



CURRENT AFFAIRS QUIZ

MCQs on important
news of the day
from Hindu &
Indian Express.

SEPTEMBER 2021

September: 1

Q.1) Which of the following are the permanent members of the United Nations Security Council (UNSC)?

1. China
2. U.K
3. Japan

Select the correct answer using the code given below:

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

Explanation: Despite the abstention of two “P5” countries — Russia and China — from the India-led United Nations Security Council (UNSC) Resolution 2593, the Government of India said it was a “matter of satisfaction” that the resolution addressed India’s “key concerns” on Afghanistan.

P5 refers to the five permanent members of the UNSC — China, France, Russia, the U.K. and the U.S.

The resolution called on the Taliban to keep their commitments on preventing terror groups in Afghanistan and urged them to assist the safe evacuations of all Afghan nationals wishing to leave the country

The resolution demands that Afghan territory should not be used to threaten or attack any country or to shelter and train terrorists and plan or finance terrorist attacks.

It mentions individuals designated by Resolution 1267, (which includes the Lashkar-e-Taiba and the Jaish-e-Mohammad)

Hence, option (a) is the correct answer.

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

1. Hurricane Ida is a weakening tropical depression that became the second most intense hurricane to strike the U.S. state of Louisiana on record.
2. Ida slammed into the Louisiana coast as a Category 4 storm.

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

Explanation: Powerful Hurricane Ida battered the southern U.S. State of Louisiana and knocking out power for more than a million people, including the whole of New Orleans.

Hurricane Ida is a weakening tropical depression that became the second most intense hurricane to strike the U.S. state of Louisiana on record, only behind Hurricane Katrina of 2005.

Ida slammed into the Louisiana coast as a Category 4 storm.

Hence both statements are correct.

Q.3) With reference to the Constitution of India, consider the following statements:

1. Articles 15 prohibits discrimination on the grounds of religion, race, caste, sex or place of birth.
2. Article 25 guarantees all persons the freedom of conscience and the right to preach, practice and propagate any religion of their choice.

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

Explanation: Former Congress president Rahul Gandhi asked if the Union government had “sold off” Articles 15 and 25 of the Constitution after tweeting a video that showed alleged instances of Muslim men being attacked and asked to chant “Jai Sri Ram”.

Articles 15:

It prohibits discrimination on the grounds of religion, race, caste, sex or place of birth.

However, the State is not precluded from making special provisions for women and children or any socially and educationally backward classes of citizens, including the Scheduled Castes and Scheduled Tribes.

Article 25:

It guarantees all persons the freedom of conscience and the right to preach, practice and propagate any religion of their choice.

The right to propagate, however, does not include the right to convert another individual, since it would amount to an infringement of the other's right to freedom of conscience.

Hence both statements are correct.

Q.4) Which one of the following countries has become the sixth member of the Five Eyes Intelligence Network?

- a) India
- b) South Korea
- c) Japan**
- d) France

Explanation: Five Eyes is a network of five nations -- Australia, Britain, Canada, New Zealand, and the US who collaborated to better respond to increasing threats by North Korea and China. Japan is on its way to become the 'sixth eye'.

Q.5) Consider the following statements-

- 1. Nine-degree channel separates the main Lakshadweep from Minicoy Islands.
- 2. Eight Degree channel separates Andaman and Nicobar Islands.

Which of the following statements are correct?

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

Explanation: Statement 2 is not correct.

Nine-degree channel: It separates the main Lakshadweep archipelago from Minicoy islands.

It is so named as it lies on the 9-degree Latitude, north of the equator

Eight-degree channel: It separates Minicoy group of islands with Maldives

It is so named as it lies on the 8-degree Latitude, north of the equator.

Q.6) Which of the following are correctly matched

Places in News	Country/Region
1. Burkina Faso	East Africa
2. Tigray	Iraq
3. Bamiyan	Afghanistan

Select the correct answer using the code given below-

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

Explanation:

Burkina Faso- West Africa
Tigray Region- Ethiopia
Bamiyan Buddha- Afghanistan

Q.7) Which of the following are the identified animal corridors in Kaziranga National Park and Tiger Reserve?

- 1. Amguri
- 2. Bagori
- 3. Kanchanjuri

Select the correct answer using the code given below:

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

Explanation: All are part of Kaziranga National Park

The authorities in Assam's Golaghat and Nagaon districts have begun probing cases of clearance of forest land, digging and construction activities on at least three animal corridors within the eco-sensitive zone of the Kaziranga National Park and Tiger Reserve.

These two districts share large swathes of the 1,300-sq. km. tiger reserve that has nine identified animal corridors.

Seven of these — Amguri, Bagori, Chirang, Deosur, Harmati, Hatidandi and Kanchanjuri — are in Nagaon district while Haldibari and Panbari corridors are in Golaghat district.

These corridors are crucial for the rhinos, elephants, tigers, deer and other animals that escape a flooded Kaziranga during the monsoon months for the safety of the hills of Karbi Anglong district beyond the highway skirting the southern boundary of the tiger reserve.

But the most blatant violation has been on the Kanchanjuri animal corridor in Nagaon district. A patch of forest land has been cleared and a section of a tea plantation dug up apparently for a water reservoir.

Kaziranga National Park is located in the Golaghat, Karbi Anglong and Nagaon districts of the state of Assam. The sanctuary, which hosts two-thirds of the world's great one-horned rhinoceroses, is a World Heritage Site.

Q.8) Consider the following statements:

1. The National Mission on Edible Oil-Oil Palm (NMEO-OP) is a Centrally Sponsored Scheme.
2. Under the NMEO-OP scheme oil palm farmers will be provided financial assistance and will get remuneration under a price and viability formula.

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

Explanation: National Mission on Edible Oil-Oil Palm (NMEO-OP) is a new Centrally Sponsored Scheme. It is proposed to have an additional 6.5

lakh hectares for palm oil by 2025-26. Hence, statement 1 is correct.

It will involve raising the area under oil palm cultivation to 10 lakh hectares by 2025-26 and 16.7 lakh hectares by 2029-30.

Oil palm farmers will be provided financial assistance and will get remuneration under a price and viability formula. Hence, statement 2 is correct.

The Viability Formula is a Minimum Support Price-type mechanism and the government will fix this at 14.3% of Crude Palm Oil (CPO) price.

It will eventually go up to 15.3%.

Another focus area of the scheme is to substantially increase the support of inputs/interventions.

Special assistance will be given to replant old gardens for their rejuvenation.

Q.9) Consider the following statements:

1. He is known as a pioneer of the academic movement for interfaith understanding.
2. His most important works include Majma-ul-Bahrain and Surr-i-Akbar.
3. He translated the Upanishads from Sanskrit to Persian.

The above statements most appropriately describe which of the following personalities?

- a) Abul Fazal
- b) Tipu Sultan
- c) SherShah Suri
- d) Dara Shikoh

Explanation: Dara Shikoh (1615-59) was the eldest son of Shah Jahan. He is described as a "liberal Muslim" who tried to find commonalities between Hindu and Islamic traditions.

He is known as a pioneer of the academic movement for interfaith understanding in India. He had a deep understanding and knowledge of major religions, particularly Islam and Hinduism.

His most important works, Majma-ul-Bahrain (Mingling of Two Oceans) and Surr-i-Akbar

(Great Mystery) are devoted to the cause of establishing connections between Hinduism and Islam.

He translated the Upanishads and other important sources of Hindu religion and spirituality from Sanskrit to Persian. Through these translations, he was responsible for taking the Hindu culture and spiritual traditions to Europe and the West.

Hence, option D is correct.

Restrictions on this freedom can only be imposed on two grounds which are mentioned in the Article 19(5) of the constitution itself, namely, the interests of the general public and the protection of interests of any scheduled tribe. Hence, statement 2 is correct

Q.10) Consider the following statements:

1. Article 19(1)(d) of the Indian Constitution entitles every citizen to move freely throughout the territory of the country.

2. The free movement of people can be restricted to protect the interests of the general public and the protection of interests of any scheduled tribe.

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

Explanation: Freedom to Move Freely Throughout the Territory of India:

Article 19(1)(d) of the Indian Constitution entitles every citizen to move freely throughout the territory of the country. Hence, statement 1 is correct.

This right is protected against only state action and not private individuals.

Moreover, it is available only to the citizens and to shareholders of a company but not to foreigners or legal persons like companies or corporations, etc.

The freedom of movement has two dimensions, viz, internal (right to move inside the country) and external (right to move out of the country and right to come back to the country).

Article 19 protects only the first dimension.

The second dimension is dealt by Article 21 (Right to life and personal liberty).

September: 2

Q.1) With reference to the Remission of Duties and Taxes on Export Products (RoDTEP) scheme, consider the following statements:

1. It is administered by the Department of Revenue under Ministry of Finance.
2. It reimburses electricity duties and VAT on the fuel used for transportation of export products.
3. It is exclusively for textiles.

Which of the statements given above are not correct?

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

Explanation: Statement 3 is not correct.

The Remission of Duties and Taxes on Export Products (RoDTEP) scheme is notified by the Department of Commerce. The Scheme shall be fully administered by the Department of Revenue. A separate RODTEP Policy Committee (RPC) chaired by Director General of Foreign Trade is constituted to address residual issues related to the Scheme.

The Remission of Duties and Taxes on Export Products (RoDTEP) scheme will reimburse all the taxes/duties/levies being charged at the Central/State/Local level which are not currently refunded under any of the existing schemes but are incurred at the manufacturing and distribution process. The tax refund rates will vary between 0.5% and 4.3% of the export value of goods. They include:

- 1) VAT and Excise duty on the fuel used.
- 2) Electricity duty on purchase of electricity.
- 3) Mandi Tax/ Municipal Taxes/ Property Taxes.
- 4) Stamp duty on export documents.
- 5) Un-creditable CGST/ SGST/ IGST/

Compensation Cess.

Benefit of the scheme are extended to all export goods including agriculture products. However,

there are few sectors currently excluded from the scheme:

Pharmaceuticals

Steel

Textiles

Chemicals

Q.2) Which of the following are key provisions of Draft-E Commerce Rules 2021?

1. Ban on Flash Sales
2. 24*7 Compliance Nodal Officer
3. Rules of Origin Clause
4. Mandatory Registration with Department of Revenue

Select the correct answer using the code given below-

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

Explanation: Item 1 and 4 are not correct.

Key Provisions of Draft e-Commerce Rules 2021:

Mandatory Registration: There is a need for mandatory registration for e-commerce entities with the Department of Promotion for Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry.

E-commerce entity means persons who own, operate or manage a digital or electronic facility or platform for electronic commerce.

Limiting Flash Sales: Conventional e-commerce flash sales are not banned. Only specific flash sales or back-to-back sales which limit customer choice, increase prices and prevent a level playing field are not allowed.

Compliance Officer: The e-commerce sites are also directed to ensure appointment of Chief Compliance Officer (CCO) and a nodal contact person for 24x7 coordination with law enforcement agencies.

Restricting Related Parties: To tackle growing concerns of preferential treatment, the new rules propose to ensure none of the related parties are allowed to use any consumer information (from the online platform) for 'unfair advantage'.

Clause of Country of Origin: The entities will also have to identify goods based on their country of origin and provide a filter mechanism at a pre-purchase stage for customers.

They will also have to offer alternatives to these imported goods to provide a "fair opportunity" to domestic sellers.

Reporting Cybersecurity Issues: All e-commerce entities must provide information within 72 hours on any request made by an authorised government agency, probing any breach of the law including cybersecurity issues.

Q.3) Which of the following statements are correct about Hurricanes?

1. They make use of warm water and moist air as fuel and therefore form usually around Mediterranean region.
2. They rotate faster, and an eye gets formed in the center which is the strongest part and consists of strong winds.
3. Recently Hurricane Ida made a landfall in Turkey.

Select the correct answer using the code given below-

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

Explanation: All statements are incorrect.

Hurricanes are the biggest and most violent storms on the planet.

Tropical cyclones or hurricanes use warm, moist air as fuel, and therefore form over warm Equatorial water.

Mechanism:

When the warm, moist air rises upward from the surface of the ocean, it creates an area of low air pressure below.

When this happens, the air from the surrounding areas rushes to fill this place, eventually rising when it becomes warm and moist too.

An eye forms in the centre. It is the calmest part of the cyclone. Before the wind reaches the centre it gets warmed up and rises upwards.

When the warm air rises and cools off, the moisture forms clouds. This system of clouds and winds continues to grow and spin.

This disturbance is fuelled by the ocean's heat and the water that evaporates from its surface.

Such storm systems rotate faster and faster.

Storms that form towards the north of the equator rotate counterclockwise, while those that form to the south spin clockwise because of the rotation of the Earth.

Q.4) Consider the following Statements, with respect to Eutelsat Quantum Satellite?

- 1) it is the world's first commercial fully re-programmable satellite
- 2) it has been developed by NASA in partnership with Airbus.

Which of the above statements is/are correct?

- a) 1 only**
- b) 2 only
- c) Both 1 & 2
- d) None of the above

Explanation: Statement 1 is correct & Statement 2 is Incorrect:

Recently, Eutelsat Quantum, the world's first commercial fully re-programmable satellite lifted off from French Guiana on board an Ariane 5 rocket, with the hope of a new era of more flexible communications.

Eutelsat Quantum, developed under an ESA partnership project with satellite operator Eutelsat and prime manufacturer Airbus, is the first

commercial fully flexible software-defined satellite in the world.

Because it can be reprogrammed in orbit, it can respond to changing demands for data transmission and secure communications during its 15-year lifetime.

Its beams can be redirected to move in almost real-time to provide information to passengers onboard moving ships or planes.

Q.5) With reference to the China's first road-rail transport link to Indian Ocean, consider the following statements:

1. This passage connects the logistics lines of Singapore, Myanmar and China.
2. The transport corridor involves a sea-road-rail link from the Myanmar border to the key commercial hub of Chengdu in western 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

Explanation: China opens its first road-rail transport link to Indian Ocean named China-Myanmar New Passage. The route is "the first to link western China with the Indian Ocean".

The transport corridor involves a sea-road-rail link from the Myanmar border to the key commercial hub of Chengdu in western China, that provides China a new road-rail transportation channel to the Indian Ocean.

This passage connects the logistics lines of Singapore, Myanmar and China.

The railway line currently ends in Lincang on the Chinese side opposite the Myanmar border trade town of Chin Shwe Haw. Plans are underway to develop Chin Shwe Haw as a "border economic cooperation zone" under the Belt and Road Initiative.

Hence both statements are correct.

Q.6) With reference to the ZAPAD exercise 2021, consider the following statements:

1. It is one of the theatre level exercises of Russian armed forces and will focus primarily on operations against terrorists.
2. The NAGA Battalion group of Indian Army participating in the exercise will feature an all arms combined task force.

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

Explanation: A contingent of 200 Army personnel will participate in the multinational Exercise ZAPAD 2021 being held at Nizhniy, Russia from September 3 to 16, the Army said.

Of the 17 countries invited for the exercise, there are nine Participating countries and eight Observers including China and Pakistan.

ZAPAD 2021 is one of the theatre level exercises of Russian armed forces and will focus primarily on operations against terrorists.

The NAGA Battalion group participating in the exercise will feature an all arms combined task force. The exercise aims to enhance military and strategic ties amongst the participating nations while they plan and execute this exercise. Hence both statements are correct.

Q.7) The South China Sea, which lies between which of the following countries?

1. China
2. Taiwan
3. Philippines

Select the correct answer using the code given below:

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

d) 1, 2 and 3

Explanation: From September 1, 2021, China's new maritime rules designed to control the entry of foreign vessels in what Beijing calls "Chinese territorial waters" take effect.

Foreign vessels, both military and commercial, will be henceforth required to submit to Chinese supervision in "Chinese territorial waters," as per the new law.

The move is expected to have far-reaching consequences for passage of vessels, both commercial and military, in the disputed South China Sea, East China Sea and Taiwan Strait, and is likely to escalate the existing tension with the US and its neighbours in the region.

South China Sea

The South China Sea, which lies between China, Taiwan, the Philippines, Brunei, Malaysia, Indonesia and Vietnam, is of great economic importance globally.

The waters around China are hotly contested. Under a "nine-dash line" map, China claims most of the South China Sea as its sovereign territory. This claim is contested by its neighbours in the region and by the United States, which, though it has no claim in the Sea, backs the smaller nations in the fight against Chinese overreach.

Currently, international maritime activities are governed by an international agreement called the United Nations Convention on the Law of the Sea (UNCLOS) of which China, India and over a hundred other countries are signatories (the US, significantly, is not).

Accordingly, states have the right to implement territorial rights up to 12 nautical miles into the sea. The UNCLOS also states that all vessels have the right of "innocent passage" through this region – China's new law violates this.

Hence, option (d) is the correct answer.

Q.8) Which of the following statements is/are correct regarding India's achievement in the domain of climate change?

1. India is the only G20 nation complaint with the Paris Agreement.

2. India has been ranked within top 10 in Climate change performance index for two years consecutively

3. The Unnat Jyoti by Affordable LEDs for All (UJALA) scheme is the world's largest zero-subsidy LED bulb programme for domestic consumers.

Select the correct answer using the codes given below:

a) 1 and 2 only

b) 2 and 3 only

c) 1 and 3 only

d) All of the above

Explanation: All the statements are correct.

Q.9) The 'World Social Protection Report' is released by which of the following?

a) United Nations Development Programme (UNDP)

b) International Labour Organisation (ILO)

c) United Nations Population Fund (UNFPA)

d) World Bank

Explanation: Recently, a International Labour Organization (ILO) report titled 'World Social Protection Report 2020–22' has revealed that, globally 4.1 billion people are living without any social safety net of any kind.

Social Security is a comprehensive approach designed to prevent deprivation, give assurance to the individual of a basic minimum income for himself and his dependents and to protect the individual from any uncertainties.

Social protection includes access to health care and income security measures related especially to old age, unemployment, sickness, disability, work injury, maternity or the loss of the main breadwinner in a family, as well as extra support for families with children.

Hence, option B is correct.

Q.10) With reference to the Special Drawing Rights (SDR), consider the following statements:

1. The SDR is allocated to the members of the IMF in proportion to their existing quotas.
2. India's foreign exchange reserves do not incorporate SDR.
3. The SDR basket of currencies includes only the US dollar, Japanese yen and Euro.

Which of the statements given above is/are correct?

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

Explanation: The Special Drawing Rights (SDR) is neither a currency nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members. SDRs can be exchanged for these currencies.

The SDR serves as the unit of account of the IMF and some other international organizations.

The currency value of the SDR is determined by summing the values in US dollars, based on market exchange rates, of a SDR basket of currencies.

The SDR basket of currencies includes the US dollar, Euro, Japanese yen, pound sterling and the Chinese renminbi (included in 2016). Hence, statement 3 is not correct.

The SDR currency value is calculated daily (except on IMF holidays or whenever the IMF is closed for business) and the valuation basket is reviewed and adjusted every five years.

Quota (the amount contributed to the IMF) of a country is denominated in SDRs.

Members' voting power is related directly to their quotas.

IMF makes the general SDR allocation to its members in proportion to their existing quotas in the IMF. Hence, statement 1 is correct.

India's foreign exchange reserves also incorporate SDR other than gold reserves, foreign currency

assets and Reserve Tranche in the IMF. Hence, statement 2 is not correct.

September: 3

Q.1) Which of the following country has recently declared an economic emergency to contain soaring inflation after a steep fall in the value of the country's currency caused a spike in food prices?

- a) India
- b) China
- c) France

d) Sri Lanka

Explanation: Sri Lankan President Gotabaya Rajapaksa has declared an economic emergency to contain soaring inflation after a steep fall in the value of the country's currency caused a spike in food prices.

It was declared under the Public Security Ordinance on the supply of essential goods to prevent the hoarding of essential items, including rice and sugar.

The wide-ranging measure is also aimed at recovering credit owed to state banks by importers.

Hence, option (d) is the correct answer.

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

1. The Chairmanship of the forum rotates biannually between the members.
2. Currently India is holding the chairmanship for the first time.

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

Explanation: Statement 1 is incorrect: The Chairmanship of the forum rotates annually between the member states, in accordance with acronym BRICS. Statement 2 is incorrect: India was chair in 2012 and 2016 too. Currently India is holding the chairmanship for third time.

Q.3) Which of the following state/Union Territory has recently adopted snow leopard and black-necked crane, as State animal and State bird respectively?

- a) Ladakh
- b) Sikkim
- c) Nagaland
- d) Jammu and Kashmir

Explanation: Ladakh adopted snow leopard and black-necked crane, as State animal and State bird, two years after it was carved out as a separate Union Territory (UT) from the erstwhile State of J&K.

The snow leopard (*Panther unica*), whose numbers are dwindling worldwide, has been categorised as "vulnerable" in the International Union for Conservation of Nature Red List.

Black-necked cranes (*Grus nicricollis*), considered loyal couples, are only found in Ladakh's Changthang region in India. It was the State bird of J&K before August 5, 2019. It is evaluated as Near Threatened on the IUCN Red List of Threatened Species.

Hence, option (a) is the correct answer.

Q.4) Recently seen in the news, Orang National Park is in?

- a) Meghalaya
- b) Nagaland
- c) Arunachal Pradesh

d) Assam

Explanation: The Orang National Park, located on the north bank of the Brahmaputra River in the Darrang and Sonitpur districts of Assam, India, covers an area of 78.81 square kilometers.

It is also called Mini Kaziranga.

The Orang National Park in Assam is famous for its natural scenic beauty that captivates tourists from all over the world.

The fauna found here include the one-horned rhinoceros, elephants, leopard, sambar, barking deer, tiger, varieties of water birds, green pigeon, florican, teal, geese.

The park is also famous for its migratory birds like the milky white pelicans.

Q.5) Consider the following statements

1) In the election for Lok Sabha or State Assembly, the winning candidate must get at least 50% of the votes to be declared elected.

2) According to the provisions laid down in the Constitution of India, in Lok Sabha the Speaker's post goes to the majority party & the Deputy Speaker's to the opposition.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

c) Both 1 & 2

d) None of the above

Explanation: Both Statements 1 & 2 are incorrect:

In the election for Lok Sabha or State Assembly, the First past the post system is followed where a candidate who secures more pole votes than any other candidate is declared elected, even if it is less than 50% of total votes polled.

Speaker & Deputy Speaker are elected by the house as per the conventions of the Parliament not under Constitutional provisions.

Generally, Speaker's post goes to the majority party & the Deputy Speaker's to the Opposition.

Q.6) Consider the following statements, with respect to the Kaipad farming technique?

1. It is mainly practiced in the less fertile regions of the Gangetic plains.

2. It is primarily a technique for the cultivation of pest-resistant paddy varieties

3. Through this technique, crops can be grown in brackish water

Which of the above statements is/are correct?

a) 2 and 3 only

b) 1 and 2 only

c) 1 only

d) 1 and 3 only

Explanation: Statement 2 & 3 are correct & Statement 1 is InCorrect:

Kaipad farming is a technique of paddy cultivation. Kaipad Rice received the Geographical Indication tag in 2014.

Kaipad farming is a mode of paddy cultivation in brackish water. The traditional kaipad system of rice cultivation is an integrated organic farming system in which rice cultivation and aquaculture go together in coastal brackish water marshes rich in organic matter.

Kaipad farming is practiced in the Northern districts of Kerala. Kaipad is a saline-prone naturally organic rice production tract of North Kerala falling in Kozhikode, Kannur, and Kasargod districts.

Q.7) Program for International Student Assessment (PISA) is an initiative of:

a) WEF

b) UNESCO

*c) OECD

d) G20

Explanation: The Programme for International Student Assessment (PISA) is a worldwide study by the Organisation for Economic Co-operation and Development (OECD) in member and non-member nations intended to evaluate educational systems by measuring 15-year-old school pupils' scholastic performance on mathematics, science, and reading.

It was first performed in 2000 and then repeated every three years. Its aim is to provide comparable data with a view to enabling countries to improve their education policies and outcomes. It measures problem solving and cognition.

In India the field trial of PISA (Program for International Student Assessment) is scheduled to be held from September 15 to 18 in 38 schools.

PISA will help to come out of the learning loss that has occurred due to the pandemic. It would lead to recognition and acceptability of Indian students and prepare them for the global economy in the 21st century.

Q.8) With reference to the Loan Guarantee Scheme for Covid-affected Sectors, consider the following statements:

1. The Scheme is aimed at upscaling the medical infrastructure specifically targeting in rural areas.
2. Under the scheme banks would provide interest free loans for building healthcare infrastructure.

Which of the above statements is/are correct?

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

Explanation: Loan Guarantee Scheme for COVID-affected Sectors (LGSCAS):

The scheme is aimed at boosting medical infrastructure in the country, specifically targeting underserved areas.

The scheme was approved by the government in June 2021.

Banks would provide loans for building healthcare infrastructure in non-metro cities and smaller towns at a maximum interest rate of 7.95%.

LGSCAS provides a guarantee of 50% for brownfield projects and 75% to greenfield projects for loans sanctioned up to Rs.100 crore, set up at urban or rural locations other than 8 Metropolitan Tier 1 cities (Class X cities).

For aspirational districts, the guarantee cover for both brownfield expansion and greenfield projects is 75%.

The Scheme is applicable to all eligible loans sanctioned up to 31.03.2022, or till an amount of Rs. 50,000 crore is sanctioned, whichever is earlier.

The LGSCAS will become a path-breaking scheme as it can be collaborated and it can work

in conjunction with other ongoing interventions in the healthcare sector.

Q.9) Which of the following statements is/are correct regarding Sand and dust storms?

1. It increases the nutrient content in the areas of deposition.
2. It can also aid in phytoplankton growth in the sea thus helps maintain marine ecosystem.

Select the correct answer using the codes given below:

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

Explanation: Both the statements are correct. Statement 2 is correct: Dust particles that carry iron helps in maintaining phytoplankton balance and hence helps maintain marine ecosystem.

Q.10) Match the following Ramsar Convention wetlands to their geographical locations:

1. Wadhvana ----- Rajasthan
2. Deepor Beel ----- Assam
3. Vembanad Kol ----- Kerala
4. Bhoj Wetland ----- Gujarat

Which of the pairs given above is/are correct?

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

Explanation: Statement 1 is incorrect: Wadhvana Wetland is in Gujarat. Statements 2 and 3 are correct. Statement 4 is incorrect: Bhoj wetland is In Madhya Pradesh.

September: 3

Q.1) With reference to the appointment of Supreme Court Judges, consider the following statements:

1. Articles 124(2) and 217 of the Constitution governs the appointment of judges to the Supreme Court and High Courts respectively.
2. The Prime Minister has the power to make the appointments.

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

Explanation: Nine judges of the Supreme Court took oath on Tuesday, the biggest ever number at one go.

Articles 124(2) and 217 of the Constitution governs the appointment of judges to the Supreme Court and High Courts respectively.

Under both provisions, the President has the power to make the appointments “after consultation with such of the Judges of the Supreme Court and of the High Courts in the States as the President may deem necessary”.

Three Judges Cases

In three cases — which came to be known as the Judges Cases — in 1981, 1993 and 1998, the Supreme Court evolved the collegium system for appointing judges.

A group of senior Supreme Court judges headed by the CJI would make recommendations to the President on who should be appointed.

These rulings not only shrank the executive say in proposing a candidate for judgeship, but also took away the executive’s veto power.

National Judicial Appointments Commission

In 2014, the NDA government attempted to claw back control on judicial appointments by establishing the National Judicial Appointments Commission through constitutional amendments.

Although the law, which gave the executive a greater foot in the door in appointments, had support across political parties, the Supreme Court struck it down as unconstitutional.

Hence only statement 1 is correct.

Q.2) With reference to the Mahanadi Coalfields Ltd (MCL), consider the following statements:

1. It was carved out of South Eastern Coalfields Limited in 1992 with its headquarters at Sambalpur.
2. MCL was the first coal company to introduce environment-friendly Surface Mining technology in 1999.

Which of the statements given above is/are correct?

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

Explanation: In a first, in Coal India Ltd. (CIL) under the Ministry of Coal, an innovative Remotely Piloted Aircraft System (RPAS) at Mahanadi Coalfields Ltd (MCL) was inaugurated.

Designed by the MCL’s Innovation Cell and the Department of E&T, the portal named “Vihangam’ for remote monitoring was created by a Mumbai-based start-up of drone manufacturing, robotics and automation.

This state-of-art initiative will enable the Company to access real-time video through the internet and pave the way for other allied potential use-cases of drones in mines.

Mahanadi Coalfields Limited (MCL) is one of the major coal producing company of India. It was carved out of South Eastern Coalfields Limited in 1992 with its headquarters at Sambalpur. It has its coal mines spread across Odisha.

MCL was the first coal company to introduce environment-friendly Surface Mining technology in 1999.

Hence both statements are correct.

Q.3) Recently seen in the news, ALUAV is related?

- a) Missile
- b) Submarine

c) Unmanned Aerial Vehicle

- d) Patrol Vehicle

Explanation: India and the US have signed an agreement for cooperation in the development of Air-Launched Unmanned Aerial Vehicle (ALUAV), in what is seen as a new step to further expand their bilateral defence and military cooperation.

Q.4) Recently, seen in news Eubrontes & Grallator Species are related to?

- a) Homo Sapiens
- b) Fish
- c) Dinosaur**
- d) Arthropod

Explanation: In a major discovery, footprints of three species of dinosaurs have been found in the Thar desert in Rajasthan's Jaisalmer district, proving the presence of the giant reptiles in the western part of the State, which formed the seashore to the Tethys Ocean during the Mesozoic era.

The footprints, made in the sediment or silt of the seashore, later become permanently stone-like. They belong to three species of dinosaurs — Eubrontes cf. giganteus, Eubrontes glenrosensis, and Grallator tenuis. While the giganteus and glenrosensis species have 35 cm footprints, the footprint of the third species was found to be 5.5 cm.

Eubrontes could have been 12 to 15 meters long and weighed between 500 kg and 700 kg, while the height of the Grallator is estimated to have been two meters, as much as a human, with a length of up to three meters.

Q.5) Consider the following statements:

1. The Purchasing Managers' Index (PMI) is compiled and released monthly by the Ministry of Statistics and Programme Implementation (MoSPI).
2. The Purchasing Managers' Index (PMI) above 50-mark shows growth, while one below it reflects contraction.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only**
- c) Both 1 & 2
- d) None of the above.

Explanation: Statement 1 is incorrect & Statement 2 is Correct:

The Purchasing Managers' Index (PMI) is an index of the prevailing direction of economic trends in the manufacturing and service sectors. PMI or a Purchasing Managers' Index (PMI) is an indicator of business activity -- both in the manufacturing and services sectors. It is calculated separately for the manufacturing and services sectors and then a composite index is constructed.

There are three principal producers of Purchasing Managers Index (PMI) namely: Institute for Supply Management (ISM), Singapore Institute of Purchasing and Materials Management (SIPMM), and the Markit Group.

The headline PMI is a number from 0 to 100. A PMI above 50 represents an expansion when compared with the previous month. A PMI reading under 50 represents a contraction, and a reading at 50 indicates no change. The further away from 50 the greater the level of change

Q.6) Two important rivers one with its source in Jharkhand (and known by a different name in Odisha), and another, with its source in Odisha -merge at a place only a short distance from the coast of the Bay of Bengal before flow into the sea. This is an important site of wildlife

and biodiversity and a protected area. Which one of the following could be this?

- a) Bhitarkanika
- b) Chandipur-on-sea
- c) Gopalpur-on-sea
- d) Simlipa

Explanation: The Brahmani is a major seasonal river in the state of Odisha. The Brahmani is formed by the confluence of the rivers South Koel and Sankh near the major industrial town of Rourkela. Whereas the Baitarani is one of six major rivers of Odisha.

