made versions of the male hormone testosterone and have a similar effect of increasing muscle mass as the natural hormone does. It also increases male characteristics in a person, such as facial hair and a deeper voice.
- **Statement 2 is incorrect:** These are very different from the corticosteroids that are prescribed by doctors for inflammations, several autoimmune diseases, or to suppress the body's immune system during a Covid-19 infection. Corticosteroids are lab-made molecules that mimic the action of the hormone called cortisol that controls the body's stress response, metabolism, and inflammation.

Source: [Article](#)

Q.2) With reference to National Open Access Registry (NOAR), consider the following statements:

1. It is an integrated single window electronic platform for electronic processing of short-term open access applications in inter-state transmission system.
2. Central Electricity Regulatory Commission (CERC) has been designated as the nodal agency for implementation and operation of NOAR.

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:** National Open Access Registry (NOAR) has successfully gone live from 1st May 2022. NOAR has been designed as an integrated single window electronic platform accessible to all stakeholders including open access participants, traders, power exchanges, national/regional/state load despatch centres for electronic processing of short-term open access application thereby automating the administration of the short-term open access in inter-state transmission system.
- **Statement 2 is incorrect:** National Load Despatch Centre (NLDC) operated by Power System Operation Corporation Limited (POSOCO) has been designated as the nodal agency for implementation and operation of NOAR

Source: [Article](#)

Q.3) Which of the following have been matched correctly?

Schedule	Features
1. 2 nd Schedule	Supreme Court judges
2. 5 th Schedule	Legislative lists
3. 9 th Schedule	Zamindari system

Select the correct code from the answers given below:

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

Answer: c

2nd schedule: The provisions in relation to allowances, privileges, emoluments of:

- President of India
- Governors of Indian States
- Speaker of Lok Sabha & Deputy Speaker of Lok Sabha
- Chairman of Rajya Sabha & Deputy Chairman of Rajya Sabha
- Speaker and Deputy Speaker of Legislative Assemblies of Indian States
- Chairman and Deputy Chairman of Legislative Councils of the Indian States
- Supreme Court Judges
- High Court Judges
- Comptroller & Auditor General of India (CAG)

5th Schedule: It contains provisions in relation to the administration and control of scheduled areas and scheduled tribes.

9th Schedule: It deals with the state acts and regulations that deal with land reforms and abolition of the zamindari system. It also deals with the acts and regulations of Parliament dealing with other matters.

Source: [Article](#)

Q.4) With reference to the Coalition for Disaster Resilient Infrastructure (CDRI), consider the following statements:

- 1. It is an intergovernmental organization with the objective of promoting the resilience of infrastructure systems to climate and disaster risks.
- 2. The policies, standards and other outputs of CDRI would be binding on its members.

Which of the statements given above is/are correct?

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

Answer: d

- CDRI is a multi-stakeholder global partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and academic and knowledge institutions. It is not an intergovernmental organization, which is ordinary treaty-based organization.

10 PM Compilation for the Month of May, 2022

- Envisioned as a partnership, the CDRI is not organized around the notion of rights and obligations. However, national governments that endorse the Charter and become a member of the CDRI have a key role in setting its substantive agenda as well as in its governance. It may be noted that the policies, standards and other outputs of CDRI would not be binding on its members.

Q.5) Consider the following statements regarding National Board for Wildlife (NBWL):

1. It is chaired by the Prime Minister.
2. No alteration of boundaries in national parks and wildlife sanctuaries can be done without the approval of the NBWL.

Which of the above statements 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

- NBWL is a statutory body constituted under the Wildlife Protection Act, 1972.
- Chairman: Prime minister.
- Vice-Chairperson: Minister of Environment, Forests & Climate Change.
- Functions: Its role is advisory in nature and advises the Central Government on framing policies and measures for the conservation of wildlife in the country.
- The board has the power to review all wildlife-related matters and approve projects in and around national parks and sanctuaries.
- No alteration of boundaries in national parks and wildlife sanctuaries can be done without the approval of the NBWL.

Q.6) With reference to the Jute, consider the following statements;

1. Jute is primarily grown in West Bengal, Odisha, Assam, Meghalaya, Tripura and Andhra Pradesh.
2. India accounts for three-fourths of the global jute exports.
3. The Jute Packaging Material Act, 1987 mandates 100% production of foodgrains and 20% sugar production must be packaged in jute bags.

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: Jute Industry in India is 150 years old. In India, Jute is primarily grown in West Bengal, Odisha, Assam, Meghalaya, Tripura and Andhra Pradesh. (West Bengal, Bihar and Assam account for almost 99% of India's total jute production)

10 PM Compilation for the Month of May, 2022

Statement 2 is incorrect: India is the largest producer of jute followed by Bangladesh and China. However, in terms of acreage and trade, Bangladesh takes the lead accounting for three-fourths of the global jute exports in comparison to India's 7%.

Statement 3 is correct: The provisions of the Jute Packaging Material (Compulsory use in Packing Commodities) Act, 1987 or the JPM Act mandate that 100% production of foodgrains and 20% sugar production must be packaged in jute bags.

Source: [The Hindu](#)

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

1. These are found in Sri Lanka, India, Bhutan and Nepal.
2. Sloth bears hibernate during winters.

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: Sloth bears are found in Sri Lanka, India, Bhutan and Nepal, predominantly in lowland areas.

Statement 2 is incorrect: Sloth bears primarily eat termites and ants, and unlike other bear species, they routinely carry their cubs on their backs. They are also very fond of honey, hence their alternative name of "honey bear".

Sloth bears do not hibernate.

Source: [Indian Express](#)

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

1. It is a medical pharmacopoeia and collection of commentaries and discussions on medical practices.
2. It is considered as the foundational text of ancient Indian medicine.

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.

The Charak Samhita is a medical pharmacopoeia and collection of commentaries and discussions on medical practices that is historically dated to the 1st-2nd centuries AD.

Along with the compendium of Susruta (c. 4th century AD), which is about surgery, the Charak Samhita is considered the foundational text of ancient Indian medicine, which was an evolved system of understanding and treating disease that was in several ways ahead of the Greeks.

Source: [Indian Express](#)

10 PM Compilation for the Month of May, 2022

Q.9) With reference to Flag Code of India, consider the following statements:

1. Only khadi or hand-spun cloth was the material for the flag. Use of other material was punishable.
2. So far, the code that deals with the description of the flag has remained untouched.

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: As per rule 1. 2 of part 1 of the Flag code of India 2002, only khadi or hand-spun cloth was the material for the flag. Use of other material was punishable. But the recent amendment has changed it to “The National Flag shall be made of hand spun and hand woven or machine made, cotton, polyester, wool, silk khadi bunting.”

Statement 2 is correct: The original flag code of India 1947 was amended in 2002 after a Supreme Court judgment. This expanded the definition of places where the flag could be displayed or hoisted.

However, part one of the code that deals with the description of the flag had remained untouched.

Source: [The Hindu](#)

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

1. A severe heatwave is declared if the departure from normal temperature is more than 6.4 degrees.
2. A lower wet bulb temperature means the air is moist and can hold less water vapor compares to higher wet bulb temperature.

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 heatwave is declared when the maximum temperature is over 40°C and at least 4.5 notches above normal. A severe heatwave is declared if the departure from normal temperature is more than 6.4 degrees, according to the IMD. Based on absolute recorded temperatures, a heatwave is declared when an area logs a maximum temperature of 45°C. A severe heatwave is declared if the maximum temperature crosses 47 degrees.

Statement 2 is incorrect: A lower wet bulb temperature means the air is drier and can hold more water vapor than it can at a higher wet bulb temperature.

Source: [The Hindu](#)

PRELIMS

Q.1) With reference to North Atlantic Treaty Organization (NATO), consider the following statements:

1. The aim of the organisation is to guarantee the freedom and security of its members through political and military means
2. The organisation is established based on Washington Treaty
3. It is headquartered in New York.

Which of the above statements is/are correct?

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

Answer: b

Recently, the NATO Summit was held recently in Brussels. During the summit, countries agreed to step up their collective defence against threats from all directions.

- North Atlantic Treaty Organization(NATO) also called North Atlantic Alliance is an intergovernmental military alliance.
- Formed in: NATO was formed in 1949 with the signing of the Washington Treaty.
- Members: It consists of 30 countries from North America and Europe.
 - The most recent member state is North Macedonia, included in NATO in 2020.
- Headquarters: Brussels, Belgium.
- The mandate of NATO: NATO's purpose is to guarantee the freedom and security of its members through political and military means

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

1. The language relies upon the Devanagari script.
2. The language is included under the eight Schedule of the Constitution of 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

- **Statement 1 is incorrect:** The language relies upon **the Bengali and Roman scripts** which were adopted based on studies of the **Shyama Charan Tripura Commission** and **Pabitra Sarkar Commission**.
- **Statement 2 is incorrect:** Kokborok has still not been included under the Eight Schedule of the Constitution.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

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

1. It is the world's largest flying telescope.
2. It discovered water molecules (H₂O) on the sun-facing side of the Moon.

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:** It is the world's largest flying telescope.
- **Statement 2 is correct:** In 2020, NASA announced that SOFIA discovered water molecules (H₂O) on the sun-facing side of the Moon. The site is the Clavius Crater, located in the Moon's southern hemisphere

Source: [Article](#)

Q.4) Transnistria sometimes seen in news lies between which of the following two countries?

- a) Ukraine and Belarus
- b) Poland and Romania
- c) Moldova and Ukraine
- d) Turkey and Bulgaria

Answer: c

- Transnistria lies between Moldova to its west and Ukraine towards its east. Often described as a "remnant of the Soviet Union", Transnistria declared independence like Moldova did soon after the break-up of the Soviet Union.
- When Moldovan troops attempted to take over the territory in 1990-1992, Transnistria was able to resist them because of Russian soldiers based in Transnistria. Since then, it has remained free of Moldovan control. However, most countries continue to see Transnistria as part of Moldova.

Source: [Article](#)

Q.5) Consider the following statements regarding the Higher Education Financing Agency (HEFA):

1. It is a statutory body under the Ministry of Education.
2. It provides finance at competitive interest rates to educational institutions and supplements it with grants by channelizing CSR funds.

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 May, 2022

- **Statement 1 is incorrect.** Higher Education Financing Agency (HEFA) is a joint venture of Ministry of Education, Government of India and Canara Bank.
 - HEFA is registered under Section 8 [Not-for-profit] under the Companies Act 2013 as a Union Govt company and as Non-deposit taking NBFC with RBI.
- **Statement 2 is correct.** HEFA Vision: To enable India's premier educational institutions to excel and reach the top in global rankings by financing building world class infrastructure including R&D Infra.
 - HEFA Mission: To provide timely finance at competitive interest rates for capital assets creation in India's educational institutions and supplement it with grants by channelizing CSR funds from the corporate and donations from others.

Q.6) With reference to the Air-independent propulsion (AIP) Systems, consider the following statements;

1. This system allows conventional submarines to remain submerged for much longer than ordinary diesel-electric submarines.
2. All AIPs are based on fuel cells.

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: AIP technology allows a conventional submarine to remain submerged for much longer than ordinary diesel-electric submarines.

Statement 2 is incorrect: There are different types of AIP mechanisms available; For instance, India is looking for AIP based on fuel cells under the P-75I project. These cells convert chemical energy into electrical energy, recharging the batteries of the submarine.

Source: [Indian Express](#)

Q.7) Press Freedom Index is released by which of the following organisation?

- a) United Press International
- b) Reuters
- c) Reporters Without Borders(RSF)
- d) International Federation of Journalists

Answer: C

The World Press Freedom Index 2022 has been released. The index ranks countries based on five indicators: the political context, legal framework, economic context, sociocultural context and security

India's ranking in the Index has fallen down to 150th position in 2022 from 142nd rank in 2021.

Source: [TOI](#)

10 PM Compilation for the Month of May, 2022

Q.8) Consider the following statements;

1. His philosophy was based on the principles of Arivu (true knowledge), ethos (right conduct), and Anubhava (divine experience).
2. He gave two more very important socio-economic principles such as Kayaka and Dasoha.
3. He was a social reformer during the reign of the Kalyani Chalukya/Kalachuri dynasty.

Which of the following personality is described in the statements above?

- a) Sri Sampradaya
- b) Allama Prabhu
- c) Lord Basaveshwara
- d) Ramanujacharya

Answer: C

Source: [PIB](#)

Q.9) Which of the following is/are the benefits of Stubble burning?

1. Kills weeds resistant to herbicide
2. Can reduce nitrogen tie-up
3. Faster clearance of the field

Select the correct answer from the codes given below:

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

Answer: d

The advantages of Stubble burning are,

- It quickly clears the field and is the cheapest alternative.
- Kills weeds, including those resistant to herbicide.
- Kills slugs and other pests.
- Can reduce nitrogen tie-up.

Source: [Indian Express](#)

Q.10) With reference to Wifi Jammers, consider the following statements:

1. These are signal blocking devices which transmits radio waves at the same frequency as a device in order to blur its signal.
2. Sale and use of any wireless device without authorization is legal 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

10 PM Compilation for the Month of May, 2022

Statement 1 is correct: Wifi Jammers are a signal blocking device which transmits synchronized radio waves at the same frequency as a device like a cell phone or drone in order to blur its signal.

Statement 2 is incorrect: Sale and use of any wireless device without authorization and license under the Indian Telegraph Act or Indian Wireless Telegraphy Act is illegal.

Source: [All India Radio](#)

POLITY AND GOVERNANCE

Q.1) Which of the following is/are included under Right to Life?

1. Freedom from noise
2. Right to road in hilly areas
3. Right to timely medical treatment in any hospital

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: a

- Freedom from noise and right to road in hilly areas are both a part of Right to life under Article 21.
- Right to timely medical treatment in government hospitals is part of Right to life.

Source: [Article](#)

Q.2) Local sheet sometimes seen in news is a?

- a) weather phenomenon in Himalayas
- b) layer of fly ash on vegetation near power plants
- c) An extragalactic region of space
- d) deposition of lava near caldera

Answer: c

- The Local Sheet in astronomy is a nearby extragalactic region of space where the Milky Way, the members of the Local Group and other galaxies share a similar peculiar velocity.

Q.3) Global Hunger Index (GHI) is based on which of the following indicators?

1. Child Stunting
2. Child Wasting
3. Undernourishment

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

10 PM Compilation for the Month of May, 2022

- Global Hunger Index is based on four indicators - Undernourishment, Child Stunting, Child Wasting and Child Mortality.
- The report is prepared by 'Welthungerhilfe' and 'Concern Worldwide',

Source: [Article](#)

Q.4) With reference to the pardoning powers of the President in India, consider the following statements:

1. Pardoning power of the President is an executive power.
2. President sits as a court of appeal while exercising his pardoning power.

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

- Pardoning power of the President is independent of the judiciary and is an executive power.
- President does not sit as a court of appeal while exercising his pardoning power.

Source: [Article](#)

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

1. These are quasiparticles.
2. Their movement through the material does not generate any 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.

- Magnons are particle avatars of spin waves which can ripple through a lattice of tiny ferromagnetic particles of nano dimensions.
- Since magnons are quasiparticles, their movement through the material does not generate any heat.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

Q.6) With reference to the **Registration of Births and Death Act (RBD Act)**, consider the following statements:

1. Registration of births, deaths and stillbirths has become mandatory in India under the Act.
2. The registration of births and deaths in the country is done by the functionaries appointed by the Central government.

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 Registration of Births and Death Act (RBD Act) was enacted in 1969 to promote uniformity and comparability in the registration of births and deaths across the country and compilation of vital statistics based thereon.

With the enactment of the Act, registration of births, deaths and stillbirths has become mandatory in India.

Statement 2 is incorrect: The registration of births and deaths in the country is done by the functionaries appointed by the state governments.

Source: [The Hindu](#)

Q.7) With reference to **Shigella Bacteria**, consider the following statements:

1. Currently, there are no vaccines available for shigellosis.
2. It is transmitted through bodily fluids.
3. It is the second leading cause of diarrhea (after Rotavirus) worldwide.

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: Shigella is a genus of bacteria that causes an infection called shigellosis. It is the second leading cause of diarrhea (after Rotavirus) worldwide and the third leading cause of death in children less than 5 years old. Currently, there are no vaccines available for shigellosis.

Statement 2 is incorrect: Shigella is generally transmitted through contaminated food or water, or through person-to-person contact.

Statement 3 is correct: It is the second leading cause of diarrhea (after Rotavirus) worldwide and the third leading cause of death in children less than 5 years old.

Source: [The Hindu](#)

Q.8) State of the World's Forests report is released by which of the following organizations?

- a) United Nations Forum on Forests
- b) International Union of Forest Research Organizations
- c) United Nations Food and Agriculture Organization (FAO)
- d) Global Forest Coalition

Answer: C

Recently, the State of the World's Forests 2022 (SOFO 2022) was released by the United Nations Food and Agriculture Organization (FAO). According to the report, 420 million hectares (mha) of forests have been lost between 1990 and 2020, due to deforestation, though forests cover 4.06 billion ha of the earth's geographical area.

Source: [DTE](#)

Q.9) With reference to the declaration for the Future of the Internet, consider the following statements:

- 1. The Declaration and its guiding principles are legally binding.
- 2. India, China and Russia are part of this declaration.

Which of the statements given above is/are correct?

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

Answer: d

Recently, the United States and 60 other partner countries signed a political declaration called the "Declaration for the Future of the Internet". The declaration aims to operate Internet as a single, decentralised network of networks, where digital technologies are used in a trustworthy way, avoiding unfair discrimination between individuals and allowing for contestability of online platforms, and for fair competition among businesses.

- **Statement 1 is incorrect:** The Declaration and its guiding principles are not legally binding. It should be used as a reference point for public policy makers, as well as citizens, businesses, and Civil Society Organisations.
- **Statement 2 is incorrect:** India, China and Russia are among the large nations that are not part of this declaration. India also did not sign the Budapest Convention on Cybercrime, 2001.

Source: [Business Line](#)

10 PM Compilation for the Month of May, 2022

Q.10) With reference to Health Star Rating system, consider the following statements:

1. Under this, packaged food will be assigned a certain number of stars based on “positive” components balanced against other components.
2. The system is implemented throughout India since 2021.

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 this, packaged food will be assigned a certain number of stars based on “positive” components (fiber, protein, fruit, vegetable, nut and legume content) balanced against other components (energy, sugars, sodium, and saturated fat).

