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For the Month

Of

February

2021

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1. Geography

Click on the links given below to watch the following questions on YouTube

- [Video 1](#)
- [Video 2](#)
- [Video 3](#)

1. The Sinai Peninsula is surrounded by which of the following water bodies?

1. Mediterranean Sea
2. Gulf of Aqaba
3. Gulf of Suez
4. Red Sea

- A. 1, 2, 3 and 4
- B. 1, 3 and 4
- C. 1 and 4 only
- D. 2 and 4 only

Answer: A

Explanation



2. With reference to the term 'Pesticide Treadmill', consider the following statements:

1. It means increasing the doses of pesticides to prevent the resurgence of the earlier controlled pest.

2. It yields counterproductive results as repeated spraying increase the vulnerabilities of the farming communities to debt and poor health.
3. It involves targeted spraying on pests so that no other insects which are harmless or beneficial to the crops get killed.

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

- A. 1 and 2 Only
- B. 1 and 3 Only
- C. 2 and 3 Only
- D. All of the Above

Answer: A

Explanation

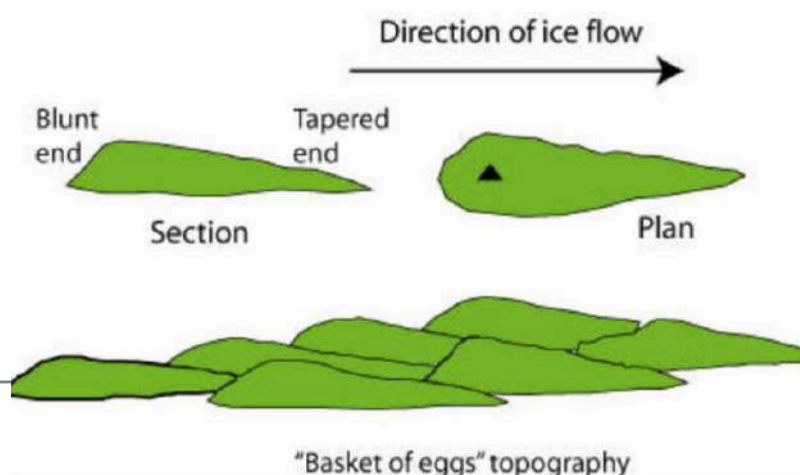
- The pesticide treadmill is a term indicating a situation in which it becomes necessary for a farmer to continue using pesticides regularly because they have become an indispensable part of an agricultural cycle. .
- An even more severe aspect of the pesticide treadmill is when it escalates. It can happen that the effective elimination of one target insect pest allows other insect pests to thrive, resulting in the farmer having to use other insecticides to eliminate the new pest problem. This can lead to more pests and the need for yet more insecticide types to deal with the additional problems. In starting to use any agricultural insecticide, the farmer should be aware of the danger of unintentionally ending up in a treadmill situation, which becomes self-perpetuating.

3. The terms “basket of eggs” topography is :

- A. Depositional landform formed by Glaciers
- B. Erosional landforms by Winds
- C. Depositional landforms by Water
- D. Erosional landforms by River

Answer: A

Explanation



4. Which of the following pairs have been incorrectly matched?

1. Tombolo: a narrow piece of land that connects a larger piece of land to a smaller piece of land.
2. Isthmus : a narrow strip of land with sea on either side, forming a link between two larger areas of water bodies.
3. Strait : a narrow channel of water connecting two larger bodies of land
4. Peninsula : a piece of land that is almost surrounded by water but connected to mainland