Together with the river Baitarani, river Brahmani forms a large delta before emptying into the Bay of Bengal at Dhamra.

Bhitarkanika National Park is a large national park in northeast Kendrapara district in Odisha.

The Bhitarkanika National Park is home to Saltwater crocodiles.

The Bhitarkanika Mangroves is a mangrove wetland in Odisha, India, covering an area of 650 km in the Brahmani and Baitarani river deltas. It was designated as a Ramsar site.

Q.7) Which of the following reports are released by National Statistical office?

- 1. Periodic Labour Force Survey
- 2. Consumer Price Index
- 3. GDP Data
- 4. Index of Industrial Production

Select the correct answer using the code given below-

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

Explanation: About NSO:

It is the central statistical agency of the Government mandated under the Statistical Services Act 1980 under the Ministry of Statistics and Programme Implementation.

It is responsible for the development of arrangements for providing statistical information services to meet the needs of the Government and other users for information on which to base policy, planning, monitoring and management decisions.

Reports & Indices by NSO:

Index of Industrial Production (IIP)

Consumer Price Index (CPI)

Sustainable Development Goals National Indicator Framework Progress Report

Periodic Labour Force Survey (PLFS)

GDP data

Q.8) With reference to Special Drawing Rights, consider the following statements-

- 1. It is neither a currency or a claim on International Monetary Fund.
- 2. Currencies under Special Drawing Rights are Rupee, Euro, Renmibi, US Dollar.
- 3. All members have proportionate power related to their quotas.

Select the correct answer using the code given below-

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

Explanation: Statement 2 is not correct.

Special Drawing Rights (SDR):

The SDR is neither a currency nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members. SDRs can be exchanged for these currencies.

The SDR serves as the unit of account of the IMF and some other international organizations.

The currency value of the SDR is determined by summing the values in US dollars, based on market exchange rates, of a SDR basket of currencies.

The SDR basket of currencies includes the US dollar, Euro, Japanese yen, pound sterling and the Chinese renminbi (included in 2016).

The SDR currency value is calculated daily (except on IMF holidays or whenever the IMF is closed for business) and the valuation basket is reviewed and adjusted every five years.

Quota (the amount contributed to the IMF) of a country is denominated in SDRs.

Members' voting power is related directly to their quotas.

IMF makes the general SDR allocation to its members in proportion to their existing quotas in the IMF.

Q.9) SAARC comprises of which of the following Member States?

1. Afghanistan
2. Bangladesh
3. Myanmar

Select the correct answer using the code given below:

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

Explanation: Myanmar is not a part of SAARC

SAARC comprises of eight Member States: (1) Afghanistan, (2) Bangladesh, (3) Bhutan, (4) India, (5) Maldives, (6) Nepal, (7) Pakistan and (8) Sri Lanka.

Afghanistan was admitted into the SAARC as the eighth member in 2007 when the country was led by President Hamid Karzai.

Q.10) With reference to the coal sector of India, consider the following statements:

1. India has the largest coal reserves in the world.
2. India is the third-largest producer of coal in the world.

3. Electricity generation makes up three-fourths of India's coal consumption.

Which of the above statements is/are correct?

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

Explanation: Coal in India has been mined since 1774 and is now the second fastest mined in the world, producing 716 million metric tons (789 million short tons) in 2018.

India is the second largest producer of coal in the world, after China.

India has the fourth-largest coal reserves in the world. It is the second-largest producer of coal in the world, after China.

Coal deposits are primarily found in eastern and south-central India.

Jharkhand, Odisha, Chhattisgarh, West Bengal, Madhya Pradesh, Telangana and Maharashtra accounted for 98.09% of the total known coal reserves in India.

Coal-fired power accounts for more than 70% of India's electricity generation. Electricity generation makes up three-fourths of India's coal consumption.

September: 4

Q.1) The Brahmani is a major seasonal river in:

- a) Odisha
- b) Tamil Nadu
- c) Kerala
- d) Karnataka

Explanation: Environmentalists expressed concern over the massive diversion of fresh water from the Brahmani river basin, which could pose a grave threat to the famous mangrove vegetation in Odisha.

The Talcher-Angul coal mines, steel and power plants as well as the Kalinganagar steel and power hub are drawing enormous quantities of fresh water from the Brahmani river

The Brahmani is a major seasonal river in the Odisha state of eastern India. The Brahmani is formed by the confluence of the Sankh and South Koel rivers.

Together with the river Baitarani, it forms a large delta before emptying into the Bay of Bengal at Dhamra.

Bhitarkanika — a notified Ramsar wetland — is spread over 195 sq. km and is home to 62 mangrove species. Proportionate fresh water flow from the Brahmani river basin and the Kharasrota river keep the salinity level of the water along the shore down.

Hence, option (a) is the correct answer.

Q.2) With reference to the INSPIRESat-1 CubeSat, consider the following statements:

1. It was developed under the International Satellite Program in Research and Education (INSPIRE).
2. The small satellite that weighs less than 10 kg will be launched aboard an upcoming Polar Satellite Launch Vehicle (PSLV) mission of the Indian Space Research Organisation (ISRO).

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

Explanation: INSPIRESat-1 CubeSat, developed under the International Satellite Program in Research and Education (INSPIRE), is ready for launch, the Indian Institute of Space Science and Technology (IIST) has said.

The small satellite that weighs less than 10 kg will be launched aboard an upcoming Polar Satellite Launch Vehicle (PSLV) mission of the Indian Space Research Organisation (ISRO).

Hence both statements are correct.

Q.3) What is Hycean worlds, recently seen in news?

a) A new class of exoplanets

b) Cryptocurrency

c) Mini satellites launched by European Space Agency

d) None of the above

Explanation: A study published in The Astrophysical Journal identifies a new class of exoplanets – Hycean worlds – that could support life different from that on Earth.

These planets are about 2.6 times the size of Earth, have temperatures about 200 degrees Celsius and planet-wide oceans. These could support microbial underwater life.

An exoplanet is any planet beyond our solar system. Most orbit other stars, but free-floating exoplanets, called rogue planets, orbit the galactic center and are untethered to any star.

Hence, option (a) is the correct answer.

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

1. Footprints of three species of dinosaurs have been found in the Thar desert in Rajasthan's Jaisalmer district.
2. The footprints were 200 million years old.

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

Explanation: Footprints of three species of dinosaurs have been found in the Thar desert in Rajasthan's Jaisalmer district, proving the presence of the giant reptiles in the western part of the State, which formed the seashore to the Tethys Ocean during the Mesozoic era.

The footprints, made in the sediment or silt of the seashore, later became permanently stone-like. They belong to three species of dinosaurs —

Eubrontes cf. giganteus,

Eubrontes glenrosensis and

Grallator tenuis.

While the giganteus and glenrosensis species have 35 cm footprints, the footprint of the third species was found to be 5.5 cm.

The footprints were 200 million years old. They were found near Jaisalmer's Thaiat village.

The dinosaur species are considered to be of the theropod type, with the distinguishing features of hollow bones and feet with three digits. All the three species, belonging to the early Jurassic period, were carnivorous.

Hence both statements are correct.

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

1. The virus is transmitted to people from animals and can also be passed on through contaminated food or directly from person-to-person.
2. There are currently no drugs or vaccines specific for Nipah virus infection.

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

Explanation: After a gap of over three years, a case of the zoonotic Nipah virus infection was reported in Kozhikode district of Kerala, with the death of a 12-year-old boy from Pazhoor, near Chathamangalam, at a private hospital.

The virus is transmitted to people from animals and can also be passed on through contaminated food or directly from person-to-person.

Fruit bats are considered to be a natural reservoir of the virus.

In infected people, it causes a range of illnesses from asymptomatic (subclinical) infection to acute respiratory illness and fatal encephalitis. The virus can also cause severe disease in animals such as pigs, resulting in significant economic losses for farmers.

There are currently no drugs or vaccines specific for Nipah virus infection although WHO has identified Nipah as a priority disease for the WHO Research and Development Blueprint.

Hence both statements are correct.

Q.6) Recently seen in the news, RELOS agreement is related to?

a) India-Russia

b) China-Russia

c) India-France

d) China-Pakistan

Explanation: India is all set to conclude the bilateral logistics agreement with Russia soon while the agreement with the U.K. is in the final stages of conclusion. The Navy has been the biggest beneficiary of these administrative arrangements, signed with several countries, improving operational turnaround and increasing inter-operability on the high seas.

With Russia, the Reciprocal Exchange of Logistics Agreement (RELOS) is likely to be signed in a month or two while the one with the U.K. is in the final stages and should see a conclusion soon.

The RELOS, which has seen several delays, gives India access to Russian facilities in the Arctic region which is seeing increased global activity as new shipping routes open up and India's own investments in the Russian Far East. In addition, it comes at a time when both nations are looking at significantly scaling up the already broad military-to-military cooperation.

Q.7) Which of the following statements is/are correct regarding Financial Stability and Development Council (FSDC)?

1. It is an apex body for coordination among regulatory bodies in financial sector.
2. It can override the decision taken by an independent regulator.
3. It is headed by the Prime Minister of India.

Choose the correct answer from the codes given below:

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

Explanation: Financial Stability and Development Council (FSDC) is an apex-level body constituted by the government of India.

Composition of the council:

Chairperson: The Union Finance Minister of India

Members:

Governor Reserve Bank of India (RBI),
Finance Secretary and/ or Secretary, Department of Economic Affairs (DEA),
Secretary, Department of Financial Services (DFS),
Secretary, Ministry of Corporate Affairs,
Secretary, Ministry of Electronics and Information Technology,
Chief Economic Advisor, Ministry of Finance,
Chairman, Securities and Exchange Board of India (SEBI),

Chairman, Insurance Regulatory and Development Authority (IRDA),
Chairman, Pension Fund Regulatory and Development Authority (PFRDA),
Chairman, Insolvency and Bankruptcy Board of India (IBBI)
Functions of FSDC:

Coordination among regulatory bodies in financial sector. But it cannot override the decision taken by an independent regulator (SEBI, RBI) etc. Coordinating India's international interface with financial sector bodies like the Financial Action Task Force (FATF), Financial Stability Board (FSB) and any such body as may be decided by the Finance Minister from time to time. Promotes financial literacy and financial inclusion. Macro prudential supervision of the economy including the functioning of large financial conglomerates.

Q.8) The objective of SHAKTI scheme is:

- a) To operationalise atleast one high speed train in every railway zone of the country for faster mobility.
- b) To make coal available to all the Thermal Power Plants of the country in a transparent and objective manner.**
- c) To provide integrated support and assistance under one roof to women affected by violence, both in private and public spaces.
- d) To promote off-grid applications of Solar photovoltaic systems for meeting lighting, electricity requirements of individuals, institutions, communities, commercial and industrial establishments.

Explanation: The SHAKTI (Scheme for Harnessing and Allocating Koyala Transparently in India) policy was approved in May 2017 with the intent of better allocation of coal to present and future power plants.

It aims to phase out the present Letter of Assurance and Fuel Supply Agreement (FSA)-based regime, and instead introduce a more transparent and competitive coal allocation policy.

Q.9) With reference to the Singapore-India Maritime Bilateral Exercise (SIMBEX), consider the following statements:

1. It was taken place in the southern fringes of the South China Sea.
2. Initiated in 2000, SIMBEX is the Indian Navy's longest uninterrupted bilateral maritime exercise with any foreign navy.

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

Explanation: India and Singapore have carried out a mega naval wargame in the southern fringes of the South China Sea over the last three days, in reflection of their growing congruence of interests in the strategically key region.

It was the 28th edition of the Singapore-India Maritime Bilateral Exercise (SIMBEX)

Initiated in 1994, SIMBEX is the Indian Navy's longest uninterrupted bilateral maritime exercise with any foreign navy.

Hence only statement 1 is correct.

Q.10) Exercise Bright Star is a multinational military exercise, held in which country?

- a) India
- b) Japan
- c) USA
- *d) Egypt

Explanation: Exercise Bright Star is a multinational military exercise, held once in two years at Egypt. This year's exercise would witness participation from 21 countries including the USA.

The first such exercises were held in the year 1980 after signing of the peace treaty between Egypt and Israel. The last Bright Star exercise was conducted in 2018, with 16 participating nations.

September: 6

Q.1) With reference to the Insolvency and Bankruptcy Code (IBC), consider the following statements:

1. Under the IBC, a Committees of Creditors (CoC), composed of financial creditors to the Corporate Debtor (CD) or operational creditors in the absence of unrelated financial creditors is empowered to take key decisions, including decisions on haircuts for creditors, that are binding on all stakeholders, including those dissenting.
2. The CoC is also empowered to seek and choose the best resolution plan for a corporate debtor from the market, and its role is vital for a timely and successful resolution for a CD.

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

Explanation: The insolvency regulator has called for public comments on a proposal to introduce a code of conduct for Committees of Creditors (CoC), of companies undergoing insolvency proceedings under the Insolvency and Bankruptcy Code (IBC).

Under the IBC, a CoC composed of financial creditors to the Corporate Debtor (CD) — or operational creditors in the absence of unrelated financial creditors — is empowered to take key decisions, including decisions on haircuts for creditors, that are binding on all stakeholders, including those dissenting.

The CoC is also empowered to seek and choose the best resolution plan for a corporate debtor from the market, and its role is vital for a timely and successful resolution for a CD.

The Insolvency and Bankruptcy Board of India (IBBI) noted that a code of conduct for CoCs would promote transparent and fair working on the part of CoCs.

The IBBI noted several cases in which certain lenders have withdrawn funds from a CD

undergoing insolvency proceedings and contributed to delays in the insolvency process.

Delays in resolution are seen as contributing to loss of value in corporate debtors and have become a key criticism of the IBC, with over 75 per cent of ongoing insolvency proceedings having crossed the 270-day timeline.

Hence both statements are correct.

Q.2) With reference to the Account Aggregator (AA) network, consider the following statements:

1. Recently all scheduled private and public banks in India joined the Account Aggregator (AA) network that will enable customers to easily access and share their financial data.
2. An Account Aggregator is a non-banking financial company engaged in the business of providing, under a contract, the service of retrieving or collecting financial information pertaining to its customer.

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

Explanation: On September 2 eight of India's major banks joined the Account Aggregator (AA) network that will enable customers to easily access and share their financial data.

The framework, which has been under discussion since 2016 and in the testing phase for some time, will now be open to all customers.

An Account Aggregator is a non-banking financial company engaged in the business of providing, under a contract, the service of retrieving or collecting financial information pertaining to its customer.

It is also engaged in consolidating, organising and presenting such information to the customer or any other financial information user as may be specified by the bank.

The licence for AAs is issued by the RBI, and the financial sector will have many AAs.

The AA framework allows customers to avail various financial services from a host of providers on a single portal based on a consent method, under which the consumers can choose what financial data to share and with which entity.

It reduces the need for individuals to wait in long bank queues, use Internet banking portals, share their passwords, or seek out physical notarisation to access and share their financial documents.

Hence only statement 2 is correct

Q.3) Recently seen in the news, Miyawaki Method is related to?

- a) It is a traditional system of medicine practiced in Tibet.
- b) It is a system designed to harvest surface runoff water for agriculture.
- c) It is a conventional slash and burn agriculture practiced in East Asia

d) It is a technique to build dense, native forests to ensure that plants grow faster.

Explanation: This method of growing forests in urban areas was first practiced by Japanese botanist Akira Miyawaki in the 1980s, after whom it is named. Forests regenerated by this method are claimed by some studies to grow 10 times faster and become 30 times denser and 100 times more biodiverse than those planted through conventional methods.

Q.4) Consider the following statements:

1. Manda buffalo found in Eastern Ghats & Odisha.
2. National Bureau of Animal Genetics Resources has recognized the Manda buffalo as the Unique breed of Buffaloes found in India.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only

c) Both 1& 2

d) None of the above.

Explanation: Both Statements 1 & 2 are Correct:

The National Bureau of Animal Genetic Resources (NBAGR) has recognized the Manda buffalo, found in the Eastern Ghats and plateau of Koraput region of Odisha, as the 19th unique breed of buffaloes found in India.

The Manda are resistant to parasitic infections, less prone to diseases, and can live, produce and reproduce at low or nil input systems.

Manda buffaloes get matured at around 3 years and drop the first calf at around 4 years. Every 1.5 to 2 years they give birth to a calf for the whole life of around 20 years.

With Manda buffalo recognized by NBAGR, it will be incumbent upon both Centre and State governments to devise a strategy for the conservation of these buffaloes. Besides, research would be carried out to enhance buffaloes' productivity through breeding strategies.

Q.5) Which of the following are in Agasthyamala Biosphere Reserve?

- a) Neyyar, Peppara and Shendurney Wildlife Sanctuaries; and KalakadMundanthurai Tiger Reserve
- b) Mudumalai, Sathyamangalam and WayanadWildlife Sanctuaries; and Silent Valley National Park.
- c) Kaundinya, GundlaBrahmeswaram and Papikonda Wildlife Sanctuaries; and Mukurthi National Park.
- d) Kawal and Sri Venkateswara Wildlife Sanctuaries; and Nagarjunasagar- Srisailam Tiger Reserve

Explanation: Agasthyamala Biosphere Reserve is situated at the southern-most end of the Western Ghats and spread over two southern states Kerala and Tamil Nadu. It was established in 2001.

It is named after the Agastya Mala peak that rises up to almost 1868 meters above sea level, in Thiruvananthapuram, Kerala.

In March 2016, it was included in the World Network of Biosphere Reserves of UNESCO.

Agasthyamala Biosphere Reserve covers an area of 3,500 sq km at an altitude ranging from 100 meters to 1,868 meters above the Mean Sea Level.

It covers Peppara and Shendurney wildlife sanctuaries and parts of the Neyyar sanctuary in Kerala and the KalakadMundanthurai Tiger Reserve of Tamil Nadu.

Its flora mostly consists of tropical forests and is home to 2,254 species of higher plants including about 400 that are endemic. About 400 Red Listed Plants, 125 species of orchids, and rare, endemic, and threatened plants have been recorded from the reserve.

It is also home to rare endemic animals include the tiger, Asian Elephant, and NilgiriTahr.

It is home to the Kanikaran tribe, one of the oldest surviving ancient tribes in the world.

Q.6) Which of the following statements regarding the Green-Ag Project is/are correct?

1. It will strengthen the community led initiatives to support conservation of species such as tiger and elephant.
2. It is financed by the Global Environment Facility.
3. It is being implemented in all states of India.

Select the correct option using the code given below

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

Explanation: Statement 3 is not correct.

The Green-Ag Project aims to catalyse transformative change of India's agricultural sector to support achievement of national and global environmental benefits and conservation of critical biodiversity and forest landscapes.

Key missions that will be targeted for strengthening include community led initiatives to

support conservation of globally important species such as the tigers, elephants and the Great Indian Bustard.

Such initiatives could include community led actions such as community anti-poaching patrolling, community led communication/ awareness activities, habitat and species monitoring activities. These will be strongly linked to Tiger Reserve and Elephant reserve management plans at the landscapes that the project will be working.

This project has been implemented with the help of funding from Global Environment Facility (GEF).

It is being implemented only in high conservation value landscapes in 5 chosen states - (i) Madhya Pradesh: Chambal Landscape, (ii) Mizoram: Dampa Landscape, (iii) Odisha: Similipal Landscape, (iv) Rajasthan: Desert National Park Landscape and v) Uttarakhand: Corbett-Rajaji Landscape.

Q.7) Climate Smart Cities Assessment Framework has been launched by:

- a) Ministry of Housing and Urban Affairs**
- b) NITI Aayog
- c) Germanwatch
- d) UNFCCC

Explanation: Climate Smart Cities Assessment Framework (CSCAF) is initiated and implemented by the Ministry of Housing and Urban Affairs and is supported by the Climate Centre for Cities under National Institute of Urban Affairs (NIUA).

Q.8) Which of the following Indian Biosphere Reserves are included in UNESCO's World network of Biosphere Reserves?

1. Panna Biosphere Reserve
2. Nokrek Biosphere Reserve
3. Nilgiri Biosphere Reserve
4. Great Nicobar Biosphere Reserve

Select the correct answer using the code given below-

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

d) 1,2,3 and 4

Explanation: Recently, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has included the Panna Biosphere Reserve (PBR) in its World Network of Biosphere Reserves (WNBR). The PBR is the third in Madhya Pradesh to be included in the list after Pachmarhi and Amarkantak.

Panna is characterised by forests and marshy vegetation, with an abundance of rare medicinal plants as well as other non-timber forestry products, such as katha, gum and resins. It is a critical tiger habitat area and hosts the Panna Tiger Reserve, as well as the World Heritage site of the Khajuraho Group of Monuments.

There are 12 biosphere reserves of India which have been recognized internationally under Man and Biosphere (MAB) Reserve program.

These are: 1) Nilgiri (First one to be included) 2) Gulf of Mannar 3) Sunderban 4) Nanda Devi 5) Nokrek 6) Pachmarhi 7) Similipal 8) Achanakmar – Amarkantak 9) Great Nicobar 10) Agasthyamala 11) Khangchendzonga (2018) and 12) Panna (2020).

Q.9) Houthis, seen sometimes in news, are an armed rebel group in:

- a) Yemen
- b) Afghanistan
- c) Syria
- d) Israel

Explanation: Houthis are an armed rebel group belonging to the Zaidi Shia sect fighting against the government of Yemen. Traditionally, the Houthis have been concentrated in the northwestern Saada Province of Yemen.

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

1. This scheme was launched under the National Mission for a Green India.
2. It aims to make the industrial sector of India energy efficient.

Which of the above statements is/are correct?

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

Explanation: Perform, Achieve and Trade' (PAT) scheme is a regulatory instrument to reduce specific energy consumption in energy intensive industries, with an associated market based mechanism to enhance the cost effectiveness through certification of excess energy saving which can be traded.

This scheme is been implemented by the Bureau of Energy Efficiency to make India's industrial sector energy efficient.

PAT has been launched under the National Mission for Enhanced Energy Efficiency, one of the eight missions under the umbrella National Action Plan on Climate Change, launched in June 2008.

September: 8

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

1. The National Bureau of Animal Genetic Resources (NBAGR) has recognised the Manda buffalo, found only in Kerala as the 19th unique breed of buffaloes found in India.
2. The NBAGR is affiliated to Indian Council of Agriculture Research.

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

Explanation: The National Bureau of Animal Genetic Resources (NBAGR) has recognised the Manda buffalo, found in the Eastern Ghats and plateau of Koraput region of Odisha, as the 19th unique breed of buffaloes found in India.

The Manda are resistant to parasitic infections, less prone to diseases and can thrive on modest resources.

This buffalo germ-plasm was first identified through a survey conducted by the Animal Resource Development (ARD) department of Odisha in collaboration with the Orissa University of Agriculture and Technology (OUAT).

The NBAGR is affiliated to Indian Council of Agriculture Research.

Hence only statement 2 is correct.

Q.2) Recently seen in the news, The 'Enhanced Transparency Framework', is related to?

- a) SAFTA
- b) Regional Comprehensive Economic Partnership.
- c) Joint Comprehensive Plan of Action
- d) Paris Agreement

Explanation: The enhanced transparency framework is central to the design, credibility, and operation of the Paris Agreement.

The development of the transparency portion of the Rulebook did not start from scratch as countries were able to draw on earlier experience under the UNFCCC.

Unlike previous UNFCCC arrangements, however, the Paris Agreement set out to build a common set of guidelines for all countries, while providing flexibility for developing countries that need it.

Q.3) Recently by Foundation for Environment Education (FEE) has been accorded the 'Blue Flag' tag for this beach for having greywater treatment plants and solid waste management plants. It is situated in Karnataka. Which one of the following is that beach?

- a) Krishnapatanm Beach
- b) Padubidri Beach
- c) Rushikonda Beach
- d) Yanam Beach

Explanation: Recently Padubidri beach has been accorded the 'Blue Flag' tag by Foundation for Environment Education (FEE) for

having greywater treatment plants,
solid waste management plants,
disabled-friendly equipment to enable them to enter seawater,
clean drinking water,
bathing facility,
disabled-friendly and general toilets,
solar power plant & solar lighting.

It is situated in Karnataka which is famous for the Dakkebali ritual held once in two years.

Q.4) If you want to see Red Panda in their natural habitat which one of the following is the best place to visit?

- a) Valley of flowers
- b) Neora Valley
- c) GirNational park

d) Dachigam National park

Explanation: The red panda is a small arboreal mammal found in the forests of India, Nepal, Bhutan and the northern mountains of Myanmar and southern China.

It thrives best at 2,200-4,800m, in mixed deciduous and conifer forests with dense understories of bamboo. It is also the state animal of Sikkim.

The in-situ locations of Red panda in India are Singalila ridge and Neora valley both of them are notified protection areas.

The red panda is listed as Endangered in the IUCN red list of Threatened Species and under Schedule, I of the Indian Wildlife (Protection) Act, 1972, the red panda has the highest legal protection at par with other threatened species.

The Neora Valley National Park (NVNP), covers a total area of 88 km². NVNP is a compact patch of virgin forest, rich in biodiversity located in the Eastern Himalayas, a global 'biodiversity hotspot'.

It was notified as a National Park based on the provisions of the Wildlife (Protection) Act 1972 in the year 1992.

It is contiguous with Sikkim and Bhutan at its northern and north-eastern boundaries respectively and links the Pangolakha Wildlife Sanctuary in Sikkim and the Toorsa Strict Reserve of Bhutan.

It is also an integral part of the Kanchenjunga Landscape. The southern boundaries of the Park are adjoining to the forests of Jalpaiguri district which have connectivity with the Chapramari Wildlife Sanctuary and the Gorumara National Park.

Q.5) Consider the following statement regarding PM-WANI (Prime Minister – Wi-fi Access Network Interface).

1. It aims to provide all PDS shop with Wi-Fi-access to provide seamless transaction.
2. The public network will set up by the PDOA's to provide Wi-Fi-service through the PDO's spread throughout the country.

3. It was recommended by TRAI (Telecom regulatory Authority of India) in first place.

Select the correct answer using the code below-

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

Explanation: Statement 1 is not correct.

The public Wi-Fi Access Network Interface, which will be called 'PM-WANI', was first recommended by the Telecom Regulatory Authority of India (TRAI) in 2017.

PM-WANI: This will involve multiple players, including PDOs, PDOAs, app providers, and a central registry. PM-WANI infrastructure can be structured in the form of a pyramid.

Need for a Public Wi-Fi Network in India:

To increase the proliferation of internet services in the country.

With PDOs - which will basically be small retail outlets across the length and breadth of the country - last mile connectivity is being aimed at.

To offer a cost-effective option for the common man.

Even in urban areas with sufficient mobile data coverage, the mobile internet tariffs are bound to increase.

To achieve the 'Digital India' vision.

From 2015 to June of 2020, India grew from 302 million internet subscribers to 750 million. That is a Compound Annual Growth Rate (CAGR) of 20%, making India one of the fastest growing internet markets in the world.

Q.6) Pradhan Mantri JI-VAN Yojana is aimed towards:

- a) Developing skills among the youth in the environment and forest sector
- b) Providing financial support to Integrated Bioethanol Projects**

c) Providing financial support to TB patients for their nutrition

d) Promoting of large grid connected wind-solar PV hybrid system for optimal and efficient utilization of wind and solar resources

Explanation: Pradhan Mantri JI-VAN (Jaiv Indhan- Vatavaran Anukool fasal awashesh Nivaran) Yojana aims to provide financial support to Integrated Bioethanol Projects using lignocellulosic biomass and other renewable feedstock.

Centre for High Technology (CHT), a technical body under the aegis of Ministry of Petroleum and Natural Gas (MoP&NG), is the implementation Agency for the scheme.

The objectives of the scheme are:

Establish commercially viable projects for 2G Ethanol production.

Provide remunerative income to farmers for their otherwise waste agriculture residues.

Address concerns of environmental pollution caused by burning of biomass/ agriculture residues. d

Help in meeting the targets envisaged in Ethanol Blended Petrol (EBP) programme promoted by Government of India & Government of India vision of 10% reduction in import dependence by way of reducing the use of fossil fuels.

To create rural & urban employment opportunities.

To contribute to Swachh Bharat Mission by supporting the aggregation of non-food biofuel feedstocks such as waste biomass and urban waste.

Indigenisation of second generation biomass to ethanol technologies.

Q.7) With reference to the Account Aggregator framework, seen recently in news, consider the following statements:

1. An Account Aggregator provides the service of retrieving or collecting financial information pertaining to its customer.

2. The licence for Account Aggregator is issued by the RBI.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

c) **Both 1 and 2**

d) Neither 1 nor 2

Explanation: According to the Reserve Bank of India, an Account Aggregator is a non-banking financial company engaged in the business of providing, under a contract, the service of retrieving or collecting financial information pertaining to its customer.

It is also engaged in consolidating, organising and presenting such information to the customer or any other financial information user as may be specified by the bank.

The AA framework was created through an inter-regulatory decision by RBI and other regulators including Securities and Exchange Board of India, Insurance Regulatory and Development Authority, and Pension Fund Regulatory and Development Authority (PFRDA) through and initiative of the Financial Stability and Development Council (FSDC).

The licence for AAs is issued by the RBI, and the financial sector will have many AAs.

The AA reduces the need for individuals to wait in long bank queues, use Internet banking portals, share their passwords, or seek out physical notarisation to access and share their financial documents. An Account Aggregator is a financial utility for secure flow of data controlled by the individual.

Q.8) Which state/UT has decided to issue “Resident Certificate” only to Permanent Resident Certificate holders of the region?

a) Jammu and Kashmir

b) **Ladakh**

c) Sikkim

d) Dadra and Nagar Haveli

Explanation: According to the Ladakh Resident Certificate Order 2021 passed on September 4, 2021, the Ladakh administration has decided to issue “Resident Certificate” only to Permanent

Resident Certificate holders of the region unlike J&K, where new domicile laws allowed outsiders too to apply for jobs, land and other facilities.

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

1. It is a tributary of Mahanadi River.
2. Bhitarkanika Wildlife sanctuary lies in the estuarial region of Brahmani-Baitrani river system.

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

Explanation: Statement 1 is incorrect: Brahmani is not a tributary of Mahanadi. The Brahmani is formed by the confluence of the Sankh and South Koel rivers.

Statement 2 is correct: The Brahmani is formed by the confluence of the Sankh and South Koel rivers

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

1. Dementia is a viral disease that affects the functions of intestine.
2. It is one of the major causes of disability and dependency among older people worldwide.

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

Explanation: Recently, The World Health Organisation (WHO) has released a report titled 'Global status report on the public health response to 'dementia'. About Dementia: Dementia is a syndrome – usually of a chronic or progressive nature – that leads to deterioration in cognitive

function (i.e. the ability to process thought) beyond what might be expected from the usual consequences of biological ageing. (Statement 1 is incorrect) Dementia is currently the seventh leading cause of death among all diseases and one of the major causes of disability and dependency among older people worldwide. (Statement 2 is correct)

September: 9

Q.1) Recently seen in the news Project Dantak is established between which of the following countries?

- a) India-Bhutan
- b) India-Nepal
- c) India-Bangladesh
- d) India-Maldives

Explanation: Project DANTAK is commemorating its Diamond Jubilee in Bhutan.

It was a fitting tribute to the sacrifices made by personnel of DANTAK in strengthening the bonds of friendship between India and Bhutan.

Project DANTAK was established on April 24, 1961, as a result of the visionary leadership of His Majesty the Third King and then Prime Minister Jawahar Lal Nehru. Identifying the utmost importance of connectivity in spurring the socio-economic development and growth of Bhutan, DANTAK was tasked to construct the pioneering motorable roads in the Kingdom.