Statement 2 is incorrect: The Food Safety and Standards Authority of India (FSSAI) had recently proposed to introduce ‘Health Start Rating’ (HSR) system. The system is yet to be implemented in India.

Source: [The Hindu](#)

SCIENCE AND TECHNOLOGY

Q.1) With reference to the Virtual Private Network (VPN), consider the following statements:

1. It shields a user’s identity by replacing their computer’s IP address with a temporary IP address hosted on a remote server.
2. It is capable of location spoofing.

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**
- **Statement 2 is correct:** With VPN location spoofing, one can switch to a server to another country and effectively “change” their location.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

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

1. The Parliament enacts a Delimitation Act after every Census.
2. The orders of the Delimitation Commission come under judicial review.

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 **Article 82**, the Parliament enacts a Delimitation Act after every Census.
- **Statement 2 is incorrect:** The Delimitation Commission in India is a high-power body whose orders have the force of law and **cannot be called in question before any court.**

Source: [Article](#)

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

1. Corona is less dense than the surface of the Sun.
2. Sun's surface is a solid mass like 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: a

- **Statement 1 is correct:** The corona is about 10 million times less dense than the Sun's surface. This low density makes the corona much less bright than the surface of the Sun.
- **Statement 2 is incorrect:** Sun's surface isn't solid like Earth's. Instead, the Sun is made of super-hot, electrically charged gas called plasma. This plasma rotates at different speeds on different parts of the Sun.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

Q.4) Arrange the following sources of power generation in the decreasing order of their share in India's power supply?

1. Coal
2. Solar
3. Wind

Select the correct answer from the codes given below:

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

Answer: a

- Coal power generation dominates India's power supply, followed by hydro power. Solar emerged as the third-largest source in 2021, with wind power close behind.

Source: [Article](#)

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

1. The term 'Naga' was created by the British for administrative convenience.
2. The Nagas did not consider themselves a part of British 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: c

Both statements are correct.

- The term 'Naga' was **created by the British for administrative convenience** to refer to a group of tribes with similar origins but distinct cultures, dialects, and customs.
- Residing in the Naga hills of Assam during the advent of the British and the annexation of Assam in 1820, the Nagas **did not consider themselves a part of British India.**

Source: [Article](#)

Q.6) With reference to the National Film Heritage Mission(NFHM), consider the following statements:

1. The Mission aims to preserve, restore and digitize India's cinematic heritage.
2. The mission is implemented by National Film Development Corporation of 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

10 PM Compilation for the Month of May, 2022

Statement 1 is correct: The mission aims to preserve, restore and digitize India's cinematic heritage.

Statement 2 is incorrect: The mission is implemented by National Film Archives of India (NFAI)

Source: [PIB](#)

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

1. These are localized rainfall and thunderstorm events which occur in Bangladesh and the Indian states.
2. They occur mostly in the month of August with their frequency increasing in early December.
3. These are helpful for Kharif crops like jute and paddy and gives relief after the midday heat.

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: These are localized rainfall and thunderstorm events which occur in Bangladesh and the Indian states.

Statement 2 is incorrect: They occur mostly in the month of March with their frequency increasing in May and early June.

Statement 3 is correct: These are helpful for Kharif crops like jute and paddy and gives relief after the midday heat.

Source: [The Hindu](#)

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

1. "Only married woman or her husband" were allowed to medically terminate the pregnancy.
2. Woman does not have the basic right to terminate a pregnancy if and when she decides.

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: Earlier "only married woman or her husband" were allowed to medically terminate the pregnancy, but the recent amendment to the MTP Act, provides the same for "any woman or her partner".

Statement 2 is correct: Although the new rules have increased access to abortions to some extent, they fail to correct a fundamental flaw in the MTP Act that a woman does not have the basic right to terminate a pregnancy if and when she decides.

Source: [Indian Express](#)

Q.9) Which of the following is/are the advantages of Direct Seeding of Rice (DSR)?

1. Require Less Number of Labours
2. Offers avenues for ground water recharge
3. Suitable for all types of 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

Answer: A

In DSR, the pre-germinated seeds are directly drilled into the field by a tractor-powered machine. There is no nursery preparation or transplantation involved in this method. Farmers have to only level their land and give one pre-sowing irrigation.

Advantages of DSR are

- Require Less Number of Labours.
- Offers avenues for ground water recharge.
- Increase in Yield

Disadvantages of DSR are

- Not Suitable for all types of soil: It is suitable for medium to heavy textured soils but not for light textured soil.
- Laser and Levelling are Compulsory

Source: [Indian Express](#)

Q.10) With reference to Grey Slender Loris, consider the following statements:

1. The Grey slender loris is a nocturnal animal.
2. The species occurs in southern and eastern India (Andhra Pradesh, Karnataka, Kerala and Tamil Nadu) and Sri Lanka.

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

About the Grey slender loris: The Grey slender loris belongs to the family Loridae. It is a species of primate. It has got a lean and lanky appearance, with longer and slender limbs, larger ears, pointed snout and eyes circled with black or dark brown.

The Grey slender loris is a nocturnal animal. It comes down into the bushes to feed and crosses open stretches of ground to enter isolated groves or to cross from one tree to another.

Habitat: They are found in tropical rainforests, scrub forests, semi-deciduous forests, and swamps.

Grey Slender Loris generally inhabits dry and drought-prone areas of Dindigul district of Tamil Nadu. The species occurs in southern and eastern India (Andhra Pradesh, Karnataka, Kerala and Tamil Nadu) and Sri Lanka.

Source: [DTE](#)

PRELIMS

Q.1) The relationship between a reef-building coral and zooxanthellae can be characterized under which of the following categories?

- a) Amensalism
- b) Commensalism
- c) Mutualism
- d) Competition

Answer: c

- Shallow water, reef-building corals have a symbiotic relationship with photosynthetic algae called zooxanthellae, which live in their tissues. The coral provides a protected environment and the compounds zooxanthellae need for photosynthesis. In return, the algae produce carbohydrates that the coral uses for food, as well as oxygen. The algae also help the coral remove waste. Since both partners benefit from association, this type of symbiosis is called mutualism.

Source: [Article](#)

Q.2) Which of the following marine species can show biofluorescence?

- 1. Sea Turtle
- 2. Sharks
- 3. Corals

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 of the given species show biofluorescence.

- **Corals:** Corals make so much of one particular protein which causes them to be fluorescent. This composes 15% of the protein in corals. Corals could use biofluorescence as an **attractant for microbes** with whom they have a symbiotic relationship — microbes have very good photoreceptors and can see different colours. So, this could be a great way to signal microbes to inhabit corals.
- **Fishes:** Fishes use biofluorescence as camouflage or to call to other fish with the same phenomena.
 - **Shark:** The molecule causing fluorescence in sharks is an anti-microbial. So, nothing will ever grow on these sharks, even if they just sit at the bottom of the sea.
- **Sea turtle:** Biofluorescence has also been found in a sea turtle.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

Q.3) Consider the following statements regarding Bharat Net Project:

1. It aims to provide a minimum bandwidth of 2gbps to each of the 2.5lakh Gram Panchayats.
2. It is being implemented by a special purpose vehicle named Bharat Broadband Network Ltd. set up under Companies Act.
3. It is being funded by the Universal Service Obligation Fund (USOF).

Which of the statements given above is/are correct?

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

Answer: c

It aims to provide a minimum bandwidth of 100 Mbps to each of the 2.5 lakhs GPs.

- It will facilitate delivery of e-governance, e-health, e-education, e-banking, public internet access, G2C, B2B, P2P, B2C etc., weather, agricultural and other services to rural India.
- It is the new brand name of NOFN (National Optic Fibre Network) which is being implemented in three phases.
- First phase – Envisaged to provide one lakh gram panchayats with broadband connectivity by laying underground optic fibre cable lines with deadline of 31st December 2017, which was achieved.
- Second Phase – It will provide connectivity to all 2,50,000 Panchayats using an optimal mix of underground fibre, fibre over powerlines, radio and satellite media to be completed by March 2019.
- Third Phase – It will be implemented from 2019 to 2023 during which state-of-the-art, future proof network, including fiber between districts and blocks, with ring topology would be created.
- It is being implemented by a special purpose vehicle named Bharat Broadband Network Ltd. set up under Companies Act.
- It is being funded by the Universal Service Obligation Fund (USOF).

Q.4) Which of the following is/are a benefit offered by Wetlands?

1. Prevention of coastal flooding
2. Reduction in Air temperature
3. Anaerobic decomposition of organic matter

Select the 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: a

- Mangroves and salt marshes help shield the 60% of the world's population that live along our coasts from the impacts of coastal flooding.
- Wetlands can also protect us from droughts and reduce air temperatures by up to 10 degrees Celsius.

10 PM Compilation for the Month of May, 2022

- Wetlands produce about one-quarter of the Earth's atmospheric methane through the anaerobic decomposition of organic matter.

Source: [Article](#)

Q.5) Consider the following statements regarding the Storm Surge:

1. Storm surge is the abnormal rise in seawater level during a storm, measured as the height of the water above the normal predicted astronomical tide.
2. The amplitude of the storm surge at any given location depends on the orientation of the coast line with the storm track.

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

Storm Surge.

- Storm surge is the abnormal rise in seawater level during a storm, measured as the height of the water above the normal predicted astronomical tide.
- The surge is caused primarily by a storm's winds pushing water onshore.
- The amplitude of the storm surge at any given location depends on the orientation of the coast line with the storm track;
- The intensity, size, and speed of the storm; and the local bathymetry.

Q.6) With reference to Direct Seeding of Rice (DSR), consider the following statements:

1. In DSR, the pre-germinated seeds are directly drilled into the field by a tractor-powered machine.
2. The spraying of herbicides is not required in DSR.

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: In DSR, the pre-germinated seeds are directly drilled into the field by a tractor-powered machine.

Statement 2 is incorrect: The spraying of herbicides must be done simultaneously along with sowing, and the first irrigation.

Source: [Indian Express](#)

10 PM Compilation for the Month of May, 2022

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

1. Noise pollution and its sources were regulated under the Air (Prevention and Control of Pollution) Act, 1981.
2. The Central Pollution Control Board (CPCB) has laid down the permissible noise levels in India for different areas.

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: Earlier, noise pollution and its sources were addressed under the Air (Prevention and Control of Pollution) Act, 1981. They are now, however, regulated separately under the Noise Pollution (Regulation and Control) Rules, 2000.

Statement 2 is correct: The Central Pollution Control Board (CPCB) has laid down the permissible noise levels in India for different areas.

- In industrial areas, the permissible limit is 75 dB for daytime and 70 dB at night.
- In commercial areas, it is 65 dB and 55 dB.
- In residential areas, it is 55 dB and 45 dB during daytime and night respectively.

Source: [Indian Express](#)

Q.8) Which of the following is/are the benefits of Regional Rapid Transit System (RRTS)?

1. Reduce CO2 emissions
2. Help in Sustainable Urbanization
3. Provide reliable, high frequency, point to point travel

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

The benefits of RRTS are,

RRTS is a new, dedicated, high speed, high capacity, comfortable commuter service connecting regional nodes in NCR.

RRTS is different from conventional Railway as it will provide reliable, high frequency, point to point regional travel at high speed along dedicated path way.

RRTS is different from metro as it caters to passengers looking to travel a relatively longer distance with fewer stops and at higher speed.

Environment Friendly: The corridor is estimated to reduce 2.5 lakh CO2 tonnes/year of total annual greenhouse gas emissions, making the city a cleaner and a much better place to live.

Sustainable Urbanization: The project will serve as a demonstration for developing high-capacity rapid urban transit corridors in other urban areas of India.

Source: [AIR](#)

10 PM Compilation for the Month of May, 2022

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

1. The Fishing Cat is a nocturnal animal.
2. Unlike all other cats, they are not carnivores.

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: Fishing cats are nocturnal or crepuscular which means active during the night or the twilight period but daytime sightings have been reported too.

Statement 2 is incorrect: They are hyper-carnivores—animals that get over 70% of their nutrition from meat—making them excellent predators. They mostly prey on fish and are perfectly adapted to hunt in water. Apart from fish, they also prey on frogs, crustaceans, snakes, birds, and scavengers on carcasses of larger animals.

Source: [Livemint](#)

Q.10) With reference to interstate arrests, consider the following statements:

1. Interstate arrests can be done only with the execution of a warrant issued by a competent court.
2. In interstate arrests, the police have an obligation to present an arrested person before a magistrate within 24 hours.

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: Interstate arrests can be done by the execution of a warrant issued by a competent court or even without a warrant — in which case the concerned state police must inform the local police about the arrest.

Statement 2 is correct: In interstate arrests, the police have an obligation to present an arrested person before a magistrate within 24 hours. This excludes the time necessary for the journey from the place of arrest to the court of the magistrate. Further, no such person shall be detained in custody beyond the said period without the authority of a magistrate.

Source: [Indian Express](#)

PRELIMS

Q.1) 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

Q.2) 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

Q.3) Which of the following is an area of usage geo-textiles?

1. Road construction
2. Soil conservation
3. Protecting the terrain

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

- A geo-textile is any permeable textile used to increase soil stability, provide erosion control, aid in drainage, and reinforce or protect the terrain. They usually come in three forms – woven, needle-punched and heat bonded.
- Apart from road construction, geotextiles can be used for soil conservation, as erosion control blankets and so on.

Source: [Article](#)

Q.4) With reference to CAPF Punarvas scheme, consider the following statements:

1. The scheme will facilitate retired Central Armed Police Force (CAPF) and Assam Rifle personnel to secure employment with private security agencies.
2. The scheme has been launched by the Ministry of 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: a

- **Statement 1 is correct:** With an aim to facilitate retired Central Armed Police Force (CAPF) and Assam Rifle personnel to secure employment with private security agencies, the Ministry of Home Affairs under the directions of the Union Home Minister, Shri Amit Shah has launched 'CAPF Punarvaas', through the Welfare & Rehabilitation Board (WARB).
- **Statement 2 is incorrect:** Scheme has been launched by the Ministry of Home Affairs.

Source: [Article](#)

Q.5) Prosotas dubiosa sometimes seen in news is a species of?

- a) Spider
- b) Butterfly
- c) Frog
- d) Lizard

Answer: b

- Tailless Lineblue or Prosotas dubiosa or Small Purple Lineblue is a blue butterfly (Lycaenidae) species found in Asia to Australia.
- The species was first described by Georg Semper in 1879.

Source: [Article](#)

Q.6) With reference to Humidity and heatwave, consider the following statements:

1. As humidity rises, sweat evaporate faster and it is easy to regulate body temperature.
2. Heatwaves are formed due to magnified effect of paved and concrete surfaces in urban areas.

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: As humidity rises, sweat does not evaporate and makes it difficult to regulate body temperature.

Statement 2 is correct: The major reason behind the formation of heatwaves are,

- Magnified effect of paved and concrete surfaces in urban areas.
- Urban heat island effects.
- High intensity of UV rays in medium-high heat wave zones.

Source: [Indian Express](#)

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

1. It is transmitted from infected animals to humans.
2. The fatality rate of monkeypox is more than 50%.
3. There is no safe, proven treatment for monkeypox yet.

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: Monkeypox is transmitted from infected animals to humans.

Statement 2 is incorrect: According to the WHO, the proportion of patients who die has varied between 0 and 11% in documented cases, and has been higher among young children.

Statement 3 is correct: There is no safe, proven treatment for monkeypox yet.

Source: [Indian Express](#)

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

1. Pulsars are among the few celestial objects that emit circular polarised light.
2. A pulsar is a neutron star that rotates quickly and releases two polarised radio lights.

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

A pulsar (from pulsating radio source) is a neutron star that rotates quickly and releases two polarised radio lights. The beams create a unique timing and polarisation signature as they burst across space.

Pulsars are among the few celestial objects that emit circular polarised light.

Recently, An object that astronomers thought was a distant galaxy has now been discovered as the brightest extra-galactic pulsar ever seen. This pulsar could be the most luminous one ever found- 10 times brighter than any other detected.

Source: [The Hindu](#)

10 PM Compilation for the Month of May, 2022

Q.9) With reference to the Virtual Private Networks (VPN), consider the following statements:

1. VPN masks a person's actual Internet Protocol (IP) address, so the online actions are virtually untraceable.
2. Corporates use VPNs to mask their identity from the government.

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: VPN masks a person's actual Internet Protocol (IP) address, so the online actions are virtually untraceable.

Statement 2 is incorrect: Corporates use VPNs to create an internal network that can be accessed by their employees even when they aren't within the office premises, which is a very important use case under the current work-from-home conditions. Without VPNs, competitors can use third-party trackers and target important employees online to extract confidential business data.

Source: [Indian Express](#)

Q.10) With reference to Front-running, consider the following statements;

1. It involves purchasing stock based on advance non-public information regarding an expected large transaction that will affect the price of the shares.
2. Front Running is legal 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: It involves purchasing stock based on advance non-public information regarding an expected large transaction that will affect the price of the shares.

Statement 2 is incorrect: Front-running is illegal in India.

Source: [Indian Express](#)

PRELIMS

Q.1) Arrange the following from North to South:

1. Duncan passage
2. Little Nicobar
3. Ten-degree channel

Select the correct answer from the codes given below:

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

Answer: d

The correct order from North to South is -

- Duncan passage
- Ten degree channel
- Little Nicobar

Source: [Article](#)

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

1. Avian diversity peaks globally in the tropics
2. The highest richness of threatened species is found in temperate zones.

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:** Avian diversity peaks globally in the tropics
- **Statement 2 is incorrect:** The highest richness of threatened species is found in tropics.

Source: [Article](#)

Q.3) With reference to Atal Pension Yojana, consider the following statements:

1. The scheme is administered by the Pension Fund Regulatory and Development Authority.
2. All bank account holders who are not members of any statutory social security scheme are eligible for the Atal Pension Yojana.

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 scheme is administered by the Pension Fund Regulatory and Development Authority through the National Pension System (NPS).
- Atal Pension Yojana (APY) is open to all bank account holders who are not members of any statutory social security scheme.

Source: [Article](#)

Q.4) Which of the following statements best describes “Renewable Purchase obligation”?

- a) It is a policy instrument that requires distribution companies, energy producers and certain consumers to obtain a share of their electricity from renewable sources
- b) It refers to practices and policies undertaken by corporations established in India to increase their investment in renewable energy that will have a positive influence on the environment.
- c) It allows a country with an emission-reduction or emission-limitation commitment to implement a project in the renewable energy sector.
- d) It is a fee to be paid by an Individual to stop their personal vehicle from getting scrapped after it has failed the fitness test as announced in the recently released voluntary vehicle scrapping policy.

Answer: A

- Renewable purchase obligation (RPOs) are a policy instrument to ensure the uptake of renewable energy. They require Distribution companies (discoms), energy producers and certain consumers to obtain a share of their electricity from renewable sources.
- As renewable deployment remains highly concentrated in a few resource-rich states. Enabling greater inter-regional transfer of RE can help reduce the financial burden on discoms. This can be done through the physical transfer of power through grid interconnections, or through the mechanism of tradable renewable energy certificates.

10 PM Compilation for the Month of May, 2022

Q.5) With reference to Cryptocurrencies and Non-Fungible Tokens (NFTs), consider the following statements:

1. Bitcoin is fungible.
2. Anything digital can be converted into an NFT and monetized.

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:** Cryptocurrencies designed to operate as currencies, such as bitcoin, **are fungible**, which means that any two bitcoins are similar and thus interchangeable.
- **Statement 2 is correct:** Anything digital - images, videos, music, online version of various articles - can be converted into an NFT and monetized.

Q.6) With reference to Occurrence of Cyclones in India, consider the following statements:

1. India has a bi-annual cyclone season that occurs between March to May and October to December.
2. Cyclones are less common during the June to September monsoon season because wind shear is very low.

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: India has a bi-annual cyclone season that occurs between March to May and October to December.

Statement 2 is incorrect: Cyclones are less common during the June to September monsoon season because wind shear is very high. Wind shear the difference between wind speeds at lower and upper atmospheric levels. As a result, clouds do not grow vertically and monsoon depressions often fail to intensify into cyclones.

Source: [Indian Express](#)

Q.7) With reference to standard model of particle physics, consider the following statements:

1. The standard model is thought to be incomplete because it omits gravity.
2. The model does not include clear description of dark matter particles.

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

The Standard Model of Elementary Particles is a theoretical construct in physics that describes particles of matter and their interaction.

It is a description that views the elementary particles of the world as being connected by mathematical symmetries, just as an object and its mirror image are connected by a bilateral (left-right) symmetry.

However, the standard model believed to be incomplete because,

- The standard model is thought to be incomplete because it gives a unified picture of only three of the four fundamental forces of nature — electromagnetic, weak nuclear, strong nuclear and gravitational interactions — it totally omits gravity.
- The model does not include a description of dark matter particles. So far these have been detected only through their gravitational pull on surrounding matter.

Source: [The Hindu](#)

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

1. Egyptian cities used burnt bricks, but the contemporary buildings of Harappan Civilization used only sun dried bricks.
2. Harappan Civilization have signs of three tiers of habitation such as aristocratic settlement, common settlements and middle-rung settlements.

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: Harappan cities used burnt bricks, but the contemporary buildings of Egypt use mainly dried bricks.

10 PM Compilation for the Month of May, 2022

Statement 2 is correct: Harappan Civilization have signs of three tiers of habitation such as aristocratic settlement, common settlements and middle-rung settlements.

Source: [Indian Express](#)

Q.9) Consider the following statements;

1. He was referred to as 'Gurudev', 'Kabiguru', and 'Biswakabi'.
2. He published his first poems aged 16 under the pen-name 'Bhanusimha'.
3. He established the Vishwa-Bharati University, a university that challenged conventional education.

Which of the following personality is described in the lines above?

- a) Harivansh Rai Bachhan
- b) Shyamlal Gupta
- c) Hasrat Mohani
- d) Rabindranath Tagore

Answer: D

Source: [PIB](#)

Q.10) Operation Dudhi was recently seen in the news, is related to which of the following?

- a) Preventing smuggling of wildlife, animal parts and forest products through rail.
- b) Counter insurgency operation conducted by Assam Rifles.
- c) Indian government's evacuation mission from Ukraine.
- d) Indian Military Operation that led to the incorporation of Portuguese India (Goa, Daman, and Diu) into India.

Answer: B

Operation WILEP: Under this, RPF takes action against the smuggling of wildlife, animal parts and forest products through rail.

Operation Ganga: Indian government's evacuation mission from Ukraine.

Operation Vijay: Operation by the Military of India that led to the incorporation of Portuguese India (Goa, Daman, and Diu) into India.

Operation Dudhi: A team of 15 soldiers of the Assam Rifles' 7th Battalion led by Naib Subedar Padam Bahadur Chhetri had on May 5, 1991, gunned down 72 Pakistan-trained extremists and captured 13 others at 14,000 ft in J&K. Two Assam Rifles soldiers died during the six-hour gun battle.

Recently, Assam Rifles felicitated the surviving soldiers of Operation Dudhi. The operation is marked as India's most successful counter-insurgency operation which is conducted more than 30 years ago.

Source: [The Hindu](#)

PRELIMS

Q.1) With reference to coral reefs, consider the following statements:

1. Coral reefs are absent in cold waters.
2. All types of coral reefs need sunlight to survive.

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

- **Statement 1 is incorrect:** They are also found in cold waters (temperature as low as 4°C) at depths between 40m to 2000m
- **Statement 2 is incorrect:** Coral reefs present in cold waters do not require sunlight to survive and don't have zooxanthellae living in their polyps.

Source: [Article](#)

Q.2) In which of the following ways do the birds contribute to the various ecosystem services?

1. Pest control
2. Birdwatching
3. Seed dispersers

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

- Birds **contribute toward many ecosystem services** that either directly or indirectly benefit humanity. These include provisioning, regulating, cultural, and supporting services.
- The **functional role of birds within ecosystems** as pollinators, seed-dispersers, ecosystem engineers, scavengers and predators facilitates accrual and maintenance of biodiversity. It also supports human endeavours such as **sustainable agriculture via pest control**, besides aiding other animals to multiply.
- The **cultural role of birds** is perhaps more important than any other taxonomic group, the study says. Beyond its symbolic and artistic values, **birdwatching is a global pastime** practised by millions of people.

Q.3) With reference to Advanced Chemistry Cell (ACC) batteries, consider the following statements:

1. They can store electric energy either as electrochemical or as chemical energy.
2. Currently, all the demand for the ACCs is satisfied through imports 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: C

- ACCs are the new generation of advanced storage technologies. They can store electric energy either as electrochemical or as chemical energy. The cells then can convert it back to electric energy as and when required.
- Currently, all the demand for the ACCs is satisfied through imports in India.

Source: [Article](#)

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

1. Ocean warming is slowing algae growth in shallow wetland areas.
2. Ocean warming is accelerating sea level rise which causes 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: D

- 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.

Q.5) Which of the following practices will help in Preventing Ground water exploitation?

1. Zero Tillage
2. Replacing sugarcane plantation with cotton
3. Adoption of modern precision irrigation technologies

Select the correct answer using the code given below:

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

Answer: A

10 PM Compilation for the Month of May, 2022

- Cotton is also a water intensive crop. Following are the Typical Crop water requirement (in litres) per kilogram of crop. For Cotton 7,000 - 29,000 and for Sugar Cane it is 1,500 - 3,000.
- The No Till system is very effective to increase soil water infiltration, to reduce evaporation from soil and also to reduce water run-off. The water availability for crops is increased. The savings in soil moisture can be just as important, especially in a year when soil moisture and precipitation are short or when irrigation is costly or water supplies are limited.

Q.6) Who among the following rejected the title of Knighthood and refused to accept a position in the Council of the Secretary of State for India?

- a) Motilal Nehru
- b) M.G. Ranade
- c) G.K. Gokhale
- d) B.G. Tilak

Answer: C

The Prime Minister of India paid tribute to Gopal Krishna Gokhale on his Jayanti.

Gopal Krishna Gokhale was a great social reformer and educationist who provided exemplary leadership to India's freedom movement. He rejected the title of Knighthood and refused to accept a position in the Council of the Secretary of State for India.

- He established the Servants of India Society in 1905 for the expansion of Indian education.
- He was also associated with the Sarvajanic sabha journal started by Govind Ranade.
- In 1908, Gokhale founded the Ranade Institute of Economics.
- He started English weekly newspaper, The Hitavada (The people's paper).

Source: [PIB](#)

Q.7) Which of the following is/are the impacts of Depreciation of Indian Rupee?

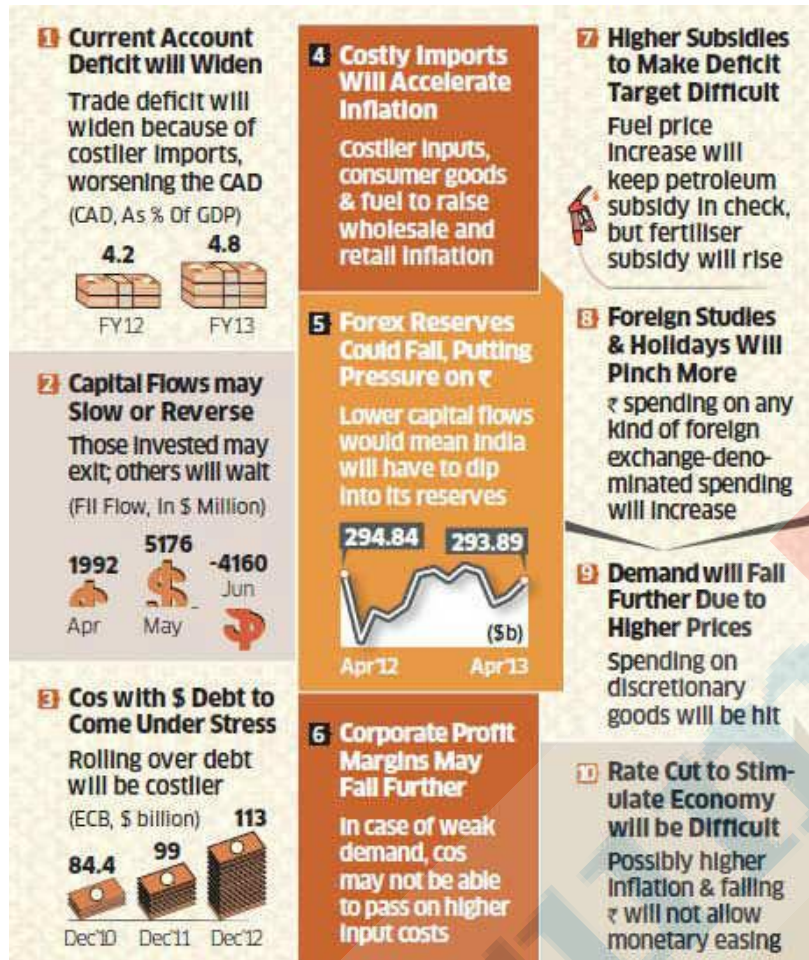
1. Current Account Deficit will widen.
2. Corporate profit margin may increase.
3. Reduction in foreign trips by Individuals.

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

With depreciation, imports become more expensive and exporters earn more money. This will result in the following impacts,



Source: [The Hindu](#)

Q.8) With reference to Radio Access Network(RAN), consider the following statements:

1. RAN uses cellular radio connections to link individual devices to other parts of a network.
2. With Open RAN, telecom players would have the flexibility to use in-house solutions or solutions from multiple vendors for RAN services.

Which of the statements given above is/are correct?

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

Answer: C

Both the statements are correct.

RAN is a key part of a mobile network system that uses cellular radio connections to link individual devices to other parts of a network.

10 PM Compilation for the Month of May, 2022

It comprises antennae which transmit and receive signals to and from our smartphones or other compatible devices. The signal is then digitized in the RAN-base station and connected to the network.

About Open RAN

Currently, RAN is provided as an integrated platform of both hardware and software. Therefore, it is difficult to mix vendors for the radio and baseband unit and in most cases, they come from the same supplier.

The idea of Open RAN is to change this. It aims to enable a multi-supplier RAN solution that allows for the separation - or disaggregation - between hardware and software.

Source: [PIB](#)

Q.9) Oxybenzone is most likely present in which of the following?

- a) Toiletries
- b) Sun Screens
- c) Plastic Containers
- d) Body Deodorants

Answer: B

Researchers have identified a mechanism by which oxybenzone - a common sunscreen component - may be hastening the demise of reefs.

Oxybenzone is the sun-blocking agent in many sun creams. Its chemical structure causes it to absorb UV rays, preventing damage to skin cells.

But it has attracted controversy in recent years after studies reported that it can damage coral reefs. These concerns have led to some beaches in Hawaii, Palau and the US Virgin Islands, banning oxybenzone-containing sunscreens.

Source: [DTE](#)

Q.10) Which one of the following pairs of islands is separated from each other by the 'Ten Degree Channel'?

- a) Andaman and Nicobar
- b) Nicobar and Sumatra
- c) Maldives and Lakshadweep
- d) Sumatra and Java

Ans: A

Eight Degree channel: The maritime boundary between the Maldives and India runs through the Eight Degree Channel. It separates the islands of Minicoy and Maldives.

Nine Degree channel: It separates the island of Minicoy from the main Lakshadweep archipelago.

Ten Degree channel: It separates the Andaman Islands and the Nicobar Islands from each other in the Bay of Bengal.

Source: [The Hindu](#)

PRELIMS

Q.1) With reference to Tomato flu, consider the following statements:

1. It can spread from person to person.
2. There's no specific drug for this flu.

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.

- Like other cases of flu, tomato fever is also contagious. If someone is infected with this flu, they need to be kept in isolation as this could spread rapidly from one person to another,
- This flu is a self-limiting one and there is no specific drug for this. This means that the symptoms will resolve overtime on their own if supportive care is given.

Source: [Article](#)

Q.2) With reference to the United Nations Convention to Combat Desertification (UNCCD), consider the following statements:

1. The Convention addresses specifically the arid, semi-arid and dry sub-humid areas.
2. It is the only convention stemming from a direct recommendation of the Rio Conference's Agenda 21.

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:** The Convention addresses specifically the arid, semi-arid and dry sub-humid areas, known as the dryland, where some of the most vulnerable ecosystems and peoples can be found.
- **Statement 2 is correct:** It is the only legally binding instrument that came out as a result of a direct recommendation of Agenda 21.

Source: [Article](#)

Q.3) Prakash Singh judgement sometimes seen in news is associated with which of the following?

- a) Amendability of Preamble
- b) Police reforms
- c) Basic structure of the Constitution
- d) President's rule

Answer: b

- The Prakash Singh judgement issued a series of measures that were to be undertaken by the governments to ensure the police could do their work without worrying about any political interference.

Source: [Article](#)

Q.4) The right of a pregnant woman to continue pregnancy or not is part of which of the following fundamental rights in India?

- 1. Right to Life
- 2. Right to Privacy
- 3. Right to Health

Select the correct answer from the codes given below:

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

Answer: D

- In case of abortion in certain circumstances, permission to terminate the pregnancy was sought from the judiciary. In various case, the courts had ruled that the **right of a pregnant woman to decide on the continuation of her pregnancy is a part of her right to health and right to life.** Therefore, right is **non-negotiable.**
- After **the right to privacy judgment**, it has been argued that the right of a pregnant person to **continue a pregnancy or not has to be part of the right to privacy and the right to life.**

Source: [Article](#)

Q.5) Consider the following statements

1. Direct taxes go entirely to the Central government in India
2. As per recommendations of 15th Finance Commission, Central government is supposed to distribute 41% of its total revenue to the 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: c

- **Statement 1 is correct.** in India, direct taxes go entirely to the Central government.
- **Statement 2 is correct.** As per 15th Finance commission (FC) report The Central government is supposed to distribute 41% of its gross tax revenues (reduced from 42% after the formation of new Union Territories in Jammu and Kashmir) to the State governments.

Q.6) Pantanal Wetland which is seen in news recently, is located in which of the following country?

- a) India
- b) Spain
- c) Brazil
- d) Mexico

Answer: C

Pantanal Wetland (world's largest wetland) is at the risk of collapse due to a series of decisions that aims to open up the wetland to more intensive uses that collectively threaten the long-term survival of the Wetland.

Pantanal Wetland is a natural region encompassing the world's largest tropical wetland area and the world's largest flooded grasslands.

Location: It is located mostly within Brazil, but it extends into portions of Bolivia and Paraguay.

Source: [DTE](#)

10 PM Compilation for the Month of May, 2022

Q.7) With reference to Association of Asian Election Authorities(AAEA), consider the following statements:

1. AAEA aims to promote and institutionalize open and transparent elections, independent and impartial election authorities.
2. India is not a member of AAEA.

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: AAEA aims to promote and institutionalize open and transparent elections, independent and impartial election authorities.

Statement 2 is incorrect: India is a member of AAEA. Recently, India has been unanimously elected as the new Chair of the AAEA for 2022-2024 at Manila, Philippines.

Source: [AIR](#)

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

1. Adenovirus infections are fatal and they require sophisticated treatments.
2. Scientists have used modified adenoviruses to build other vaccines.

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: Adenovirus Infections are mild, and they typically get better on their own.

Statement 2 is correct: Scientists have used modified adenoviruses to build other vaccines such as those that protect against COVID-19.

Source: [Livemint](#)

Q.9) Mission Amrit Sarovar is related to which of the following?

- a) To make India ODF within 2 years in Mission Mode.
- b) To reduce drinking water scarcity in Indian Cities.
- c) To revamp rivers in Indian forests.
- d) To develop and rejuvenate water bodies in each district of the country.

Answer: D

The Prime Minister has launched a Mission Amrit Sarovar.

10 PM Compilation for the Month of May, 2022

The Mission aims to develop and rejuvenate 75 water bodies in each district of the country as a part of the celebration of Azadi ka Amrit Mahotsav. In total, it would lead to the creation of 50,000 water bodies of a size of about an Acre or more.

Source: [PIB](#)

Q.10) Which of the following is/are the benefits of food fortification?

1. Requires no alteration of food characteristics.
2. It has a high benefit-to-cost ratio.
3. Increase participation from small industries.

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: A

The advantages of food fortification are,

High benefit-to-cost ratio: Food fortification has a high benefit-to-cost ratio. The Copenhagen Consensus estimates that every 1 Rupee spent on fortification results in 9 Rupees in benefits to the economy.