DANTAK completed the road connecting Samdrup Jongkhar to Trashigang in 1968. In the same year, Thimphu was connected to Phuentsholing by DANTAK. Many Bhutanese had also volunteered to work with DANTAK.

Q.2) Recently seen in the news, Race to Zero is led by?

- a) IUCN
- b) European Union
- c) Climate Watch
- d) UN-related institutions.

Explanation: Race To Zero is a global campaign to rally leadership and support from businesses, cities, regions, investors for a healthy, resilient, zero-carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth.

It mobilizes a coalition of leading net zero initiatives, representing 733 cities, 31 regions, 3,067 businesses, 173 of the biggest investors, and

622 Higher Education Institutions. These ‘real economy’ actors join 120 countries in the largest ever alliance committed to achieving net-zero carbon emissions by 2050 at the latest. Collectively these actors now cover nearly 25% of global CO2 emissions and over 50% of GDP.

It is Led by the United Nations High-Level Climate Champions for Climate Action mobilizes actors outside of national governments to join the Climate Ambition Alliance, which was launched at the UNSG’s Climate Action Summit 2019.

The objective is to build momentum around the shift to a decarbonized economy ahead of COP26, where governments must strengthen their contributions to the Paris Agreement. This will send governments a resounding signal that businesses, cities, regions, and investors are united in meeting the Paris goals and creating a more inclusive and resilient economy.

Q.3) Bhogdoi River, seen recently in news, is a tributary of:

- a) Krishna
- b) Brahmaputra
- c) Indus
- d) Narmada

Explanation: The Bhogdoi River is a tributary of the Brahmaputra in India. From its origin in the Naga hills and flows through Jorhat before joining Dhansiri River.

River Bhogdoi is the most polluted river of Assam.

Q.4) Which of the following state government recently passed a law which provides 75% reservation for locals in private sector jobs with a monthly salary of up to ₹40,000?

- a) Kerala
- b) Jharkhand
- c) Bihar
- d) None of the above

Explanation: The Jharkhand Assembly passed ‘The Jharkhand State Employment of Local

Candidates in Private Sector Bill, 2021', which provides 75% reservation for locals in private sector jobs with a monthly salary of up to ₹40,000.

Once notified, Jharkhand will become the third State, after Andhra Pradesh and Haryana, to pass such a law.

Every employer shall register such employees receiving gross monthly salary as wages not more than ₹40,000 as the limit notified by the government from time to time on the designated portal," states the Bill.

Hence, option (b) is the correct answer.

Q.5) With reference to the India and Portugal relations, consider the following statements:

1. The Union Cabinet has recently approved the signing of an agreement on the recruitment of Indian citizens to work in the Portuguese Republic between the Government of the Republic of India and the Government of Republic of Portugal.

2. Under this agreement, a Joint Committee will be set up to follow up the implementation of the same.

Which of the statements given above is/are correct?

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

Explanation: The Union Cabinet has approved the signing of an agreement on the recruitment of Indian citizens to work in the Portuguese Republic between the Government of the Republic of India and the Government of Republic of Portugal.

The present agreement would set an institutional mechanism for partnership and cooperation between India and Portugal on sending and accepting Indian workers.

Under this agreement, a Joint Committee will be set up to follow up the implementation of the same.

Signing this agreement with Portugal will add new destination for Indian migrant workers in an EU member nation, especially in the context of many Indian workers who have returned to India following the Covid-19 pandemic. Indian workers would have enhanced job opportunities to work in Portugal.

Hence both statements are correct.

Q.6) With reference to the Production Linked Incentive (PLI) Scheme for Textiles, consider the following statements:

1. Government of India has recently approved Production Linked Incentive (PLI) Scheme for Textiles for MMF Apparel, MMF Fabrics and 10 segments/ products of Technical Textiles with a budgetary outlay of Rs. 10,683 crore.

2. PLI scheme for Textiles is part of the overall announcement of PLI Schemes for 13 sectors made earlier during the Union Budget 2021-22, with an outlay of Rs. 1.97 lakh crore.

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

Explanation: Government of India has approved Production Linked Incentive (PLI) Scheme for Textiles for MMF Apparel, MMF Fabrics and 10 segments/ products of Technical Textiles with a budgetary outlay of Rs. 10,683 crore.

PLI for Textiles along with RoSCTL, RoDTEP and other measures of Government in sector e.g. providing raw material at competitive prices, skill development etc will herald a new age in textiles manufacturing.

PLI scheme for Textiles is part of the overall announcement of PLI Schemes for 13 sectors made earlier during the Union Budget 2021-22, with an outlay of Rs. 1.97 lakh crore. With the announcement of PLI Schemes for 13 sectors, minimum production in India is expected to be around Rs. 37.5 lakh crore over 5 years and

minimum expected employment over 5 years is nearly 1 crore.

There are two types of investment possible with different set of incentive structure.

Any person, (which includes firm / company) willing to invest minimum ₹300 Crore in Plant, Machinery, Equipment and Civil Works (excluding land and administrative building cost) to produce products of Notified lines (MMF Fabrics, Garment) and products of Technical Textiles, shall be eligible to apply for participation in first part of the scheme.

In the second part any person, (which includes firm / company) willing to invest minimum ₹100 Crore shall be eligible to apply for participation in this part of the scheme.

In addition, priority will be given for investment in Aspirational Districts, Tier 3, Tier 4 towns, and rural areas and due to this priority Industry will be incentivized to move to backward area.

Hence both statements are correct.

Q.7) With reference to the ‘Emergency Report on School Education’, consider the following statements:

1. It says that only 8% of school students in rural India have been able to access online education, while at least 37% have stopped studying altogether.
2. Dalit and Adivasi children were at a greater disadvantage as a mere 5% of the children from these groups had access to online classes.

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

Explanation: The prolonged closure of primary and upper primary schools since the onset of the pandemic has led to “catastrophic consequences” for school students, says The ‘Emergency Report on School Education’

It says that only 8% of school students in rural India have been able to access online education, while at least 37% have stopped studying altogether.

Reach of online education is very limited: the proportion of schoolchildren who were studying online “regularly” was just 24% and 8% in urban and rural areas respectively. One reason for this is that many sample households (about half in rural areas) have no smartphone.

Dalit and Adivasi children were at a greater disadvantage as a mere 5% of the children from these groups had access to online classes.

Access to online education among students in those houses with smartphones is also handicapped by the fact that the smartphones are mainly used by the working adults who are not always able to share the gadgets with the children at home.

In addition to education, the closure affected the level of nutrition among the children in rural schools where the midday meals have been stopped.

Hence both statements are correct.

Q.8) With reference to the Odisha Municipal Laws (Amendment) Bill, 2021, consider the following statements:

1. It aims to cap reservation at 50%, a move that has paved the way for conducting elections to urban local bodies in the State.
2. It amends the Odisha Municipal Act, 1950, and the Odisha Municipal Corporation Act, 2003.

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

Explanation: The Odisha Assembly passed the Odisha Municipal Laws (Amendment) Bill, 2021, to cap reservation at 50%, a move that has paved the way for conducting elections to urban local bodies in the State.

It amends the Odisha Municipal Act, 1950, and the Odisha Municipal Corporation Act, 2003.

In 2013, the Orissa High Court passed a order stating that the upper ceiling limit of reservation of seats for the SC, ST and Backward Classes shouldn't exceed 50% in accordance with the judgment passed by the Supreme Court in the K. Krishna Murthy case.

The Odisha Panchayat Laws (Amendment) Bill, 2021, which seeks amendment to the Odisha Grama Panchayats Act, 1964; Odisha Panchayat Samiti Act, 1959 and Odisha Zilla Parishad Act, 1991 was also introduced in the House.

Hence both statements are correct.

Q.9) Vidyanjali 2.0 portal, recently seen in news, is an initiative of:

a) NITI Aayog

b) Union Ministry of Education

c) Union Ministry of Finance

d) None of the above

Explanation: Addressing the inaugural conclave of 'Shikshak Parv', Prime Minister Narendra Modi launched the Vidyanjali 2.0 portal.

Vidyanjali is an initiative taken by the Ministry of Education, Government of India with the aim to strengthen Schools through community and private sector involvement in schools across the country.

This initiative would connect schools with varied volunteers from the Indian Diaspora namely, young professionals, school alumni, in service and retired teachers / Government officials / professionals and many others.

Vidyanjali has two verticals : “Participate in school Service/Activity” and “Assets/Material/Equipment” in which volunteer can support and strengthen the government and government aided schools.

Vidyanjali 2.0 is an amalgamation of the words Vidya meaning "correct knowledge" or "clarity" and Anjali meaning “an offering with both hands” in Sanskrit language.

Hence, option (b) is the correct answer.

Q.10) Which of the following are the initiatives taken under Union Ministry of Education?

1. Indian Sign Language Dictionary

2. School Quality Assurance and Assessment Framework of CBSE

3. NISHTHA teachers' training programme for NIPUN Bharat

Select the correct answer using the code given below:

a) 1 and 3 only

b) 1 and 2 only

c) 2 and 3 only

d) 1, 2 and 3

Explanation: Addressing the inaugural conclave of 'Shikshak Parv', Prime Minister Narendra Modi launched a number of initiatives of Ministry of Education.

Modi launched the Indian Sign Language Dictionary -- audio and text embedded sign language video for the hearing impaired, in conformity with Universal Design of Learning, along with 'Talking Books', which are audiobooks for the visually impaired.

Among other initiatives unveiled by the prime minister include School Quality Assurance and Assessment Framework of CBSE and NISHTHA teachers' training programme for NIPUN Bharat.

Hence, option (d) is the correct answer.

September: 10

Q.1) With reference to the Medium Range Surface to Air Missile (MRSAM) System, consider the following statements:

1. It is an advanced network centric combat Air Defence System developed jointly by Defence Research and Development Organisation (DRDO) and Israel Aerospace Industries (IAI).
2. It is capable of engaging multiple targets at ranges up to 70 kms in severe saturation scenarios.

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

Explanation: In a significant boost to India's defence capabilities, the first deliverable Firing Unit (FU) of Medium Range Surface to Air Missile (MRSAM) System was handed over to Indian Air Force (IAF) in the presence of Raksha Mantri Shri Rajnath Singh at Air Force Station, Jaisalmer in Rajasthan on September 09, 2021.

The MRSAM (IAF) is an advanced network centric combat Air Defence System developed jointly by Defence Research and Development Organisation (DRDO) and Israel Aerospace Industries (IAI) in collaboration with the Indian industry comprising of private and public sectors including MSMEs.

The MRSAM system provides point and area air defence for ground assets against a wide range of threats including fighter aircraft, UAVs, helicopters, guided and unguided munitions, subsonic & supersonic cruise missiles etc.

It is capable of engaging multiple targets at ranges up to 70 kms in severe saturation scenarios.

The missile is powered by indigenously developed rocket motor and control system for achieving high manoeuvrability during the terminal phase.

The firing unit comprises of Missiles, Combat Management System (CMS), Mobile Launcher Systems (MLS), Advanced Long Range Radar, Mobile Power System (MPS), Radar Power System

(RPS), Reloader Vehicle (RV) and Field Service Vehicle (FSV).

Hence both statements are correct.

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

1. India's first Dugong conservation reserve will be built in Kerala.
2. Dugong is the State animal of Andaman & Nicobar Islands.
3. It is the only herbivorous mammal that is strictly marine and is the only extant species in the family Dugongidae.

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

Explanation: India's first Dugong conservation reserve will be built in Tamil Nadu for the conservation of Dugong, a marine animal that has been enlisted vulnerable to extinction on a global scale by the World Conservation Union (IUCN).

The reserve will spread over an area of 500 km in Palk Bay on the southeast coast of Tamil Nadu. Palk Bay is a semi-enclosed shallow water body with a water depth maximum of 13 meters.

Located between India and Sri Lanka along the Tamil Nadu coast, the dugong is a flagship species in the region.

Dugong or the sea cow is the State animal of Andaman & Nicobar Islands. This endangered marine species survive on seagrass and other aquatic vegetation found in the area.

It is the only herbivorous mammal that is strictly marine and is the only extant species in the family Dugongidae.

Dugongs are usually about three-meter long and weigh about 400 kg. Dugongs have an expanded head and trunk-like upper lip. Elephants are considered to be their closest relatives. However, unlike dolphins and other cetaceans, sea cows have two nostrils and no dorsal fin.

Distributed in shallow tropical waters in the Indo-Pacific region, in India, they are found in the Gulf of Kutch, Gulf of Mannar, Palk Bay, and Andaman & Nicobar Islands.

Hence, option (c) is the correct answer.

Q.3) Recently seen in the news Asola Bhatti Wildlife Sanctuary is in?

- a) Madhya Pradesh
- b) Maharashtra
- c) Delhi**
- d) Bihar

Explanation: Asola-Bhatti Wildlife Sanctuary covering 32.71 km² area on the Southern Delhi Ridge of Aravalli hill range on Delhi-Haryana border lies in Southern Delhi as well as northern parts of Faridabad and Gurugram districts of Haryana state.

It is part of the South Delhi District.

A leopard at the Asola Bhatti Wildlife Sanctuary has been caught on a camera trap – the first piece of concrete evidence of the recent presence of the big cat in the area.

Q.4) Which of the following is/are the targets under the Sustainable Development Goals-12?

- 1. Reducing by half the per capita global food waste at the retail and consumer levels.
- 2. Reduce the adverse per capita environmental impact of cities by 2030.
- 3. Encourage large and transnational companies, to adopt sustainable practices.

Choose 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

Explanation: Sustainable Development Goal 12 is about “responsible consumption and

production”. It is one of the 17 Sustainable Development Goals established by the United Nations in 2015.

SDG 12 is meant to ensure good use of resources, improving energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and ensuring a better quality of life for all.

SDG 12 has 11 targets to be achieved by at least 2030. The 11 targets of the goal are:

Implement the 10-Year Framework of Programs on Sustainable Consumption and Production Patterns;

Achieve the sustainable management and efficient use of natural resources;

Reducing by half the per capita global food waste at the retail and consumer levels and the reduction of food losses along production and supply chains, including post-harvest losses;

Achieving the environmentally sound management of chemicals and all wastes throughout their life cycle;

Reducing waste generation through prevention, reduction, recycling and reuse;

Encourage companies to adopt sustainable practices;

Promote public procurement practices that are sustainable;

Ensure that people everywhere have the relevant information and awareness for sustainable development;

Support developing countries scientific and technological capacity for sustainable consumption and production;

Develop and implement tools to monitor sustainable tourism;

Remove market distortions that encourage wasteful consumption.

The three “means of achieving” targets are: support developing countries to strengthen their scientific and technological capacity; develop and implement tools to monitor sustainable development impacts; and remove market

distortions, like fossil fuel subsidies, that encourage wasteful consumption.

Q.5) Which of the following statement is incorrect?

- a) Millets have low carbon footprint.
- b) Millets are rich in antioxidants.
- c) **More than 90 per cent of millet production takes place in developed countries.**
- d) UNGA has declared year 2023 as the International Year of Millets.

Explanation: Millets, often called ‘nutri-cereals’, encompass a diverse group of cereals and were among the first plants that were domesticated and have served as a traditional staple crop for millions of families in Sub-Saharan Africa and Asia. More than 90 per cent of millet production today takes place in developing countries of Africa and Asia.

Millets can survive in adverse climatic conditions and provide high energy, high dietary fiber, proteins, many essential minerals, vitamins, and antioxidants, all of which play a substantial role in lowering diabetes. The diversity of millets offers opportunities for economic development through income-generating activities in the food sector.

Capable of growing on poor soils with little or no inputs, millets have a low carbon and water footprint and are resistant to many crop diseases and pests.

Millets can help tackle lifestyle problems and health challenges such as obesity and diabetes as they are gluten-free and have a low glycemic index (a relative ranking of carbohydrate in foods according to how they affect blood glucose levels).

United Nations General Assembly has adopted the resolution that declares the year 2023 as the International Year of Millets and invites all Member States, the UN and other global organisations to observe the International Year through activities aimed at raising awareness of and directing policy attention to the nutritional and health benefits of millet consumption and their suitability for cultivation under adverse and changing climatic conditions, while also directing

policy attention to improving value chain efficiencies.

Q.6) With reference to the initiatives taken by the government in the field of education sector, consider the following statements:

1. Vidyanjali portal aims to facilitate CSR contribution to the development of higher education institutions in India.
2. NIPUN Bharat aims to create an enabling environment for students to achieve learning competencies in reading, writing and numeracy by the end of Grade 3.

Which of the above statements is/are correct?

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

Explanation: Vidyanjali Portal:

Vidyanjali portal aims to facilitate education volunteers, donors or CSR contributors for school development. It will enable community/volunteers to contribute by connecting directly with the government and government-aided schools of their choice.

According to education ministry, any person who is a citizen of India/NRI/PIO OR any organisation/institution/company/group registered in India can volunteer and contribute in two ways:

Services/activities

Assets/material/equipment such as basic civil infrastructure, basic electrical infrastructure, classroom support materials and equipment, digital infrastructure, equipment for extra-curricular activities and sports, yoga, health, etc.

NIPUN (National Initiative for Proficiency in Reading with Understanding and Numeracy) Bharat Initiative:

It was launched to create an enabling environment to ensure universal acquisition of foundational literacy and numeracy, so that every child achieves the desired learning competencies in reading, writing and numeracy by the end of Grade 3, by 2026-27.

The Objectives of NIPUN Bharat are:

To ensure an inclusive classroom environment by incorporating play, discovery, and activity-based pedagogies, linking it to the daily life situations of the children and formal inclusion of children's home languages.

To enable children to become motivated, independent and engaged readers and writers with comprehension possessing sustainable reading and writing skills.

To make children understand the reasoning in the domains of number, measurement and shapes; and enable them to become independent in problem solving by way of numeracy and spatial understanding skills.

To focus on continuous capacity building of teachers, head teachers, academic resource persons and education administrators.

To actively engage with all stakeholders i.e., Teachers, Parents, Students and Community, policy makers for building a strong foundation of lifelong learning.

Q.7) Which of the following statements is true about NISHTHA initiative?

- a) It is a portal to help skilled people find sustainable livelihood opportunities.
- b) It aims at creating an enabling ecosystem for Entrepreneurship development.
- c) **It is a capacity building programme for improving the quality of school education through integrated teacher training.**
- d) It is the scheme is to improve the performance of it is in India.

Explanation: Statement a is incorrect: It is the definition of ASEEM (Atma Nirbhar Skilled Employee Employer Mapping). The scheme was launched in 2020 Launched in 2020 to help skilled people find sustainable livelihood opportunities.

Statement b is incorrect: it is the definition of Pradhan Mantri YUVA Yojana (Yuva Udyamita Vikas Abhiyan). The scheme was launched in the year 2016. It aims at creating an enabling ecosystem for Entrepreneurship development through Entrepreneurship education and training.

Statement c is correct: The Union Human Resource Development Minister has launched 'National Initiative for School Heads and Teachers Holistic Advancement (NISHTHA)'. Its Objective is to motivate and equip teachers to encourage and foster critical thinking in students.

Statement d is incorrect: It is the definition of Skills Strengthening for Industrial Value Enhancement (STRIVE). The scheme was launched in 2016. The main focus of the scheme is to improve the performance of ITIs.

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

- 1. Grey Hydrogen – Coal
- 2. Brown Hydrogen – Natural Gas
- 3. Pink Hydrogen – Electrolysis via nuclear power

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

Explanation: Grey Hydrogen: This is the most common form of hydrogen production. Grey hydrogen is created from natural gas, or methane, using steam methane reformation but without capturing the greenhouse gases made in the process.

Brown hydrogen: Using black coal or lignite (brown coal) in the hydrogen-making process, these black and brown hydrogen are the absolute opposite of green hydrogen in the hydrogen spectrum and the most environmentally damaging.

Pink hydrogen: Pink hydrogen is generated through electrolysis powered by nuclear energy. Nuclear-produced hydrogen can also be referred to as purple hydrogen or red hydrogen. In addition, the very high temperatures from nuclear reactors could be used in other hydrogen productions by producing steam for more efficient electrolysis or fossil gas-based steam methane reforming.

Q.9) With reference to Inspiration4 mission, consider the following statements:

1. It is a manned spaceflight aboard the SpaceX Resilience capsule.
2. It will orbit the Earth higher than both International Space Station and the Hubble Space Telescope.
3. The mission involves circling the Earth for three days and then splashing down into the Atlantic Ocean.

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**

Explanation: All statements are correct.

Inspiration4 is a spaceflight planned for four people aboard the SpaceX Resilience capsule. The three-day flight will be the first human spaceflight to orbit Earth with exclusively private citizens on board. The flight will be privately operated by SpaceX using a previously-flown Crew Dragon capsule launched to low Earth orbit.

The objective of the Inspiration4 mission: The mission involves circling the Earth for three days and then splashing down into the Atlantic Ocean. It will orbit the Earth at 575 km, higher than the International Space Station (408 km) and the Hubble Space Telescope (547 km). This will be the farthest distance travelled by a crewed mission since 2009, when astronauts last went to repair the Hubble.

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

1. It is a perennial plantation crop.
2. Its plantation can lead to a decline in forest cover and biodiversity of a region.

Which of the statements given above is/are correct?

- a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Explanation: Statement 1 is correct: Oil palm is a low maintenance, high yield, perennial plantation crop. It is one of the essential food items such as onions and pulses and widely used by a majority of Indians.

Statement 2 is correct: Studies on agrarian change in Southeast Asia have shown that increasing oil palm plantations is a major reason for the region's declining biodiversity. For example: Indonesia has seen a loss of 1,15,495 million hectares of forest cover in 2020, mainly to oil palm plantation

September: 11

Q.1) FOSS4Gov Innovation Challenge is an initiative of:

a) NITI Aayog

b) Union Ministry of Electronics and IT

c) Union Ministry of Finance

d) None of the above

Explanation: The government has extended the last date of participation and submission in FOSS4Gov Innovation Challenge till 15th of September.

Ministry of Electronics and IT has appealed to the Free and Open Source Software (FOSS) innovators to participate in large numbers to drive the FOSS revolution to its maximum potential.

In July this year, on the occasion of 7-year anniversary of MyGov, the Ministry had launched #FOSS4Gov Innovation Challenge to accelerate adoption of Free and Open Source Software in Government and build Indian FOSS Ecosystem.

Through this challenge, various innovators, start-ups, working professionals, academics and students in India are invited to showcase their existing FOSS based innovations or build new, implementable, open-source product innovations in Customer Relationship Management and Enterprise Resource Planning.

The winners of the Challenge will receive cash rewards and incubation support to scale their products for listing on Government e Market.

Hence, option (b) is the correct answer.

Q.2) Recently seen in the news, Project Pyrasol is related to which of the following?

a) Municipal Waste disposal system

b) Crude oil refining method

c) Afforestation method

d) Water harvesting method

Explanation: Project Pyrasol is a new waste disposal method to convert urban municipal waste (fibrous organic and sludge) into valuable biochar via pyrolysis (heating at extremely high

temperatures in the absence of oxygen), with energy sourced from renewable source-solar plants.

It is being developed as a collaboration between India and Germany.

It is a part of the Indo-German Science & Technology Centre (IGSTC) flagship program 2+2 Project.

Q.3) Consider the following statements:

1) Asiatic lion is naturally found in India only.

2) Double-humped camel is naturally found in India only.

3) One-horned rhinoceros is naturally found in India only.

Which of the following statement given above is/are correct?

a) 1 only

b) 2 only

c) 1 and 3 only

d) 1,2 and 3

Explanation: Only Statements 1 is Correct:

Asiatic lions are slightly smaller than African lions. At present Gir National Park and Wildlife Sanctuary is the only natural abode of the Asiatic lion.

Double-hump camels are found naturally in Tibet, Mountain regions of China, Mongolia, Pakistan, and also in mountain regions of Afghanistan.

One horned rhino is found in India, Pakistan, Nepal and the lower reached of Bhutan. This law has been amended 5 times and the last amendment was in 2013.

Q.4) The 'Principle of Non-Refoulement' is sometimes seen in the news in the context of:

a) Protection of international refugees

b) Freedom of navigation operations

c) Non-proliferation of nuclear weapons

d) Protection of right to privacy

Explanation: The principle of non-refoulement is the cornerstone of asylum and of international refugee law. The principle of non-refoulement forms an essential protection under international human rights, refugee, humanitarian and customary law. Under international human rights law, the Principle of Non-Refoulement guarantees that no one should be returned to a country where they would face torture, cruel, inhuman or degrading treatment or punishment and other irreparable harm.

Under international human rights law the prohibition of refoulement is explicitly included in the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) and the International Convention for the Protection of All Persons from Enforced Disappearance (ICPPED).

Q.5) Consider the following-

Military Exercises: Countries Involved

1. SIMBEX: India and Srilanka
2. Yudh Abhyaas: India and United States
3. Prabal Dostyk: India and Russia

Which of the above military exercises are correctly matched?

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

Explanation:

SIMBEX-India and Singapore

Yudh Abhyaas- India and US

Prabal Dostyk- India and Kazakhstan

Q.6) With reference to Methanol Economy' Programme, consider the following statements:

1. It is an initiative of the Ministry of Environment, Forest and Climate Change.
2. It is a pathway for meeting India's commitment to COP 21.

3. Blending of methanol in gasoline can result in bring down GHG emissions by 20% in terms of particulate matter, NOx, and SOx.

Which of the above statement sis/are correct?

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

Explanation: Methanol is a low carbon, hydrogen carrier fuel produced from high ash coal, agricultural residue, CO2 from thermal power plants and natural gas. It is the best pathway for meeting India's commitment to COP 21.

The United Nations Climate Change Conference (COP 21) was held in Paris in 2015. The COP 21 led to a new international climate agreement, applicable to all countries, aiming to keep global warming at 1.5°C – 2°C, in accordance with the recommendations of the Intergovernmental Panel on Climate Change (IPCC).

Methanol Economy program initiated by NITI Aayog is aimed at reducing our oil import bill; reducing greenhouse gas (GHG) emissions & converting Indian coal reserves and municipal solid waste into methanol leading to independence from import while creating new jobs by setting up Methanol Production Plants.

Methanol, although slightly lower in energy content than petrol and diesel, can replace both petrol and diesel in transport sector (road, rail and marine), energy sector (comprising of DG sets, boilers, process heating modules, tractors and commercial vehicles) and retail cooking replacing LPG (partially), Kerosene and wood charcoal. Blending of 15% methanol in gasoline can result in at least 15% reduction in import of gasoline/ crude. In addition, it would bring down GHG emissions by 20% in terms of particulate matter, NOx, and Sox thereby improving urban air quality.

Q.7) Democracy Index is published annually by:

- a) Economist Intelligence Unit
- b) German Watch

- c) Reporters Without Borders
- d) Amnesty International

Explanation: The Democracy Index (began in 2006) is prepared by the Economist Intelligence Unit. It provides a snapshot of the state of democracy worldwide in 165 independent states and two territories.

The Index is based on five categories:

Civil liberties,
Electoral process and pluralism;
Functioning of government;
Political participation; and
Political culture
The countries are scored on a scale of 0 to 10 on 60 indicators within the above categories.

Based on their scores, each country is classified as one of four types of regimes:

Full democracy (scores greater than 8);

Flawed democracy (greater than 6 and up to 8);
Hybrid regime (greater than 4 and up to 6); and
Authoritarian regime (less than or equal to 4)

Q.8) Biofuels made from algal biomass are known as:

- a) 1st Generation Biofuel
- b) 2nd Generation Biofuel
- c) 3rd Generation Biofuel**
- d) 4th Generation Biofuel

Explanation: Biofuels are liquid or gaseous fuels primarily produced from biomass, and can be used to replace or can be used in addition to diesel, petrol or other fossil fuels for transport, stationary, portable and other applications. Crops used to make biofuels are generally either high in sugar (such as sugarcane, sugarbeet, and sweet sorghum), starch (such as maize and tapioca) or oils (such as soybean, rapeseed, coconut, sunflower).

Biofuels produced from the algae are known as third generation biofuels. These are also known as also known as “algae fuel” or “oilage”. Algae leads to the production of all types of bio-fuels such as biodiesel, gasoline, butanol, propanol and

ethanol with high yield, approximately 10 times higher than the second generation biofuel. Cultivation of third generation biofuel biomass also assists in maintaining environmental balance by consuming the CO₂ present in the atmosphere.

Q.9) With reference to Open Natural Ecosystems (ONEs), consider the following statements:

1. In India, ONEs have been classified as wastelands.
2. They have the highest densities & diversity of large mammalian fauna and also support the livelihoods of local populations.

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

Explanation: Both statements are correct.

In India, ONEs has been classified as wastelands. They cover around 300,000 sq km (10 percent) of India’s land surface. The largest stretches are found in Rajasthan, Madhya Pradesh, Maharashtra, Andhra Pradesh and Gujarat.

These have the “highest densities and diversity of large mammalian fauna” and also support the livelihoods of local populations. So, the government should exclude these habitats when considering the location of renewable energy projects.

Q.10) With reference to Production Linked Incentive (PLI) schemes, consider the following statements:

1. It aims to promote the local companies to setup or expand their manufacturing units.
2. It restricts the foreign investors to set up their manufacturing units 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

Explanation: Statement 1 is correct: It aims to promote the local manufacturers to expand their manufacturing. Under the Scheme, companies will get incentives on incremental sales from products manufactured in domestic units. Statement 2 is incorrect: The major aim of the scheme is to invite foreign investors to set up their manufacturing units in India.

September: 13

Q.1) Which of the following agreements signed by India are associated with Australia?

1. Comprehensive Strategic Partnership
2. Mutual Logistics Support Agreement
3. Logistics Exchange Memorandum of Agreement (LEMOA)

Select the correct answer using the code given below-

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

Explanation: LEMOA is signed with United States.

Recently, Prime Ministers of India and Australia held their first virtual bilateral summit and both concluded nine agreements including the Comprehensive Strategic Partnership (CSP) and the Mutual Logistics Support Agreement (MLSA).

Agreements:

Comprehensive Strategic Partnership: Upgradation of the existing 2+2 dialogue to the Ministerial level, elevating the 2009 bilateral Strategic Partnership to a CSP.

India already has a 2+2 ministerial-level dialogues mechanism with the USA and Japan, the other members of the Quadrilateral grouping (QUAD).

India has signed CSPs with the United Kingdom, Indonesia, Vietnam and the United Arab Emirates (UAE) thus far, while Australia has CSPs with China, Indonesia and Singapore.

Mutual Logistics Support Agreement: Both sides agreed to continue to deepen and broaden defence cooperation by enhancing the scope and complexity of their military exercises and engagement activities to develop new ways to address shared security challenges.

It will increase military interoperability through defence exercises and allow both militaries the reciprocal use of bases, humanitarian and disaster

relief cooperation, port exercises and passage exercises.

India has such agreements with the USA (Logistics Exchange Memorandum of Agreement-LEMOA), France, Singapore and South Korea.

Q.2) Which of the following are the likely consequences of Production Linked Incentive Scheme for Textiles?

1. Increase in Investment
2. Drastic increase in all fibre exports.
3. Increase of employment opportunities

Select the correct answer using the code given below-

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

Explanation: Statement 2 is not correct.

PLI scheme for Textiles is part of the overall announcement of PLI Schemes for 13 sectors made earlier during the Union Budget 2021-22, with an outlay of Rs. 1.97 lakh crore.

Expected Benefits:

Increase in Investment and Employment:

It will lead to fresh investment of more than Rs.19,000 crore, cumulative turnover of over Rs. 3 lakh crore and additional employment opportunities of more than 7.5 lakh jobs in this sector and several lakhs more for supporting activities.