No alteration of food characteristics: It does not alter the characteristics of the food like the taste, aroma or the texture of the food (Statement 1 and 2 are correct).

Quick implementation: It can be implemented quickly as well as show results in improvement of health in a relatively short period of time.

Wide reach: Since the nutrients are added to widely consumed staple foods, fortification is an excellent way to improve the health of a large section of the population, all at once.

However the fortification has the following issues,

Loss of natural protective substances: Sometimes, fortification can have the opposite effect. Natural foods contain protective substances such as phytochemicals and polyunsaturated fat that are adversely affected by the process of blending micronutrients.

Impact on small industries: Fortification creates an assured market for multinationals. It could threaten the livelihoods of small units across India. Like, in case of rice and oil processing. Although the FSSAI claims that medium and large rice millers will be incentivised to fortify rice, the process itself is expensive and prohibitive for small players. An indicative cost of setting up rice fortification infrastructure for a medium-sized mill is Rs 3.2 crore, according to the government. **(Statement 3 is incorrect)**

Source: [Business Standard](#)

PRELIMS

Q.1) Which of the following is a biodegradable material?

1. Glass
2. E-waste
3. DDT (Dichlorodiphenyltrichloroethane)
4. Leather

Select the correct answer using the code given below:

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

Answer: D

- Leather is made from skins of animals. So, in its true natural form, leather is indeed
- DDT is non-biodegradable. It's a persistent organic pollutant that can't decompose into simple, harmless substances in nature.
- Glass and e- waste are also non-biodegradable.

Q.2) Consider the following statements:

1. Followers of Judaism have been granted minority community status in India.
2. States in India have the power to recognize any community as a minority 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

- **Statement 1 is incorrect:** Centre has notified the following six communities as minority communities in India - Muslims, Christians, Sikhs, Buddhists, Parsis and followers of Jainism.
- **Statement 2 is correct:** States can have minorities notified as such within their jurisdiction. For instance: Maharashtra recognising Jews as a minority community and Karnataka recognising speakers of several languages as linguistic minorities.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

Q.3) With reference to retail inflation, consider the following statements:

1. It refers to the prices faced by consumers, and not the ones prevailing in the wholesale market.
2. The RBI targets retail inflation rate to maintain price stability.

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.

- Retail inflation essentially refers to the rate at which the general price level went up in a particular month (April in the current instance) over what it was in the same month a year ago.
 - The change is expressed as a percentage.
 - Retail inflation also refers to the **prices faced by consumers**, and not the ones prevailing in the wholesale market.
- The retail inflation level is the most important measure of inflation in India because **it is this inflation rate that India's central Bank, the RBI, targets to maintain price stability**. According to the law, the RBI is supposed to keep overall retail inflation between 2% and 6%.

Source: [Article](#)

Q.4) Hallikar, Kangayam and Kenkath sometimes seen in news belong to which of the following categories?

- a) Tribal art forms
- b) Cattle breeds
- c) Medicinal herbs
- d) Harvest festivals

Answer: B

All of the mentioned terms are cattle breeds found in different parts of the country.

- Kenkatha in Madhya Pradesh
- Kangayam - Tamil Nadu
- Hallikar - Karnataka

Source: [Article](#)

Q.5) With reference to the Prompt corrective action (PCA) Framework, consider the following statements regarding:

1. It has been developed by the Securities & Exchange Board of India.
2. A company put under PCA is barred from trading on exchanges.

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

Both statements are incorrect.

- The Reserve Bank of India has specified certain regulatory trigger points, as a part of prompt corrective action (PCA) Framework, in terms of three parameters, i.e. capital to risk weighted assets ratio (CRAR), net non-performing assets (NPA) and Return on Assets (RoA), for initiation of certain structured and discretionary actions in respect of banks hitting such trigger points.
- Reserve Bank of India (RBI) has recently taken out IDBI Bank from the prompt corrective action (PCA) framework. But it is still subject to certain conditions and continuous monitoring.

Q.6) With reference to Hypertension, consider the following statements:

1. Hypertension is defined as having a diastolic blood pressure level greater than or equal to 140 mmHg or a systolic blood pressure level greater than or equal to 90 mmHg.
2. Southern States have a higher prevalence of hypertension than the national average.

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: Hypertension is defined as having systolic blood pressure level greater than or equal to 140 mmHg or diastolic blood pressure level greater than or equal to 90 mmHg or/and taking anti-hypertensive medication to lower his/her blood pressure.

Statement 2 is correct: Southern States have a higher prevalence of hypertension than the national average, according to the latest edition of the National Family Health Survey.

While 21.3% of women and 24% of men aged above 15 have hypertension in the country, the prevalence is the highest in Kerala where 32.8% men and 30.9% women have been diagnosed with hypertension.

Source: [The Hindu](#)

10 PM Compilation for the Month of May, 2022

Q.7) Justice JS Verma Committee, which was seen in news recently, is related to which of the following?

- a) Regarding the legality of Sedition.
- b) To propose the changes to India's rape laws.
- c) Regarding the pardoning powers of the Governor.
- d) To propose reforms in physical education.

Answer: B

In 2012, the Justice JS Verma Committee was tasked with proposing amendments to India's rape laws.

While some of its recommendations helped shape the Criminal Law (Amendment) Act passed in 2013, some suggestions, including that on marital rape, were not acted on.

Recently, the Delhi High Court delivered a split verdict in a batch of petitions challenging the exception provided to marital rape in the Indian Penal Code (IPC).

Source: [The Hindu](#)

Q.8) With reference to Protected Mobility Vehicles(PMV), consider the following statements:

- 1. PMV provides protection to the soldiers travelling inside the vehicle from mine blasts and sudden attacks by small arms.
- 2. India is importing all the PMVs it required.

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: PMV provides protection to the soldiers travelling inside the vehicle from mine blasts and sudden attacks by small arms.

Statement 2 is incorrect: India has the capability of producing PMVs. In April 2022, the Tata Advanced Systems Limited (TASL) handed over the first of such Infantry Protected Mobility Vehicles(IPMVs) to the Chief of Army Staff.

Hence, TASL is now the first private sector company in the country to produce IPMV in collaboration with the DRDO.

Source: [Indian Express](#)

10 PM Compilation for the Month of May, 2022

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

1. These are caused by shifts in Martian tectonic plates.
2. InSight Mars lander has detected the largest quake ever observed on Mars.

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: On Earth, quakes are caused by shifts in tectonic plates.

However, Mars does not have tectonic plates and its crust is a giant plate. Therefore, NASA notes, 'marsquakes' are caused due to stresses that cause rock fractures or faults in their crust.

Statement 2 is correct: InSight Mars lander has detected the largest quake ever observed on another planet including Mars.

Source: [Indian Express](#)

Q.10) With reference to Black hole, consider the following statements;

1. Black holes are places in space so dense, with such immense gravity, that beyond a certain boundary not even light can escape from it.
2. They form at the end of some stars' 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: C

Both the statements are correct.

Black holes are places in space so dense, with such immense gravity, that beyond a certain boundary called the "event horizon," nothing—not even particles and electromagnetic radiation such as light—can escape from it.

They form at the end of some stars' lives. When stars, which are around twenty times bigger than the sun exhaust all the energy, they can collapse in on themselves forming a black hole.

Source: [Indian Express](#)

International Relations

Q.1) Macolin Convention which is seen in news recently, is related to which of the following?

- a) To reduce terror financing in West Asia.
- b) To improve IPR policies in participant countries.
- c) To reduce deforestation in developing countries.
- d) To check the match-fixing in Sports Competitions.

Answer: D

The 12th meeting of Interpol’s Match-Fixing Task Force (IMFTF), in which the Central Bureau of Investigation (CBI) was one of the participants, concluded with a call for harmonised global efforts to curb competition manipulation.

The members deliberated on various mechanisms to improve intelligence sharing “such as the establishment of national platforms, as outlined in the Macolin Convention, that centralise and analyse information on irregular and suspicious trends”.

The Council of Europe Convention on the Manipulation of Sports Competitions, known as the Macolin Convention, is a multilateral treaty aimed at checking match-fixing. It came into force on September 1, 2019.

Source: [The Hindu](#)

Q.2) With reference to Ecology, Consider the following statements:

- 1. Shallow ecologism reduces the inequalities between countries.
- 2. Shallow ecologism primarily serves to maintain the lifestyle of those dwelling in developed countries.
- 3. Deep ecologism believes that humans should radically change their relationship with nature.

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: B

Shallow ecology refers to the philosophical or political position that environmental preservation should only be practiced to the extent that it meets human interests.

- **Statement 1 is incorrect:** Shallow ecologism further widens the inequalities between countries.
- **Statement 2 is correct:** Shallow ecologism primarily serves to maintain the lifestyle of those dwelling in developed countries.

Deep ecologism believes that humans should radically change their relationship with nature. Its proponents reject shallow ecologism for prioritizing humans above other forms of life, and

10 PM Compilation for the Month of May, 2022

subsequently preserving the environmentally destructive way of life in modern societies.
(Statement 3 is correct)

Source: [The Hindu](#)

Q.3) With reference to Foreign Portfolio Investments, consider the following statements;

1. FPI is part of a country's capital account and is shown on its Balance of Payments (BOP).
2. FPI promotes the development of Equity 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

Both statements are correct.

Foreign portfolio investment (FPI) consists of securities and other financial assets passively held by foreign investors. It does not provide the investor with direct ownership of financial assets and is relatively liquid depending on the volatility of the market.

FPI is part of a country's capital account and is shown on its Balance of Payments (BOP). FPI is often referred to as "hot money" because of its tendency to flee at the first signs of trouble in an economy. FPI is more liquid, volatile and therefore riskier than FDI.

As the market's liquidity and functionality evolve with FPIs, equity prices will become value-relevant for investors, ultimately driving market efficiency.

Source: [Indian Express](#)

Q.4) With reference to green manure, consider the following statements;

1. Green manure must be leguminous in nature, bear maximum nodules on its roots to fix large amount of atmospheric nitrogen in the soil.
2. Green manures are crops grown specifically for maintaining soil fertility and structure.

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 the statements are correct.

10 PM Compilation for the Month of May, 2022

Green manures are crops grown specifically for maintaining soil fertility and structure. They are normally incorporated back into the soil, either directly, or after removal and composting.

Green manure varieties are incorporated into the soil when the crop is 42-56 days old. Green manure must be leguminous in nature, bear maximum nodules on its roots to fix large amount of atmospheric nitrogen in the soil.

Source: [Indian Express](#)

Q.5) Recently which of the following state has become the first smoke free state in India?

- a) Kerala
- b) Himachal Pradesh
- c) Arunachal Pradesh
- d) Tamil Nadu

Answer: B

Himachal Pradesh, in January 2022, became the first 'smoke-free state' in India.

The major milestone was achieved while riding on the back of welfare schemes like 'Ujjwala Yojana' of Centre and 'Himachal Grihini Suvidha scheme of the state government'.

It is also the 100 percent LPG-enabled state in the country. It simply refers to the fact that 100% of households in Himachal have LPG connections in their houses.

Source: [AIR](#)

Q.6) With reference to Black Hole and Neutron Stars, consider the following statements:

1. Like black holes, neutron stars are formed due to the process known as supernova explosion
2. The mass of a neutron star is generally 1 to 3 times the mass of Sun. Anything less than that will be identified as a black hole.
3. Neutron star would be having a hard surface while a black hole does not have a surface.

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: Like black holes, neutron stars are formed due to the process known as supernova explosion when the centre of a very big star falls in upon itself, or collapses.

Statement 2 is incorrect: The mass of a neutron star is generally 1 to 3 times the mass of Sun. Anything greater than that will be identified as a black hole.

10 PM Compilation for the Month of May, 2022

Statement 3 is correct: Neutron star would be having a hard surface while a black hole does not have a surface.

Source: [The Hindu](#)

Q.7) Ujh Multipurpose Project is located in which of the following state?

- a) Assam
- b) Haryana
- c) Punjab
- d) Jammu & Kashmir

Answer: D

Ujh Multipurpose (National) Project is being carried out in Kathua region of Jammu & Kashmir.

The expected timeline of completion of the project is about 6 years and once completed, the project will store around 781 Million Cubic meter of waters of river Ujh (a tributary of river Ravi).

Source: [PIB](#)

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

1. Madtsoiidae is an extinct group of turtle species.
2. Their fossil deposits have found in Ladakh Himalaya.

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: Madtsoiidae is an extinct group of medium-sized to gigantic snakes, firstly appeared during the late Cretaceous and mostly distributed in the Gondwanan landmasses.

Statement 2 is incorrect: Recently, their fossil deposits have been found in Ladakh Himalaya. This is for the first time indicating their prevalence in the subcontinent for much longer time than previously thought.

Source: [Tribune](#)

Q.9) Which of the following countries is/are sharing the land border with Côte d'Ivoire?

1. Ghana
2. Sierra Leone
3. Mali
4. Togo
5. Guinea

Select the correct answer from the codes given below.

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

Answer: C

The fifteenth session of the Conference of the Parties (COP15) of the United Nations Convention to Combat Desertification (UNCCD) is being held in Abidjan, Côte d'Ivoire, from 9 to 20 May 2022.



Source: [PIB](#)

Q.10) With reference to National Data & Analytics Platform(NDAP), Consider the following statements?

1. The portal aims to democratize access to public government data.
2. It is an initiative of 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: A

Statement 1 is correct: The portal aims to democratize access to public government data by making data accessible, interoperable, interactive and available on a user-friendly platform.

Statement 2 is incorrect: It is an initiative of NITI Aayog.

Source: [PIB](#)

GEOGRAPHY

Q.1) With reference to twin cyclones, Consider the following statements:

1. Twin cyclones are basically caused by equatorial Rossby waves.
2. Both Cyclones will always form in the Northern hemisphere.
3. Among them, one will have the positive spin and the other will have the negative spin.

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: B

- **Statement 1 is correct:** Twin cyclones are basically caused by equatorial Rossby waves. They are huge waves in the ocean with wavelengths of around 4,000–5,000 kilometres. This system has a vortex in the northern hemisphere and another in the southern hemisphere, and each of these is a mirror image of the other.
- **Statement 2 is incorrect:** Recently a pair of tropical cyclones, Asani & Karim (one in the northern hemisphere and one in the southern hemisphere) one on each side of the equator, have been formed.
- **Statement 3 is correct:** The vortex in the north spins counterclockwise and has a positive spin, while the one in the southern hemisphere spins in the clockwise direction and therefore has a negative spin.

Source: [The Hindu](#)

10 PM Compilation for the Month of May, 2022

Q.2) Amalthea, which was seen in news recently, is related to which of the following?

- a) One of Jupiter's 53 named satellites
- b) New potentially dangerous near-Earth Asteroid
- c) New black hole identified in our galaxy
- d) Newly found object in space that can reveal details about Super Novas.

Answer: A

The moon Amalthea is one of Jupiter's 53 named satellites; it was the first to be discovered after the four Galilean moons, and it is the fifth-largest overall.

According to recent findings, Amalthea appears to radiate out more heat than it receives from the sun, which NASA suggests may be due to Jupiter's magnetic field or from tidal stresses.

Amalthea also contributes to one of the Gossamer Rings of Jupiter — the Amalthea Gossamer Ring — which is the faint innermost Gossamer ring of the planet. The Gossamer Rings are outside the main Jovian ring.

Only two missions have visited Amalthea: Voyager and Galileo. Both the Voyager 1 and Voyager 2 spacecraft photographed the Jovian moon during their flybys in 1979.

Source: [Space.com](https://www.space.com)

GEOGRAPHY

Q.3) With reference to the Southwest Monsoon, consider the following statements;

- 1. The onset of southwest monsoon is announced by Kerala Government.
- 2. Southwest monsoon season brings more than 70 per cent of the country's annual rainfall.

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 onset of southwest monsoon is announced by IMD, after the following parameters are met,

Rainfall: At least 60% of 14 designated meteorological stations in Kerala and Lakshadweep record at least 2.5 mm of rain for two consecutive days at any time after May 10.

Wind field: The depth of westerlies should be upto 600 hectopascal (1 hPa is equal to 1 millibar of pressure) in the area bound by the equator to 10°N latitude, and from longitude 55°E to 80°E.

Heat: Outgoing Longwave Radiation (OLR) value (a measure of the energy emitted to space by the Earth's surface, oceans, and atmosphere) should be below 200 watt per sq m (wm²) in the box confined by 5-10°N latitude and 70-75°E latitude.

Statement 2 is correct: Southwest monsoon season over India, which brings more than 70 per cent of the country's annual rainfall.

Source: [Indian Express](https://www.indianexpress.com)

Q.4) Which of the following is/are the advantages of mRNA Vaccines?

1. Non-infectious, non-integrating in nature
2. Highly efficacious compare to other vaccines
3. Do not require a host for growth

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

The major advantages of mRNA vaccines are,

1. They are non-infectious, non-integrating in nature, and degraded by standard cellular mechanisms.
2. Highly efficacious because of their inherent capability of being translatable into the protein structure inside the cell cytoplasm.
3. mRNA vaccines are fully synthetic and do not require a host for growth, e.g., eggs or bacteria. Therefore, they can be quickly manufactured inexpensively to ensure their "availability" and "accessibility" for mass vaccination on a sustainable basis.

Source: [The Hindu](#)

ECONOMY

Q.5) With reference to Fertilizer subsidy, consider the following statements;

1. The MRPs of urea and non-urea fertilisers are decontrolled or fixed by the companies.
2. All Non-Urea based fertilisers are regulated under Nutrient Based Subsidy Scheme.

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 MRPs of non-urea fertilisers are decontrolled or fixed by the companies. But, for urea the manufacturers are required to sell the fertiliser at the government-set Maximum Retail Price (MRP).
- **Statement 2 is correct:** All Non-Urea based fertilisers are regulated under Nutrient Based Subsidy Scheme.

Note: The Centre pays subsidy on urea to fertiliser manufacturers on the basis of cost of production at each plant.

Source: [Indian Express](#)

10 PM Compilation for the Month of May, 2022

Q.6) With reference to the Devasahayam Pillai, consider the following statements:

1. He is considered as the first Indian to be converted to Christianity.
2. He served in the court of Travancore's Maharaja Marthanda Verma.

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: Devsahayam Pillai, an 18th-century Hindu convert to Christianity would be made a saint by the Roman Catholic Church in the Vatican. He became the first Indian layman to be declared a saint by the Vatican.

Statement 2 is correct: He grew up in an upper caste family of temple priests and was known as Nilakanda Pillai.

He went on to serve in the court of Travancore's Maharaja Marthanda Verma. It was here that he met a Dutch naval commander, who taught him about the Catholic faith.

He then converted to Christianity in 1745. He took the Christian name Lazarus, but later came to be known as Devasahayam (God's help).

Source: [Indian Express](#)

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

1. Space debris includes only man-made debris in space.
2. Kessler Syndrome is related to 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: Space debris can include natural space debris such as meteoroids, or man-made ones. Man made debris include defunct spacecrafts and satellites, stages of rockets which have launched payloads, dead satellites, satellite explosions and collisions.

Statement 2 is incorrect: Free floating space debris is a potential hazard for operational satellites and colliding with them can leave the satellites dysfunctional.

This is referred to as Kessler Syndrome, named after National Aeronautics and Space Administration (NASA) scientist Donald Kessler in 1978.

Source: [Indian Express](#)

10 PM Compilation for the Month of May, 2022

Q.8) With reference to Fire Safety, consider the following statements;

1. The Fire Services is a concurrent subject.
2. National Building Code of India (NBC) published by Bureau of Indian Standards, mentions about fire safety requirements in buildings.

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 Fire Services is a State subject and has been included as a Municipal function in the 12th Schedule of the Constitution of India under Article 243 (W).

Statement 2 is correct: National Building Code of India (NBC) published by Bureau of Indian Standards is the comprehensive building Code. It is a national instrument which provides guidelines for regulating the building construction activities across the country.

The Code mainly contains administrative regulations, development control rules and general building requirements; fire safety requirements; stipulations regarding materials, etc.

Source: [The Hindu](#)

Q.9) With reference to Pravaig Field Pack, consider the following statements:

1. It is a portable contains various spare parts.
2. It can be used to energize military personnel equipment and to deploy remote sensors.

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 portable heavy-duty power bank battery.

Statement 2 is correct: It can be used to energize military personnel equipment and to deploy remote sensors.

Source: [The Hindu](#)

Q.10) Which of the following is/are the benefits of battery swapping?

1. Reduction in cost of operating EVs.
2. Reduce charging time of battery vehicles.
3. Requires limited parking in charging stations.

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

10 PM Compilation for the Month of May, 2022

The benefits of Battery Swapping are,

Cost Benefits: While battery swapping involves a greater number of batteries than conventional batteries, each swappable battery can be smaller in capacity (kWh) which reduces the cost.

Reduces Charging Time: With existing technologies for e-2Ws and e-3Ws, regular charging takes at least 3 to 4 hours, adding to inconvenience and creating range anxiety. Whereas, battery swapping is done in minutes, as the batteries are pre-charged in swapping stations.

Less Space: Charging stations require more space, since vehicles need to be parked next to the chargers during the charging process. Battery swapping is a relatively quicker exercise and swapping stations will require limited parking. This would address space constraints in urban areas.

Source: [ForumIAS Blog](#)

ENVIRONMENT

Q.1) Ramgarh Vishdhari Wildlife Sanctuary is located in which of the following states?

- Haryana
- Gujarat
- Rajasthan
- Uttar Pradesh

Answer: C

- Ramgarh Vishdhari Wildlife Sanctuary has been notified as a tiger reserve on May 16, 2022, after a nod by the Union Ministry of Environment, Forest and Climate Change (MoEF&CC) in July 2021.
- It is now India's 52nd tiger reserve and Rajasthan's fourth, after Ranthambore, Sariska and Mukundra.

Source: [Article](#)

Q.2) With reference to Kanheri caves in India, consider the following statements:

- The excavations at these caves were primarily undertaken during Hinayana phase of Buddhism.
- The name of these caves is derived from 'Kanhagiri' in Prakrit.
- The earliest reference of Kanheri is ascribed to Hiuen Tsang.

Which of the statements given above is/are correct?

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

Answer: A

- Statement 1 is correct:** The Kanheri caves comprise more than 110 different rock-cut monolithic excavations and is one of the largest single excavations in the country. These excavations were primarily undertaken during the Hinayana phase of Buddhism but also has several examples of the Mahayana stylistic architecture as well as few printings of the Vajrayana order.

10 PM Compilation for the Month of May, 2022

- **Statement 2 is correct:** The name Kanheri is derived from 'Kanhagiri' in Prakrit and occurs in the Nasik inscription of the Satavahana ruler Vasisthiputra Pulumavi.
- **Statement 3 is incorrect:** Kanheri was mentioned in the travelogues of foreign travelers. The earliest reference of Kanheri is ascribed to Fa-Hein who visited India during 399-411 CE and later by several other travelers.

Source: [Article](#)

Q.3) With reference to Repo Rate, consider the following statements:

1. The Bank rate is always kept higher than the Repo Rate.
2. The government securities kept under Statutory Liquidity Ratio cannot be pledged against the money taken under Repo Rate facility.

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.

- As no collateral (or security) is pledged by the bank when borrowing from RBI under bank rate so **bank rate is always kept higher than Repo Rate**. This way banks are encouraged to borrow under Repo rate
- Under SLR a bank has to keep a certain percentage of its deposits in the form of g-sec also? This g-sec **cannot be pledged against the money taken under Repo Rate**.

Source: [Article](#)

Q.4) Which of the following diseases is characterized by the presence of excess iron in the human body?

1. Tuberculosis
2. Malaria
3. Sickle-cell anaemia

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: B

- Thalassemia, sickle cell anemia and Malaria are conditions when there is an excess iron in the body
- TB patients are unable to absorb iron in their body

Source: [Article](#)

Q.5) “Lima Declaration” is related to which of the following organizations?

- a) United Nations Industrial Development Organization
- b) World Economic Forum
- c) BRICS
- d) United Nations Conference on Trade and Development

Answer: A

UNIDO is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability.

- As of 1 April 2019, 170 States are Members of UNIDO. They regularly discuss and decide UNIDO’s guiding principles and policies in the sessions of the Policymaking Organs.
- The mission of the United Nations Industrial Development Organization (UNIDO), as described in the Lima Declaration adopted at the fifteenth session of the UNIDO General Conference in 2013, is to promote and accelerate inclusive and sustainable industrial development (ISID) in Member States.

Q.6) With reference to Remittances, consider the following statements:

1. Remittances comprise only the income of workers who work in another country.
2. India is the world’s biggest recipient of remittances.

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: Remittances comprise two major parts,

Personal Transfers: This can be in cash or in kind between resident and non-resident households

Compensation of Employees: This refers to the income of workers who work in another country for a limited period of time.

Statement 2 is correct: According to the World Bank’s latest Migration and Development Brief, the top five recipient countries for remittances in 2021 were India, Mexico (replacing China), China, the Philippines, and Egypt.

Source: [All India Radio](#)

10 PM Compilation for the Month of May, 2022

Q.7) With reference to North Atlantic Treaty Organization (NATO), consider the following statements:

1. It is a military alliance established by Washington Treaty.
2. NATO has never invoked collective defence clause.

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 is a military alliance established by the North Atlantic Treaty (also called the Washington Treaty) of April, 1949.

Statement 2 is incorrect: NATO is committed to the peaceful resolution of disputes. If diplomatic efforts fail, it has the military power to undertake crisis-management operations. These are carried out under the collective defence clause of NATO's founding treaty (Article 5 of the Washington Treaty or under a United Nations mandate).

NATO has only once invoked Article 5, on 12th September 2001 following the 9/11 attacks on the World Trade Center in the US.

Source: [Indian Express](#)

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

1. It is a form of currency substitution, where dollars are used in addition to or instead of the local currency of a country.
2. Dollarisation increases the stability of the country's financial system.
3. Dollarisation may result in lesser resources for banks to lend.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: Dollarisation is a form of currency substitution, where dollars are used in addition to or instead of the local currency of a country

Statement 2 is incorrect: Dollarisation challenges the Stability of the Financial System. For instance, Central banks of economies with high dollarisation, become bodies with no power.

Statement 3 is incorrect: Dollarisation negatively impact the Banking System. For instance, people may invest their hard-earned savings in dollars which may result in banks having lesser resources to lend.

Source: [ET](#)

Q.9) With reference to the representation of Anglo-Indian, consider the following statements:

1. The term Anglo Indian is not defined anywhere in the constitution.

10 PM Compilation for the Month of May, 2022

2. Any Anglo-Indian member can take the membership of any party within 6 months of the nomination.

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 term Anglo Indian is defined as per the article 366 (2) of the Indian constitution; “a person whose father or any of whose other male progenitors in the male line is or was of European descent but who is a native of India.”

Statement 2 is correct: According to the 10th schedule of the Constitution, any Anglo-Indian member can take the membership of any party within 6 months of the nomination. After the membership; they are bound to the party whip and they have to work in the house according to the party’s agenda.

Source: [Indian Express](#)

Q.10) Aureobasidium pullulan, was recently seen in news, is related to which of the following?

- a) A butterfly species which is identified in Western Ghats
- b) A bacterial species which resist viral attacks on them
- c) A fungus which is used to produce biomaterials
- d) New bird species which does not lay eggs

Answer: C

Scientists have developed a biomaterial derived from the polymer pullulan which is secreted by the fungus Aureobasidium pullulans.

Aureobasidium pullulan is an exopolysaccharide which means that this polymer is secreted by the fungus itself into the medium on which it is growing.

This biomaterial can be used to disinfect wounds and hastens the process of healing.

Source: [The Hindu](#)

PRELIMS

Q.1) With respect to Endosulfan, consider the following statements:

1. It is also known by its trade name Thiodan.
2. It is listed under both Rotterdam Convention on the Prior Informed Consent and the Stockholm Convention on Persistent Organic Pollutants.

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.

- Endosulfan is an organochlorine insecticide which was first introduced in the 1950s and is commonly known by its trade name Thiodan.
- It is listed under both Rotterdam Convention on the Prior Informed Consent and the Stockholm Convention on Persistent Organic Pollutants.

Source: [Article](#)

Q.2) With reference to Base Erosion and Profit Shifting (BEPS), consider the following statements:

1. It involves tax avoidance by exploiting loopholes in taxation system of the countries
2. BEPS has been deemed illegal globally.

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:** BEPS refers to “tax planning strategies that exploit gaps and mismatches in tax rules to make profits ‘disappear’ for tax purposes or to shift profits to locations where there is little or no real activity but the taxes are low resulting in little or no overall corporate tax being paid
- **Statement 2 is incorrect:** As per OECD, in most cases BEPS strategies are not illegal. Largely they just take advantage of current rules that are still grounded in a bricks and mortar economic environment rather than today’s environment of global players which is characterized by the increasing importance of intangibles and risk management. That said, some of the schemes used are illegal and tax administrations are fighting them.

Q.3) Consider the following statements:

1. Equality can be achieved through equity.
2. In an equitable approach, people will be treated fairly but differently
3. Arranging extra classes only for academically weak students is an example of equality

Which of the above statements 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: A

- **Statement 1 is correct:** Equity means treating people based on their respective circumstances. So, every individual shall be helped as per their need and brought to the same level of development resulting in equality.
- **Statement 2 is correct:** Under principles of equity, only those individuals are helped who require that help. This means people are treated fairly as per their conditions, but differently.
- **Statement 3 is incorrect:** Everyone in the class will not be in need of extra classes. So, only those students who are weak shall be given help. This ensures that only those students are given assistance who actually need it. Hence, this is a case of equity, not equality. Under equality, all students would be given extra classes.

Q.4) Consider the following statements regarding the Currency Chests:

1. These are branches of selected banks authorised by the RBI to stock rupee notes and coins.
2. The money present in the currency chest belongs to the respective 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: A

- **Statement 1 is correct:** Currency chests are branches of selected banks authorised by the RBI to stock rupee notes and coins. The responsibility for managing the currency in circulation is vested in the RBI. The central bank advises the Centre on the number of notes to be printed, the currency denominations, security features and so on.
- **Statement 2 is incorrect:** These chests are usually situated on the premises of different banks but administered by the RBI. Representatives of the RBI inspect currency chests time-to-time, and update their senior officers about it. The money present in the currency chest belongs to the RBI and the money kept in the strong room outside the currency chest belongs to the bank.

10 PM Compilation for the Month of May, 2022

Q.5) Bucher files sometimes seen in news is associated with?

- Period of National Emergency in India
- Accession of Jammu & Kashmir to India
- Partition of India
- Sikh Riots of 1984

Answer: B

- These papers reportedly deal with the accession of Jammu & Kashmir to India.

Q.6) With reference to the Lab Grown Diamonds, consider the following statements:

- These are diamonds which are grown inside a lab using cutting-edge technology.
- These diamonds are chemically, physically, and optically different from natural diamond.
- These diamonds are used in computer chips and satellites.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: Lab-grown diamonds are diamonds which are grown inside a lab using cutting-edge technology that replicates the natural diamond growing process.

Statement 2 is incorrect: Man-made diamond is chemically, physically, and optically same as those grown beneath the Earth's surface.

Lab-grown diamonds can be created by two processes - High Pressure High Temperature (HPHT) which is used in China and Chemical Vapor Deposition (CVD) which is used in USA and India.

Statement 3 is correct: Lab-grown diamonds are also used in computer chips, satellites, 5G networks as they can be used in extreme environments as it has potential to operate at higher speeds while using less power than the silicon-based chips.

Source: [PIB](#)

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

- Thomas Cup is a 16-nation team event which signifies the world supremacy in the sport of badminton.
- Including India, only five nations have won the Thomas Cup.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: Thomas Cup is a 16-nation team event which signifies the world supremacy in the sport of badminton. The cup was donated in 1939 by Sir George Thomas for a series of men's international team competitions to be managed by the International Badminton Federation (IBF), of which Thomas was then president.

10 PM Compilation for the Month of May, 2022

Statement 2 is incorrect: In the tournament's seven-decade-long history, the championship title has changed hands only among five nations - China, Malaysia, Indonesia, Japan and Denmark. With its win, India became only the sixth country ever to break into this elite club.

Source: [The Hindu](#)

Q.8) With reference to Assistive Technology (AT), consider the following statements:

1. AT is any item, software program or product system that is used to increase, maintain or improve the functional capabilities of Computers.
2. Some examples of ATs include wireless extenders, Solid state drives, Routers etc.

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

Statement 1 is incorrect: AT is any item, piece of equipment, software program or product system that is used to increase, maintain or improve the functional capabilities of persons with disabilities.

Statement 2 is incorrect: Technologies and devices such as prosthetics, braces, walkers, special switches, special-purpose computers, screen readers and specialised curricular software.

Source: [The Hindu](#)

Q.9) Consider the following statements;

1. He was conferred the title of 'Mahamana' by Mahatma Gandhi.
2. He started the 'Abhyudaya' as a Hindi weekly and 'Maryada' as a Hindi monthly.
3. During his school days he started writing poems under the pen name 'Makarand'.

Which of the following personalities is described in the statements above?

- a) Jawaharlal Nehru
- b) Lala Lajpat Rai
- c) Madan Mohan Malaviya
- d) Chittaranjan Das

Answer: C

Source: [PIB](#)

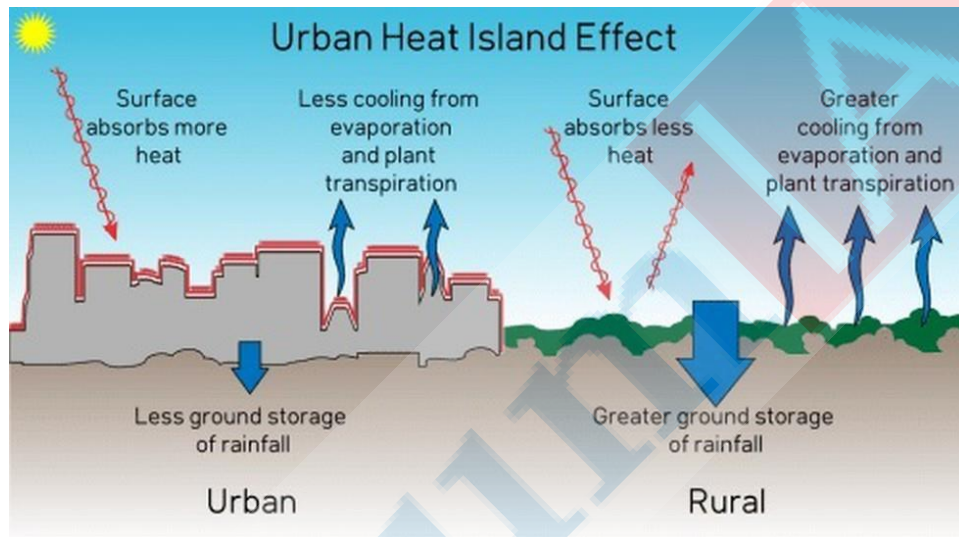
Q.10) Which of the following is/are the impacts of Urban heat island?

1. Less ground storage for rain water
2. More absorption of heat from concrete surface
3. Less cooling from evaporation and plant transpiration

Select the correct answer from the codes given below.

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

Answer: D



Source: [Indian Express](#)

PRELIMS

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

1. Biofuels can be solid, liquid or gaseous in nature.
2. The first-generation biofuels are made from non-food crops or portions of food crops that are not edible and considered as wastes.

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: Biofuels may be solid, liquid or gaseous in nature.

- **Solid:** Wood, dried plant material, and manure
- **Liquid:** Bioethanol and Biodiesel
- **Gaseous:** Biogas

Statement 2 is incorrect: First-generation Biofuels are made from food sources such as sugar, starch, vegetable oil, or animal fats using conventional technology.

- Second-generation Biofuels are produced from non-food crops or portions of food crops that are not edible and considered as wastes. For example: stems, husks, wood chips, and fruit skins and peeling.

Source: [Article](#)

Q.2) Which among the following is/are some potential effects of Urbanisation?

1. Increase in individualism
2. Reduction in interpersonal communication
3. Agricultural productivity may reduce

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

- Urban areas have a lifestyle that is centred around individualism. As a result there is no communal bonding between people as it is present in the villages.
- The use of gadgets is more widespread in urban areas and the resulting ‘**gadgetisation**’ reduces the interpersonal communication in the family.
- Increase in urbanization can reduce the amount of land available for cultivation and may hamper agricultural productivity.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

Q.3) With reference to Ballistic and Cruise missiles, consider the following statements:

1. Cruise missiles are launched directly into the upper layers of the earth's atmosphere.
2. Ballistic missiles are self-propelled for the most part of their flights.