The textiles industry predominantly employs women, therefore, the scheme will empower women and increase their participation in the formal economy.

Priority to Backward Areas:

In addition, priority will be given for investment in Aspirational Districts, Tier 3, Tier 4 towns, and rural areas and due to this priority, Industry will be incentivized to move to backward areas.

This scheme will positively impact especially States like Gujarat, UP, Maharashtra, Tamil Nadu, Punjab, AP, Telangana, Odisha etc.

Q.3) With reference to the Medium Range Surface to Air Missile (MRSAM) System, consider the following statements:

1. It is an advanced network centric combat Air Defence System developed jointly by Defence Research and Development Organisation (DRDO) and Israel Aerospace Industries (IAI).

2. It is capable of engaging multiple targets at ranges up to 70 kms in severe saturation scenarios.

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

Explanation: The MRSAM (IAF) is an advanced network centric combat Air Defence System developed jointly by Defence Research and Development Organisation (DRDO) and Israel Aerospace Industries (IAI) in collaboration with the Indian industry comprising of private and public sectors including MSMEs.

The MRSAM system provides point and area air defence for ground assets against a wide range of threats including fighter aircraft, UAVs, helicopters, guided and unguided munitions, sub-sonic & supersonic cruise missiles etc.

It is capable of engaging multiple targets at ranges up to 70 kms in severe saturation scenarios.

The missile is powered by indigenously developed rocket motor and control system for achieving high manoeuvrability during the terminal phase.

The firing unit comprises of Missiles, Combat Management System (CMS), Mobile Launcher Systems (MLS), Advanced Long Range Radar, Mobile Power System (MPS), Radar Power System (RPS), Reloader Vehicle (RV) and Field Service Vehicle (FSV).

Q.4) Recently seen in the news, Jatayu Conservation & Breeding Center is situated in

- a) Jim Corbett National Park
- b) Chinnar Wildlife Sanctuary
- c) **Bir Shikargah Wildlife Sanctuary**
- d) Karakoram Wildlife Sanctuary

In October 2020, eight critically endangered Oriental white-backed vultures were released into the wild for the first time in India from the Jatayu Conservation and Breeding Centre (JCBC) situated at the Bir Shikargah Wildlife Sanctuary in Shivalik ranges of the Himalayan foothills in Haryana's Pinjore.

A year later, they have blended well into the untamed habitat outside the aviary, offering hope to conservationists. But the grave threats to the survival of vultures are far from over.

Q.5) Recently seen in the news, Climate Action & Finance Mobilization Dialogue (CAFMD) is related to?

- a) India-Russia
- b) Germany-Japan
- c) China-Russia
- d) **India-USA**

Explanation: The Climate Action and Finance Mobilization Dialogue (CAFMD) is one of the two main tracks of the US-India Agenda 2030 partnership that was announced in April 2021.

Q.6) With reference to the recently held BRICS Summit, which of the following statements is/are correct?

- 1. The theme for the Summit was Realizing Opportunities of the 21st Century For All.
- 2. It adopted Delhi Declaration which called for reforms of the principal organs of the United Nations.

Choose the correct answer from the codes given below:

- a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Explanation: The BRICS (Brazil-Russia-India-China-South Africa) brings together five of the largest developing countries of the world, representing 41% of the global population, 24% of the global GDP and 16% of the global trade.

India chaired the annual summit of the BRICS which was held virtually. The theme for the Summit was ‘BRICS@15: Intra-BRICS cooperation for continuity, consolidation and consensus’.

Key Takeaways from the Summit are:

The BRICS asserted that the territory of Afghanistan must not be used to carry out terror attacks against other countries called for combating terrorism in all its forms and manifestations, including the cross-border movement of terrorists.

The summit also endorsed the BRICS Counter-Terrorism Action Plan for implementing the grouping’s Counter-Terrorism Strategy that was adopted by the NSAs of the member nations of the grouping.

The Delhi Declaration called for reforms of the principal organs of the United Nations including instilling new life in the discussion on the reform of the United Nations Security Council (UNSC). It pledged resolve towards strengthening and reforming the multilateral system to make global governance more responsive and effective. The declaration also condemned “in strongest terms” terrorist attacks near Kabul airport that resulted in a large number of death and injuries.

Q.7) With reference to the Carbon Capture and storage (CCS) Technology, consider the following statements:

1. This technology captures CO₂ from fossil fuel-fired power plants and injects it into depleted oil and gas fields.
2. This technology is capable of capturing up to 90% of the CO₂ emissions for over a 1000-year period.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Explanation: CCS is a technology reportedly capable of capturing up to 90% of the CO₂ emissions produced by the burning of fossil fuels to generate electricity, as well as those used in industrial processes, and prevent it from polluting the atmosphere.

Fossil fuel power plants can be built with the technology already integrated or it can also be combined with renewable biomass to create a “carbon-negative” mode the goes one step further by actually removing CO₂ from the planet.

CCS involves capturing CO₂, before transporting it to be stored in geological rock formations thousands of metres below the Earth’s surface.

The initial part of the process involves separating CO₂ from the gasses produced in power generation and industrial processes, such as manufacturing cement or steel, by pre-combustion capture, post-combustion capture or oxy-fuel combustion.

The pollutant is then transporting using either a pipeline or a ship.

It is then stored in depleted oil and gas fields or deep saline aquifer formations, which the Intergovernmental Panel on Climate Change (IPCC) says can retain 99% of the pollutant over a 1000-year period.

Q.8) With reference to the “precision-guided sterile insect technique” (pgSIT), consider the following statements:

1. It alters genes linked to male fertility—creating sterile offspring—and female flight in *Aedes aegypti*.
2. The pgSIT uses CRISPR to sterilise male mosquitoes and render female mosquitoes flightless.

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

Explanation: Leveraging advancements in CRISPR-based genetic engineering, researchers have created a system that restrains populations of mosquitoes that infect millions each year with debilitating diseases.

The “precision-guided sterile insect technique” (pgSIT), alters genes linked to male fertility—creating sterile offspring—and female flight in *Aedes aegypti*, the mosquito species responsible for spreading diseases including dengue fever, chikungunya and Zika.

The pgSIT uses CRISPR to sterilise male mosquitoes and render female mosquitoes (which spread disease) flightless.

The system is self-limiting and is not predicted to persist or spread in the environment, two safety features that should enable acceptance for this technology, the release said.

The scientists say pgSIT eggs can be shipped to a location threatened by mosquito-borne disease or developed at an on-site facility that could produce the eggs for nearby deployment.

Once the pgSIT eggs are released in the wild, sterile pgSIT males will emerge and eventually mate with females, driving down the wild population as needed.

Hence both statements are correct.

Q.9) With reference to the LCA-Mk2, consider the following statements:

1. The LCA-Mk2 will be a heavier and much more capable aircraft than the current LCA variants.
2. The Mk2 is 1,350 mm longer featuring canards and can carry a payload of 6,500 kg compared to 3,500 kg the LCA can carry.

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

Explanation: LCA-Mk2 to roll out next year, first flight in 2023, says scientist.

The configuration for the Light Combat Aircraft (LCA)-Mk2 has been frozen and steel cutting is expected to begin soon while configuration for the fifth-generation Advanced Medium Combat Aircraft (AMCA) has been frozen and preliminary design completed.

Roll-out of the aircraft (Mk2) is planned next year and the first flight in early 2023.

The aircraft features enhanced range and endurance including an onboard oxygen generation system, which is being integrated for the first time.

Heavy weapons of the class of Scalp, Crystal Maze and Spice-2000 will also be integrated on the Mk2. The LCA-Mk2 will be a heavier and much more capable aircraft than the current LCA variants.

The Mk2 is 1,350 mm longer featuring canards and can carry a payload of 6,500 kg compared to 3,500 kg the LCA can carry.

The Indian Air Force (IAF) has one squadron of the LCA in initial operational clearance and deliveries of the second squadron in final operational clearance configuration are under way.

Hence both statements are correct.

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

1. The National Company Law Tribunal (NCLT) deals with matters mainly related to companies law and the insolvency law, while the Income Tax Appellate Tribunal (ITAT) deals with income tax matters.
2. The appointments will be for five years from the date of assumption of charge or till attaining the age of 65 or until further orders.

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

Explanation: The government has appointed 31 people as judicial, technical and accountant members at the NCLT and the ITAT, amid the Supreme Court flagging concerns about vacancies in various tribunals.

The National Company Law Tribunal (NCLT) deals with matters mainly related to companies law and the insolvency law, while the Income Tax Appellate Tribunal (ITAT) deals with income tax matters.

The appointments also come at a time when the Supreme Court has flagged concerns, saying the Centre was “emasculating” tribunals by not appointing officials to the quasi-judicial bodies that are facing a staff crunch.

The appointments will be for five years from the date of assumption of charge or till attaining the age of 65 or until further orders.

There are around 250 posts lying vacant at various key tribunals and appellate tribunals such as the NCLT, the DRT, the TDSAT and the SAT.

Hence both statements are correct.

September: 14

Q.1) Recently seen in the news, Thumbimahotsavam is related to

- a) It is part of Onam dance.
- b) Tamil Nadu's Annual fair related to Goddess Earth.
- c) Karnataka's 12 years fair.

d) Kerala's Dragon Fly Festival.

Explanation: Thumbimahotsavam is the first-ever State Dragonfly Festival in Kerala.

World Wide Fund for Nature-India (WWF-India) State unit has joined hands with the Society for Odonate Studies (SOS) and Thumbipuram for the festival.

This is part of a national dragonfly festival being organised by the WWF India, Bombay Natural History Society & Indian Dragonfly Society in association with the National Biodiversity Board, United Nations Environment Programme, United Nations Development Programme and IUCN – Centre for Environment Conservation.

Q.2) Recently seen in the news, the Groundswell report released by?

- a) UNFCCC
- b) German Watch
- c) **Word Bank Group**
- d) European Union

Explanation: The World Bank's updated Groundswell report finds that climate change, an increasingly potent driver of migration, could force 216 million people across six world regions to move within their countries by 2050.

Sub-Saharan Africa could see as many as 86 million internal climate migrants; East Asia and the Pacific around 49 million; South Asia as many as 40 million; North Africa to 19 million; Latin America to 17 million; and Eastern Europe and Central Asia to around 5 million.

Hotspots of internal climate migration could emerge as early as 2030 and continue to spread and intensify by 2050.

The report also finds that immediate and concerted action to reduce global emissions, and support green, inclusive, and resilient development, could reduce the scale of climate migration by as much as 80 per cent.

Climate change is a powerful driver of internal migration because of its impacts on people's livelihoods and loss of liveability in highly exposed locations.

Q.3) India and which of the following country recently launched the "Climate Action and Finance Mobilization Dialogue (CAFMD)"?

- a) **United States of America (USA)**
- b) Spain
- c) China
- d) Sri Lanka

Explanation: India and the United States of America (USA) launched the "Climate Action and Finance Mobilization Dialogue (CAFMD)".

The CAFMD is one of the two tracks of the India-U.S. Climate and Clean Energy Agenda 2030 partnership launched at the Leaders' Summit on Climate in April 2021, by Prime Minister Shri Narendra Modi and US President Mr. Joseph Biden.

The dialogue was formally launched by Union Minister of Environment, Forest and Climate Shri Bhupender Yadav and Mr. John Kerry, U.S. Special Presidential Envoy for Climate (SPEC), at an event held in New Delhi.

The dialogue will not only strengthen India-US bilateral cooperation on climate and environment but will also help to demonstrate how the world can align swift climate action with inclusive and resilient economic development, taking into account national circumstances and sustainable development priorities.

The launch was preceded by a bilateral meet where both sides discussed at length a wide range of climate issues relating to COP26, Climate Ambition, Climate Finance, Global Climate Initiatives including International Solar Alliance (ISA), Agriculture Innovation Mission for Climate (AIM4C).

Hence, option (a) is the correct answer.

Q.4) With reference to the Stock market exchanges, consider the following statements:

1. Recently SEBI allowed stock exchanges to start the T+1 system as an option in place of T+2.
2. T+1 also reduces the number of outstanding unsettled trades at any instant, and thus decreases the unsettled exposure to Clearing Corporation by 50%.

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

Explanation: On September 7, Sebi allowed stock exchanges to start the T+1 system as an option in place of T+2. If it opts for the T+1 settlement cycle for a scrip, the stock exchange will have to mandatorily continue with it for a minimum 6 months.

Thereafter, if it intends to switch back to T+2, it will do so by giving one month's advance notice to the market.

Any subsequent switch (from T+1 to T+2 or vice versa) will be subject to a minimum period.

Why T+1 settlement?

According to a Sebi paper, a shortened cycle not only reduces settlement time but also reduces and frees up the capital required to collateralise that risk.

T+1 also reduces the number of outstanding unsettled trades at any instant, and thus decreases the unsettled exposure to Clearing Corporation by 50%. The narrower the settlement cycle, the narrower the time window for a counterparty insolvency/bankruptcy to impact the settlement of a trade.

Working

If an investor sells shares on Tuesday, settlement of the trade takes place in two working days

(T+2). The broker who handles the trade will get the money on Thursday, but will credit the amount in the investor's account only by Friday. In effect, the investor will get the money only after three days.

In T+1, settlement of the trade takes place in one working day and the investor will get the money on the following day. The move to T+1 will not require large operational or technical changes by market participants, nor will it cause fragmentation and risk to the core clearance and settlement ecosystem.

In April 2002, stock exchanges had introduced a T+3 rolling settlement cycle. This was shortened to T+2 from April 1, 2003.

Hence both statements are correct.

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

1. Permafrost is defined as ground (soil, rock and any included ice or organic material) that remains at or below zero degree Celsius for at least ten consecutive years.
2. Permafrost is spread across an area of over 23 million square kilometers, covering about 15% of the land area of the globe.

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

Explanation: The latest IPCC report has warned that increasing global warming will result in reductions in Arctic permafrost and the thawing of the ground is expected to release greenhouse gases like methane and carbon dioxide.

Permafrost is defined as ground (soil, rock and any included ice or organic material) that remains at or below zero degree Celsius for at least two consecutive years.

Permafrost is spread across an area of over 23 million square kilometers, covering about 15% of the land area of the globe.

Effects as permafrost melts due to increasing global temperatures

The first impacts that are very rapid will affect countries where roads or buildings were constructed on permafrost. The Russian railways are an example.

But the biggest international problem is to do with the potential for organic material, which is now entombed and frozen in the ground. If the ground begins to thaw, this material will become available for microbiota to break down.

In some environments, the biota will release carbon dioxide, and in others release methane which is about 25 to 30 times more potent as a greenhouse gas than carbon dioxide.

The total quantity of carbon that is now buried in the permafrost is estimated at about 1500 billion tonnes and the top three meters of the ground has about 1000 billion tonnes.

Hence only statement 2 is correct.

Q.6) With reference to the 'bio Decomposer', consider the following statements:

1. 'Pusa Decomposer' capsule has been developed by Council of Scientific and Industrial Research.
2. 'Pusa Decomposer' is essentially a fungi-based liquid solution that can soften hard stubble to the extent that it can be easily mixed with soil in the field to act as compost.

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

Explanation: Terming the bio-decomposer technique a "smashing success" at curbing stubble burning in the Capital, Chief Minister Arvind Kejriwal appealed to the Centre to ask the

neighbouring States to use the same to prevent pollution.

The burning of paddy stubble left in the fields after harvest has been a cause of concern for the past several years as it contributes to air pollution in the northern Gangetic plains and its already polluted cities like Delhi.

It is a common practice in October and November across North West India, but primarily in Punjab, Haryana, and Uttar Pradesh to quickly clear crop residue from their fields before planting the rabi wheat crop.

To tackle the issue 'Pusa Decomposer' capsule has been developed by Indian Agriculture Research Institute (IARI).

'Pusa Decomposer' is essentially a fungi-based liquid solution that can soften hard stubble to the extent that it can be easily mixed with soil in the field to act as compost.

This would then rule out the need to burn the stubble, and also help in retaining the essential microbes and nutrients in soil that are otherwise damaged when the residue is burned.

There are seven strains of fungi that IARI has identified after research which help in rapid breakdown of hard stubble. These seven strains of fungi are packed into four capsules.
Hence only statement 2 is correct.

Q.7) Which of the following statements is/are correct regarding NATGRID?

1. It is a project under Indian government for creating a comprehensive and integrated system for effective policing through e-Governance.
2. It is exempted from the Right to Information Act, 2005.

Choose the correct answer from the codes given below:

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

Explanation: NATGRID is conceptualised as a seamless and secure database for information on

terrorists, economic crimes and similar incidents to help bolster India's capabilities.

The NATGRID has been envisaged as a robust mechanism to track suspects and prevent terrorist attacks with real-time data and access to classified information like immigration, banking, individual taxpayers, air and train travels.

It is different from Crime and Criminal Tracking Networks and Systems (CCTNS) which is a project under Indian government for creating a comprehensive and integrated system for effective policing through e-Governance.

NATGRID database will be available to prominent federal agencies including, the Central Bureau of Investigation (CBI), Directorate of Revenue Intelligence (DRI), Enforcement Directorate (ED), Central Board of Indirect Taxes and Customs, Central Board of Direct Taxes (for Income Tax Department) (CBDT), Cabinet Secretariat, Intelligence Bureau (IB), Directorate General of GST Intelligence, Narcotics Control Bureau (NCB), Financial Intelligence Unit and the National Investigation Agency (NIA).

NATGRID is exempted from the Right to Information Act, 2005 under sub-section (2) of Section 24.

The project was supposed to go live by December 31 2020 but was postponed due to COVID-19.

Q.8) Samvatsari is a festival celebrated by:

a) Swetambar Sect of Jainism

b) Digambar Sect of Jainism

c) Mahayana Buddhists

d) Theravada Buddhists

Explanation: Samvatsari is the last day of Paryushana Shwetambar sect of Jainism. It falls on Shukla Panchami each year in the Jain calendar month of Bhadrapada, somewhere between the middle of August and September in the Gregorian calendar.

On this day, Jains forgive and seek forgiveness for their mistakes committed knowingly or unknowingly from all the living beings.

Q.9) Which of the following statements is/are correct regarding the Kaipad farming technique, sometimes seen in news?

1. It is primarily a technique for the cultivation of pest-resistant wheat varieties.
2. Through this technique, crops can be grown in brackish water.
3. It is mainly practiced in the less fertile regions of Brahmaputra plains.

Select the correct answer using the code given below:

a) 1 only

b) 2 and 3 only

c) 1 and 2 only

d) 2 only

Explanation: Statement 1 and 3 are not correct.

Kaipad farming is a technique of paddy cultivation. It is not a technique for the cultivation of wheat. Kaipad Rice received the Geographical Indication tag in 2014.

Kaipad farming is a mode of paddy cultivation in brackish water.

The traditional kaipad system of rice cultivation is an integrated organic farming system in which rice cultivation and aquaculture go together in coastal brackish water marshes rich in organic matter.

Kaipad farming is practised in the Northern districts of Kerala. Kaipad is a saline prone naturally organic rice production tract of North Kerala falling in Kozhikode, Kannur and Kasargod districts.

Q.10) With reference to "Agristack", consider the following statements-

1. It is a collection of digital technologies and digital databases focusing on farmers' welfare and agricultural sector.
2. Data generated by it will be used for policymaking and provide solution to farmer's problem.

Which of the above given statements are correct?

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

Explanation: Both statements are correct.

What is AgriStack?

It is a proposed digital ecosystem for covering everything related to agriculture – including farmers' database, land records, soil types, crops, etc.

The AgriStack is a collection of technologies & digital databases focusing on India's farmers & the agricultural sector.

As per scheme each farmer will be provided with a digital ID, which will be linked to their Aadhaar number.

Data Generated by AgriStack will be used by Government & Companies in policy making & in provide solutions to farmer problems.

Details to be collected:

Personal details: Name, age, sex, household size, Aadhaar, bank account details, KCC

Profile of land held: cadastral maps, farm size, land titles, local climatic & geographical conditions.

Production details: Crops grown, production history, input history, quality of output, machinery in possession;

Financial details: input costs, average return, credit history

What are benefits of a proposed "AgriStack"?

It will help in tackling issues such as poor access to credit & crop wastage in the agricultural supply chain.

Pest infestation, poor price discovery & yield forecasting can be sufficiently addressed by use of digital technology.

Potential Issues

Firstly, no farmer organisations seem to have been consulted during the drafting of the recent agricultural reforms.

It is likely to push farmers even faster into the clutches of companies & agribusiness - with no proper safeguards to protect their rights & interests.

There exist risks of exclusion with Aadhaar linked welfare delivery.

September: 15

Q.1) With reference to the Unified Payments Interface (UPI), consider the following statements:

1. The Reserve Bank of India (RBI) and the Monetary Authority of Singapore (MAS) recently announced a project to link their respective fast payment systems Unified Payments Interface (UPI) and PayNow to facilitate instant, low-cost, cross-border fund transfers.
2. The linkage is targeted to be operationalised by July 2022.

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

Explanation: The Reserve Bank of India (RBI) and the Monetary Authority of Singapore (MAS) announced a project to link their respective fast payment systems — Unified Payments Interface (UPI) and PayNow — to facilitate instant, low-cost, cross-border fund transfers.

The linkage is targeted to be operationalised by July 2022.

The UPI-PayNow linkage will enable users of each of the two fast-payment systems to make instant, low-cost fund transfers on a reciprocal basis without a need to get onboarded onto the other payment system.

UPI is India's mobile-based, 'fast-payment' system that facilitates customers to make round-the-clock payments instantly using a virtual payment address created by the customer.

PayNow is the fast payment system of Singapore that enables peer-to-peer fund-transfer service.

Hence both statements are correct.

Q.2) Which of the following countries are part of the Quadrilateral Security Dialogue or the Quad?

1. India
2. Japan
3. France

Select the correct answer using the code given below:

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

Explanation: The White House announced that US President Joe Biden will be hosting the first in-person meeting of the Quad countries on September 24. Prime Minister Narendra Modi, Australian PM Scott Morrison and Japanese PM Yoshihide Suga will be present at the meeting.

Following the Indian Ocean tsunami, India, Japan, Australia, and the US created an informal alliance to collaborate on disaster relief efforts. In 2007, then PM of Japan, Shinzo Abe, formalised the alliance, as the Quadrilateral Security Dialogue or the Quad.

In 2017, faced again with the rising threat of China, the four countries revived the Quad, broadening its objectives and creating a mechanism that aimed to slowly establish a rules-based international order.

In 2020, the trilateral India-US-Japan Malabar naval exercises expanded to include Australia, marking the first official grouping of the Quad since its resurgence in 2017 and the first joint military exercises among the four countries in over a decade.

In March 2021, the Quad leaders met virtually and later released a joint statement titled 'The Spirit of the Quad,' which outlined the group's approach and objectives.

Hence, option (b) is the correct answer.

Q.3) Recently seen in the news, the Nuakhai festival is observed in which of the following State

- a) Odisha
- b) Nagaland

- c) Himachal Pradesh
- d) Kerala

Explanation: Odisha is a land of 13 festivals in 12 months, out of which Nuakhai is a Sambalpuri festival that is highly popular in Western Odisha. The area is densely populated with tribal people whose main occupation is agriculture and this is the reason they celebrate Nuakhai.

The new harvest crops are worshipped and people celebrate it by eating the first rice of the harvest together with their family.

This festival has been a tradition since the 12th century AD. People celebrate this festival with joy and happiness. The festival is celebrated by Chauvan Raja Ramai Deo at Patanagarh, which is now Bolangir district in Odisha.

Q.4) Recently seen in news, the Democracy Index is released by

- a) OECD
- b) United Nations
- c) WEF

d) The Economist Intelligence Unit (EIU)

Explanation: India slipped two places to 53rd position in the 2020 Democracy Index's global ranking, according to The Economist Intelligence Unit (EIU), which said the "democratic backsliding" by authorities and "crackdowns" on civil liberties has led to a further decline in the country's ranking. However, India is ranked higher than most of its neighboring countries.

India's overall score fell from 6.9 in 2019 to 6.61 in the Index that provides a snapshot of the current state of democracy worldwide for 167 countries.

Q.5) With reference to the Periodic Labour Force Survey (PLFS), consider the following statements:

1. It is conducted by the Ministry of Labour and Employment.
2. Its objective is to estimate the key employment and unemployment indicators in the short time

interval of three months for the urban areas only in the Current Weekly Status.

Which of the above statements is/are correct?

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

Explanation: Periodic Labour Force Survey (PLFS) was launched in 2017 by National Statistical Office (NSO) under the Ministry of Statistics & Programme Implementation.

The objectives of PLFS are:

to estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in the short time interval of three months for the urban areas only in the 'Current Weekly Status' (CWS).

to estimate employment and unemployment indicators in both 'Usual Status' and CWS in both rural and urban areas annually.

The Periodic Labour Force Survey (PLFS) gives estimates of Key employment and unemployment Indicators like the Labour Force Participation Rates (LFPR), Worker Population Ratio (WPR), Unemployment Rate (UR), etc.

Q.6) With reference to PRANA portal, which of the following statements is/ are correct:

- a) It is a portal for monitoring the implementation of the National Clean Air Programme (NCAP)**
- b) It is the portal for Indian citizens to access information about all the services offered to them.
- c) It is the portal to grant certificate of disability to disabled people through online mode only
- d) It is a one-stop access of elderly care products and services by credible start-ups.

Explanation: About Prana portal Full Form: PRANA stands for Portal for Regulation of Air-pollution in Non-Attainment cities. Developed by: Central Pollution Control Board (CPCB) in partnership with Knowledge Lens (a B2B product

company) Purpose: It is a portal for monitoring the implementation of the National Clean Air Programme (NCAP). It will support tracking of physical as well as financial status of city air action plan implementation and disseminate information on air quality management efforts under NCAP to the public.

Q.7) Which of the following are the challenges associated with Legalizing Crypto currencies in India?

1. Safety and security of cryptocurrencies.
2. Volatility of cryptocurrency.
3. High investor protection.
4. Non-regulation of Cryptocurrency.

Which of the statements given above is/are correct?

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

Explanation: Safety and security of cryptocurrencies: This is one of the key issues with cryptocurrency. Mt Gox bankruptcy case is a highlight of this. Mt gox is a Tokyo-based cryptocurrency exchange. After the cyberattack, several thousands of bitcoin went lost and the company is yet to settle the claim. (Statement 1 is correct)

No investor protection: Since the cryptocurrency transactions are anonymous in nature, there is no investor/consumer protection in cryptocurrencies. (Statement 3 is incorrect)

Conflict of interest: Globally, crypto-currency exchanges act as both custodian and a regulator. So, their own interest and consumer protection get into conflict.

Non-regulation: There are some cryptocurrency regulators who often indulge in money laundering and terrorism financing. Further, they are immune to the Central Bank regulation of various countries. (Statement 4 is correct)

The volatility of cryptocurrency: Many cryptocurrencies have only a limited amount of

coins. For example, Bitcoins fixed the maximum possible number as 21 million. This creates an increase in demand with each passing day and creates instability in exchange rates. This made the cryptocurrency more volatile in nature. (Statement 2 is correct)

Q.8) With reference to National Clean Air Programme (NCAP), consider the following statements:

1. It aims to improve air quality at city, regional and national level.
2. It has a target of 25% reduction of PM10 and PM2.5 concentration by 2025.

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

Explanation: Statement 1 is correct: It is a comprehensive initiative in partnership with various Ministries and States to improve air quality at city, regional and national level.

Statement 2 is incorrect: It has a target of 20%–30% reduction of Particulate Matter (PM10 and PM2.5) concentration by 2024.

Q.9) PayNow, with which India has announced the linking of the Unified Payments Interface (UPI), is a payment interface of which country?

- a) Singapore**
- b) Nepal
- c) Bhutan
- d) Australia

Explanation: India and Singapore have announced the linking of the Unified Payments Interface (UPI) and PayNow, in order to enable users to make instant, low-cost fund transfers. The project to link the fast payment systems of both the countries was announced by Reserve Bank of India (RBI) and Monetary Authority of Singapore

(MAS). This linked payment interface is expected to be operationalised by July 2022. Linked interface will help in making instant, low-cost fund transfers on a reciprocal basis without onboarding onto the other payment system. PayNow is the fast payment system of Singapore, enabling peer-to-peer funds transfer service.

Q.10) Consider the following statements regarding India Plastic Pact, recently seen in news.

1. It is developed by World-Wide Fund for Nature-India (WWF India) and the Confederation of Indian Industry (CII).
2. It aims to promote a circular system for plastics.
3. The pact has time-bound targets for reducing, innovating and re-imagining plastic packaging.

Which of the above statements is/are correct?

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

Explanation: World-Wide Fund for Nature-India (WWF India) and the Confederation of Indian Industry (CII) have joined hands to develop a platform to promote a circular system for plastics. The new platform is called the 'India Plastic Pact'.

This will bring together prominent enterprises on a national level to make pledges toward the creation of a circular plastics system. The pact works to create a world where Plastic is respected and does not contaminate the environment.

The pact, like similar one, has time-bound targets for reducing, innovating and re-imagining plastic packaging. Targets to be achieved by 2030 include defining a list of unnecessary or problematic plastic packaging and items and take measures to address them through redesign and innovation.

September: 15

Q.1) With reference to the Exercise PEACEFUL MISSION, consider the following statements:

1. It is a Multilateral Exercise, which is conducted biennially as part of military diplomacy between Shanghai Cooperation Organisation (SCO) member states.
2. The Shanghai Cooperation Organization (SCO) is an intergovernmental organization founded in Shanghai on 15 June 2001.
3. India is not a member country of Shanghai Cooperation Organisation (SCO).

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

Explanation: Joint Counter Terrorism Exercise PEACEFUL MISSION is a Multilateral Exercise, which is conducted biennially as part of military diplomacy between Shanghai Cooperation Organisation (SCO) member states.

The 6th edition of Exercise PEACEFUL MISSION is being hosted by Russia in the Orenburg Region of South West Russia from 13 to 25 September 2021.

The aim of the exercise is to foster close relations between SCO member states and to enhance abilities of the military leaders to command multi-national military contingents.

The Shanghai Cooperation Organization (SCO) is an intergovernmental organization founded in Shanghai on 15 June 2001.

The SCO currently comprises eight Member States (China, India, Kazakhstan, Kyrgyzstan, Russia, Pakistan, Tajikistan and Uzbekistan) and four Observer States interested in acceding to full membership (Afghanistan, Belarus, Iran, and Mongolia).

Hence, option (b) is the correct answer.

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

1. Indian researchers have recently developed transparent ceramics, reaching theoretical transparency through a technique called colloidal processing followed by simultaneous application of temperature and pressure, for the first time in India.
2. Transparent ceramics is a new class of advanced materials with unique transparency and excellent mechanical properties.

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

Explanation: Indian researchers have developed transparent ceramics, reaching theoretical transparency through a technique called colloidal processing followed by simultaneous application of temperature and pressure, for the first time in India.

The material can be used for thermal imaging applications, especially in harsh service conditions and personal protection systems such as, helmets, face shields, and goggles.

Transparent ceramics is a new class of advanced materials with unique transparency and excellent mechanical properties.

These materials can be designed not only for transparent to visible light but also for ultraviolet (UV), Infrared (IR), and Radiofrequency (RF), giving opportunity for diverse applications.

Though produced by different countries globally, transparent ceramics are restricted in supply as they can be used for strategic applications in infantry personal protection systems involving thermal imaging such as helmets, face shields, and goggles.

Hence both statements are correct.

Q.3) With reference to 'fly ash' produced by the power plants using coal as fuel, which of the following statements is/are correct?

1) Fly ash can be used in the production of bricks for building construction.