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.

- **Statement 1 is incorrect:** Ballistic missiles are launched directly into the upper layers of the earth's atmosphere.
- **Statement 2 is incorrect:** Cruise missiles are self-propelled for the most part of their flight, flying in a relatively straight line and at lower altitudes due to rocket propellant.

Source: [Article](#)

Q.4) MARPOL Convention was sometimes seen in the news. Which of the following correctly describes the convention?

- a) It is a convention that aims to provide adequate powers to marine police to curb crime on high seas and EEZ.
- b) It is a convention that aims to enhance global cooperation on coastal area protection.
- c) It is a convention that aims to prevent pollution of the marine environment by ships from operational or accidental causes.
- d) It is a convention that aims to address the issues faced by marginalised sections of people.

Answer: C

- International Convention for the Prevention of Pollution from Ships (MARPOL) is one of the main international conventions. It aims at the prevention of pollution of the marine environment by ships from operational or accidental causes.
- Adopted in: The Convention was adopted by the International Maritime Organisation(IMO) on 2nd November 1973.
- India is a signatory to the MARPOL Convention.

Q.5) Consider the following statements regarding the Wholesale Price Index (WPI):

1. It is a monthly price index released by the National Statistical Office.
2. Services sector is not covered under the WPI.
3. Manufactured Products has highest weightage in the WPI.

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: B

10 PM Compilation for the Month of May, 2022

- **Statement 1 is incorrect:** Wholesale Price Index (WPI) measures the average change in the prices of commodities for bulk sale at the level of early stage of transactions. It is released by Office of the Economic Adviser on 14th of every month (or next working day) with a time lag of two weeks of the reference month and compiled with data received from institutional sources and selected manufacturing units across the country.
- **Statement 2 is correct:** The Wholesale Price Index (WPI) is an index covering prices of products/commodities only pertaining to four sectors comprising agriculture, mining, manufacturing and electricity. The other sectors of GDP, in particular, services sector are not covered under WPI.
- **Statement 3 is correct:** The weight of manufactured products is highest in WPI (2004-05) at 64.2%. The weight of the Primary Article is to 22.6% and the weight of Fuel & Power is 13.2%.

Q.6) Which of the following is/are the benefits of Ethanol blending?

1. Better use of damaged food grains.
2. Increase farmers' income.
3. Increase energy security.

Select the correct answer from the codes given below.

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

Answer: D

There are immense benefits that will accrue to the country by ethanol blending. Such as saving foreign exchange per year, increased energy security, lowered carbon emissions, better air quality, self-reliance, better use of damaged foodgrains, increased farmers' incomes and investment opportunities.

Source: [The Hindu](#)

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

1. The tags can carry encrypted information, serial numbers and short descriptions..
2. Passive RFIDs use their own power source, mostly batteries for their application.

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

Radio Frequency Identification (RFID) is a wireless tracking system that consists of tags and readers.

Radio waves are used to communicate information/identity of objects or people to nearby readers – devices that can be hand-held or built into fixed positions like poles or buildings.

10 PM Compilation for the Month of May, 2022

Statement 1 is correct: The tags can carry encrypted information, serial numbers and short descriptions. There are also high-memory tags like the ones designed for use in the aviation industry.

Statement 2 is incorrect: Active RFIDs use their own power source, mostly batteries. Passive RFIDs, on the other hand, are activated through the reader using the electromagnetic energy it transmits.

Active tags have a longer read range, around 300 ft, compared to passive tags.

Source: [Indian Express](#)

Q.8) With reference to the 5Gi Technology, consider the following statements:

1. 5Gi offers more range at a higher frequency.
2. This technology is indigenously developed.
3. 5Gi technology is primarily meant to enhance rural coverage.

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: C

Statement 1 is incorrect: 5Gi offers more range at a lower frequency, which is the opposite of 5G. The latter works between the 700 MHz to 52,000 MHz bands and sacrifices on range.

Statement 2 is correct: The 5G Radio Interface Technology, called 5Gi is a locally designed telecommunication network that has been designed by IIT Hyderabad, IIT Madras and the Centre of Excellence in Wireless Technology.

Statement 3 is correct: 5Gi technology is primarily meant to enhance rural coverage. It facilitates much larger reach of the 5G towers and radio networks. Hence, it is a major breakthrough for bridging the rural-urban digital divide in 5G deployment.

Source: [The Hindu](#)

Q.9) Seoul Declaration which was seen in the news, is related to which of the following?

- a) Declaration of peace between North Korea and South Korea.
- b) Regarding the protection of cyber security.
- c) To make green, healthy and resilient future with forests.
- d) To provide human rights in war torn regions.

Answer: C

The Seoul Declaration was adopted at the XV World Forestry Congress. World Forestry Congress is a forum for the exchange of views and experiences on all aspects of forests and forestry. This may lead to the formulation of broad recommendations applicable at national, regional and global levels.

It identifies priority areas with potential to lead to a green, healthy and resilient future.

Source: [DTE](#)

10 PM Compilation for the Month of May, 2022

Q.10) With reference to the pardoning power of Governor, consider the following statements;

1. Governor's non-exercise of power under Article 161 of the Constitution was immune from judicial review.
2. Governor does not have the power to grant pardon in a case under Section 302 (murder) of the Indian Penal Code.

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

Statement 1 is incorrect: Governor's non-exercise of power under Article 161 of the Constitution was not immune from judicial review. For instance, Governor's delay to decide Perarivalan's pardon for more than two years has compelled the apex court to employ its constitutional powers under Article 142 to do justice to Perarivalan.

Statement 2 is incorrect: In Perarivalan case, Centre's argued that the President exclusively and not the Governor had the power to grant pardon in a case under Section 302 (murder) of the Indian Penal Code. But the court said that such a contention would render Article 161 a "dead-letter".

This would rather create an extraordinary situation whereby pardons granted by Governors in murder cases for the past 70 years would be rendered invalid.

Source: [The Hindu](#)

PRELIMS

Q.1) With reference to P waves and S waves generated during an earthquake, consider the following statements:

1. P waves and S waves can travel through all three mediums- solid, liquid, and gas.
2. The shadow zone of S-wave is larger than that of the P-waves.

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 waves can travel only through solid medium.

Statement 2 is correct: The shadow zone results from P waves being refracted by the liquid core and S waves being stopped completely by the liquid core.

- The shadow zone of S-wave is larger than that of the P-waves.

Source: [Article](#)

Q.2) Which of the following is a criterion for designation of a Biosphere Reserve?

1. A site must contain a protected and minimally disturbed core area of value of nature conservation.
2. Core area must be a bio-geographical unit and should be large enough to sustain a viable populations representing all trophic levels.
3. The involvement of local communities and use of their knowledge in biodiversity preservation.

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

Following are the criteria for designating an area as a Biosphere Reserve:

- A site must contain a protected and minimally disturbed core area of value of nature conservation.
- Core area must be a bio-geographical unit and should be large enough to sustain a viable populations representing all trophic levels.
- The involvement of local communities and use of their knowledge in biodiversity preservation.
- Areas potential for preservation of traditional tribal or rural modes of living for harmonious use of the environment.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

Q.3) With reference to Cage aquaculture, consider the following statements:

1. Only fishes are grown in this process.
2. This type of aqua culture reduces water pollution as well as eutrophication.

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:** Cage aquaculture involves the growing of fishes in existing water resources while being enclosed in a net cage which allows free flow of water.
- **Statement 2 is incorrect:** In cage aquaculture, accumulation of unused feed and excreta will lead to water pollution as well as eutrophication

Q.4) With reference to the phenomenon of photosynthesis, consider the following statements:

1. Water molecules are produced and released into the soil.
2. Carbon dioxide is converted into organic molecules which are stored in the producer.
3. Oxygen is produced and released into the atmosphere.

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

Water molecules are used, not produced, during photosynthesis. Oxygen is released as a waste product during photosynthesis. Carbon dioxide is used during photosynthesis to produce glucose, which is stored for use by the producer.

Q.5) 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.

10 PM Compilation for the Month of May, 2022

- **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.

Q.6) With reference to the National Green Tribunal, consider the following statements:

1. The Tribunal is guided by principles of natural justice.
2. With the establishment of NGT, India became the first country in the world to set up a specialized environmental tribunal.

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 Tribunal is not bound by the procedure laid down under the Code of Civil Procedure 1908, but shall be guided by principles of 'natural justice'.

Statement 2 is incorrect: With the establishment of the NGT, India became the third country in the world to set up a specialised environmental tribunal, only after Australia and New Zealand, and the first developing country to do so.

Source: [The Hindu](#)

Q.7) With reference to Sudden Infant Death Syndrome (SIDS), consider the following statements:

1. It only occurs in malnourished babies during sleep.
2. Newborn babies delivered prematurely or with low weight at birth are believed to be at a greater risk of SIDS.

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: SIDS is the unexpected death of an apparently healthy infant. It usually occurs while the baby is asleep, although in rare cases, it can also occur while the child is awake. Hence it is also called as "Cot Death".

Statement 2 is correct: Newborn babies delivered prematurely or with low weight at birth are believed to be at a greater risk of SIDS.

Source: [The Hindu](#)

10 PM Compilation for the Month of May, 2022

Q.8) Sela Tunnel project, which was seen in news, is located in which of the following state/UTs?

- a) Jammu and Kashmir
- b) Assam
- c) Arunachal Pradesh
- d) Punjab

Answer: C

The strategically-significant Sela Tunnel project in Arunachal Pradesh is nearing completion. The project is located in West Kameng district of Arunachal Pradesh.

Source: [Indian Express](#)

Q.9) With reference to the National Startup Advisory Council (NSAC), consider the following statements;

- 1. It advises the government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country.
- 2. It was constituted by the Ministry of Micro, Small and Medium Enterprises.

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 advises the government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country.

Statement 2 is incorrect: It was constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

Source: [PIB](#)

Q.10) Which of the following is/are the environmental cost of promoting Ethanol Blending?

- 1. No reduction in Nitrous Oxide.
- 2. Increase in land use.
- 3. Increased water use.

Select the correct answer from the codes given below.

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

Answer: C

No reduction in Nitrous Oxide: Because ethanol burns more completely than petrol, it avoids emissions such as carbon monoxide. However, tests conducted in India have shown that there is no reduction in nitrous oxides, one of the major environmental pollutants.

10 PM Compilation for the Month of May, 2022

More usage of Land: A report by the Institute for Energy Economics and Financial Analysis (IEEFA) says that for India to meet its target of 20% ethanol blended in petrol by the year 2025, it will need to bring in 30,000 additional sq km of land to come under maize cultivation. However, the report says that half of that land can be used more efficiently to produce clean electricity from solar energy.

High Usage of Water: For India, sugarcane is the cheapest source of ethanol. On average, a ton of sugarcane can produce 100 kg of sugar and 70 litres of ethanol, but that would mean 1,600 to 2,000 litres of water to produce 1 kg of sugar implying that a litre of ethanol from sugar requires about 2,860 litres of water.

Source: [The Hindu](#)

SCIENCE AND TECHNOLOGY

Q.1) With reference to Gene editing, consider the following statements:

1. It can be used to make plants exhibit properties not native to them.
2. Gene editing involves insertion of foreign genetic material.

Which of the statements given above is/are correct?

- 1) 1 only
- 2) 2 only
- 3) Both 1 and 2
- 4) Neither 1 nor 2

Answer: A

- **Statement 1 is correct:** Gene editing can be used to make plants exhibit properties not native to them.
- **Statement 2 is incorrect:** Gene editing enables modification of plants' owned genes, without insertion of external genes (foreign genetic material).

Source: [Article](#)

Q.2) Nazul land sometimes seen in news is a?

- a) Non-agricultural state land owned by Marathas and then the British.
- b) Naturally degraded agricultural land used for commercial purposes.
- c) Land used for non-commercial agricultural purposes by the state.
- d) Non-agricultural community owned land used for public purposes.

Answer: A

- Nazul land is a non-agricultural state land owned by the Marathas, and then the British.

Source: [Article](#)

Q.3) With reference to the internal structure of the Earth, consider the following statements:

1. Moho discontinuity forms the boundary between the crust and the asthenosphere.
2. Earth's inner core rotates slightly faster relative to the rotation of the surface.

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.

- Mohorovicic (Moho) discontinuity forms the boundary between the crust and the asthenosphere (upper reaches of the mantle) where there is a discontinuity in the seismic velocity.
- Earth's inner core rotates slightly faster relative to the rotation of the surface.

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

Q.4) With reference to Bamboo cultivation in India, consider the following statements:

1. Growing or cutting bamboo outside the forests is prohibited in India.
2. India is the world's second largest cultivator of bamboo after China.

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:** Following the amendment in the Indian Forest Act, 1927, bamboo was removed from the category of tree in 2017. Now there is no prohibition on growing or cutting bamboo trees even outside the forests.
- **Statement 2 is correct:** Around 80 per cent of bamboo forests lie in Asia with India, China and Myanmar having 19.8 million hectares of bamboo. India is the world's second largest cultivator of bamboo after China, with 136 species and 23 genera spread over 13.96 million hectares.

Source: [Article](#)

Q.5) Arrange the following events in chronological order:

1. Bay of Pigs invasion
2. Korean War
3. Persian Gulf War

Select the correct answer using the code given below:

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

Answer: b

- **1950–1953: Korean War** a proxy conflict in the Cold War between United States (as part of the United Nations) and South Korea vs. North Korea and Communist China.
- **1961: Bay of Pigs invasion:** an unsuccessful attempt to invade Cuba by Cuban exiles, organised and financed by Washington.
- **1990–91: The Gulf War** was a war waged by coalition forces from 35 nations led by the United States against Iraq in response to Iraq's invasion and annexation of Kuwait arising from oil pricing and production disputes

10 PM Compilation for the Month of May, 2022

Q.6) With reference to Regional Anti-Terrorist Structure-SCO, consider the following statements:

1. It is a permanent body of the Sanghai Cooperation Organization (SCO).
2. The main functions of SCO-RATS are information sharing..

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.

SCO-RATS is a permanent body of the Sanghai Cooperation Organization (SCO).

It is promoting coordination and interaction between the SCO member states as per as fight against terrorism, extremism and separatism are concern.

The main functions of SCO-RATS are information sharing. Being a member, India has actively participated in the activities of SCO-RATS.

Source: [Indian Express](#)

Q.7) Which of the following is/are the benefits associated with carbon farming?

1. Make agriculture climate friendly.
2. Incentivise farmers to introduce regenerative practices.
3. Enhance the food security.

Select the correct answer from the codes given below.

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

Answer: D

Carbon farming (also known as carbon sequestration) is a system of agricultural management that helps the land store more carbon and reduce the amount of Greenhouse Gases (GHGs) that it releases into the atmosphere.

Carbon farming promises a bold new agricultural business model — one that fights climate change, creates jobs, and saves farms that might otherwise be unprofitable.

The Carbon farming will increase income generation opportunity and ensure food security net for the population.

Carbon farming can incentivise farmers to introduce regenerative practices in their agricultural processes. Thus help them shift their focus from improving yields to functioning ecosystems and sequestering carbon that can be sold or traded in carbon markets.

Source: [Business Line](#)

10 PM Compilation for the Month of May, 2022

Q.8) Consider the following statements;

1. He was influenced by Nakshabandi sufi order.
2. Shaista Khan and Jai Singh were his abled gernerals.
3. He ruled most of the Indian subcontinent for half a century.

Which of the following personality is described in the lines above?

- a) Akbar
- b) Shah Jahan
- c) Aurangzeb
- d) Humayun

Answer: C

Recently, the Archaeological Survey of India (ASI) has barred visit to Mughal emperor Aurangzeb's tomb for five days after a threat.

Source: [The Hindu](#)

Q.9) Project WARDEC was sometime seen in news is related to which of the following?

- a) To enhance the war time coordination among UN Peacekeeping forces.
- b) To use artificial intelligence(AI) to design virtual reality wargames.
- c) To improve the mathematical understanding of Decimals.
- d) To make all the government buildings and wards accessible to divyangs.

Answer: B

WARDEC will be a first-of-its-kind simulation-based training center in India that will use artificial intelligence(AI) to design virtual reality wargames.

Purpose: The centre will be used by the Army to train its soldiers and test their strategies through metaverse-enabled gameplay.

Source: [Indian Express](#)

Q.10) Consider the following statements regarding the Respiratory Syncytial Virus;

1. Unlike Covid-19, RSV is not contagious in nature.
2. Children six months and younger are most vulnerable to this virus.
3. RSV killed 97 percent of children under the age of five in low- and middle-income nations.

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: B

- **Statement 1 is incorrect:** Respiratory Syncytial Virus is characterized by its highly contagious nature i.e., it has a high potential to infect people. It exacerbated the seasonal lung infection.
- **Statement 2 is correct:** Children six months and younger are most vulnerable to this virus.

10 PM Compilation for the Month of May, 2022

- **Statement 3 is correct:** RSV killed 97 percent of children under the age of five in low- and middle-income nations.

Source: [Indian Express](#)

MODERN HISTORY

Q.1) Consider the following statements:

1. He was a polyglot.
2. Rabindranath Tagore called him a Bharatpathik.
3. He assisted Alexander Duff to set up the General Assembly's Institution, which later became the Scottish Church College.

Which of the following personalities is being referred to in the statements given above?

- a) Ishwar Chandra Vidyasagar
- b) Raja Ram Mohan Roy
- c) Swami Dayanand Saraswati
- d) Jyotiba Phule

Answer: B

- A **polyglot**, Roy knew Bengali and Persian, but also Arabic, Sanskrit, and later, English. His exposure to the literature and culture of each of these languages bred in him a **scepticism towards religious dogmas and social strictures**. For instance: practices such as Sati.
- Rabindranath Tagore called him a '**Bharatpathik**' by which he meant to say that Rammohun combined in his person the underlying spirit of Indic civilisation, its spirit of pluralism, tolerance and a cosmic respect for all forms of life," says historian Amiya P Sen.
- In 1817, he collaborated with Scottish philanthropist David Hare to set up the **Hindu College** (now, Presidency University).
 - He followed it up with the **Anglo-Hindu School** in 1822 and, in 1830, assisted Alexander Duff to set up the General Assembly's Institution, which later became the **Scottish Church College**.

Source: [Article](#)

Q.2) Which of the following are potential benefits of Universal Basic Income (UBI)?

1. Social justice
2. Efficiency in government spending.
3. Promotes Equity

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: A

- **Social justice:** A society that fails to guarantee a decent minimum income to all citizens will fail the test of justice. Hence UBI, by guaranteeing a minimum unconditional income, promotes social justice.
- **Promotes efficiency in government spending and better targeting:** UBI seeks to replace the existing myriad subsidies given by the government under its social welfare schemes, riddled with misallocation, leakages and exclusion of the poor, with a universal direct cash transfer.
- UBI, if distributed among rich and poor alike, defeats the idea of equity and state welfare for the poor.

Source: [Article](#)

Q.3) Export of which of the following leads to virtual export of India's water?

1. Rice
2. Sugar
3. Buffalo meat

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

- The maximum export of virtual water of India is mainly through rice, maize and buffalo meat

Source: [Article](#)

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

1. It powers our Sun.
2. Fusion process causes no poisonous radiation.

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.

- Nuclear Fusion reactions power the Sun and other stars. In a fusion reaction, two light nuclei merge to form a single heavier nucleus.
- Nuclear fusion is a potentially inexhaustible source, and it has no dangerous side effects.
- Fusion causes no poisonous radiation. There are no emissions of carbon compounds, or any other pollutants.

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

1. It is caused by the misalignment between the length of the eyeball and its power to refract light.
2. Prevalence of Myopia is high among rural children as compared to their urban counterparts.

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:** Myopia is commonly found in children. As they grow and their bodies change, the **length of the eyeball** and its **power to refract light** do not always align, leading to vision that is blurry.
- **Statement 2 is incorrect:** As urbanisation increases, so does the burden of myopia. Myopia can be twice as high among urban children when compared to rural ones. One study found a higher prevalence among South Asian children in the United Kingdom compared to those living in rural India.

Source: [Article](#)

Q.6) With reference to Pit Viper, consider the following statements;

1. Some pit viper species lay eggs; others produce live young.
2. Russell's Viper and Saw-scaled Viper are two most venomous vipers species 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: C

Both the statements are correct.

Recently, a new venomous green snake named *Trimeresurus mayaae* or Maya's Pit viper was discovered from Umroi Military station in Ri-Bhoi district of Meghalaya.

Pit vipers are found from deserts to rainforests. They may be terrestrial, arboreal, or aquatic. Some species lay eggs; others produce live young.

Russell's Viper and Saw-scaled Viper are two most venomous vipers species found in India and member of big four poisonous and deadliest snakes in India. These snake species are responsible for the majority of snake bites in India.

Source: [The Hindu](#)

Q.7) Consider the following kinds of organisms/factors:

1. Bat
2. Bee
3. Water

Which of the above is/are pollinating agent/agents?

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

Answer: D

Pollination is the transfer of pollen from the male part of a plant to the female part of a plant, thus, enabling fertilisation and production of seeds, most often by an animal or by wind.

Pollinating agents are animals such as insects, birds, bees and bats; water; wind; and even plants themselves, when self-pollination occurs within a closed flower.

Source: [PIB](#)

10 PM Compilation for the Month of May, 2022

Q.8) With reference to Look Out Circular, consider the following statements;

1. The LOCs can be modified; deleted or withdrawn only at the request of the Initiating authority/individual.
2. The government has to serve a copy of the LOC to the affected person and provide a “post-decisional opportunity”.

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: Bureau of Immigration (BOI) under the MHA is only the executing agency. They generate LOCs based on requests by different agencies. Similarly, the LOCs can be modified; deleted or withdrawn only at the request of the originator.

Statement 2 is incorrect: The Punjab and Haryana High Court asked to serve a copy of the LOC to the affected person, state the reasons for issuing the LOC “as soon as possible” and provide a “post-decisional opportunity”. But the apex court has stayed the particular paragraph of the High Court order.

At present, no accused or subject of LOC can be provided with any opportunity of hearing before the issuance of the LOC since it defeats the purpose of LOC.

Source: [The Hindu](#)

Q.9) With reference to Polio, consider the following statements;

1. The virus is transmitted by person-to-person, spread only through the faecal-oral route.
2. For a country to be declared polio-free, the wild transmission of all three kinds has to be stopped.
3. India was declared polio-free in January 2014, after three years of zero cases.

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: B

10 PM Compilation for the Month of May, 2022

- **Statement 1 is incorrect:** The virus is transmitted by person-to-person, spread mainly through the faecal-oral route. However, the virus also spreads through a common medium such as contaminated water or food.
- **Statement 2 is correct:** There are three variants of the poliovirus, numbered 1 to 3. For a country to be declared polio-free, the wild transmission of all three kinds has to be stopped.
- **Statement 3 is correct:** India was declared polio-free in January 2014, after three years of zero cases. The last case due to wild poliovirus in the country was detected on January 13, 2011. The WHO on February 24, 2012, removed India from the list of countries with active endemic wild poliovirus transmission.

Source: [Indian Express](#)

Q.10) With reference to Deep Neural Networks (DNNs), consider the following statements;

1. DNN is a completely different concept from machine learning and AI.
2. DNNs combine a series of computer commands or algorithms that stimulate activity and brain structure.

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: DNN is a subset of machine learning and comes under the broader umbrella of AI.

Statement 2 is correct: DNNs combine a series of computer commands or algorithms that stimulate activity and brain structure.

Source: [The Hindu](#)

SCHEMES AND PROGRAMMES

Q.1) With reference to Accredited Social Health Activists (ASHA) worker program, consider the following statements:

1. It is based on Chhattisgarh's successful Mitandin program.
2. ASHA workers are paid a fixed salary like government servants.

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 ASHA programme was based on Chhattisgarh's successful Mitandin programme, in which a Community Worker looks after 50 households. The ASHA was to be a local resident, looking after 200 households.
- **Statement 2 is incorrect:** ASHA workers get performance-based payments, not a fixed salary like government servants

Source: [Article](#)

Q.2) With reference to the Permanent Court of Arbitration, consider the following statements:

1. It has an observer status with the UN.
2. It is the only principal organ not located in New York.
3. Its rulings are binding in nature

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

- **Statement 1 is correct:** PCA has an observer status with United Nations.
- **Statement 2 is incorrect:** International Court of Justice (ICJ) is the only principal organ of UN not located in New York.
- **Statement 3 is correct:** Its rulings are binding in nature although it has no power to enforce them.

Q.3) Which of the following vaccines are provided under the Universal Vaccination Programme of Government of India?

1. Bacillus Calmette-Guerin vaccine
2. Hepatitis-B vaccine
3. Pneumococcal Conjugate Vaccine

Select the correct answer using the code 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 of the above are covered under the Universal Vaccination Programme. Immunization Programme in India was introduced in 1978 as 'Expanded Programme of Immunization' (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the programme was modified as 'Universal Immunization Programme' (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world.
- Vaccines provided under UIP: BCG vaccine; Pentavalent Vaccine (covering Diphtheria, Tetanus, Pertussis, Haemophilis influenza type b infection and Hepatitis B), Rotavirus Vaccine, Pneumococcal Conjugate Vaccine, Measles vaccine, Japanese encephalitis, DPT booster (a combined vaccine; it protects children from Diphtheria, Tetanus and Pertussis), Tetanus and adult diphtheria (Td) vaccine.

Q.4) Trimeresurus mayaae sometimes seen in news is a species of?

- a) Snake
- b) Bat
- c) Frog
- d) Spider

Answer: A

- Meghalaya, the land of the mythical evil spirit that takes the form of a giant serpent called U Thlen, has yielded a new-to-science, venomous green snake.
- Recorded simultaneously in Mizoram, the snake has been named Maya's Pit Viper after the deceased mother of an Army officer, one of seven authors of a study on it. The name

10 PM Compilation for the Month of May, 2022

of the pit viper, recognised as **Trimeresurus mayaae**, is also believed to allude to maya, meaning the supernatural powers, or the illusion related to local legends.

Source: [Article](#)

Q.5) With reference to the legislative powers of the Parliament, consider the following statements:

1. Parliament has the power to legislate on treaties.
2. The power of the Parliament to implement treaties by enacting domestic laws extends to topics that are part of the state 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: C

In the Constitution, **entry 14 of the Union list** contains the following item — *“entering into treaties and agreements with foreign countries and implementing of treaties, agreements and conventions with foreign countries”*.

According to **Article 246**, Parliament has legislative competence on all matters given in the Union list.

Thus, **Parliament has the power to legislate on treaties.**

This power includes:

- deciding how India will ratify treaties and thus assume international law obligations.
- Parliament’s competence to give effect to treaties within the domestic legal regime by enacting laws.

Article 253 elucidates that the **power of Parliament to implement treaties by enacting domestic laws also extends to topics that are part of the state list.**

Source: [Article](#)

10 PM Compilation for the Month of May, 2022

Q.6) With reference to vitamin D, consider the following statements;

1. Vitamin D is needed for a process known as calcium homeostasis which is the maintenance of a constant concentration of calcium ions in the body.
2. Vitamin D can be obtained only from the exposure of humans to ultraviolet B (UVB) light.

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: Vitamin D is needed for a process known as calcium homeostasis which is the maintenance of a constant concentration of calcium ions in the body.

Statement 2 is incorrect: Provitamin D3 is a precursor from which humans can make vitamin D. The chemical name of Provitamin D3 is 7-dehydrocholesterol, or 7-DHC. Humans can synthesise vitamin D from 7-DHC when they are exposed to ultraviolet B (UVB) light. Vitamin D3 is also present in fish and dairy products.

Source: [The Hindu](#)

Q.7) With reference to People's Biodiversity Register (PBR), consider the following statements;

1. A PBR comprehensively documents traditional knowledge of local biological resources..
2. Delhi became the first major metropolitan city in India to prepare PBR.

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 People's Biodiversity Register (PBR) entails complete documentation of biodiversity such as flora, fauna medicinal sources, land use and human activities etc. within a particular place such as a city.

A PBR comprehensively documents traditional knowledge of local biological resources.

Statement 2 is incorrect: Kolkata became the first major metropolitan city in India to prepare a PBR. Chandigarh and Indore are other important cities that have prepared the document.

Source: [DTE](#)

Q.8) Which of the following is/are the ways to address 'invisible' hunger?

1. Providing micronutrient supplements in the form of tablets.
2. Food fortification.
3. Genetically modifying plants to produce biofortified leaves and fruit.

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

The term 'invisible' hunger is used for diseases caused by a deficiency of vitamins and minerals in the diet. This is a major problem in developing countries. Some of the methods to alleviate micronutrient hunger are **a)** Providing micronutrient supplements in the form of tablets or capsules, **b)** Fortify food products such as flour or salt by enhancing micronutrient in them, and **c)** genetically modifying plants to produce biofortified leaves and fruit.

Source: [The Hindu](#)

Q.9) Which of the following countries is/are the members of Indo-Pacific Economic Framework for Prosperity (IPEF)?

1. The United States
2. Myanmar
3. Vietnam
4. China
5. India

Select the correct answer from the codes given below;

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

Answer: C

The US President has launched the Indo-Pacific Economic Framework for Prosperity (IPEF).

The grouping includes seven out of 10 members of the Association of South-East Asian Nations (ASEAN), all four Quad countries, and New Zealand represents about 40% of global GDP.

Three ASEAN countries considered closer to China — Myanmar, Cambodia and Laos — are not members of the IPEF, however.

10 PM Compilation for the Month of May, 2022

Source: [The Hindu](#)

Q.10) With reference to the Inter-State Council, consider the following statements;

1. It is a statutory body formed by the Inter-State Council Act.
2. The standing committee of the council is headed by Union Home Minister.

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: Article 263 of the Constitution of India provides for the establishment of an Inter-State Council. It is a constitutional body that has representatives of the Union government as well as chief ministers of states.

Statement 2 is correct: A standing committee of the council was set up in 1996 for continuous consultation and processing of matters for the consideration of the council. The chairman of this standing committee is Union Home Minister.

Source: [The Hindu](#)

PRELIMS

Q.1) With reference to Registration of Births and Deaths Act 1969, consider the following statements:

1. Birth under this act includes both live and still birth.
2. After 21 days, birth/death can be registered under the Act with an order of a First-Class Magistrate.

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:** Under the act "birth" means live-birth or still-birth.
- **Statement 2 is correct:** A birth/death should be registered within 21 days. After 21 days, birth/death can be registered under the RBD Act with an order of a First-Class Magistrate issued after verifying the facts about the birth or death.

Source: [Article](#)

Q.2) Daulat Singh Kothari commission sometimes seen in news related to?

- a) Development of education in India
- b) Preventing stubble burning
- c) Setting parameters for Loan Restructuring
- d) Formulating food policy in the long term

Answer: A

- Kothari commission was established to examine all aspects of the educational sector in India

Source: [Article](#)

Q.3) With reference to Public Distribution System (PDS) in India, consider the following statements:

1. The supervision of the Fair Price Shops (FPSs) under the PDS rests with the Central government.
2. One of the objectives of the PDS is to control the price rise of essential commodities in the open market.

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

- **Statement 1 is incorrect:** The supervision of FPSs under the PDS is done by the state government.
- **Statement 2 is correct:** Apart from protecting the low-income groups by guaranteeing minimum quantity of food grains at affordable price, and controlling the price rise of essential commodities in the open market.

Source: [Article](#)

Q.4) Which of the following factors is/are responsible for land degradation in India?

1. Soil salinity in agricultural fields
2. Practice of Shifting cultivation
3. Wind erosion in the areas that have lost their vegetative cover

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

Among the major factors responsible for land degradation, the most significant ones are -

- **soil salinity** and **water-logging** in agricultural fields due to flawed agronomic practices, and

- **water** and **wind erosion** in the areas that have lost their vegetative cover.

- In the Northeast, a hilly region, the continuation of the **practice of shifting cultivation**, also known as slash-and-burn agriculture or jhum, is the main cause of land degradation. Under this

10 PM Compilation for the Month of May, 2022

system, the farmers clear the forested land, cultivate it for a few years, and then move to another spot, leaving the old patch **barren**.

Source: [Article](#)

Q.5) Consider the following statements:

1. Around half of the installed renewable energy in India, comes from the states of Gujarat and Madhya Pradesh.
2. In India, Only Small Hydro power projects have renewable energy 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: D

- Tamil Nadu , Karnataka and Gujarat are the top three status in terms of installed renewable energy capacity . Large hydel projects also have 'renewable energy status'.

Q.6) With reference to Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, consider the following statements;

1. According to the Act, construction is prohibited within a 100-metre periphery of a protected area.
2. Permission from the National Monument Authority is required if construction has to be undertaken in the regulated or prohibited area.
3. The term “construction” in the Act include the construction of public toilets, urinals, and “similar conveniences”.

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: A

Statement 1 is correct: As per the Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act (AMSAR), construction is prohibited within a 100-metre periphery of a protected area.

10 PM Compilation for the Month of May, 2022

Statement 2 is correct: The area extending to 200 metres around the monument in all directions is called a regulated area. Permission from the National Monuments Authority (NMA) is required if construction has to be undertaken in the regulated or prohibited area.

Statement 3 is incorrect: The term “construction” as defined in the AMSAR Act does not include the construction of public toilets, urinals, and “similar conveniences”.

Source: [The Hindu](#)

Q.7) With reference to the iRASTE project, consider the following statements;

1. It is a unique AI approach that uses the predictive power of AI to identify risks on the road and collision alert system to improve road safety.
2. The project is being implemented in Nagpur.

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: It is a unique AI approach that uses the predictive power of AI to identify risks on the road and collision alert system to improve road safety.

Statement 2 is correct: The project is being implemented in Nagpur. While the initial rollout of iRASTE is in Nagpur, the eventual goal is to replicate the solution in other cities. Currently, talks are on with the Telangana government to adopt the technology in a fleet of buses that ply on highways.

Source: [PIB](#)

Q.8) With reference to the Swachh Survekshan, consider the following statements;

1. So far, the Swachh Survekshan surveys are limited to cities only ~~and not for rural areas~~.
2. The Swachh Survekshan 2023 is designed with the theme of ‘Waste to Wealth’ as its driving philosophy.

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:

10 PM Compilation for the Month of May, 2022

Ministry of Housing and Urban Affairs (MoHUA) along with its implementation partner Quality Council of India (QCI) is conducting the surveys in Urban areas.

Ministry of Jal Shakti has launched Swachh Survekshan Gramin in 2021. As part of the survey, 17,475 villages in 698 Districts across the country will be covered.

Statement 2 is correct: The Swachh Survekshan(SS) 2023 is designed with the theme of 'Waste to Wealth' as its driving philosophy.

SS 2023 is curated towards achieving circularity in waste management. The survey would give priority to the principle of 3Rs – Reduce, Recycle and Reuse.

Source: [PIB](#)

Q.9) Which of the following statement explains the term “Front Running”?

- a) Domination of few private players in production of goods
- b) Scientific trial of medicines before rolling out the medicine for human consumption
- c) Advancement in socio-economic indicators by developed countries in comparison to developing and Least Developed Countries
- d) A dubious market practice in which a dealer, trader or employee places big orders before the official trade to get profits.

Answer: D

Front-running is a dubious market practice in which a dealer, trader or employee gets wind of a big order for buying or selling shares that will be placed by a fund or big investor and get 'in front' of the trade.

Large orders usually move a stock's price. By buying shares just before the big order hits the market and selling them once the price moves up, the front-runner pockets illegal gains from his advanced knowledge.

Source: [The Business Line](#)

10 PM Compilation for the Month of May, 2022

Q.10) With reference to sinkholes, consider the following statements;

1. Sinkholes are depressions formed in the ground when layers of the Earth's surface start collapsing into caverns.
2. Sinkholes are formed only due to natural process.

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: Sinkholes are depressions formed in the ground when layers of the Earth's surface start collapsing into caverns.

Statement 2 is incorrect: Sinkholes can be formed due to natural processes or human activity.

Natural process: Typically, sinkholes form in areas of "karst" terrains, where the rock below the surface of the Earth can be easily dissolved by groundwater.

Human activities: This can happen due to broken land drains, water mains and sewerage pipes, and diversion of surface water, among other reasons.