2) Fly ash can be used as a replacement for some of the Portland cement contents of concrete.

3) Fly ash is made up of silicon dioxide and calcium oxide only and does not contain any toxic elements.

Select the correct answer using the code given below:

a) 1 and 2

b) 2 only

c) 1 and 3

d) 3 only

Explanation: Statement 1 and 2 are correct:

Fly ash can be used in the production of bricks for building construction and as a replacement for some of the Portland cement contents of concrete.

Fly ash is made up of aluminum silicate, silicon dioxide, calcium oxide. Fly ash particles are oxide rich and consist of silica, alumina, oxides of iron, calcium, and magnesium, and toxic heavy metals like lead, arsenic, cobalt, and copper.

Statement 3 is incorrect: as it says Fly ash is made up of only two components namely: silicon dioxide and calcium oxide

Q.4) Consider the following statements: with respect to Pusa Decomposer

1. It is used to decompose paddy stubble after a harvest & prevent stubble burning.

2. It uses a fungi-based liquid solution for decomposing.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 & 2

d) None of the Above

Explanation: Pusa bio-decomposer is a solution developed by the scientists at the Indian Agricultural Research Institute, Pusa, which can

turn crop residue into manure in 15 to 20 days and therefore, can prevent stubble burning

It is essentially a fungi-based liquid solution that can soften hard stubble to the extent that it can be easily mixed with soil in the field to act as compost.

This would then rule out the need to burn the stubble, and also help in retaining the essential microbes and nutrients in the soil that are otherwise damaged when the residue is burned.

Q.5) In context of Indian Agriculture, consider the following statements-

1. Biofortification is the process by which the nutritional quality of food crops is improved through agronomic practices, conventional plant breeding, or modern biotechnology.

2. In India, there is no crop which has been bio-fortified yet.

Which of the statements are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Explanation: Statement 1 is correct.

Biofortification is the process by which the nutritional quality of food crops is improved through agronomic practices, conventional plant breeding, or modern biotechnology.

Initiatives Taken by India:

Recently, the Prime Minister dedicated 17 biofortified varieties of 8 crops to the nation. Some examples:

Rice- CR DHAN 315 has excess zinc.

Wheat- HI 1633 rich in protein, iron and zinc.

Maize- Hybrid varieties 1, 2 and 3 are enriched with lysine and tryptophan.

Madhuban Gajar, a biofortified carrot variety, is benefitting more than 150 local farmers in Junagadh, Gujarat. It has higher β -carotene and iron content. Hence, statement 2 is not correct.

ICAR has started Nutri-Sensitive Agricultural Resources and Innovations (NARI) programme for promoting family farming linking agriculture to nutrition, nutri-smart villages for enhancing nutritional security and location specific nutrition garden models are being developed to ensure access to locally available, healthy and diversified diet with adequate macro and micronutrients.

The production of bio-fortified crop varieties will be upscaled and linked with government programmes of mid-day meal, Anganwadi etc. to reduce malnutrition.

Q.6) Which of the following species are critically endangered in IUCN Red List?

1. Great Indian Bustard
2. Forest Owlet
3. Cheetah
4. Leopard
5. Himalayan Quail

Select the correct answer using the code below-

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

d) 1 and 5 only

Explanation:

Species	IUCN Status
Great Indian Bustard-	Critically Endangered
Forest Owlet-	Endangered
Cheetah-	Extinct
Leopard-	Vulnerable
Himalayan Quail-	Critically Endangered

Q.7) Which of the following is/are benefits of a T+1 settlement cycle introduced by SEBI?

1. Frees up capital for risk collateralization
2. Provides liquidity to investors

3. Decreases unsettled exposure to clearing corporation

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

Explanation: All statements are correct.

T+1 means settlements will have to be cleared within one day after the actual transaction takes place. This means the trades executed on Monday gets settled on Tuesday, the next working day.

What are the benefits of T+1 Settlement?

Firstly, a shortened cycle not only reduces settlement time but also reduces and frees up the capital required to collateralise that risk.

Secondly, it will provide liquidity to the investors as they get their funds for the shares sold/ credited to their account earlier.

Thirdly, it reduces the number of outstanding unsettled trades at any instant, and thus decreases the unsettled exposure to Clearing Corporation by 50%.

Lastly, a shortened settlement cycle will also help in reducing systemic risk.

Q.8) With reference to the saline gargle RT-PCR technique, consider the following statements:

1. It is an entirely non-invasive technique.
2. It has been developed by National Institute of Virology.

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

Explanation: Statement 1 is correct: The method is non-invasive and simple enough for a patient to

collect his/her own sample for testing. A simple collection tube filled with a saline solution is used. The patient gargles with the solution and rinses it inside the tube.

Statement 2 is incorrect: it has been developed by National Environmental Engineering Research Institute (NEERI).

Q.9) With reference to Shanghai Cooperation Organisation, consider the following statements:

1. It's a Eurasian political, economic and military organisation aiming to maintain peace, security and stability in the region
2. Kazakhstan, China, Kyrgyzstan, Russia and Tajikistan, Turkmenistan, India and Pakistan are the members of SCO.

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

Explanation: Statement 1 is correct: The Shanghai Cooperation Organization (SCO) was established as a multilateral association to ensure security and maintain stability across the vast Eurasian region, join forces to counteract emerging challenges and threats, and enhance trade, as well as cultural and humanitarian cooperation. Statement 2 is incorrect: The SCO currently comprises eight Member States (China, India, Kazakhstan, Kyrgyzstan, Russia, Pakistan, Tajikistan and Uzbekistan).

Q.10) With reference to sterile insect technique, consider the following statements:

1. Under this method biological insect control large numbers of sterile insects are released into the wild.
2. Insects used for this method are preferably female.

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

Explanation: Statement 1 is correct: The sterile insect technique is a method of biological insect control whereby overwhelming numbers of sterile insects are released into the wild.

Statement 2 is incorrect: The released insects are preferably male as this is more cost-effective and the females may in some situations cause damage by laying eggs in the crop, or, in the case of mosquitoes, taking blood from humans

September: 16

Q.1) With reference to the plant-based mRNA vaccines, consider the following statements:

1. Messenger RNA or mRNA technology, used in Covid-19 vaccines, works by teaching our cells to recognize and protect us against infectious diseases.
2. Plant-based mRNA vaccines can be stored at room 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

Explanation: University of California, Riverside scientists are studying whether they can turn edible plants like lettuce into mRNA vaccine factories.

Messenger RNA or mRNA technology, used in Covid-19 vaccines, works by teaching our cells to recognize and protect us against infectious diseases. One of the challenges with this new technology is that it must be kept cold to maintain stability during transport and storage.

If this new project is successful, plant-based mRNA vaccines — which can be eaten — could overcome this challenge with the ability to be stored at room temperature, the University said in a press release.

The project, backed by a US \$500,000 grant from the US National Science Foundation, has three goals:

showing that DNA containing the mRNA vaccines can be successfully delivered into the part of plant cells where it will replicate,

demonstrating the plants can produce enough mRNA to rival a traditional shot, and

finally, determining the right dosage.

Hence both statements are correct.

Q.2) With reference to NITI Aayog's report 'Reforms in Urban Planning Capacity in India', consider the following statements:

1. The report recommends a Central Sector Scheme '500 Healthy Cities Programme', for a period of 5 years, wherein priority cities and towns would be selected jointly by the states and local bodies.
2. It recommends a 'Citizen Outreach Campaign' for demystifying urban planning.

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

Explanation: NITI Aayog today launched a report titled 'Reforms in Urban Planning Capacity in India', on measures to ramp up urban planning capacity in India.

The report makes several recommendations that can unblock bottlenecks in the value chain of urban planning capacity in India. Some of them are:

Every city must aspire to become a 'Healthy City for All' by 2030. The report recommends a Central Sector Scheme '500 Healthy Cities Programme', for a period of 5 years, wherein priority cities and towns would be selected jointly by the states and local bodies.

Formation of an apex committee at the state level is recommended to undertake a regular review of planning legislations (including town and country planning or urban and regional development acts or other relevant acts).

It recommends a 'Citizen Outreach Campaign' for demystifying urban planning.

The Central universities and technical institutions in all the other States/UTs are encouraged to offer postgraduate degree programmes (MTech Planning) to cater to the requirement of planners in the country in a phased manner.

The report recommends the constitution of a 'National Council of Town and Country Planners' as a statutory body of the Government of India.

Also, a 'National Digital Platform of Town and Country Planners' is suggested to be created within the National Urban Innovation Stack of MoHUA. This portal will enable self-registration of all planners and evolve as a marketplace for potential employers and urban planners.

Hence both statements are correct.

Q.3) Which of the following country is part of new trilateral security partnership (AUKUS) for the Indo-Pacific?

1. India
2. U.K
3. Australia

Select the correct answer using the code given below:

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

Explanation: The USA administration announced a new trilateral security partnership for the Indo-Pacific between Australia, the U.K. and the U.S. (AUKUS).

The security grouping AUKUS will focus on advancing strategic interests in the Indo-Pacific region

A central feature of the partnership would involve a trilateral 18-month effort to help Australia acquire nuclear-powered submarines which are quieter, more capable (than their conventional counterparts) and can be deployed for longer periods, needing to surface less frequently.

The partnership would also involve a new architecture of meetings and engagements between the three countries and also cooperation across emerging technologies (applied AI, quantum technologies and undersea capabilities).

Australia has felt increasing pressure from an assertive China, like other countries in the region, and has sought to strengthen its partnerships with India, the U.S. and the U.K., including through 'plurilateral' forums.

However, as in the case of the Quad, the U.S. officials denied the partnership was a response to China.

Hence, option (c) is the correct answer.

Q.4) Recently seen in the news, REX MK II a armed combat robot for borders is realted to which of the following country

- a) India
- b) Japan
- c) USA
- d) Israel**

Explanation: An Israeli defense contractor recently unveiled a remote-controlled armed robot it says can patrol battle zones, track infiltrators and open fire. The unmanned vehicle is the latest addition to the world of drone technology, which is rapidly reshaping the modern battlefield.

Proponents say such semi-autonomous machines allow armies to protect their soldiers, while critics fear this marks another dangerous step toward robots making life-or-death decisions.

The four-wheel-drive robot presented Monday was developed by the state-owned Israel Aerospace Industries' "REX MKII."

It is operated by an electronic tablet and can be equipped with two machine guns, cameras, and sensors

Q.5) Consider the following statements regarding Kaladan Multi-Modal Transit Transport Project:

1. It connects the countries of Vietnam, Myanmar, Thailand, and Cambodia to India.
2. It will reduce the need to transport good to the landlocked north eastern states of India through the narrow Siliguri corridor.

Which of the above statements is/are correct?

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

d) Neither 1 nor 2

Explanation: The Kaladan Multi-Modal Transit Transport is a project connecting the eastern Indian seaport of Kolkata with Sittwe seaport in Rakhine State, Myanmar by sea.

This project will reduce distance from Kolkata to Sittwe by approximately 1,328 km and will reduce the need to transport goods through the narrow Siliguri corridor, also known as Chicken's Neck.

India has for years sought transit access through Bangladesh to ship goods to the landlocked north-eastern States. At present, the only route to this region from the rest of India is a rather circuitous one through a narrow strip of Indian territory nicknamed the Chicken's Neck in West Bengal, sandwiched between Bhutan and Bangladesh. The new route through Sittwe would significantly lower the cost and distance of movement from Kolkata to Mizoram and beyond.

Q.6) Which of the following states are the hotspots of Arsenic contamination in India?

1. West Bengal
2. Jharkhand
3. Karnataka

Choose 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

Explanation: Arsenic is a naturally occurring trace element found in rocks, soils and the water in contact with them. Arsenic has been recognized as a toxic element and is considered a human health hazard.

Arsenic contamination in groundwater:

The occurrence of Arsenic in ground water was first reported in 1980 in West Bengal in India. In West Bengal, 79 blocks in 8 districts have Arsenic beyond the permissible limit of 0.05 mg/l. The most affected areas are on the eastern side of Bhagirathi River in the districts of Malda,

Murshidabad, Nadia, North 24 Parganas and South 24 Parganas and western side of the districts of Howrah, Hugli and Bardhaman. The occurrence of Arsenic in ground water is mainly in the aquifers up to 100 m depth. The deeper aquifers are free from Arsenic contamination.

Apart from West Bengal, Arsenic contamination in ground water has been found in the states of Assam, Bihar, Chhattisgarh, Haryana, Jharkhand, Karnataka, Punjab and Uttar Pradesh. The occurrence of Arsenic in the states of Bihar, West Bengal and Uttar Pradesh is in alluvial formations but in the state of Chhattisgarh, it is in the volcanic rocks exclusively confined to N-S trending Dongargarh- Kotri ancient rift zone. It has also been reported in Golaghat, Jorhat, Lakhimpur, Nagaon, Nalbari, Sibsagar, Sonitpur districts of Assam.

Long-term intake of arsenic contaminated water leads to arsenic poisoning or arsenicosis, with cancer of skin, bladder, kidney or lung or diseases of skin (colour changes, and hard patches on palms and soles), or blood vessels of legs and feet. Fresh evidence indicates possible association between intake of contaminated water to onset of diabetes, hypertension and reproductive disorders.

Q.7) Which of the following protected area is the only tiger habitat in the world with melanistic tigers?

- a) Buxa
- b) Panna
- c) Sariska

d) Simlipal

Explanation: A black tiger is a rare colour variant of the tiger, and is not a distinct species or geographic subspecies. So-called black tigers are due to pseudo-melanism. Pseudo-melanistic tigers have thick stripes so close together that the tawny background is barely visible between stripes. It is believed that inbreeding results in their thick black stripes.

Simlipal Tiger Reserve is the only tiger habitat in the world with melanistic tigers, which have broad black stripes running across their bodies and thicker than those seen on normal tigers, so much so that their tawny skin colour is barely visible.

Q.8) Model 3 expressway was recently seen in news. Which of the following correctly describes the term?

a) It is a newly planned highway to connect India 2019s North East with West Bengal through Bangladesh.

b) It is a new technology that connects multiple platforms such as Broad band, mobile, DTH, etc in same platform.

c) It is a new platform that connects all the India 2019s website data in one high speed connection so that to improve data security.

d) It is a single distributed ledger, capable of handling multiple currencies, and settling the claims.

Explanation: Model 3 is a single distributed ledger, capable of handling multiple currencies, and settling the claims. It comes with inbuilt checks on money-laundering and a dedicated set of players jostling to offer foreign-exchange services at the best price. Hong Kong and Thailand, together with China and the United Arab Emirates, are studying a bridging option for their digital currencies. Once several such expressways are in place, banks' profit from opaquely priced currency conversions and fat fees may vanish from retail transfers.

Q.9) With reference to Unified Farmer Service Platform (UFSP), Consider the following statements:

1. It is a combination of Core Infrastructure, Data, Applications and Tools that enable seamless interoperability of various public and private IT systems in the agriculture ecosystem.

2. It will act as a central agency in the agri ecosystem like UPI in the e Payments.

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

Explanation: Unified Farmer Service Platform (UFSP) is a combination of Core Infrastructure, Data, Applications and Tools that enable seamless interoperability of various public and private IT systems in the agriculture ecosystem across the country. (Statement 1 is correct) UFSP is envisaged to play the following role: It will act as a central agency in the agri ecosystem (like UPI in the e Payments) (Statement 2 is correct) The platform enables Registration of the Service Providers (public and private) and the Farmer Services. The platform enforces various rules and validations required during the service delivery process. The platform will act as a medium of data exchange amongst various schemes and services to enable comprehensive delivery of services to the farmer.

Q.10) Athikaraya, Kayame, Srihati, and Bhejri sometimes seen in news, these are associated with which of the following?

a) Indigenous rice

b) Folk rituals

c) Medicinal herbs

d) Sacred groves

Explanation: As many as 12 folk varieties of Indian rice examined by researchers can supplement the nutritional demand of important fatty acids in undernourished mothers.

In India, many folk varieties of rice like Athikaraya, Dudh-sar, Kayame, Neelam samba, Srihati, Maharaji and Bhejri are known to enhance milk production in lactating women. Other traditional varieties like Kelas, DudheBolta and Bhutmoori are rich in iron and can be included in diet of mothers to treat anaemia.

September: 17

Q.1) Which are the following institutions/organization releases Ease of doing business report?

- a) UNCTAD
- b) WEF
- c) World Bank**
- d) NITI Aayog

Explanation: The World Bank releases the Ease of Doing Business Report. The indicator measures the performance of countries across 10 different dimensions.

Starting a Business,

Dealing with Construction permits,

Electricity availability,

Property registration,

Credit availability,

Protecting minority Investors,

Paying Taxes,

Trading across borders,

Contracts enforcement, and

Resolving Insolvency.

India has ascended 17 notches, ranking at 63rd position in the 2020 EoDB report published by The World Bank.

Q.2) Which of the following statements is/are correct regarding National Asset Reconstruction Company Limited (NARCL), seen recently in news?

- 1. It is incorporated under the Companies Act.
- 2. Government of India will maintain 51% ownership in NARCL.
- 3. It will help in reducing the burden of Non-Performing Assets from the banks.

Choose 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

Explanation: National Asset Reconstruction Company Limited (NARCL) has been set up by banks to aggregate and consolidate stressed assets for their subsequent resolution. NARCL will acquire stressed assets worth about Rs 2 lakh crore from various commercial banks in different phases.

NARCL has been incorporated under the Companies Act and has applied to Reserve Bank of India for license as an Asset Reconstruction Company (ARC).

PSBs will maintain 51% ownership in NARCL.

NARCL is intended to resolve stressed loan assets above ₹500 crore each amounting to about ₹ 2 lakh crore. In phase I, fully provisioned assets of about Rs. 90,000 crores are expected to be transferred to NARCL, while the remaining assets with lower provisions would be transferred in phase II. It intends to acquire these through 15% Cash and 85% in Security Receipts (SRs).

Q.3) With reference to the Forest Rights Act, 2006, consider the following statements:

- 1. It gives ownership rights of minor forest produce to the forest-dwelling communities.
- 2. Under the act, the authority to initiate the process for determining Individual Forest Rights lies with the State Governments.

Which of the above statements is/are correct?

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

Explanation: The Forest Rights Act (FRA), 2006 recognizes the rights of the forest dwelling tribal communities and other traditional forest dwellers to forest resources, on which these communities were dependent for a variety of needs, including livelihood, habitation and other socio-cultural needs.

Objective of the Act:

To undo the historical injustice occurred to the forest dwelling communities

To ensure land tenure, livelihood and food security of the forest dwelling Scheduled Tribes and other traditional forest dwellers

To strengthen the conservation regime of the forests by including the responsibilities and authority on Forest Rights holders for sustainable use, conservation of biodiversity and maintenance of ecological balance.

The act identifies following rights:

Title rights – i.e. ownership – to land that is being farmed by tribals or forest dwellers as on 13 December 2005, subject to a maximum of 4 hectares; ownership is only for land that is actually being cultivated by the concerned family as on that date, meaning that no new lands are granted.

Use rights – to minor forest produce (also including ownership), to grazing areas, to pastoralist routes, etc.

Relief and development rights – to rehabilitation in case of illegal eviction or forced displacement; [15] and to basic amenities, subject to restrictions for forest protection.

Forest management rights – to protect forests and wildlife.

Section 6(1) of the Act provides that the gram sabha, or village assembly, will initially pass a resolution recommending whose rights to which resources should be recognised (i.e. which lands belong to whom, how much land was under the cultivation of each person as on 13 Dec 2005, etc.). This resolution is then screened and approved at the level of the sub-division (or taluka) and subsequently at the district level. The screening committees consist of three government officials (Forest, Revenue and Tribal Welfare departments) and three elected members of the local body at that level. These committees also hear appeals.

Q.4) Consider the following statements with reference to the Producer Price Index (PPI):

1. It measures the change in average retail prices that a consumer pays for the goods.

2. PPI excludes indirect taxes.

Which of the statements given above is/are not correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Explanation: Statement 1 is not correct.

Producer Price Index (PPI) measures the average change in the price of goods and services either as they leave the place of production, called output PPI or as they enter the production process, called input PPI. PPI estimates the change in average prices that a producer receives.

Consumer Price Index (CPI) is a measure of the change in retail prices of goods and services consumed by defined population group in a given area with reference to a base year. Hence, statement 1 is not correct. A wholesale price index (WPI) is an index that measures and tracks the changes in the price of goods in the stages before the retail level.

PPI is different from WPI on the following grounds:

o WPI captures the price changes at the point of bulk transactions and may include some taxes levied and distribution costs up to the stage of wholesale transactions. PPI measures the average change in prices received by the producer and excludes indirect taxes.

o Weight of an item in WPI is based on net traded value whereas in PPI weights are derived from the Supply Use Table.

o PPI removes the multiple counting bias inherent in WPI.

o WPI does not cover services and whereas PPI includes services.

Q.5) Also known as Kanwar Jheel, this wetland lies in the Indo-Gangetic plains. It is an important stopover along the Central Asian

Flyway. It is home to critically endangered species like the red-headed vulture and sociable lapwing. It was recently designated as a protected wetland under the Ramsar Convention.

Which of the following wetlands is being described in the above passage?

a) Kabartal Island

b) Jhelum Lake

c) Asan Conservation Reserve

d) Samaspur Bird Sanctuary

Explanation: Kabartal Wetland

It covers 2,620 hectares of the Indo-Gangetic plains in the Begusarai district of Bihar.

It is also known as Kanwar Jheel.

It acts as a vital flood buffer for the region besides providing livelihood opportunities to local communities.

It hosts significant biodiversity with 165 plant species and 394 animal species recorded, including 221 bird species.

It is an important stopover along the Central Asian Flyway, with numerous migratory waterbirds using it to rest and refuel.

It hosts five critically endangered species: the red-headed vulture, white-rumped vulture, Indian vulture, sociable lapwing and Baer's pochard.

Water management activities such as drainage, water abstraction, damming and canalization pose major threats to the site.

It was recently designated a Ramsar wetland.

Q.6) Consider the following statements with reference to Infrastructure Investment Trusts (InvITs):

1. These are institutions that enable investments into the infrastructure sector by pooling money from individual investors.

2. InvITs are regulated by the Reserve Bank of India.

3. InvITs help in attracting international finance into the Indian infrastructure sector.

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

Explanation: Statement 2 is not correct.

Infrastructure Investment Trusts (InvITs) are mutual fund like institutions that enable investments into the infrastructure sector by pooling small sums of money from multitude of individual investors for directly investing in infrastructure so as to return a portion of the income (after deducting expenditures) to unit holders of InvITs.

InvITs can invest in infrastructure projects, either directly or through a special purpose vehicle (SPV). In case of Public Private Partnership (PPP) projects, such investments can only be through SPV.

InvITs are regulated by the securities market regulator in India- Securities and Exchange Board of India (SEBI). InvITs are set up as a trust and registered with SEBI. The objective of InvIT is to facilitate investment into the infrastructure sector in India.

InvITs may help in attracting international finance into Indian infrastructure sector.

InvITs are also proposed to bring higher standards of governance into infrastructure development and management and distribution of income from assets so as to attract investor interest.

Q.7) With reference to Bad Banks, Consider the following statements:

1. A bad bank is an asset reconstruction company (ARC), involved in management and recovery of bad loans or NPAs of other banks.

2. Sunil Mehta panel on NPA's (Non-Performing Assets) propose to establish bad banks 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

Explanation: Recently, The Union Government has approved a proposal that requires the government to guarantee Security Receipts(SR) issued by National Asset Reconstruction Company Ltd (NARCL) when buying non-performing assets (NPAs) from banks. This will clear the path for the launch of National Asset Reconstruction Company (NARCL). The NARCL is a type of Bad Bank that has to be set up to resolve the problem of bad loans impacting the public sector banks. About Bad Bank A bad bank is an asset reconstruction company (ARC), involved in management and recovery of bad loans or NPAs of other banks. (Statement 1 is correct) Generally, these Banks are initially funded by the government and gradually, banks and other investors start to co-invest in them. Concept of Bad bank in India

The idea gained momentum when the RBI held asset quality review (AQR) found several banks showing a healthy balance sheet but have suppressed or hidden bad loans.

Sunil Mehta panel on NPA's (Non-Performing Assets) proposed Sashakt India Asset Management company,(a bad bank) for resolving large bad loans in 2018. (Statement 2 is correct)

Q.8) With reference to Telecom sector reforms, consider the following statements:

1. 100% FDI is permitted under the automatic route.
2. Non-telecom revenue will be excluded on prospective basis from the definition of AGR.

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

Explanation: Both statements are correct. I). Rationalization of Adjusted Gross Revenue: Non-telecom revenue will be excluded on prospective basis from the definition of AGR. To protect government revenues, companies availing of the moratorium will have to pay interest. This would be at the rate of marginal cost of funds-based lending rate (MCLR) plus 2%. ii). For auctions held henceforth, no Bank Guarantees (BGs) will be required to secure installment payments. Industry has matured and the past practice of BG is no longer required. iii). To encourage investment, 100% Foreign Direct Investment (FDI) under automatic route permitted in Telecom Sector. All safeguards will apply. Currently, 100% FDI is allowed in the sector, but only 49% was on the automatic route, and any investment above that limit required government approval.

Q.9) Shooonya initiative sometimes seen in news is associated with?

- a) Formulating India's 2019s net zero emission targets before the Glasgow Climate Change conference.
- b) Promoting zero-pollution delivery vehicles by working with consumers and the industry.**
- c) Swachh Bharat Campaign's 2019s zero garbage-centric approach to smart cities.
- d) identifying, developing and deploying technologies for converting waste to wealth.

Explanation: Shooonya is an initiative to promote zero-pollution delivery vehicles by working with consumers and the industry. Aim: To accelerate the adoption of electric vehicles (EVs) in the urban deliveries segment and create consumer awareness about the benefits of zero-pollution delivery. As part of the campaign, a corporate branding and certification programme is being launched to recognise and promote the industry's efforts towards transitioning to EVs for final-mile deliveries. Moreover, an online tracking platform will share the campaign's impact through data such as vehicle-kilometres electrified, carbon savings, criteria pollutant savings and other benefits from clean delivery vehicles.

Q.10) With reference to “AUKUS” consider the following statements:

1. It is the military component of Quad grouping.
2. Under this nuclear ballistic missile will be provided to Australia.

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**

Explanation: Statement 1 is incorrect: New Trilateral Security Partnership grouping has been formed between the US, UK and Australia (AUKUS) for the Indo-Pacific. It is not the military component of QUAD. The aim of the grouping is to advance the strategic interests, uphold the international order and promote peace and stability in the Indo-Pacific region. Statement 2 is incorrect: USA is sharing the technology with Australia for nuclear submarines. No nuclear weapons will be supplied to Australia as per the deal.

September: 18

Q.1) Consider the following statements regarding Net Zero targets, seen recently in news:

1. China is the largest emitter of GHGs.
2. China announced it move Net-Zero by 2060.

Which of the above statements is/are correct?

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

Explanation: Both Statement 1 & 2 are correct:

As the largest emitter of GHGs, China told the U.N. in 2020 that it would move to net-zero by 2060.

Its pledge to peak CO2 emissions before 2030 and achieve carbon neutrality three decades later is among the most high-profile commitments.

To operationalize this goal, China's State Council has issued a guideline on the transition to a green and low-carbon circular economic development system, focusing on industrial production, logistics, infrastructure, consumption, innovation, and enabling policies.

Q.2) Recently seen in the news, Helina is related to?

- a) Submarine
- b) Howitzer
- c) Anti-tank Guided Missile**
- d) Intercontinental Ballistic Missile

Explanation: The helicopter-launched Nag Anti-Tank Guided Missile (ATGM), Helina, being developed indigenously, has completed all trials and the process for issuing of Acceptance of Necessity (AoN) by the Army has started.

It is indigenously developed by Defence Research and Development Laboratory (DRDL) Hyderabad, a laboratory of the Defence Research and Development Organisation (DRDO).

Q.3) With reference to Bad Bank, consider the following statements-

1. It was proposed in Budget 2021.
2. It will acquire stressed assets from public sectors only.
3. It is involved in lending and taking deposits.

Select the correct answer using the code given below-

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

Explanation: Statement 2 and 3 are not correct.

Bad Bank

The bad bank is an Asset Reconstruction Company (ARC) or an Asset Management Company (AMC) that takes over the bad loans of commercial banks, manages them and finally recovers the money over a period of time.

The bad bank is not involved in lending and taking deposits, but helps commercial banks clean up their balance sheets and resolve bad loans.

The takeover of bad loans is normally below the book value of the loan and the bad bank tries to recover as much as possible subsequently.

About the New Bad Bank Structure:

Recently, the Union Cabinet approved the Rs 30,600 crore guarantee to back Security Receipts issued by National Asset Reconstruction Company Limited (NARCL) for acquiring stressed loan assets.

The NARCL is a part of a new Bad bank structure that was announced in the Budget 2021.

For resolution of huge NPAs (Non-Performing Assets) in the Indian Banking sector, the government of India has set up two new entities to acquire stressed assets from banks and then sell them in the market.

NPA refers to a classification for loans or advances that are in default or in arrears.

NARCL: NARCL has been incorporated under the Companies Act and has applied to the Reserve Bank of India for a license as an Asset Reconstruction Company (ARC).

NARCL will acquire stressed assets worth about Rs 2 lakh crore from various commercial banks in different phases.

Public Sector Banks (PSBs) will maintain 51% ownership in NARCL.

Q.4) If you would like to see “Irrawaddy Dolphin”, which of the following place you are likely to visit?

- a) Chilika Lake
- b) Sambhar Lake
- c) Nainital
- d) Vembanad Lake

Explanation: During the Dolphin Census in Chilika lake, direct sighting of 146 Irrawaddy dolphins has been reported.

The Census is being carried out using Hydrophone monitoring technique. A hydrophone is a microphone designed to be used underwater for recording or listening to underwater sound.

Irrawaddy dolphins

Irrawaddy dolphins (*Orcaella brevirostris*) are found in coastal areas in South and Southeast Asia, and in three rivers: the Irrawaddy (Myanmar), the Mahakam (Indonesian Borneo) and the Mekong (China).

They are ‘Endangered’ as per the IUCN Red List.

The total population of these aquatic mammals in the world is estimated to be less than 7,500.

More than 6,000 Irrawaddy dolphins have been reported from Bangladesh.

Dolphin distribution in Chilika is considered to be the highest single lagoon population.

Q.5) Drugs like Nimesulide, Ketprofen and Diclofenac leads to neck dropping and kidney failure of which of the following organism?

- a) Dhole Dogs

b) Vultures

- c) Leopards
- d) Coral Reefs

Explanation: A veterinary pain killer drug, nimesulide, has been causing the death of vultures in India, finds a new study published in the latest edition of the international scientific journal, Environmental Science and Pollution Research.

Diclofenac has long been established as the prime reason for wiping out 99 percent of the vulture population in India in the 90s. Later two more veterinary drugs – aceclofenac and ketoprofen – were found to be toxic for vultures. While diclofenac is banned, a proposal to ban the other two drugs is already under consideration by the Indian government, lead vulture scientist and deputy director at Bombay Natural History Society, Vibhu Prakash told Mongabay-India.

As per the new study, nimesulide appears to act similar to diclofenac in exerting toxic effects on vultures.

If the veterinary use of nimesulide continues, vultures could further suffer in India. Hence, the study recommends that nimesulide should be banned by the Indian government to conserve vultures in the Indian subcontinent.

Q.6) Which of the following countries have recently signed “AUKUS” Agreement?