Source: [Indian Express](#)

POLITY AND GOVERNANCE

Q.1) With reference to the National Human Right Commission (NHRC), consider the following statements:

1. It has the powers of criminal court and can grant interim relief.
2. Its recommendations are binding on the government

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

- **Statement 1 is incorrect:** It has the powers of civil court and can grant interim relief. It also has the authority to recommend payment of compensation or damages.
- **Statement 2 is incorrect:** NHRC can only make recommendations, without the power to enforce decisions.

Q.2) Which of the following is/are consists of the Economic Cost of food-grains to Food Corporation of India (FCI)?

1. Pooled cost of grains
2. Procurement incidentals
3. Cost of distribution

Select the correct answer using the code given below:

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

Answer: D

- The Economic Cost of food-grains consists of three components, namely, pooled cost of grains, procurement incidentals and the cost of distribution. The pooled cost of food grains is the weighted MSP of the stock of food-grains available with FCI at the time of calculating the economic cost.

10 PM Compilation for the Month of May, 2022

Q.3) With reference to Folic Acid, consider the following statements:

1. It is water-soluble.
2. Deficiency of folic acid and Vitamin B12 can cause anemia.

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:** Folic acid is water-soluble
- **Statement 2 is correct:** A diet which does not contain enough iron, folic acid or vitamin B12 is a common cause of anemia.

Source: [Article](#)

Q.4) Arrange the following countries in the decreasing order of their export of carbon emissions-embodied products:

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

Select the correct answer from the codes given below:

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

Answer: D

- China is the largest exporter of carbon emissions-embodied products, followed by the U.S., Russia and India.

Source: [Article](#)

Q.5) With reference to the National Supercomputing Mission (NSM), consider the following statements:

1. Supercomputers under the mission will also be networked on the National Supercomputing grid over the National Knowledge Network (NKN).
2. Param Shakti was the first indigenously assembled supercomputer 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:** These supercomputers will also be networked on the National Supercomputing grid over the National Knowledge Network (NKN). The NKN connects academic institutions and R&D labs over a high-speed network.
- **Statement 2 is incorrect:** Param Shivay is the first supercomputer assembled indigenously.

Source: [Article](#)

Q.6) With reference to Pangong Tso lake, consider the following statements;

1. It is a landlocked lake located in India-China Border.
2. China has around 45 km of Pangong Tso under its control, while India has more than two-thirds of it.

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 is a landlocked lake located in India-China Border.

Statement 2 is incorrect: India has around 45 km of Pangong Tso under its control, while China has more than two-thirds.

Source: [Indian Express](#)

10 PM Compilation for the Month of May, 2022

Q.7) With reference to the National Achievement Survey(NAS), consider the following statements;

1. The survey covered students of Class 3rd, 5th, 8th and 10th standard from government, government-aided and private schools.
2. The survey was conducted via an OMR (optical mark recognition)-based achievement test comprising multiple-choice questions.

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 survey covered students of Class 3rd, 5th, 8th and 10th standard. It covered government, government-aided and private schools.

The survey was conducted via an OMR (optical mark recognition)-based achievement test comprising multiple-choice questions along with questionnaires in 22 different languages. This nationwide survey was administered by the Central Board of Secondary Education on one single day at the same time.

Source: [PIB](#)

Q.8) Exercise 'Bongosagar' is a bilateral maritime exercise between India and which of the following country?

- a) Nepal
- b) Sri Lanka
- c) Bangladesh
- d) Myanmar

Answer: C

Recently, the third edition of Indian Navy (IN) – Bangladesh Navy (BN) Bilateral Exercise 'Bongosagar' commenced at Port Mongla, Bangladesh.

Its first edition was held in 2019. The present one is the third edition of Bonosagar.

Source: [PIB](#)

Q.9) With reference to Prithviraj Chauhan, consider the following statements;

1. He belonged to Chahamana dynasty of Ajmer.
2. He defeated majority of the Chalukyas of Gujarat.

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: He belonged to the Chauhan or Chahamana dynasty of Ajmer which emerged after the decline of the Pratihara empire in the 11th century AD.

Statement 2 is incorrect: He ascended the throne in 1177 or 1178, and very quickly expanded his kingdom, defeating many of the smaller Rajput states. He struggled against the Chalukyas of Gujarat and was forced to look towards the Ganga valley instead.

Source: [Indian Express](#)

Q.10) With reference to Qutub Minar complex, consider the following statements;

1. It was completed much later by Firoz Shah Tughlaq.
2. Quwwat ul-Islam Mosque and Alai Darwaza gate are located within the complex.
3. Tombs of Firoz Shah Tughlaq and Ibrahim Lodi are located within the complex.

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: A

Statement 1 is correct: The Construction of the Qutub Minar "victory tower" in the complex was begun by Qutb-ud-din Aibak. He later became the first Sultan of Delhi of the Mamluk dynasty.

It was continued by his successor Iltutmish, and finally completed much later by Firoz Shah Tughlaq, a Sultan of Delhi from the Tughlaq dynasty (1320-1412) in 1368 AD.

Statement 2 is correct: Famous structures within Qutub Minar complex include Qutb Minar, the Quwwat ul-Islam Mosque, Alai Darwaza gate, the Alai Minar and the Iron pillar.

Statement 3 is incorrect: Only tombs of Iltutmish, Alauddin Khalji and Imam Zamin are located within the Qutub Complex.

Source: [The Hindu](#)

ECONOMY

Q.1) Which of the following statements correctly defines the endogenous growth model?

- a) Investment in human capital, innovation, and knowledge are significant contributors to economic growth.
- b) Real gross domestic product (GDP) per person will perpetually increase because of people's pursuit of profits.
- c) Every economy has a steady state GDP and any deviation off of that steady state is temporary and will eventually return.
- d) The output per worker (growth per unit of labor) increases with the output per capita (growth per unit of capital) but at a decreasing rate.

Answer: A

- The endogenous growth theory is the concept that economic growth is due to factors that are internal to the economy and not because of external ones. It holds that investment in human capital, innovation, and knowledge are significant contributors to economic growth.

Source: [Article](#)

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





Hydrogen color	-	Method of production
1. Blue		Steam Methane Reforming (SMR)
2. Turquoise		Pyrolysis
3. Green		Electrolysis

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

10 PM Compilation for the Month of May, 2022

Color	GREY HYDROGEN	BLUE HYDROGEN	TURQUOISE HYDROGEN*	GREEN HYDROGEN
Process	SMR or gasification	SMR or gasification with carbon capture (85-95%)	Pyrolysis	Electrolysis
Source	Methane or coal 	Methane or coal 	Methane 	Renewable electricity 

Note: SMR = steam methane reforming.

* Turquoise hydrogen is an emerging decarbonisation option.

Q.3) Which among the following is/are cooling aerosols?

- Nitrates
- Black Carbon
- Sulfates

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: C

- Black carbon absorbs solar radiation and has a warming effect.
- Cooling aerosols include primarily sulfates, nitrates and organic carbon, according to other studies.

Source: [Article](#)

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

- It was created in equal amounts along with matter after the Big Bang
- Anti-matter particles can be created in a lab

Which of the above statements is/are correct?

- Only 1
- Only 2
- Both 1 and 2
- Neither 1 nor 2

Answer: C

10 PM Compilation for the Month of May, 2022

- **Statement 1 is correct:** Antimatter is the opposite of normal matter. More specifically, the sub-atomic particles of antimatter have properties opposite those of normal matter. For example, the electrical charge of antimatter particles is reversed. The creation of antimatter happened along with matter after the Big Bang
- **Statement 2 is correct:** In 2018, physicists at CERN, the massive underground particle research lab in Europe, revealed that they created an antimatter particle in the lab as a part of the ALPHA experiment. Scientists created an atom of 'antihydrogen'.

Q.5) With reference to compulsory licensing (CL), consider the following statements:

1. The TRIPS Agreement of WTO does not have any provision related to compulsory licensing.
2. Despite having a provision, India so far never issued a compulsory license for drugs.

Which of the above statements is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) None of the above

Answer: D

Both statements are incorrect.

- Articles 31(f) of the TRIPS Agreement provides for a compulsory license. Under this, the government can issue a license to make use of a patent without the patent holder's consent.
- But, this drug can be used only for the supply of the domestic market. So the government cannot export the patented product.
 - For example, In 2012, India permitted generic production of Bayer Corporation's Nexavar. This drug was used for the treatment of Liver and Kidney cancer.
 - Similarly, South Africa permitted the generic production of Anti-Retroviral Drugs used in HIV treatment.

Q.6) With reference to the International Labour Organization, consider the following statements:

1. ILO received the Nobel Peace Prize for its contribution to setting labour standards, developing policies and devising programmes.
2. It was established by the Treaty of London as an affiliated agency.

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:** ILO received the Nobel Peace Prize for its contribution to set labour standards, develop policies and devising programmes.
- **Statement 2 is incorrect:** It was established in 1919 by the Treaty of Versailles as an affiliated agency of the League of Nations.

Source: [The Hindu](#)

Q.7) With reference to Army Aviation Corps, consider the following statements;

1. Army Aviation Corps is the component of the Indian Army which was established after Kargil War.
2. The Army Aviation Corps of the Indian Army primarily carries out the evacuation of the injured troops during operations or health emergencies in the high-altitude areas.

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:** Army Aviation Corps is the component of the Indian Army which was established on 1st November, 1986. It was inducted into 'Operation Pawan' which was a crucial test for the newly formed corps.
- **Statement 2 is correct:** The Army Aviation Corps of the Indian Army primarily carries out the evacuation of the injured troops during operations or health emergencies in the high-altitude areas.

Source: [Indian Express](#)

10 PM Compilation for the Month of May, 2022

Q.8) With reference to CO₂ and non-CO₂ pollutants, consider the following statements;

1. The contribution of CO₂ gases to global heating is less compares to non-CO₂ pollutants.
2. Non-CO₂ pollutants include methane, black carbon, hydrofluorocarbons (HFC), tropospheric ozone and nitrous oxide.

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 contribution of CO₂ gases to global heating is more compares to non-CO₂ pollutants. IPCC Working Group reports have shown that the contribution of CO₂ and non-CO₂ greenhouse gases to global heating was 52-57% and 43-48%, respectively.
- **Statement 2 is correct:** Non-CO₂ pollutants include methane, black carbon, hydrofluorocarbons (HFC), tropospheric ozone and nitrous oxide.

Source: [DTE](#)

Q.9) Which of the following is/are the benefits of Digital India BHASHINI platform?

1. Promote Internet contents in Indian Languages
2. It is a step to realize the goal of Digital Government.
3. Opportunity to startups for developing innovative solutions and products.

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

Answer: D

- A Bhashini Platform will make Artificial Intelligence (AI) and Natural Language Processing (NLP) resources available to MSMEs, Startups and Individual Innovators in the public domain.
- The platform aims to empower Indian citizens by connecting them to the Digital Initiatives of the country in their own language thereby leading to digital inclusion.

10 PM Compilation for the Month of May, 2022

- It further aims to increase the content in Indian languages on the Internet substantially in the domains of public interest, particularly, governance-and-policy, science & technology, etc.
- Hence the platform will provide benefits such as,
- **Content in Indian Languages:** The platform will encourage citizens to use the Internet in their own language.
- **Revolutionise the startup ecosystem:** The Multi-linguality of the platform presents a major opportunity to startups for developing innovative solutions and products that can cater to all Indian citizens irrespective of the language.
- **Increase the reach of governance:** As public websites become multilingual and interactive, and the reach of public welfare schemes will also increase.

Source: [PIB](#)

Q.10) Project NIGAH, which was seen in news recently, is related to which of the following?

- a) It is a project that aims to create adequate infrastructure in border regions to facilitate movement of Indian Troops.
- b) It is an initiative to facilitate mathematical knowledge among school students in tribal areas.
- c) It is an initiative to track containers by using ICTM (ICD Container Tracking Module).
- d) It is a project to create a national database on health workers.

Answer: C

- Project NIGAH is an initiative to track containers by using ICTM (ICD Container Tracking Module) which will help in better visibility of the container movement inside the Inland Container Depots (ICDs).
- Significance: It will help Customs to expedite long standing containers and monitor timely clearances, thereby enhancing Ease of Doing Business along with ensuring lead preventive checks.

Source: [PIB](#)

GEOGRAPHY

Q.1) Bagmati river is the tributary of which of the following rivers?

- a) Narmada
- b) Kosi
- c) Ganga
- d) Brahmaputra

Answer: B

- The river Kosi is formed by the confluence of three streams namely the Sun Kosi, the Arun Kosi and Tamur Kosi all taking their origin in the Himalayan region of Nepal and Tibet.
- Apart from these three streams which form the Kosi, a number of tributaries join the river in course of its flows through the plains from the right bank. These are Trijunga, Bhutahi Balan, Kamla Balan and Bagmati.

Source: [Article](#)

Q.2) Which of the following statements correctly describes avulsion?

- a) The rapid abandonment of a river channel and the formation of a new river channel.
- b) A shift in the weather pattern of a place due to anthropogenic factors.
- c) Weathering of rocks over a period of time caused by the wind.
- d) A fairly rapid mass movement that usually occurs after heavy rainfall.

Answer: D

- Avulsion is the natural process by which river flow diverts out of an established river channel into a new permanent course on the adjacent floodplain.

Source: [Article](#)

Q.3) *Prosoponoides biflectogynus* sometimes seen in news is a species of?

- a) Frog
- b) Bat
- c) Spider
- d) Lizard

Answer: C

- Money spiders, commonly found in European meadows, have been reported for the first time in the country from the Muthanga range of the Wayanad Wildlife Sanctuary.

10 PM Compilation for the Month of May, 2022

- Researchers of Christ College, Irinjalakuda, Thrissur, have discovered the spider that belongs to the family of dwarf spiders (*Linyphiidae*) under the genus *Prosoponoides*. It has been given the name *Prosoponoides biflectogynus*.

Source: [Article](#)

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

1. The largest component of natural gas is methane.
2. The volume of natural gas in its liquid state is smaller than its volume in its gaseous state.

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:** Natural gas is a fossil energy source that formed deep beneath the earth's surface. Natural gas contains different compounds. The largest component of natural gas is **methane**, a compound with one carbon atom and four hydrogen atoms (CH₄)
- **Statement 2 is correct:** The volume of natural gas in its liquid state is about 600 times smaller than its volume in its gaseous state. This process makes it possible to transport natural gas to places where pipelines do not reach.

Q.5) Which of the following are the Green House Gases?

- a) Carbon dioxide, Ozone and Nitrogen
- b) Water Vapor, Methane and Nitrous oxide
- c) Ozone, carbon Monoxide and Sulphur Oxide
- d) Methane, Ozone and Nitrogen dioxide

Answer: B

The Primary GHGs are: Water Vapour, Carbon dioxide, Methane, Nitrous oxide and Ozone Other GHGs are carbon monoxide, fluorinated gases, chlorofluorocarbons (CFCs), black carbon (soot), and brown carbon.

Among the greenhouse gases, only water vapour can absorb both incoming (UV) and outgoing (infrared) radiation.

Q.6) With reference to Lavender cultivation, consider the following statements;

Created with love ❤ by ForumIAS- the knowledge network for civil services.
Visit academy.forumias.com for our mentor based courses.

10 PM Compilation for the Month of May, 2022

1. Lavender cultivation is promoted under the National Mission for Sustainable Agriculture.
2. Lavender water, which separates from lavender oil, is used to make incense sticks.

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:** 'Lavender Cultivation' is getting promoted under CSIR-IIIM's Aroma Mission.
- **Statement 2 is correct:** Lavender water, which separates from lavender oil, is used to make incense sticks. Hydrosol is formed after distillation from the flowers. This is used to make soaps and room fresheners.

Source: [PIB](#)

Q.7) Which of the following is/are advantages of coal gasification?

1. Used to produce fertilisers.
2. Use as fuel in the transport sector.
3. Less water intensive than other forms of energy production.

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

Answer: A

Statement 1 is correct: Used in a variety of applications such as in the production of electricity and making chemical products such as fertilisers.

Statement 2 is correct: Methane or natural gas extracted from coal gasification can be converted into LNG for direct use as fuel in the transport sector.

Statement 3 is incorrect: Coal gasification is one of the more water-intensive forms of energy production. There are concerns about water contamination, land subsidence and disposing of wastewater safely.

Source: [PIB](#)

Q.8) With reference to Sela macaque, consider the following statement;

1. It is a newly discovered macaque located in Western Ghats.
2. Sela macaque is a major cause of crop loss.

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:** Sela macaque belongs to the sinica species group of Macaca. It is recorded from Arunachal Pradesh has been named after a strategic Sela mountain pass.
- **Statement 2 is correct:** Sela macaque is a major cause of crop loss in the West Kameng district of Arunachal Pradesh. Hence, it faces threats due to man-wildlife conflicts.

Source: [The Hindu](#)

Q.9) With reference to the Vande Bharat Trains, consider the following statements:

1. They are self-propelled trains that do not require an engine.
2. At present, no Vande Bharat trains are operating in the country.

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: Vande Bharat Trains are self-propelled trains that do not require an engine. This feature is called a distributed traction power system, which is increasingly becoming the norm the world over for passenger operations.

Note: Distributed power gives the train higher acceleration and deceleration compared to loco-hauled trains, which take a much longer time to reach top speed or to gradually come to a halt.

Statement 2 is incorrect: Currently, two Vande Bharat trains are currently in operation, Delhi-Varanasi and Delhi-Katra.

Source: [The Hindu](#)

10 PM Compilation for the Month of May, 2022

Q.10) With reference to True Random Number Generator (TRNG), consider the following statements;

1. The random numbers are typically generated in computers using pseudorandom number generators, which rely on mathematical formulae.
2. Min-entropy is a parameter used to measure the performance of TRNGs

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: Cryptographic keys are typically generated in computers using pseudorandom number generators, which rely on mathematical formulae or pre-programmed tables to produce numbers that appear random but are not.

In contrast, a TRNG device extracts random numbers from inherently random physical processes, making it more secure.

For instance, IISc's TRNG device, random numbers are generated using the random motion of electrons. The random motion of electrons consists of an artificial electron trap constructed by stacking atomically-thin layers of materials like black phosphorus and graphene.

Statement 2 is correct: Standard tests for cryptographic applications are designed by the US National Institute of Standards and Technology (NIST). Min-entropy is a parameter used to measure the performance of TRNGs. Its value ranges from 0 (completely predictable) to 1 (completely random).

Source: [The Hindu](#)