1. United States
2. Australia
3. Japan
4. United Kingdom
5. France
6. India

Select the correct answer using the code given below-

- a) 1,2 and 5 only
- b) 1,2 and 4 only
- c) 1,2,3 and 6 only
- d) 1,2,3 and 4 only

Explanation: The United States, United Kingdom, and Australia announced a new defence deal on Thursday (September 16), under which America and Britain will help Australia deploy nuclear-powered submarines in the Pacific region.

Although the leaders of these three countries did not say so, the deal is seen as a step towards curtailing China, which has made significant aggressive manoeuvres in the Pacific region, especially in and around the South China Sea, where it has expansive territorial claims.

The first major initiative of AUKUS, would be to deliver a nuclear-powered submarine fleet for Australia. This will include an intense examination of what we need to do to exercise our nuclear stewardship responsibilities here in Australia.

The nuclear-powered submarines will give Australia naval heft in the Pacific, where China has been particularly aggressive. While the US and Britain have had the capability for decades, Australia has never had an n-sub.

Q.7) Which of the following are out of purview of Goods and Service Tax?

1. Property Tax
2. Alcohol
3. Petrol
4. Diesel
5. Natural Gas
6. Aviation Turbine Fuel
7. Stamp Duty

Select the correct answer using the code given below-

- a) 1,2 and 4 only
- b) 1,2,3,4,5,6 and 7**
- c) 1,2,3,4 and 6 only
- d) 2,3,4 and 6 only

Explanation: About Goods and services Tax GST is a single domestic indirect tax law for the entire country levied on the supply of goods and services.

It is a comprehensive, multi-stage, destination-based tax that is levied on every value addition. Under GST, several indirect taxes like excise duty, VAT, service tax, luxury tax etc. have been subsumed.

o However, several goods like Property Tax & Stamp Duty, Electricity Duty, Excise Duty on Alcohol, Basic Custom Duty, Petroleum crude, Diesel, Petrol, Aviation Turbine Fuel, Natural Gas, etc are not covered under GST.

Q.8) With reference to the 'Global Methane Pledge', consider the following statements:

1. It is an US-EU led effort to cut methane emissions by a third by the end of this decade.
2. It will help in abiding by the targets of the Paris climate deal.

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

Explanation: Recently, the US President has announced the Global Methane Pledge, which is an US-EU led effort to cut methane emissions by a third by the end of this decade. Hence, statement 1 is correct.

The announcement has come ahead of 26th Conference of the Parties (COP26) of United Nations Framework Convention on Climate Change (UNFCCC) in Glasgow, UK.

This will also help in abiding by the targets of the Paris climate deal. Hence, statement 2 is correct.

The pact between the US and the EU sets a target of cutting at least 30% from global methane emissions, based on 2020 levels, by 2030.

If adopted around the world, this would reduce global heating by 0.2C by the 2040s, compared with likely temperature rises by then.

The world is now about 1.2C hotter now than in pre-industrial times

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

1. They are so named because their habitat is located near the Humboldt Current, a large oceanic upwelling characterised by cold waters.
2. Humboldt penguins are endemic to the Norway and Greenland only.

Which of the statements given above is/are correct?

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

Explanation: Last week, Mumbai's Byculla Zoo announced the addition of two new Humboldt penguin chicks this year. The two join seven adult Humboldt penguins at Byculla Zoo — Popeye, Flipper, Bubble, and the new parents.

Humboldt penguins are a medium-sized species among at least 17 species.

The largest, the Emperor penguin, stands at over 4 ft tall while the Little penguin has a maximum height of 1 ft. Humboldt penguins have an average height of just over 2 ft.

Penguins are divided into six genera (see table). The Humboldt penguin (*Spheniscus humboldti*) belongs to a genus that is commonly known as the 'banded' group. Humboldt penguins are endemic to the Pacific coasts of Chile and Peru.

They are so named because their habitat is located near the Humboldt Current, a large oceanic upwelling characterised by cold waters.

Humboldt penguins have large, bare skin patches around their eyes, an adaptation to help keep them cool.

The Humboldt is one of the most popular zoo penguins due to its ability to withstand warmer climates.

Hence only statement 1 is correct.

Q.10) With reference to Michael Brown's new study on "Planet Nine", consider the following statements:

1. The study proposes "Planet Nine" exists beyond Neptune and is six times the mass of Earth, according to reports.
2. Neptune has a nonsolid surface made up mostly of hydrogen, helium, and methane, according to NASA.

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

Explanation: In the continued search for the hypothetical ninth planet in our Solar System, Michael Brown, the CalTech astronomer who led the demotion of Pluto to a dwarf planet in 2006, has co-written a new study that claims to have narrowed the region the potential new planet could be located.

The study proposes "Planet Nine" exists beyond Neptune and is six times the mass of Earth, according to reports.

The scientists first proposed Pluto had a replacement in a controversial study that came out in 2016 that said the clustering of asteroids and comets and other objects that orbit the sun in the Kuiper Belt suggests the existence of a large planet.

The new study also includes a "treasure map" of the planet's likely orbit that the scientists said lasts around 7,400 Earth years and is closer to the Sun than the 2016 study found.

A closer orbit to the Sun would make the planet brighter and easier to see.

Planet Nine would probably be cold gas giant like Neptune, the farthest known planet in a Solar System from the Sun. Neptune has a nonsolid surface made up mostly of hydrogen, helium, and methane, according to NASA.

Hence both statements are correct.

September: 20

Q.1) With reference to the Plant Discoveries 2020, consider the following statements:

1. The Botanical Survey of India, in its new publication Plant Discoveries 2020 has added 267 new taxa/ species to the country's flora.
2. The west coast contributed 10% while the east coast contributed (9%) in total discoveries; the Eastern Ghats and south Deccan contribute 4% each while the central highland and north Deccan added 3% each.

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

Explanation: The Botanical Survey of India, in its new publication Plant Discoveries 2020 has added 267 new taxa/ species to the country's flora.

The 267 new discoveries include 119 angiosperms; 3 pteridophytes; 5 bryophytes, 44 lichens; 57 fungi, 21 algae and 18 microbes.

In 2020, 202 new plant species were discovered across the country and 65 new records were added.

With these new discoveries the latest estimate of plant diversity in India stands at 54,733 taxa including 21,849 angiosperms, 82 gymnosperms, 1,310 pteridophytes, 2,791 bryophytes, 2,961 lichens, 15,504 fungi, 8,979 algae and 1,257 microbes.

New discoveries

Among the new discoveries this year, nine new species of balsam (*Impatiens*) and one species of wild banana (*Musa pradhanii*) were discovered from Darjeeling and one species each of wild jamun (*Syzygium anamalaianum*) from Coimbatore in Tamil Nadu and fern (*Selaginella odishana*) were recorded from Kandhamal in Odisha.

There are 14 new macro and 31 new micro fungi species recorded from various parts of India.

An assessment of the geographical distribution of these newly discovered plants reveals that 22% of the discoveries were made from the Western Ghats followed by the Western Himalayas (15%), the Eastern Himalayas (14%) and the Northeast ranges (12%).

The west coast contributed 10% while the east coast contributed (9%) in total discoveries; the Eastern Ghats and south Deccan contribute 4% each while the central highland and north Deccan added 3% each.

Hence both statements are correct.

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

1. Fossils of Vishnuonyx now extinct otters were first discovered in sediments found in the foothills of the Himalayas.
2. The species was discovered from a 11.4-million-year-old strata in the area of Hammerschmiede, which is a fossil site in Bavaria, Germany.

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

Explanation: Between 12.5 million and 14 million years ago, members of a genus of otters called Vishnuonyx lived in the major rivers of southern Asia.

Fossils of these now extinct otters were first discovered in sediments found in the foothills of the Himalayas. Now, a newly found fossil indicates it had travelled as far as Germany. The discovery has been described in the Journal of Vertebrate Paleontology.

Researchers from the Universities of Tübingen and Zaragoza have discovered the fossil of a previously unknown species, which they have named Vishnuonyx neptuni, meaning 'Neptune's Vishnu'.

The species was discovered from a 11.4-million-year-old strata in the area of Hammerschmiede,

which is a fossil site in Bavaria, Germany that has been studied for about 50 years.

This is the first discovery of any member of the Vishnuonyx genus in Europe; it is also its most northern and western record till date.

Vishnuonyx were mid-sized predators that weighed, on average, 10-15 kg. Before this, the genus was known only in Asia and Africa (recent findings show that Vishnuonyx reached East Africa about 12 million years ago).

Hence both statements are correct.

Q.3) With reference to the Fortified Rice Kernels (FRK) for grade A & Common Rice, consider the following statements:

1. Department of Food and Public Distribution (DFPD), India for the first time issued uniform specifications for Fortified Rice Kernels (FRK) for grade A & Common Rice.

2. These specifications as per standard practice have been issued only for Rice.

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

Explanation: Department of Food and Public Distribution (DFPD), India for the first time issued uniform specifications for Fortified Rice Kernels (FRK) for grade A & Common Rice, in case of procurement of Fortified Rice Stocks, of which 1% of FRK (w/w) should be blended with normal rice stock.

The department issued the uniform specifications of food grains for Central Pool procurement for the ensuing Kharif Marketing Season (KMS) 2020-21.

These specifications as per standard practice have been issued in respect of Paddy, Rice and other coarse grains namely Jowar, Bajra, Maize, Ragi.

These specifications also include standards of rice for issue to States/UTs for distribution under

TPDS and Other Welfare Schemes based on the uniform specifications of rice for KMS 2020-21.

All States/Union Territories and Food Corporation of India have been advised that the procurement during KMS 2020-21 may be strictly in accordance with the uniform specifications.

Hence, option (a) is the correct answer.

Q.4) Exercise 'Samudra Shakti' is a bilateral naval exercise between India and:

a) Singapore

b) Thailand

c) Myanmar

d) Indonesia

Explanation: Indian Naval Ships Shivalik and Kadmatt arrived at Jakarta, Indonesia on 18 September 2021 to participate in the 3rd edition of Bilateral Exercise 'Samudra Shakti' with the Indonesian Navy scheduled off the approaches to Sunda Strait from 20 Sep to 22 September, 2021.

The exercise aims to strengthen the bilateral relationship, enhance mutual understanding and interoperability in maritime operations between the two navies.

The exercise will also provide an appropriate platform to share best practices and develop a common understanding of Maritime Security Operations.

In pursuance of India's Act East Policy, Exercise 'Samudra Shakti' was conceived in 2018 as a bilateral IN-IDN exercise.

The exercise has matured in complexity over the last two editions and will involve conduct of complex maritime operations including Military Interdiction Operations (MIO), Cross Deck Landings, Air Defence serials, Practice Weapon Firings, Replenishment Approaches and Tactical Manoeuvres.

Hence, option (d) is the correct answer.

Q.5) With reference to the State Food Safety Index (SFSI), consider the following statements:

1. It is an initiative of NITI Aayog.
2. This year, among the larger states, Gujarat was the top ranking state, followed by Kerala and Tamil Nadu.

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

Explanation: Union Minister for Health and Family Welfare Mansukh Mandaviya released Food Safety and Standards Authority of India (FSSAI)'s 3rd State Food Safety Index (SFSI) to measure the performance of States across five parameters of food safety.

The Union Minister for Health and Family Welfare felicitated nine leading States/UTs based on the ranking for the year 2020-21 for their impressive performance.

This year, among the larger states, Gujarat was the top ranking state, followed by Kerala and Tamil Nadu.

Among the smaller states, Goa stood first followed by Meghalaya and Manipur.

Among UTs, Jammu & Kashmir, Andaman & Nicobar Islands and New Delhi secured top ranks.

He also flagged off 19 Mobile Food Testing Vans (Food Safety on Wheels) to supplement the food safety ecosystem across the country taking the total number of such mobile testing vans to 109.

Trans Fat

The Union Minister released the results of PAN-India survey for identifying the presence of industrially produced trans fatty acid content in the selected foods.

Samples of various packaged food items under six pre-defined food categories were collected from 419 cities/districts across 34 States/UTs.

Overall, only 84 samples, i.e. 1.34%, have more than 3% industrially produced trans fats from the total of 6245 samples; India is on the right track of

becoming industrial trans fats free in the 75th year of India's independence.

Hence, option (b) is the correct answer.

Q.6) Global Innovation Index (GII), recently seen in news, is published by:

- a) World Intellectual Property Organization (WIPO)**
- b) World Bank
- c) World Economic Forum
- d) None of the above

Explanation: India has climbed 2 spots and has been ranked 46th by the World Intellectual Property Organization (WIPO) in the Global Innovation Index 2021 rankings.

India has been on a rising trajectory, over the past several years in the Global Innovation Index (GII), from a rank of 81 in 2015 to 46 in 2021.

The GII report is published by WIPO in partnership with the Portulans Institute, with support of corporate network partners, such as the Confederation of Indian Industry, Brazilian National Confederation of Industry, Ecopetrol Group (Colombia), and the Turkish Exporters Assembly.

Lauding India's efforts, the GII report said that selected middle-income economies are changing the innovation landscape, starting with China; Turkey, Vietnam, India, and the Philippines now pulling their weight.

Hence, option (a) is the correct answer.

Q.7) With reference to "G-33" which of the following statement is incorrect?

- a) It is a coalition of developed countries.**
- b) It seeks to limit the degree of market opening required of developing countries required by WTO regarding agriculture.
- c) There are currently 48 member nations in G-33.
- d) India is a member of this group.

Explanation: The G33 (or the Friends of Special Products in agriculture) is a coalition of developing countries.

It was established prior to the 2003 Cancun ministerial conference, that have coordinated during the Doha Round of World Trade Organization negotiations, specifically in regard to agriculture.

The group has “defensive” concerns regarding agriculture in relation to World Trade Organization negotiations, and seeks to limit the degree of market opening required of developing countries.

Developing countries aim to balance power through tariffs, in order to manage their own food security, stabilize of the livelihoods of their farming populations, and strengthen rural development.

The group has advocated the creation of a “special products” exemption, which would allow developing countries to exempt certain products from tariff reductions, and also a “special safeguard mechanism” which would permit tariff increases in response to import surges. The group currently has 48 member nations including India.

Q.8) Consider the following statements regarding Buddhism, seen recently in news:

- 1 The Gandhara School of art bears the mark of Hellenistic influence.
- 2 Hinayana form was influenced by Gandhara art.

Which of the above statements is/are correct?

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

Explanation: Statement 1 is correct & Statement 2 is Incorrect:

Gandhara School was based on Greco- Roman norms encapsulating foreign techniques and an alien spirit. It is also known as the Graeco-Buddhist School of art. The foreign influence is

evident from the sculptures of Buddha in which, they bear resemblance to the Greek sculptures. Grey sandstone (Blue-grey Mica schist to be precise) is used in Gandhara School of Art.

The Gandharan Buddha image was inspired by Hellenistic realism, influenced by Persian, Scythian, and Parthian models.

This style of art was closely associated with Mahayana Buddhism and hence the main theme of this art was Lord Buddha and Bodhisattvas. Thus, it can be conjectured that in idea and conception this style was Indian and in execution it was foreign. One example of the Gandhara style of art is the Bamiyan Buddha statues.

Q.9) Which of the following country conducted the ZAPAD 2021 Exercise?

- a) Russia
- b) USA
- c) UK
- d) Saudi Arabia

Explanation: ZAPAD 2021 is one of the theatre level exercises of Russian armed forces and will focus primarily on operations against terrorists

In all, 17 countries have been invited by Russia for the exercise. Of these nine are Participating countries which include Mongolia, Armenia, Kazakhstan, Tajikistan, Kyrgyzstan, Serbia, Russia, India, and Belarus. The other eight countries are Observers which include Pakistan, China, Vietnam, Malaysia, Bangladesh, Myanmar, Uzbekistan, and Sri Lanka

India concluded its participation in war games taking place in Russia’s Nizhniy district on 16 September this year. Russia had welcomed a 200-personnel contingent of the Indian Army for its multi-nation military exercise ZAPAD-2021.

The Indian contingent personnel was from the Naga Regiment and Mechanized Infantry, and commandoes of the Indian Air Force.

Q.10) When you travel to certain parts of India, you will notice red soil. What is the main reason for this colour?

a) Abundance of magnesium

b) Accumulated humus

c) Presence of ferric oxides

d) Abundance of phosphates

Explanation: Red soils are red due to the presence of ferric oxides. The lower layer is reddish yellow or yellow.

These soils mostly occur in regions of low rainfall. They occupy about 3.5 lakh sq km (10.6 per cent) of the total area of the country. They are poor in lime, magnesia, phosphates, nitrogen and humus. They are rich in potash and potassium.

September: 22

Q.1) Consider the following statements regarding Global Innovation Index 2021, seen recently in news:

1. It is released by the US Chambers of Commerce
2. India jumps to 46th position in Global Innovation Index 2021.

Which of the above statements is/are correct?

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

Explanation: Statement 1 is Incorrect & Statement 2 is correct:

India has improved its position on the Global Innovation Index (GII) 2021 prepared by the World Intellectual Property Organisation (WIPO). India has been ranked 46th this year, marking an improvement from last year when it occupied the 48th position.

The GII report has been published by WIPO in collaboration with the Portulans Institute with support from corporate network partners such as the Confederation of Indian Industry, Brazilian National Confederation of Industry, Ecopetrol Group from Columbia, and the Turkish Exporters Assembly.

The list said the world's top innovation leaders in 2021 are Switzerland, Sweden, the US, the UK, the Republic of Korea, the Netherlands, Finland, Singapore, Denmark, and Germany.

Q.2) Which of the following organizations releases the Asian Development Outlook?

- a) ASEAN
- b) Asian-Pacific Economic Cooperation.
- c) Asian Development Bank.**
- d) Asian Infrastructure Investment Bank.

Explanation: Asian Development Outlook (ADO) is a series of annual economic reports on the

Developing Member Countries (DMCs) of the Asian Development Bank (ADB).

The Asian Development Bank recently released the Asian Development Outlook. The growth projection has been kept at 8%. These announcements are part of the Asian Development Outlook.

According to the Asian Development of Outlook, developing Asia is to contract by 0.4 % in 2020 and grow by 6.8% in 2021. The Asian Development Bank also declared that the growth of South Asia in the fiscal year 2020-21 will be at 7.2%.

Q.3) Where is the famous Vijaya Vittala temple having its 56 carved pillars emitting musical notes located?

- a) Belur
- b) Bhadrachalam
- c) Hampi**
- d) Srirangam

Explanation: The Vittala Temple, also known as Shri Vijaya Vitthala Temple is dedicated to Lord Vitthala, an incarnation of Lord Vishnu.

The temple is located in the north-eastern part of Hampi, near the banks of the Tungabhadra River.

The temple is built in the form of a sprawling campus with compound walls and gateway towers.

And the temple has 56 carved pillars emitting musical notes.

Q.4) Kodo, Kutki and Sanwa are the indigenous varieties of:

- a) Wheat
- b) Rice
- c) Millet**
- d) Corn

Explanation: Millets are often known as 'Superfood' and 'nutri-cereals'.

The three major millet crops currently growing in India are jowar (sorghum), bajra (pearl millet) and ragi (finger millet).

Along with that, India grows a rich array of biogenetically diverse and indigenous varieties of “small millets” like kodo, kutki, chenna and sanwa.

Major producers include Rajasthan, Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Maharashtra, Gujarat and Haryana.

High in dietary fibre, millets are a powerhouse of nutrients including iron, folate, calcium, zinc, magnesium, phosphorous, copper, vitamins and antioxidants. They are not only important for the healthy growth and development of children but have also been shown to reduce the risk of heart disease and diabetes in adults.

Usually grown by small and poor farmers on dry, low-fertile, mountainous, tribal and rain-fed areas, millets are good for the soil, have shorter cultivation cycles and require less cost-intensive cultivation. These unique features make millets suited for and resilient to India’s varied agro-climatic conditions. Moreover, unlike rice and wheat, millets are not water or input-intensive, making them a sustainable strategy for addressing climate change and building resilient agri-food systems.

Q.5) With reference to the defence sector of India, HELINA is a:

- a) Short-range surface to surface ballistic missile
- b) Medium range surface to air missile
- c) Anti-tank guided missile**
- d) Intercontinental ballistic missile

Explanation: Helina is a third-generation, Lock on Before Launch (LOBL) fire and forget class anti-tank guided missile (ATGM) system.

It has all- weather day and night operational capabilities.

It can defeat battle tanks with conventional and explosive reactive armour (ERA).

It can engage targets both in direct hit mode as well as top attack mode.

Q.6) Which of the following statements is/are correct regarding Pradhan Mantri Kaushal Vikas Yojana?

- 1. It is demand led skill training at programme for the rural poor.
- 2. The scheme is implemented through National Skill Development Corporation.

Choose the correct answer from the codes given below:

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

Explanation: Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship scheme for skill training of youth implemented by the Ministry of Skill Development and Entrepreneurship through the National Skill Development Corporation (NSDC).

Under this Scheme, Training and Assessment fees are completely paid by the Government.

Skill training is done based on the National Skill Qualification Framework (NSQF) and industry led standards.

In line with the scheme objectives, the scheme is applicable to any candidate of Indian nationality who:

an unemployed youth, college / school dropout

Has a verifiable identity proof – Aadhaar / Voter id and a bank account.

PMKVY 3.0 was launched in January 2021 envisages training of eight lakh candidates over a scheme period of 2020-2021 with an outlay of Rs. 948.90 crore. It will be more trainee- and learner-centric. The focus is on bridging the demand-supply gap by promoting skill development in areas of new-age and Industry 4.0 job roles. It will be a propagator of vocational education at an early level for youth to capitalize on industry-linked opportunities.

Q.7) Chandaka Wildlife Sanctuary sometimes seen in news is located in which of the following states?

- a) Jharkhand
- b) Odisha**
- c) Bihar
- d) Chhattisgarh

Explanation: Chandaka Wildlife Sanctuary lies in Odisha.

Q.8) Consider the following pairs:

Species

Recently discovered in

- 1. *Musa pradhanii*
Darjeeling
- 2. *Syzygium anamalaianum*
Coimbatore
- 3. *Selaginella odishana*
Kandhamal

Which of the above pairs is/are correctly matched?

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

Explanation: Plant Discoveries 2020 by the Botanical Survey of India has added 267 new taxa/species to India's flora. Among the new discoveries this year are:

Musa pradhanii from Darjeeling, which is a species of wild banana.

Syzygium anamalaianum, a species of wild jamun from Coimbatore in Tamil Nadu.

Selaginella odishana from Kandhamal in Odisha.

Q.9) Which of the following beaches has accorded the Blue Flag Certification?

- 1. Ghoghla-Diu

- 2. Kovalam
- 3. Eden

Select the correct answer using the code given below:

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

Explanation: The globally recognized and the coveted International eco-label "Blue Flag", has accorded the Blue Flag Certification for 2 new beaches this year –Kovalam in Tamil Nadu and Eden in Puducherry beaches.

Foundation for Environment Education in Denmark (FEE) which accords the globally recognized eco-label - Blue Flag certification, has also given re-certification for 8 nominated beaches Shivrajpur-Gujarat, Ghoghla-Diu, Kasarkod and Padubidri-Karnataka, Kappad-Kerala, Rushikonda- Andhra Pradesh, Golden-Odisha and Radhanagar- Andaman and Nicobar, which were awarded the Blue Flag certificate last year.

The Ministry of Environment embarked upon a highly acclaimed & flagship program Beach Environment & Aesthetics Management Services (BEAMS).

BEAMS is one of the initiatives under ICZM approach that the MoEF&CC has undertaken for the sustainable development of coastal regions of India, with a prime objective to protect and conserve the pristine coastal and marine ecosystems through holistic management of the resources.

This was aimed for achieving the globally recognized and the coveted International eco-label "Blue Flag", accorded by International Jury comprising of members from IUCN, UNWTO, UNEP, UNESCO etc.

FEE Denmark conduct regular monitoring & audits for strict compliance of the 33 criteria at all times. A waving "Blue Flag" is an indication of 100% compliance to these 33 stringent criteria and sound health of the beach.

The objective of BEAMS program is to abate pollution in coastal waters, promote sustainable development of beach facilities, protect & conserve coastal ecosystems & natural resources, and seriously challenge local authorities & stakeholders to strive and maintain high standards of cleanliness, hygiene & safety for beachgoers.

Hence, option (d) is the correct answer.

Q.10) With reference to a study by the Pew Research Center on India's religious groups, consider the following statements:

1. With regard to fertility rates, the study found that Muslims, who had the highest rate, also had the sharpest decline in rates.

2. From 1992 to 2015, the total fertility rates of Muslims declined from 4.4 to 2.6, while that of Hindus declined from 3.3 to 2.1.

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

Explanation: The religious composition of India's population since Partition has remained largely stable, with both Hindus and Muslims, the two largest religious groups, showing not only a marked decline but also a convergence in fertility rates, according to a new study by the Pew Research Center, a non-profit based in Washington DC.

The study, based on data sourced from India's decennial census and the National Family Health Survey (NFHS), looked at the three main factors that are known to cause changes in religious composition of populations — fertility rate, migration, and conversions.

With regard to fertility rates, the study found that Muslims, who had the highest rate, also had the sharpest decline in rates.

From 1992 to 2015, the total fertility rates of Muslims declined from 4.4 to 2.6, while that of Hindus declined from 3.3 to 2.1, indicating that

“the gaps in childbearing between India's religious groups are much smaller than they used to be.

Although growth rates had declined for all of India's major religious groups, the slowdown had been more pronounced among religious minorities, who outpaced Hindus in the earlier decades.

Hence both statements are correct.

September: 23

Q.1) Recently seen in Havana Syndrome is related to?

- a) Set of Mental health symptoms experienced by the US officials during their official visits.
- b) Syndrome experienced by the Wheat crop in Havana
- c) A fungal disease that is experienced by the Banana Plantation in Cuba
- d) None of the above

Explanation: Havana Syndrome refers to a set of mental health symptoms that are said to be experienced by US intelligence and embassy officials in various countries.

It typically involves symptoms such as hearing certain sounds without any outside noise being present, nausea, vertigo and headaches, memory loss, and balance issues.

As the name suggests, it traces its roots to Cuba. In late 2016, about a year after the US opened its embassy in Havana, some intelligence officials and members of the staff at the embassy began experiencing sudden bursts of pressure in their brain followed by persistent headaches, feeling of disorientation, and insomnia.

Q.2) Which of the following statements are incorrect with respect to Event 142 recently seen in the news?

- a) It is related to the Big Bang theory.
- b) It is part of World War-2.
- c) It is a type of Bt brinjal
- d) It is related to US secret operations in Afghanistan.

Explanation: The Event 142 variety of genetically modified brinjal was quietly approved for field trials without any data in the public domain,

Experts have slammed a recent move of the Genetic Engineering Appraisal Committee (GEAC) — a government-appointed committee responsible for the appraisal of proposals of genetically engineered organisms — giving its greenlight for biosafety research-level-II (BRL-II) field trials for Event

142, a new variety of genetically modified brinjal (Bt brinjal) during its 139th meeting May 19, 2020.

Q.3) “IndiGau” was recently seen in news is-

- a) First Cattle Genomic Chip
- b) Drone developed DRDO
- c) First Cloned Cow in India
- d) None

Explanation: It is India’s first Cattle Genomic Chip conservation

varieties of indigenous cattle breeds and helps towards doubling farmers' income by 2022.

o It is the largest cattle chip in the world with 11,496 markers.

- Till now India’s dairy development program has been referring to chips which are developed for foreign western breeds of cattle.
- This indigenous chip was developed by the National Institute of Animal Biotechnology (Hyderabad), an autonomous institution under the aegis of the Department of Biotechnology.

Q.4) Which of the following matches the matches the description?

1. It is a highly contagious and fatal animal disease that infects and leads to an acute form of hemorrhagic fever in domestic and wild pigs.
2. It is not a threat to human beings since it only spreads from animals to other animals.
3. It was first detected in Africa in the 1920s.

Select the correct answer using the code below-

- a) African Swine Fever
- b) Severe Acute Syndrome Covid-2
- c) Bird Flu
- d) Polio

Explanation: African Swine Fever

It is a highly contagious and fatal animal disease that infects and leads to an acute form of hemorrhagic fever in domestic and wild pigs.

Other manifestations of the disease include high fever, depression, anorexia, loss of appetite, hemorrhages in the skin, vomiting and diarrhoea among others.

It was first detected in Africa in the 1920s.

Historically, outbreaks have been reported in Africa and parts of Europe, South America, and the Caribbean.

However, more recently (since 2007), the disease has been reported in multiple countries across Africa, Asia and Europe, in both domestic and wild pigs.

The mortality is close to 100% and since the fever has no cure, the only way to stop its spread is by culling the animals.

ASF is not a threat to human beings since it only spreads from animals to other animals.

ASF is a disease listed in the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code and thus, reported to the OIE.

Q.5) With reference to the State Food Safety Index, consider the following statements:

It is developed by NITI Aayog.

Among the larger states Kerala ranks first in food safety parameters.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Explanation: The State Food Safety Index is developed by the Food Safety and Standards Authority of India (FSSAI).

It measures the performance of States across five parameters of food safety. The parameters include Human Resources and Institutional Data, Compliance, Food Testing – Infrastructure and Surveillance, Training & Capacity Building and Consumer Empowerment.

This year, among the larger states, Gujarat was the top ranking state, followed by Kerala and Tamil Nadu.

Among the smaller states, Goa stood first followed by Meghalaya and Manipur.

Among UTs, Jammu & Kashmir, Andaman & Nicobar Islands and New Delhi secured top ranks.

Q.6) With reference to the World Health Organization (WHO) air pollution standards, consider the following statements:

1. The upper limit of PM10, or particulate matter of size exceeding 10 microgram, is 20 microgram and has now been revised to 15.

2. The new guidelines meant that among 100 global cities, Delhi's annual PM2.5 trends in 2020 was 16.8 times more than the WHO's revised air quality guidelines.

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

Explanation: The World Health Organization (WHO), in its first-ever update since 2005, has tightened global air pollution standards in recognition of the emerging science that the impact of air pollution on health is much more serious than earlier envisaged.

The upper limit of annual PM2.5 as per the 2005 standards, which is what countries now follow, is 10 microgram per cubic metre. That has now been revised to five microgram per cubic metre.

The 24-hour ceiling used to be 25 microgram but has now dropped to 15.

The upper limit of PM10, or particulate matter of size exceeding 10 microgram, is 20 microgram and has now been revised to 15, whereas the 24-hour value has been revised from 50 to 45 microgram.

The new guidelines meant that among 100 global cities, Delhi's annual PM2.5 trends in 2020 was

16.8 times more than the WHO's revised air quality guidelines, while Mumbai's exceeded eight-fold, Kolkata's 9.4, Chennai's 5.4, Hyderabad's 7 and Ahmedabad's 9.8.

Every year, exposure to air pollution is estimated to cause 7 million premature deaths and result in the loss of millions more healthy years of life.

Hence both statements are correct.

Q.7) With reference to Assam- Mizoram conflict, consider the following statements:

1. A district of undivided Assam, Lushai Hills became Mizoram as a State in 1972.
2. Mizoram has rejected the 1933 demarcation of the interstate boundary.

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

Explanation: The government and people of Mizoram have been encroaching upon land in Assam along the 164.6-km interstate boundary since 1980, an Assam Forest Department report has alleged.

At the heart of the land conflict between the two northeastern States is the 1,318-sq.km Inner Line Reserve Forest along the boundary.

According to the report, the boundary was notified on March 9, 1933, which clearly defines "Inner Line" as the district boundary of the Lushai Hills. A district of undivided Assam, Lushai Hills became Mizoram, first as a Union Territory in 1972 and a State in 1987.

Mizoram has rejected the 1933 demarcation of the interstate boundary. The State recognises a regulation in 1873 that "includes areas wrongfully tagged with Assam" in 1933.

Disputed Areas

The major portion of the boundary between Assam and Mizoram runs along natural features like rivers, streams and watersheds. Only two

portions of the boundary, from Chattachura Peak to Longai and from Rukni river to Dholai river, do not follow definite natural features.

Incidents of encroachment in both Singla and Longai were recorded in November 1985. The "government of Mizoram" has continued to control areas under Longai Reserve Forest.

Similarly, in the Hailakandi division of the Assam Forest Department, an encroachment of about 1,000 hectares of forest land by Mizoram at two different locations — 425 hectares at Kachurtal and 575 hectares at Dholcherra — have been recorded.

Hence only statement 2 is correct.

Q.8) With reference to the India-United Arab Emirates Comprehensive Economic Partnership Agreement (CEPA), consider the following statements:

1. India and UAE's Commerce Minister have formally launched negotiations on the India-United Arab Emirates Comprehensive Economic Partnership Agreement (CEPA).
2. The UAE is currently India's third-largest trading partner with bilateral trade in 2019/2020 valued at USD 59 billion.

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

Explanation: India and UAE's Commerce Minister have formally launched negotiations on the India-United Arab Emirates Comprehensive Economic Partnership Agreement (CEPA).

The first round of CEPA negotiations will be held on 23-24 September 2021.

CEPA will create new jobs, raise living standards, and provide wider social and economic opportunities in both nations.

A new strategic economic agreement is expected to increase bilateral trade in goods to USD 100

billion within five years of the signed agreement and increase trade in services to USD 15 billion.

Economic relations

The UAE is currently India's third-largest trading partner with bilateral trade in 2019/2020 valued at USD 59 billion. The UAE is also India's second-largest export destination after the US, with exports valued at approximately USD 29 billion in 2019-2020.

India was the UAE's second-largest trading partner in 2019, with bilateral non-oil trade valued at USD 41 billion.

The UAE is the eighth-largest investor in India, having invested USD 11 billion between April 2000 and March 2021, while investment by Indian companies in the UAE is estimated to be over USD 85 billion.

Hence both statements are correct.

Q.9) With reference to the South Asian Association for Regional Cooperation (SAARC), consider the following statements:

1. SAARC is a regional inter-governmental organisation of South Asian countries namely, India, Bangladesh, Bhutan, Myanmar, Nepal, Pakistan and Sri Lanka.
2. SAARC includes nine formally recognised observers including the European Union, the US, Iran and China.
3. Afghanistan joined the bloc in 2007, under its then President Hamid Karzai.

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

Explanation: A meeting of foreign ministers from the South Asian Association for Regional Cooperation (SAARC) countries, which was set to be held in New York on Saturday, has been cancelled.

Sources report that the member states were unable to agree upon the participation of Afghanistan, with Pakistan and India in particular at loggerheads over the issue.

After no consensus could be formed, Nepal, the 'host' of the summit, officially cancelled the meeting.

The Taliban has not been recognised as the official government of Afghanistan by any SAARC countries barring Pakistan. Several top Taliban leaders are blacklisted by the US and/or designated as international terrorists.

Apart from Pakistan, which has close ties to the Taliban, particularly its violent subgroup, the Haqqani Network, none of the other SAARC members recognise the Taliban and some, like India, have openly questioned their legitimacy.

Formation of SAARC

SAARC is a regional inter-governmental organisation of South Asian countries namely, India, Bangladesh, Bhutan, the Maldives, Nepal, Pakistan and Sri Lanka. Afghanistan joined the bloc in 2007, under its then President Hamid Karzai.

SAARC also includes nine formally recognised observers including the European Union, the US, Iran and China.

Hence, option (c) is the correct answer.

Q.10) In the context of modern scientific research, consider the following statements about

1. 'IceCube', a particle detector located at South Pole, which was recently in the news:
2. It is the world's largest neutrino detector, encompassing a cubic kilometre of ice.
3. It is a powerful telescope to search for dark matter.
4. It is buried deep in the ice.

Which of the statements given above is/are correct?

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

c) 1 and 3 only

d) 1, 2 and 3

Explanation: IceCube, the South Pole neutrino observatory, is a cubic-kilometer particle detector made of Antarctic ice and located near the Amundsen-Scott South Pole Station. It is buried beneath the surface, extending to a depth of about 2,500 meters. A surface array, IceTop, and a denser inner subdetector, DeepCore, significantly enhance the capabilities of the observatory, making it a multipurpose facility.

It is the world's largest neutrino detector. It is a powerful telescope to search for dark matter.

September: 24

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

1. North-Western University engineers have created an electronic microchip with the capability of flight.
2. About the size of a grain of sand, the new flying microchip (or “microflier”) does not have a motor or engine.

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

Explanation: North-Western University engineers have created an electronic microchip with the capability of flight.

About the size of a grain of sand, the new flying microchip (or “microflier”) does not have a motor or engine. Instead, it catches flight on the wind — much like a maple tree’s propeller seed — and spins like a helicopter through the air toward the ground.

A release by Northwestern University described these microflier as the “smallest-ever human-made flying structures”.

Working

By studying maple trees and other types of wind-dispersed seeds, the engineers optimised the microflier’s aerodynamics to ensure that it — when dropped at a high elevation — falls at a slow velocity in a controlled manner.

This behaviour stabilizes its flight, ensures dispersal over a broad area and increases the amount of time it interacts with the air, making it ideal for monitoring air pollution and airborne disease.

These microfliers also can be packed with ultra-miniaturised technology, including sensors, power sources, antennas for wireless communication and embedded memory to store data.

Hence both statements are correct.

Q.2) With reference to the Arjun Mk-1A main battle tanks (MBT), consider the following statements:

1. The state-of-the-art MBT Mk-1A is a new variant of Arjun tank designed to enhance fire power, mobility and survivability.
2. It was designed and developed by the Hindustan Aeronautics Limited (HAL).

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

Explanation: The Defence Ministry placed an order with the Heavy Vehicles Factory (HVF), Avadi, for the supply of 118 indigenous Arjun Mk-1A main battle tanks (MBT) for the Army at a cost of ₹7,523 crore.

The state-of-the-art MBT Mk-1A is a new variant of Arjun tank designed to enhance fire power, mobility and survivability. Infused with 72 new features and more indigenous content from the Mk-1 variant, the tank would ensure effortless mobility in all terrains, besides precise target engagement during day and night.

The MBT Arjun Mk-1A was designed and developed by the Combat Vehicles Research and Development Establishment (CVRDE), along with the other laboratories of the Defence Research and Development Organisation (DRDO).

In February, Prime Minister Narendra Modi formally handed over Arjun Mk-1A to Army chief General Manoj Naravane in Chennai. The Army has two regiments of Arjun Mk1 tanks in service inducted between 2005 and 2010.

This production order to Avadi factory opens up a large avenue in defence manufacturing for over 200 Indian vendors including MSMEs, with employment opportunities to around 8,000 people.

The Arjun Mk-1A has 14 major upgrades over the Mk1 variant, which were formulated and approved in October 2018 and subsequently limited user

validation trials were carried out of all the upgrades. The Mk1A will be without missile firing capability and will be incorporated as and when the development is complete.

An Arjun hub has been set up in Jaisalmer where 248 rotables have been deposited to ensure quick support and maintenance for the fleet.

Hence only statement 1 is correct.

Q.3) Gogra, often mentioned in news, is located in:

- a) Sikkim
- b) Arunachal Pradesh
- c) Nagaland
- d) Ladakh**

Explanation: Villagers have lost access to a vast grazing area near Gogra in eastern Ladakh owing to growing Chinese presence in the area.

Gogra is one of the several friction points in eastern Ladakh where Indian and Chinese troops have been engaged in a stand-off since April-May 2020.

The troops have disengaged from the north and south banks of the Pangong Tso and Gogra sector, creating “no zones” in areas along the undemarcated Line of Actual Control (LAC) that was regularly patrolled by Indian troops prior to April 2020.

The Army had stopped the villagers’ access to the Kiu La pass that was till a few years ago frequented by the villagers of Lukung, Phobrang and Yourgo for cattle-grazing.

Since April 2020, Chinese troops have blocked Indian troops from reaching at least 10 patrolling points (PPs) in eastern Ladakh — running from Depsang plains in the north to the Pangong Tso lake in the south.

Hence, option (d) is the correct answer.

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

1. The project is sanctioned under the Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive’ (PRASHAD) Scheme of Ministry of Tourism.

2. It is a Centrally Sponsored 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

Explanation: Union Minister for Tourism laid the foundation stone for the “Development of Parshuram Kund, Lohit District, Arunachal Pradesh.

The project “Development of Parasuram Kund, Lohit District Arunachal Pradesh” under the scheme was approved by the Ministry of Tourism with the cost of Rs 37.88 crores in January 2021.

The components sanctioned include Interventions near the Parking area, Tourist Information Centre, Rain Shelters, Kiosks, interventions near Mela ground, View Points, Souvenir Shops, Water Supply line, Approach Road, Food Court/ Prasadam Centre etc.

PRASHAD Scheme

The project is sanctioned under the Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive’ (PRASHAD) Scheme of Ministry of Tourism.

PRASHAD is a Central Sector Scheme with complete financial assistance by the Government of India.

The scheme is launched by the Ministry of Tourism in the year 2014-15 with the vision of focused infrastructure development to harness pilgrimage and heritage tourism destinations.

Hence only statement 1 is correct.

Q.5) “Sudarshan Sen” committee was recently constituted is related to

- a) Criminal Reform System

b) Review of existing and regulatory framework related to Asset Reconstruction companies.

c) Minimum Support Price

d) India's INDC Assessment

Explanation: Sudarshan Sen Committee

Set up in 2021 by RBI, the committee will-

- review existing legal and regulatory framework applicable to ARCs with recommendations to improve efficacy of ARCs;
- review role of ARCs in stressed assets resolution under Insolvency & Bankruptcy Code (IBC)

Q.6) Which of the following countries are part of "Five Eyes" coalition?

1. Australia

2. Russia

3. New Zealand

4. France

Choose the correct answer from the codes given below:

a) 1, 3 and 4 only

b) 1 and 3 only

c) 2, 3 and 4 only

d) 1, 2, 3 and 4

Explanation: The Five Eyes (FVEY) is an intelligence alliance comprising Australia, Canada, New Zealand, the United Kingdom, and the United States. These countries are parties to the multilateral UKUSA Agreement, a treaty for joint cooperation in signals intelligence.

The origins of the FVEY can be traced back to informal secret meetings during World War II between British and US code-breakers that started before the US entry into the war, followed by the Atlantic Charter agreed by the Allies to lay out their goals for a post-war world.

In spite of continued controversy over its methods, the Five Eyes relationship remains one of the most comprehensive known espionage alliances in history.

Q.7) With respect to One Horned Rhino, consider the following statements:

1. It is listed as Endangered under the IUCN category.

2. Under India Rhino Vision 2020, it aims to Increase the Rhino Population in Assam from about 2000 to 3000 by 2020.

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

Explanation: Statement 1 is incorrect:

Conservation status of One Horned Rhino: IUCN Red List: Vulnerable. CITES: Appendix I Wildlife Protection Act, 1972: Schedule I Statement 2 is correct: The vision of IRV is to Increase the Rhino Population in Assam from about 2000 to 3000 by 2020. It aims to ensure that one-horned rhinos are spread over seven protected areas in the Indian state of Assam by the year 2020.

Q.8) With respect to "Havana Syndrome", consider the following statements:

1. It refers to a set of mental health symptoms experienced by US intelligence and embassy officials in various countries.

2. It involves symptoms such as hearing certain sounds without any outside noise being present, nausea, vertigo and headaches, memory 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

Explanation: Statement 1 is correct: The Havana syndrome is a set of medical signs and symptoms

reported by US and Canadian embassy staff first in Havana, Cuba dating to late 2016, and subsequently in other countries. Statement 2 is correct: The symptoms included nausea, severe headaches, fatigue, dizziness, sleep problems, and hearing loss.

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

1. Code on Social Security, 2020 aims to provide labor rights to gig workers.
2. At present, more than 50% of new employment in India is generated by the gig economy companies across both the blue-collar and white-collar workforce
3. There is no clear employer-employee relationship is available to gig workers in India.

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

Explanation: Statement 1 is incorrect: Code on Social Security, 2020 aims to provide only social security benefits not the labor rights. Statement 2 is correct: An estimated 56% of new employment in India is being generated by the gig economy companies across both the blue-collar and white-collar workforce. Statement 3 is correct: No clear employer-employee relationship is the main issue with the gig economy workers in India. Most of the time, it is the ambiguity around the rights of workers and the responsibilities of platforms that allows businesses to treat their gig workers as employees in terms of the control they exert upon them, but without any employee entitlements like insurance, medical benefits, employees' provident fund, bonus or gratuity, etc.

Q.10) WHO's new Global Air Quality Guidelines (GAQGs) recommends air quality levels for which of the following pollutants?

1. Ozone
2. Nitrous Oxide
3. Carbon Dioxide

Select the correct answer from the codes given below:

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

Explanation: The WHO's new guidelines recommend air quality levels for six pollutants, including ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide. The other two are PM10 and PM2.5 -- particulate matter equal or smaller than 10 and 2.5 microns in diameter.

September: 25

Q.1) Which of the following statements are correct about Green Bonds

1. They are used to invest in environmentally beneficial projects
2. They constitute more than 5% of total bonds issued in India.

Select the correct answer using the code given below-

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

Explanation: Statement 2 is not correct

Green Deposits are the term deposits which are used to invest in environmentally beneficial projects and initiatives, promoting the transition to a low-carbon, climate resilient and sustainable economy

o This includes Renewable Energy, energy efficiency, sustainable water management, clean transportation, green buildings etc.

• It helps banks in Net Zero Strategy while providing funds to organizations in rebuilding or transition of business towards sustainability; helping to meet the Environmental, social, and governance (ESG) objectives.

Details of RBI's Recent Study

Current Share:

Green bonds constituted only 0.7% of all the bonds issued in India since 2018.

However, bank lending to the non-conventional energy (renewable energy) constituted about 7.9% of outstanding bank credit to the power sector, as of March 2020.

Most of the green bonds in India are issued by the public sector units or corporates with better financial health.

Q.2) Consider the following statements-

1. Currently, Biological Data like DNA Sequence and RNA Sequence Data is not stored in country rather in international repository.
2. Currently, there are no guidelines with respect to sharing of Biological Data.

Which of the above given statements are correct?

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

Explanation: Both statements are correct.

Biotech-PRIDE guidelines have been formulated in conformity with the principles of NDSAP (National Data Sharing and Accessibility Policy) 2012, for enabling the sharing, access and storage of biological data.

o In India at present biological data is deposited in International Repositories and there are no guidelines for sharing it.

Under the guidelines, it is the responsibility of the data-generator/producer/submitter to deposit data in an appropriate database in the notified Data Repository.

Data withdrawal may be granted if the individual or the organization, whose data have been placed on a publicly accessible database, make a justified request either directly or through the submitter, with valid claims to the data.

These Guidelines will be implemented through Indian Biological Data Centre (IBDC) at Regional Center for Biotechnology supported by Department of Biotechnology. Other datasets/ data centres will be bridged to the IBDC which will be called Bio-Grid.

Biological data

• It includes, inter alia, DNA sequence data, RNA sequence transcriptomic data, Genotype data, Epigenomic data and protein structure data.

Characteristics of Biological Data

It is highly complex when compared with most other applications.

The amount and range of variability in data is high

Q.3) Consider the following statements regarding 6th Schedule of the constitution:

1. All the members of Autonomous District councils are elected based on adult franchise.
2. Village council can be established under the district council for trial of suits or cases between the tribes.
3. The President can appoint a commission to report on any matter relating to the administration of autonomous district or regions.

Which of the statements given above is/are correct?

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

Explanation: Statement 1 and 3 are not correct.

All the members of District councils are not directly elected. 4 members are nominated by the governor and remaining 26 are elected based on adult franchise.

Village councils or courts for trial can also be established under the district councils or regional councils for trial of suits or cases between the tribes.

The Governor can appoint a commission to report on any matter relating to the administration of autonomous district or regions.

Q.4) With reference to germline gene therapy, which one of the following statements is incorrect?

- a) In this therapy, DNA is transferred into the cells that produce reproductive cells in the body.
- b) It enables the correction of disease-causing gene mutations.

c) Effects of germline gene therapy are not be passed onto the patient's children.

d) Germline gene therapy is prohibited in India.

Explanation: Germline gene therapy involves transfer of a section of DNA to cells that produce eggs or sperm. Hence, the effects of gene therapy will be passed onto the patient's children and subsequent generations. Hence, statement C is incorrect.

Q.5) Gadgil Committee Report' and 'Kasturirangan Committee Report', sometimes seen in the news, are related to:

- a) Constitutional reforms
- b) Ganga Action Plan
- c) Linking of rivers

d) Protection of Western Ghats

Both the committees are related to the protection of western ghats by declaring Ecologically Sensitive Area. Hence option D is correct.

Q.6) Recently seen in news, Iron Dome missile defence system related to?

- a) Israel
- b) UK
- c) Iran
- d) Germany

Explanation: Iron Dome is a mobile all-weather air defense system developed by Rafael Advanced Defense Systems and Israel Aerospace Industries.

It is a short-range, ground-to-air, air defence system that includes a radar and Tamir interceptor missiles that track and neutralize any rockets or missiles aimed at Israeli targets. It is used for countering rockets, artillery & mortars (C-RAM) as well as aircraft, helicopters, and unmanned aerial vehicles.

The US House of Representatives voted overwhelmingly on Thursday to give \$1 billion to Israel for its Iron Dome missile-defense system, two days after objections from the most liberal

Democrats forced leaders to remove it from a broader spending bill.

Q.7) Consider the following statements regarding VIPER mission:

1. It is a joint mission of ISRO, CNES and JAXA.
2. The objective of this mission is to explore the surface of Planet Venus.

Which of the above statements is/are correct?

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

Explanation: Volatiles Investigating Polar Exploration Rover, or VIPER:

VIPER the first resource mapping mission by NASA on another celestial body. It is a mobile robot that will go to the South Pole of the Moon to get a close-up view of the location and concentration of water ice that could eventually be harvested to sustain human exploration on the Moon, Mars — and beyond. It will explore the relatively nearby but extreme environment of the Moon in search of water ice and other potential resources. This mobile robot will land at the South Pole of the Moon in late 2023 on a 100-day mission. The critical information it provides will teach us about the origin and distribution of water on the Moon and help determine how we can harvest the Moon's resources for future human space exploration. NASA will use the data the rover collects to show where the Moon's water ice is most likely to be found and easiest to access, making VIPER the first-ever resource mapping mission on another celestial body. The first water maps of the Moon will mark a critical step forward in NASA's Artemis program to establish a sustainable human presence on the surface of the Moon by 2028.

Q.8) Which of the following statements is/are correct regarding Light Fidelity (Li-Fi) technology:

1. It is a wireless technology that transmits data using radio waves.
2. It provides more secure data transfer than other data transfer technology.

Choose the correct answer from the codes given below:

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

Explanation: Li-Fi is a wireless communication technology which utilizes light to transmit data and position between devices.

In technical terms, Li-Fi is a light communication system that is capable of transmitting data at high speeds over the visible light, ultraviolet, and infrared spectrums. In its present state, only LED lamps can be used for the transmission of data in visible light

In terms of its end use, the technology is similar to Wi-Fi — the key technical difference being that Wi-Fi uses radio frequency to induce a voltage in an antenna to transmit data, whereas Li-Fi uses the modulation of light intensity to transmit data. Li-Fi can theoretically transmit at speeds of up to 100 Gbit/s. Data transfer can take place more securely as in Li-Fi light is blocked by walls.

Li-Fi technology is used airlines, undersea exploration etc.

Q.9) As per recent data which of the following state is the largest recipient of Foreign Direct Investment (FDI) during the first four months of financial year 2021-22?

- a) Maharashtra
- b) Gujarat
- c) Karnataka**
- d) Tamil Nadu

Explanation: Measures taken by the Government on the fronts of FDI policy reforms, investment facilitation and ease of doing business have resulted in increased FDI inflows into the country. The following trends in India's Foreign Direct Investment are an endorsement of its status as a preferred investment destination amongst global investors:

India has attracted total FDI inflow of US\$ 27.37 billion during first four months of F.Y. 2021-22 which is 62% higher as compared to corresponding period of F.Y. 2020-21 (US\$ 16.92 billion).

FDI equity inflow grew by 112% in the first four months of F.Y. 2021-22 (US\$ 20.42 billion) compared to the year ago period (US\$ 9.61 billion).

Karnataka is the top recipient state during the F.Y. 2021-22 (upto July, 2021) with 45% share of the total FDI Equity inflows followed by Maharashtra (23%) and Delhi (12%).

'Automobile Industry' has emerged as the top sector during the first four months of F.Y. 2021-22 with 23% share of the total FDI Equity inflow followed by Computer Software & Hardware (18%) and Services Sector (10%) respectively.

Under the sector 'Automobile Industry', majority of FDI Equity inflow (87%) was reported in the state of Karnataka during the first four months of the current financial year (2021-22).

This revision comes at the backdrop of the deadly Beirut (capital of Lebanon) explosion which occurred due to storage of 3,000 tons of ammonium nitrate at the port for 6 years.

Q.10) India has recently come out with easing the rules for storage of which hazardous chemical?

- a) Sodium Chloride
- b) Nitric Acid
- c) Sulphuric Acid

d) Ammonium nitrate and Calcium carbide

Explanation: The Department for Promotion of Industry and Internal Trade (DPIIT), Government of India has revised and eased the rules pertaining to storage and handling of ammonium nitrate and calcium carbide, for improved safety.

September: 27

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

1. Dark energy, the mysterious form of energy that makes up about 68% of the universe, has intrigued physicists and astronomers for decades.
2. While dark matter attracts and holds galaxies together, dark energy repels and causes the expansion of our universe.

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

Explanation: An international team of researchers made the first putative direct detection of dark energy.

Dark energy, the mysterious form of energy that makes up about 68% of the universe, has intrigued physicists and astronomers for decades.

Dark energy has been noted as “the most profound mystery in all of science”.

Dark energy Vs Dark matter

Everything we see – the planets, moons, massive galaxies, you, me, this website – makes up less than 5% of the universe.

About 27% is dark matter and 68% is dark energy.

While dark matter attracts and holds galaxies together, dark energy repels and causes the expansion of our universe.

Despite both components being invisible, we know a lot more about dark matter, since its existence was suggested as early as the 1920s, while dark energy wasn't discovered until 1998

Recent detection

They noticed certain unexpected results in an underground experiment and write that dark energy may be responsible for it.

The XENON1T experiment is the world's most sensitive dark matter experiment and was operated

deep underground at the INFN Laboratori Nazionali del Gran Sasso in Italy.

The finding also suggests that experiments like XENON1T, which are designed to detect dark matter, could also be used to detect dark energy.

Hence both statements are correct.

Q.2) With reference to the Ayushman Bharat Digital Mission, consider the following statements:

1. Currently, Ayushman Bharat Digital Mission is being implemented in pilot phase in six Union Territories.
2. Ayushman Bharat Digital Mission Sandbox, created as a part of the Mission, will act as a framework for technology and product testing.

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

Explanation: In a historic initiative, Prime Minister Shri Narendra Modi will launch the Ayushman Bharat Digital Mission on 27th September 2021.

The pilot project of Ayushman Bharat Digital Mission had been announced by the Prime Minister from the ramparts of Red Fort on 15th August, 2020. Currently, Ayushman Bharat Digital Mission is being implemented in pilot phase in six Union Territories.

The nation-wide rollout of Ayushman Bharat Digital Mission coincides with NHA celebrating the third anniversary of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY).

Ayushman Bharat Digital Mission is based on the foundations laid down in the form of Jan Dhan, Aadhaar and Mobile (JAM) trinity and other digital initiatives of the government

Ayushman Bharat Digital Mission will create a seamless online platform through the provision of a wide-range of data, information and

infrastructure services, duly leveraging open, interoperable, standards-based digital systems while ensuring the security, confidentiality and privacy of health-related personal information.

The key components of Ayushman Bharat Digital Mission include

a health ID for every citizen that will also work as their health account, to which personal health records can be linked and viewed with the help of a mobile application;

a Healthcare Professionals Registry (HPR) and Healthcare Facilities Registries (HFR) that will act as a repository of all healthcare providers across both modern and traditional systems of medicine.

Ayushman Bharat Digital Mission Sandbox, created as a part of the Mission, will act as a framework for technology and product testing that will help organizations, including private players, intending to be a part of National Digital Health Ecosystem become a Health Information Provider or Health Information User.

Hence both statements are correct.

Q.3) Lhasa and Nagqu, often mentioned in news, is located in:

- a) China
- b) Myanmar
- c) Nepal
- d) Bhutan

Explanation: Continuing its infrastructure build-up in Tibet, China has completed a key section of the Beijing-Lhasa expressway, a 295-km stretch from Lhasa to Nagqu.

This section is located at an average altitude of 4,500 metres above sea level, which Chinese state media have termed the world's highest expressway.

The Lhasa-Nagqu section is part of the G6 Beijing-Lhasa expressway and is the first expressway linking Lhasa, the capital of the Tibet Autonomous Region to north Tibet.

It also connects the PLA's Central Theatre Command with the Western Theatre Command

which is responsible for the border with India, an official source said.

An important stretch of the expressway between Nagqu to Yangbajain of Lhasa-Nagqu section was put into operational trial on August 21. On completion of Lhasa-Nagqu section, the driving time between Lhasa and Nagqu has reduced from six hours to three hours.

The completed expressway will pass through seven major cities of China including Beijing, Hebei, inner Mangolia, Ningxia, Gansu, Qinghai and Lhasa with an approximate length of 3,710 km.

In June, China had launched a high speed bullet train connecting Lhasa with Nyingchi, a strategically located Tibetan town located close to Arunachal Pradesh.

Hence, option (a) is the correct answer.

Q.4) Consider following with respect to the e-GOPALA app?

1. It is a comprehensive breed improvement marketplace and information portal for the direct use of farmers.
2. It is developed by National Dairy Development Board.

Select the correct answer using the code given below.

- a) 1 only
- b) 2 only
- c) Both 1 and 2 only
- d) None of the above

Explanation: Both Statements 1 & 2 are correct:

The web version of the e-GOPALA application developed by the National Dairy Development Board (NDDDB) has been launched on Saturday to aid dairy farmers. The NDDDB has launched the web version of the e-GOPALA application and IMAP web portal on Saturday which provides real-time information to dairy farmers for better productivity of dairy animals.

e-GOPALA platform helps farmers manage their livestock including buying and selling of disease-

free germplasm in all forms (semen, embryos, etc); informs about availability of quality breeding services, and guides farmers for animal nutrition, treatment of animals using appropriate Ayurvedic ethnoveterinary medicine.

E-GOPALA App is a comprehensive breed improvement marketplace and information portal for the direct use of farmers. While launching the app in 2020, Prime Minister Narendra Modi had said that the e-Gopala app will be a digital medium that would help livestock owners to choose advanced livestock. This app will give all information related to productivity, health, and diet to the cattle owners.

The e-Gopala digital platform lets farmers manage livestock including buying and selling of disease-free germplasm in all forms; check the availability of quality breeding services (artificial insemination, veterinary first aid, vaccination, treatment, etc) and guiding farmers for animal nutrition, treatment of animals using appropriate ayurvedic medicine/ethnoveterinary medicine.

The e-Gopala App also provides a mechanism to send alerts (on the due date for vaccination, pregnancy diagnosis, calving, etc) and inform farmers about various government schemes and campaigns in the area.

Furthermore, increasing the yield of milch animals directly helps in increasing the income of the farmers.

Q.5) Three of the following criteria have contributed to the recognition of Western Ghats-Sri Lanka and Indo-Burma regions as hotspots of biodiversity:

- 1) Species richness
- 2) Vegetation density
- 3) Endemism
- 4) Ethno-botanical importance
- 5) Threat perception
- 6) Adaptation of flora and fauna to warm and humid conditions

Which three of the above are correct criteria in this context?

- a) 1, 2 and 6
- b) 2, 4 and 6
- c) **1, 3 and 5**
- d) 3, 4 and 6

Explanation: To qualify as a hotspot, a region must meet two strict criteria:

It must contain at least 1,500 species of vascular plants (> 0.5 percent of the world's total) as endemics, and

It has to have lost at least 70 percent of its original habitat. So we choose Species richness as well as Endemism. Along with this Threat, perception is necessary to take, because it makes the base of this concept.

Adaptation of flora is an arbitrary option, Ethnobotanical importance does nothing with the Biodiversity Hotspot selection criteria, vegetation Density is also discarded.

Q.6) K. Kasturirangan Committee, was recently seen in news. It is related to which of the following:

- a) To study the monsoon
- *b) To devise New Curriculum Framework**
- c) To study the present inflation trends of India
- d) To study the archaeological sites of India

Explanation: Statement b is correct: The Union Education Ministry has set up a committee headed by space scientist K. Kasturirangan to devise the National Curriculum Frameworks (NCFs). It will serve as a guiding document for the development of textbooks, syllabus and teaching practices in schools across the country.

Q.7) With reference to “Blue Flag Certification” consider the following statements:

1. It is awarded by a non-profit organization called the Foundation for Environmental Education (FEE).
2. Recently, Palolem Beach of Goa received Blue Flag cert certification.

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

Explanation: Statement 1 is correct: The Blue Flag is one of the world's most recognised voluntary eco-labels awarded to beaches, marinas, and sustainable boating tourism operators. Statement 2 is incorrect: Recently, Indian Kovalam beach in Tamil Nadu and Eden in Puducherry got the Blue Flag certification. With this there are total 10 Blue flag certified beach In India

Golden Beach – Odisha

Shivrajpur Beach – Gujarat

Kappad Beach – Kerala

Ghoghla Beach – Diu

Radhanagar Beach – Andaman and Nicobar

Kasarkod Beach – Karnataka

Padubidri Beach – Karnataka

Rushikonda Beach – Andhra Pradesh

Kovalam Beach – Tamil Nadu

Eden Beach – Puducherry

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

1. The alliance is directly aimed to control offensive maneuvers of China in Indo-Pacific.
2. Under the alliance, Australia will acquire nuclear-powered submarines.
3. It is a diplomatic grouping involving Australia, UK and US.

Which of the statements given above is/are incorrect?

- a) 1 and 2 only

b) 2 and 3 only

c) 1 and 3 only

d) 1, 2 and 3

Explanation: Statement 1 is incorrect: According to the official statement, the AUKUS is not aimed [at] or about any one country, it's about advancing strategic interests of the AUKUS Countries and upholding the international rules-based order, and promoting peace and stability in the Indo-Pacific. Statement 2 is correct: Under the alliance, Australia will acquire nuclear-powered submarines. Statement 3 is incorrect: The AUKUS is a security grouping, unlike QUAD, which is a diplomatic grouping.

Q.9) UNSC Resolution 2593 (2021), recently seen in news, is related to:

- a) It demands Afghan territory must never again be used to threaten or attack any country or to shelter or train terrorists
- b) Cyber Security
- c) Collective action to tackle climate change
- d) None of the above

Explanation: President Joseph R. Biden welcomed Prime Minister Narendra Modi to the White House for their first in-person Leaders' engagement, renewing their close relationship.

The Leaders hailed the finalization of the overarching Memorandum of Understanding on Health and Biomedical Sciences to bolster cooperation on key areas affecting global health, including pandemic preparedness and biomedical research, to reduce the risk of future pandemics.

Prime Minister Modi welcomed President Biden's initiative to convene the Global COVID-19 Summit on Ending the Pandemic and Building Back Better to Prepare for the Next, given our shared commitment to combat the Covid-19 pandemic.

Through the two main tracks of the Strategic Clean Energy Partnership (SCEP) and the Climate Action and Finance Mobilization Dialogue (CAFMD) under the U.S.-India Climate and Clean Energy Agenda 2030 Partnership, the

United States and India will accelerate clean energy development and deployment of critical technologies to advance a clean energy transition.

India welcomed the United States joining the Leadership Group for Industry Transition (LeadIT).

The Leaders resolved that the Taliban must abide by UNSC Resolution 2593 (2021), which demands that Afghan territory must never again be used to threaten or attack any country or to shelter or train terrorists

The Leaders looked forward to reconvening the India-U.S. Trade Policy Forum before the end of 2021, to enhance the bilateral trade relationship by addressing trade concerns.

The Leaders looked forward to reviving the High Technology Cooperation Group (HTCG) in early 2022, with the objective of accelerating high technology commerce in key areas.

The Leaders looked forward to the finalization of a Space Situational Awareness Memorandum of Understanding that will help in sharing of data and services towards ensuring the long-term sustainability of outer space activities by the end of the year.

Hence, option (a) is the correct answer.

Q.10) With reference to the National Mission on Cultural Mapping (NMCM), consider the following statements:

1. The National Mission on Cultural Mapping (NMCM) has now been handed over to the Indira Gandhi National Centre for the Arts (IGNCA).
2. The entire project would take five years and a budget of ₹89 crore had been approved for 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

Explanation: The National Mission on Cultural Mapping (NMCM) has now been handed over to

the Indira Gandhi National Centre for the Arts (IGNCA), which is gearing up for a trial run in 75 villages in October 2021.

The Culture Ministry had approved the mission in 2017 with a ₹469 crore budget from 2017-18 to 2019-20, according to the administrative approval for the project. However, the project had been slow to take off.

Culture Ministry was working on the cultural mapping mission to build a comprehensive database of artists, art forms and other resources from organisations under the Ministry.

So far 14.53 lakh artists/artisans have been registered on NMCM portal through secondary sources State/Union Territory-wise. However, no direct benefit or assistance has been extended through this Mission to the registered artists/institution.

The work on creating a database for folk arts and mapping of heritage of villages would be carried out over five years.

Volunteers from the Nehru Yuva Kendra Sanghathan, the National Service Scheme and students of sociology and social work would be deputed to collect such data from villages, he said.

While the entire project would take five years and a budget of ₹89 crore had been approved for it, the IGNCA would aim to complete mapping in 5,000 villages by the end of financial year 2021-2022.

Hence both statements are correct.

September: 28

Q.1) With reference to Multilateral Investment Guarantee Agency (MIGA), consider the following statements:

1. It safeguards investments from effects of political turmoil in developing countries.
2. MIGA guarantee is limited to projects related to infrastructure and manufacturing sectors only.
3. India is a member of MIGA.

Which of the statements given above is/are correct?

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

Explanation: MIGA - the Multilateral Investment Guarantee Agency - is a member of the World Bank Group. MIGA's mission is to promote foreign investment into developing countries. It provides political risk insurance guarantees to private sector investors and lenders. It provides non-commercial guarantees (insurance) for cross-border investments into developing countries.

MIGA's guarantees protect investors against the risks of transfer restriction (including inconvertibility), expropriation, war and civil disturbance, breach of contract, and non-honoring of financial obligations.

Most sectors are eligible for MIGA guarantees, including (but not limited to) financial, infrastructure, oil and gas, mining, telecommunications, services, agribusiness, and manufacturing.

India is a member of MIGA.

Q.2) Consider the following

Tribes	Regions Associated
1. Bru	Tripura
2. Rengma	Nagaland
3. Bonda	Assam

Which of the above items are not correctly matched?

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

d) 3 only

Explanation: Bru- The Brus, also referred to as the Reangs, are spread across the north-eastern states of Tripura, Assam, Manipur, and Mizoram. In Tripura, they are recognised as a Particularly Vulnerable Tribal Group.

Culture: They speak the Reang dialect of Kokborok language which is locally referred to as Kau Bru. Their Hojagiri folk dance is well known all over the world. 'Buisu', not 'bihu' is the most popular festival of Reang tribes.

Rengma is a Naga tribe found in Nagaland, Assam and Arunachal Pradesh.

Bonda tribe, known for its secluded lifestyle. Bondas live in highlands, 3,500-feet above sea level, in Malkangiri, the southern-most district of Odisha.

Q.3) Consider following with respect to Akash Prime?

1. It is a Surface to Surface Missile system.
2. It is developed by DRDO

Select the correct answer using the code given below.

- a) 1 only
- b) 2 only**
- c) Both 1 and 2 only
- d) None of the above

Explanation: Statement 1 is Incorrect & Statement 2 is Correct:

Akash is a medium-range mobile surface-to-air missile system developed by the Defence Research and Development Organisation and produced by Bharat Dynamics Limited.

The Defence Research and Development Organisation (DRDO) on Monday successfully

tested a new version of Akash Surface to Air missile Akash Prime from the Integrated Test Range at Chandipur, Odisha.

In comparison to the existing Akash System, Akash Prime is equipped with an indigenous active Radio Frequency (RF) seeker for improved accuracy. Other improvements also ensure more reliable performance under low-temperature environments at higher altitudes.

A modified ground system of the existing Akash system had been used for the flight test.

Q.4) Which of the following Institutions/Organizations releases the All India Quarterly Establishment-based Employment Survey?

- a) Ministry of Labour & Employment
- b) Ministry of Finance
- c) Ministry of Statistics & Programme Implementation
- d) NITI Aayog

Explanation: The All-India Quarterly Establishment-based Employment Survey, in a report released on Monday, said that the overall employment numbers had increased by 29% from the base year of 2013-14.

However, in the first quarter of this fiscal (April-June 2021), 27% of the establishments surveyed reported pandemic-related retrenchment.

The report, released by Labour and Employment Minister, covered 10,593 firms that employed more than 10 workers and were spread over nine sectors that account for 85% of the total employment in such establishments.

Q.5) As per IUCN red list, What is the conservation status of the Blue Finned Mahseer?

- a) Least Concern
- b) Vulnerable
- c) Endangered
- d) Critically Endangered

Explanation: THE BLUE-FINNED Mahseer, which was on the International Union for Conservation of Nature's (IUCN) red list of endangered species, has now moved to the 'least concern' status.

Blue Finned Mahseer is a freshwater fish. It is also known as Deccan Mahseer or Tor Khudree.

It is one of the sub-species of Mahseer.

Blue Finned Mahseer is found in the Mula-Mutha River close to the Indian city of Pune, a part of the Krishna River basin. It is also found in other rivers of the Deccan Plateau.

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

1. It is a household electrification drive.
2. The scheme primarily benefits rural areas.
3. The beneficiaries are identified using Socio Economic and Caste Census (SECC) 2011 data.

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

Explanation: The Saubhagya Scheme or Pradhan Mantri Sahaj Bijli Har Ghar Yojana is an Indian government project to provide electricity to all households. The scheme was announced in 2017.

Saubhagya Scheme aims to achieve universal household electrification in all parts of the country.

The scheme primarily benefits rural areas, which have vast majority of households without power connections.

The beneficiaries for free electricity connection would be identified using Socio Economic and Caste Census (SECC) 2011 data.

Q.7) "Tamenglong orange", recently received GI tag belongs to:

- a) Nagaland

b) Manipur

- c) Mizoram
- d) Tripura

Explanation: Tamenglong orange is a species of mandarin group is a unique fruit crop found only in Tamenglong district of Manipur which contributes over 50 per cent of the state's annual production. It is famous especially for its well blended sweetness and acidic taste. Usually each fruit contains 10-14 pods.

Q.8) Kathaprasangam, seen recently in news, is a performing art of:

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

Explanation: Kathaprasangam (lyrical narrative or story telling performance) is a performing art of Kerala, India.

It combines speaking, acting, and singing to present a story. The main artist, the Kaadhikan, tells the story, acts and sings with two or three accompanying instrumentalists.

Themes are largely from classical and popular literature. It originated from an earlier art form Harikathakalakshepam.

Q.9) With reference to the Akash Missile – 'Akash Prime', consider the following statements:

1. It is a Surface to Surface missile.
2. Akash Prime is equipped with an indigenous active Radio Frequency (RF) seeker for improved accuracy.

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

Explanation: A new version of the Surface to Air Akash Missile – 'Akash Prime' has been successfully flight tested from Integrated Test Range (ITR), Chandipur, Odisha on 27 September 2021.

The missile intercepted and destroyed an unmanned aerial target mimicking enemy aircrafts, in its maiden flight test after improvements.

In comparison to the existing Akash System, Akash Prime is equipped with an indigenous active Radio Frequency (RF) seeker for improved accuracy. Other improvements also ensure more reliable performance under low temperature environments at higher altitudes.

Hence only statement 2 is correct.

Q.10) Which of the following is/are fundamental right(s) in India?

1. Right to privacy
2. Right to property
3. Right to Government Aid

Select the correct answer using the code given below:

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

Explanation: The right of an institution, whether run by a majority or minority community, to receive government aid is not a fundamental right. Both have to follow the rules of the aid, the Supreme Court held in a ruling.

Whether it is an institution run by the majority or the minority, all conditions that have relevance to the proper utilisation of the grant-in-aid by an educational institution can be imposed.

All that Article 30(2) states is that on the ground that an institution is under the management of a minority, whether based on religion or language, grant of aid to that educational institution cannot be discriminated against, if other educational institutions are entitled to receive aid

The Bench said if the government made a policy call to withdraw aid, an institution cannot question the decision as a “matter of right”. An institution is free to choose to accept the grant with the conditions or go its own way, it said.

The judgment came in an appeal filed by Uttar Pradesh against a decision of the Allahabad High Court to declare unconstitutional a provision of the Intermediate Education Act, 1921.

Right to property is a constitutional right under Article 300A of the Constitution”. It is not a fundamental right. The Supreme Court recently held that the right to privacy is a fundamental right and is an integral part of the right to life and liberty.

Hence, option (a) is the correct answer.

September: 29

Q.1) Consider the following statements:

1. The Constitution (Fifty-fifth Amendment) Act, 1986, added the Tenth Schedule to the Indian Constitution, which provides for Anti-Defection law.
2. In the cases of anti-defection, the decision of the Speaker of the Lok Sabha and the Chairman of the Rajya Sabha shall not be judicially reviewed, whereas the decision of the Speaker of the Legislative Assembly can be judicially reviewed.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 & 2 only
- d) None of the above

Explanation: Both Statements 1 & 2 are Incorrect:

The 52nd Constitution Amendment) Act, 1985, added the Tenth Schedule to the Indian Constitution, which provides for Anti-Defection law.

The Tenth Schedule refers to the decision on the questions as to disqualification on the ground of defection. If any question arises as to whether a member of a House has become a subject to disqualification under this Schedule, the question shall be referred for the decision of the Chairman or the Speaker of such House and his decision shall be final.

The Supreme Court, in the *Kihota Hollohon v/s Zachilhu and others* case, upheld the constitutional validity of the Tenth Schedule. The Court also held that the decision of the Speaker of the Lok Sabha or the State Assembly on the matters of disqualification will be open to judicial review.

Q.2) With reference to Indian Biodiversity, Conjoined Swift, Indian Skipper, Indian Red flash & African Babul are?

- a) Birds
- b) Reptiles

c) Butterflies

- d) Amphibians

Explanation: Haryana State Forest and Wildlife department conducted the state's first butterfly survey in Rewari's Khol block Tuesday. The survey, conducted in a contiguous stretch in ten villages — Palra, Basduda, Khol, Manethi, Bhalki, Majra, Nandha, Balwari, Ahroad and Khaleta — spread over 1,000 hectares, was conducted to chalk out a strategy for conservation of butterflies and moths in Aravallis.

Sixty species of butterfly including small branded swift, Indian skipper, conjoined swift, lesser grass blue, gram blue, tiny grass blue, small cupid, plains cupid oriental grass jewel, pea blue, Indian red flash, African Babul, common pierrot, rounded pierrot were identified in the area during the one-day survey. Common albatross, one of the rarely sighted butterflies, was also sighted in the area.

Q.3) Recently seen in the news, the Northeast's first GI Tagged traditional brew "Judima rice wine" is from which state?

- a) Assam
- b) Meghalaya
- c) Nagaland
- d) Mizoram

Explanation: Judima, a homemade rice wine of Assam's Dimasa tribe has become the first traditional brew in all of the northeast to bag a geographical indication (GI) tag.

Made from sticky rice, which is steamed and mixed with traditional herbs, the wine has a distinct sweet taste and takes around one week to prepare. However, it can be stored for years. It is a speciality of the Dimasa tribe of the state's Dima Hasao district.

Q.4) Permafrost, the perennially frozen soil in high latitude and altitude regions, has exhibited increased thawing due to global warming. Which of the following may be its consequences?

1. It may further aggravate global warming due to release of methane gas.
2. It may pose a threat to local ecosystems.
3. It may cause damage to local infrastructure.

Which of the statements given above is/are correct?

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

Explanation: All statements are correct.

Permafrost is perennially frozen soil that has been below 0°C for at least two years. Permafrost is a condition where top layer upto depth of 20-40 cm is completely frozen. This happens in high latitude and altitude regions.

It's found underneath about 25% of the northern hemisphere, mainly around the Arctic - but also in the Antarctic and Alpine regions. In the northern region of Alaska, the permafrost has been warming at about one-tenth of a degree Celsius per year since the mid 2000s.

These top soils melt due to global warming which is a great threat as there melt will aggravate the condition of global warming. As permafrost thaws, this carbon is released to the atmosphere in the form of methane, a powerful greenhouse gas. This process leads to more climate change and is an example of a positive feedback loop, which happens when warming causes changes that lead to even more warming.

As permafrost thaws, it can also cause substantial changes in the local ecosystem, altering the flow of water atop and through the soil, as well as what plant and animal life can thrive in the area.

It is a part of life in the frigid North Slope, underlying buildings, roads and other infrastructure. When it thaws, it can cause considerable damage. In Alaska, the warming of the permafrost has been linked to trees toppling, roads buckling and the development of sinkholes.

When permafrost melts, the land above it sinks or changes shape. Sinking land can damage buildings

and infrastructure such as roads, airports, and water and sewer pipes. It also affects ecosystems.

Q.5) Which of the following statements are correct about United Nation General Assembly?

1. It is elected each year by assembly to serve a three year term of office.
2. Decision on admission of new states is taken by simple majority.
3. Currently, India is elected on the chair of the assembly.

Select the correct answer using the code given below-

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

d) None of the above

Explanation: United Nations General Assembly

The General Assembly is the main deliberative, policymaking and representative organ of the UN.

All 193 Member States of the UN are represented in the General Assembly, making it the only UN body with universal representation.

Each year, in September, the full UN membership meets in the General Assembly Hall in New York for the annual General Assembly session, and general debate, which many heads of state attend and address.

Decisions on important questions, such as those on peace and security, admission of new members and budgetary matters, require a two-thirds majority of the General Assembly.

Decisions on other questions are by simple majority.

The President of the General Assembly is elected each year by assembly to serve a one-year term of office.

Recently, the Maldives' Foreign Minister Abdulla Shahid was elected the President of the 76th session of the UNGA for 2021-22

The UNGA has also appointed Antonio Guterres as the ninth UN Secretary General (UNSG) for a

second term beginning 1st January, 2022 and ending on 31st December, 2026.

Q.6) “Parshuram Kund”, development of which has been sanctioned under the PRASHAD scheme recently is located in:

- a) Uttarakhand
- b) Rajasthan
- c) Madhya Pradesh

d) Arunachal Pradesh

Explanation: Parshuram Kund is a Hindu pilgrimage sites situated on the Brahmaputra plateau in the lower reaches of the Lohit River in Lohit district of Arunachal Pradesh.

Dedicated to sage Parshuram, the popular site attracts pilgrims from Nepal, from across India, and from nearby states of Manipur and Assam.

Q.7) With reference to the Anti defection law, consider the following statements:

1. Under the anti-defection law, the power to decide the disqualification of an MP or MLA rests with the President of India.
2. The law does not specify a time frame in which such a decision has to be made.

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

Explanation: Jignesh Mewani, an independent MLA from Gujarat, has said he has joined the Congress “in spirit” as he could not formally do so, having been elected as an independent.

The Tenth Schedule of the Constitution, popularly known as the anti-defection law, specifies the circumstances under which changing of political parties by legislators invites action under the law. It includes situations in which an independent MLA, too, joins a party after the election.

The law covers three scenarios with respect to shifting of political parties by an MP or an MLA.

The first is when a member elected on the ticket of a political party “voluntarily gives up” membership of such a party or votes in the House against the wishes of the party.

The second is when a legislator who has won his or her seat as an independent candidate joins a political party after the election.

In both these instances, the legislator loses the seat in the legislature on changing (or joining) a party.

The third scenario relates to nominated MPs. In their case, the law gives them six months to join a political party, after being nominated. If they join a party after such time, they stand to lose their seat in the House.

Disqualification: Under the anti-defection law, the power to decide the disqualification of an MP or MLA rests with the presiding officer of the legislature. The law does not specify a time frame in which such a decision has to be made.

Hence only statement 2 is correct.

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

1. The scheme aims to promote the use of solar power among farmers.
2. This scheme is launched under Ministry of Agriculture and Farmer Welfare.

Which of the statements given above is/are correct?

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

Explanation: Statement 1 is correct: Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-Kusum) scheme was launched in 2019. It aims to help farmers access reliable day-time solar power for irrigation, reduce power subsidies, and decarbonise agriculture. Statement 2 is incorrect: The Ministry of New and Renewable Energy has formulated ‘Kisan Urja

Suraksha evam Utthaan Mahabhiyan (KUSUM) Scheme

Q.9) XENON1T and LUX-Zeplin experiments are associated with which of the following?

- a) Block Chain technology
- *b) Dark matter detection
- c) Search for extraterrestrial life
- d) Detection of gravitational waves

Explanation: The XENON1T experiment is the world's most sensitive dark matter experiment and was operated deep underground at the INFN Laboratori Nazionali del Gran Sasso in Italy.

LUX-Zeplin is a next-generation dark matter experiment located at the Sanford Underground Research Facility.

Q.10) With reference to outer space treaty 1967, consider the following statements:

1. Outer space shall be free for exploration and use by all States.
2. Astronauts shall be regarded as the envoys of mankind.
3. States shall be responsible for national space activities whether carried out by governmental or non-governmental activities.

Which of the statements given above is/are principles enshrined in the outer space treaty?

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

Explanation: All statements are correct. Outer Space Treaty, 1967 includes the following principles:

The exploration and use of outer space shall be carried out for the benefit and in the interests of all countries and shall be the province of all mankind;

Outer space shall be free for exploration and use by all States;

Outer space is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means;

States shall not place nuclear weapons or other weapons of mass destruction in orbit or on celestial bodies or station them in outer space in any other manner;

The Moon and other celestial bodies shall be used exclusively for peaceful purposes;

Astronauts shall be regarded as the envoys of mankind;

States shall be responsible for national space activities whether carried out by governmental or non-governmental activities;

States shall be liable for damage caused by their space objects; and

States shall avoid harmful contamination of space and celestial bodies.

September: 30

Q.1) With reference to the National Scheme for PM POSHAN in Schools, consider the following statements:

1. It is a central sector scheme.
2. The earlier name of the scheme was 'National Scheme for Mid Day Meal in Schools' popularly known as Mid Day Meal 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

Explanation: The Cabinet Committee on Economic Affairs (CCEA) has approved the continuation of 'National Scheme for PM POSHAN in Schools' for the five year period 2021-22 to 2025-26 with the financial outlay of ₹ 54061.73 crores from the Central Government and ₹ 31,733.17 crore from State Governments & UT administrations.

Central Government will also bear additional cost of about ₹ 45,000 crore on foodgrains. Therefore, the total scheme budget will amount to ₹ 1,30,794.90 crore.

The CCEA cleared the PM POSHAN Scheme for providing one hot cooked meal in Government and Government-aided schools from 2021-22 to 2025-26.

This is a Centrally-Sponsored Scheme which covers all school children studying in Classes I-VIII of Government, Government-Aided Schools.

The earlier name of the scheme was 'National Scheme for Mid Day Meal in Schools' popularly known as Mid Day Meal Scheme.

The scheme covers about 11.80 crore children studying in 11.20 lakh schools across the country. During 2020-21, Government of India invested more than ₹ 24,400 crore in the scheme, including cost of about ₹ 11,500 crore on foodgrains.

Highlights of the decision that would improve the efficiency and effectiveness of the scheme are as below:

The scheme is proposed to be extended to students studying in pre-primary or Bal Vatikas of Government and Government-aided primary schools in addition to all the 11.80 crore children from elementary classes.

The concept of Tithi Bhojan will be encouraged extensively. Tithi Bhojan is a community participation programme in which people provide special food to children on special occasions/festivals.

Government is promoting development of School Nutrition Gardens in schools to give children first hand experience with nature and gardening. The harvest of these gardens is used in the scheme providing additional micro nutrients. School Nutrition Gardens have already been developed in more than 3 lakh schools.

Social Audit of the scheme is made mandatory in all the districts.

Special provision is made for providing supplementary nutrition items to children in aspirational districts and districts with high prevalence of Anemia.

Cooking competitions will be encouraged at all levels right from village level to national level to promote ethnic cuisine and innovative menus based on locally available ingredients and vegetables.

Vocal for Local for Atmanirbhar Bharat: Involvement of Farmers Producer Organizations (FPO) and Women Self Help Groups in implementation of the scheme will be encouraged. Use of locally grown traditional food items for a fillip to local economic growth will be encouraged.

Field visits for progress monitoring and inspections will be facilitated for students of eminent Universities / Institutions and also trainee teachers of Regional Institutes of Educations (RIE) and District Institutes of Education and Training (DIET).

Hence only statement 2 is correct.

Q.2) With reference to the Emergency Credit Line Guarantee Scheme (ECLGS), consider the following statements:

1. It has provided support to eligible borrowers in meeting their operational liabilities and restarting their businesses in the wake of disruptions caused by the COVID-19 pandemic.
2. The last date of disbursement under the scheme has also been extended to 30.06. 2022.

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

Explanation: ECLGS' scope expanded and scheme extended till 31.03.2022.

Emergency Credit Line Guarantee Scheme (ECLGS) since its launch, has extended relief to over 1.15 crore Micro, Small and Medium Enterprises (MSMEs) and businesses.

It has provided support to eligible borrowers in meeting their operational liabilities and restarting their businesses in the wake of disruptions caused by the COVID-19 pandemic.

With a view to support various businesses impacted by the second wave of COVID 19 pandemic, it has been decided to extend the timeline of Emergency Credit Line Guarantee Scheme (ECLGS) till 31.03.2022 or till guarantees for an amount of Rs 4.5 lakh crore are issued under the scheme, whichever is earlier.

Further, the last date of disbursement under the scheme has also been extended to 30.06. 2022.

The following modifications have been made in the scheme to enable support to businesses impacted by the second wave of COVID

Existing borrowers under ECLGS 1.0 & 2.0 would be eligible for additional credit support of upto 10% of total credit outstanding as on 29.02.2020 or 31.03.2021, whichever is higher.

Businesses who have not availed assistance under ECLGS (ECLGS 1.0 or 2.0), can avail credit support of upto 30% of their credit outstanding as on 31.03.2021.

Businesses in sectors specified under ECLGS 3.0, who have previously not availed ECLGS, can avail credit support up to 40% of their credit outstanding as on 31.03.2021, to the maximum of Rs.200 crore per borrower;

Incremental credit can be availed within these limits by existing ECLGS borrowers whose eligibility increased because of change in cut off date to 31.03.2021 from 29.02.2020.

Accordingly, Borrowers who have availed assistance under ECLGS and whose credit outstanding as on 31.03.2021 (excluding support under ECLGS) is higher than that on 29.02.2020 shall be eligible for incremental support within the cap stipulated under ECLGS 1.0,2.0 or 3.0.

Hence both statements are correct.

Q.3) With reference to the 'Terms of Reference' (ToR) for the conduct of the navy to navy talks, consider the following statements:

1. The Indian Navy and the Australian Navy recently signed the 'Terms of Reference' (ToR) for the conduct of the navy to navy talks under the framework of the 'Joint Guidance for the India-Australia Navy to Navy Relationship' document.
2. This is the first such document signed by the Indian Navy with any 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

Explanation: The Indian Navy and the Australian Navy signed the 'Terms of Reference' (ToR) for the conduct of the navy to navy talks under the framework of the 'Joint Guidance for the India-Australia Navy to Navy Relationship' document, signed by the two Navy Chiefs in August.

This is the first such document signed by the Indian Navy with any country.

The document set the navy to navy talks as the principal medium for guiding the bilateral cooperation, the Indian Navy said in a statement.

The document would be pivotal in consolidating the shared commitment to promoting peace, security, stability and prosperity in the Indo-Pacific region. The ToR detailed the modalities for engagement at various levels between the two navies and streamlined the process.

The document provided flexibility for the implementation of separate agreements based on the specific outcomes of the talks.

The highlights of the document included close cooperation in regional and multilateral fora, including Indian Ocean Naval Symposium (IONS), Western Pacific Naval Symposium (WPNS) and Indian Ocean Rim Association (IORA).

Hence both statements are correct.

Q.4) Nimach-Ratlam railway line, often mentioned in news, is located in:

- a) Madhya Pradesh
- b) Maharashtra
- c) Tamil Nadu
- d) Odisha

Explanation: The Cabinet Committee on Economic Affairs approved the doubling of the Nimach-Ratlam (Madhya Pradesh) railway line as well as of the Rajkot-Kanulus (Gujarat) railway line, with an estimated project cost of over ₹1,000 crore each.

The total length of doubling of the line for the Nimach-Ratlam line is 132.92 km, with an estimated project cost of ₹1,095.88 crore, and the estimated length for the Rajkot-Kanulus line is 111.2 km, with an estimated cost of ₹1,080.58 crore.

Both projects are targeted for completion by 2024-25.

The Rajkot-Kanulus section is a part of the busy Mumbai-Ahmedabad-Viramgam-Okha section.

Hence, option (a) is the correct answer.

Q.5) Which of the following are correctly matched?

Anti-Missile Systems	Origin
1. Iron Dome	Israel
2. THAAD Korea	South Korea
3. S-400	Russia
4. Ground-Based Midcourse Defense	United States of America

Select the correct answer using the code below-

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

d) 1,3 and 4

Explanation:

THAAD (Terminal High Altitude Area Defense)-USA

S-400- Russia

Iron Dome- Israel

Ground-Based Midcourse Defense-USA

Q.6) Which of the following laws in India governs Intellectual Property?

- 1. Copyrights Act, 1957
- 2. Designs Act, 2000
- 3. IT Act, 2000
- 4. Semiconductor Integrated Circuits Layout Design Act, 2000.

Select the correct answer using the code below-

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

d) All of the above

Explanation: Indian Laws which Cover Intellectual Property

Trade Marks Act, 1999.

Patents Act, 1970 (as amended in 2005).

Copyright Act, 1957.

Designs Act, 2000.

Geographical Indications of Goods (Registration and Protection) Act, 1999.

Semiconductor Integrated Circuits Layout Design Act, 2000.

Protection of Plant Varieties and Farmers' Right Act, 2001.

Information Technology Act, 2000.

Q.7) Direct seeding of rice is seen as an efficient method of cultivating paddy than the transplantation method. In this context what is/are the benefits of direct seeding of rice?

1. Seed requirement is less
2. Saves labour cost
3. Reduces methane emission

Choose the correct answer from the codes given below:

- a) 1 and 2 only
- b) 2 and 3 only**
- c) 1, 2 and 3
- d) None of the above

Explanation: How is Direct Seeding of Rice (DSR) different from normal transplanting of paddy?

In transplanting, farmers prepare nurseries where the paddy seeds are first sown and raised into young plants. These seedlings are then uprooted and replanted 25-35 days later in the main field. The nursery seed bed is 5-10% of the area to be transplanted. In DSR, there is no nursery preparation or transplantation. The seeds are instead directly drilled into the field by a tractor-powered machine.

Main advantage with DSR:

Reduces water requirement. The first irrigation under DSR is necessary only 21 days after sowing. This is unlike in transplanted paddy, where watering has to be done practically daily to ensure submerged/flooded conditions in the first three weeks.

Less numbers of labourers required.

Saves labour cost.

Reduce methane emissions due to a shorter flooding period and decreased soil disturbance compared to transplanting rice seedlings

Drawbacks:

The seed requirement for DSR is higher, at 8-10 kg/acre, compared to 4-5 kg in transplanting.

Further, laser land levelling is compulsory in DSR. This is not so in transplanting.

The sowing needs to be done timely so that the plants have come out properly before the monsoon rains arrive.

Q.8) With reference to Pradhan Mantri Formalisation of Micro food processing Enterprises (PMFME) Scheme, consider the following statements:

1. It is a central sector scheme launched under the Aatmanirbhar Bharat Abhiyan.
2. It aims to enhance the competitiveness of existing individual micro-enterprises in the unorganized segment of the food processing industry.

Which of the above statements is/are correct?

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

Explanation: Launched under the Aatmanirbhar Bharat Abhiyan, the Pradhan Mantri Formalisation of Micro food processing Enterprises (PMFME) Scheme is a centrally sponsored scheme that aims to enhance the competitiveness of existing individual micro-enterprises in the unorganized segment of the food

processing industry and promote formalization of the sector and provide support to Farmer Producer Organizations, Self Help Groups, and Producers Cooperatives along their entire value chain.

With an outlay of Rs.10,000 crore over a period of five years from 2020-21 to 2024-25, the scheme envisions to directly assist the 2,00,000 micro food processing units for providing financial, technical, and business support for upgradation of existing micro food processing enterprises.

Q.9) Rat-hole mining is the primarily practiced mining technique in which of the following state of India?

- a) Karnataka
- b) Madhya Pradesh
- c) Bihar

d) Meghalaya

Explanation: A rat-hole mine involves digging of very small tunnels, usually only 3-4 feet deep, in which workers, more often children, enter and extract coal. Rat-hole mining is broadly of two types – side-cutting and box-cutting.

Rat-hole mining is primarily practiced only in Meghalaya. Such cases are not witnessed in Jharkhand and Chhattisgarh because the coal seams are thick in Jharkhand and Chhattisgarh while in Meghalaya coal seams are very thin. So, economically it is not a good idea to do an open mining, and therefore, they prefer rat-hole mining.

Although the coal is of bad quality, people see it as a treasure-chest. In backward regions, where there is loss of livelihood, lack of employment opportunities and under-education, people see rat-hole mines as an opportunity to earn daily bread. A major portion of those involved in rat hole mining are children, who are preferred because of their thin body shape and ease to access depths.

Q.10) The All-India Quarterly Establishment based Employment Survey (AQEES) is prepared by:

- a) NITI Aayog
- b) Central Statistical Organization

c) Ministry of Commerce

d) Labour Bureau

Explanation: The All-India Quarterly Establishment-based Employment Survey (AQEES) has been prepared by the Labour Bureau.

The AQEES has been taken up by the Labour Bureau to provide frequent (quarterly) updates about the employment and related variables of establishments, in both organised and unorganised segments of nine selected sectors. These sectors altogether account for a majority of the total employment in the non-farm establishments. These nine selected sectors are Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation and Restaurant, IT/ BPO and Financial Services.

Of the total employment estimated in the selected nine sectors, Manufacturing accounts for nearly 41 percent followed by Education with 22 percent, and Health 8 percent. Trade as well as and IT/BPO each engaged 7 percent of the total estimated number of workers.