A. 1, 2 and 3 only

B. 1 and 3 only

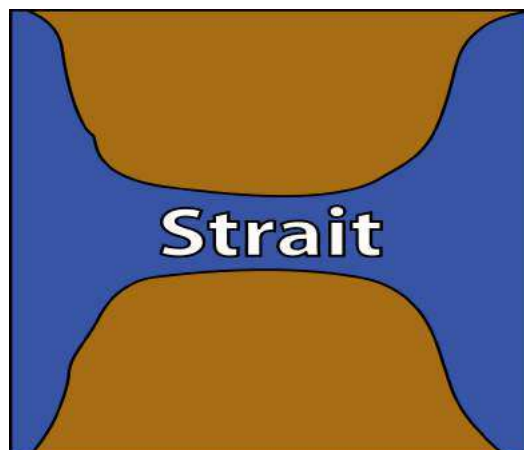
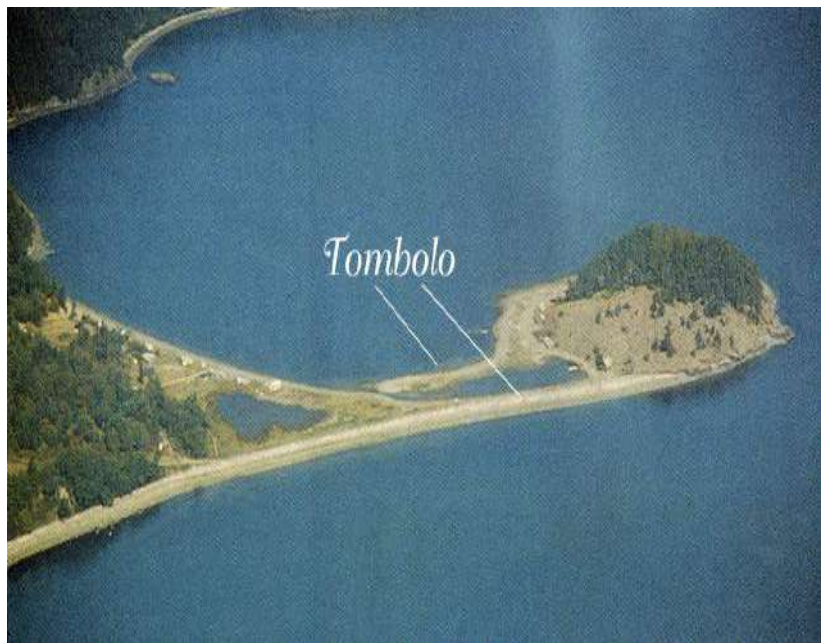
C. 2 and 3 only

D. 1 and 4 only

Answer: C

Explanation

- Isthmus is a narrow strip of land connecting two larger land areas, usually with water on either side.
- A peninsula is a piece of land that is almost surrounded by water but connected to mainland (via an isthmus). So a peninsula is often defined as land surrounded by water on three sides.
- Tombolo is a bar of sand or shingle joining an island to the mainland.
- Strait is a narrow passage of water connecting two seas or two other large areas of water.



● Peninsula



5. The Term “Bonn Challenge “ has been in news recently. It is associated with:

- A. Convention on Migratory Species
- B. Landscape Restoration
- C. Elimination of non-biodegradable waste
- D. Reduce the Green House Gases to half by 2030

Answer: B

Explanation

- The Bonn Challenge is a global goal to bring 150 million hectares of degraded and deforested landscapes into restoration by 2020 and 350 million hectares by 2030.

6. Which of the following best describes the word ‘Possibilism’ in context with Human Geography?

- A. The Environment sets certain constraints or limitations, but culture is otherwise determined by social conditions.
- B. It explains how the physical environment predisposes societies and states towards particular development trajectories.
- C. It explores the new-found possibilities of Origin of Universe.
- D. None of the above

Answer: A

Explanation

- Possibilism in Human geography is the theory that the environment sets certain constraints or limitations, but culture is otherwise determined by social conditions.

7. Which of the following is/are the possible consequence(s) of heavy sand mining in riverbeds?

- 1. Decreased salinity in the river**
- 2. Pollution of groundwater**
- 3. Lowering of the water-table**

- A. 1 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

Answer: B

Explanation

- Excessive in-stream sand and gravel mining causes the degradation of rivers. Instream mining lowers the stream bottom, which may lead to bank erosion. Depletion of sand in the streambed and along coastal areas causes the deepening of rivers and estuaries and the enlargement of river mouths and coastal inlets.
- It may also lead to saline-water intrusion from the nearby sea.
- Instream sand mining results in the destruction of aquatic and riparian habitat through large changes in the channel morphology. Impacts include bed degradation, bed coarsening, lowered water tables near the streambed and channel instability.
- Excessive in-stream sand mining is a threat to bridges, river banks and nearby structures. Sand mining also affects the adjoining groundwater system and the uses that local people make of the river.

8. Which of the following statements regarding Char Piya island recently heard in news are incorrect?

- 1. It is a remote uninhabited island located in the Bay of Bengal.**
- 2. It is formed due to washing down and deposition of Himalayan silt.**

- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: D

Explanation

- The Bhashan Char Island is a remote uninhabited island of Bangladesh, located in the Bay of Bengal. It is also known as Char Piya.
- Around thousands of Rohingyas from Cox's Bazar refugee camp are being shifted to the newly developed facility in the island.
- The Bhashan Char Islands are also called the Floating Islands.
- They are formed from the Himalayan silt washed down from the Himalayas.
- The island was formed recently within 10 year of span. But according to the environmentalists, it is already eroding at the rate of half a kilometre per year. The environmentalists believe that the island is prone to cyclones and erosion.



9. Which of the following belong to Quinary Activities?

1. Trade and Commerce.
2. Financial Banking
3. Consultants
4. Communication
5. Specialists

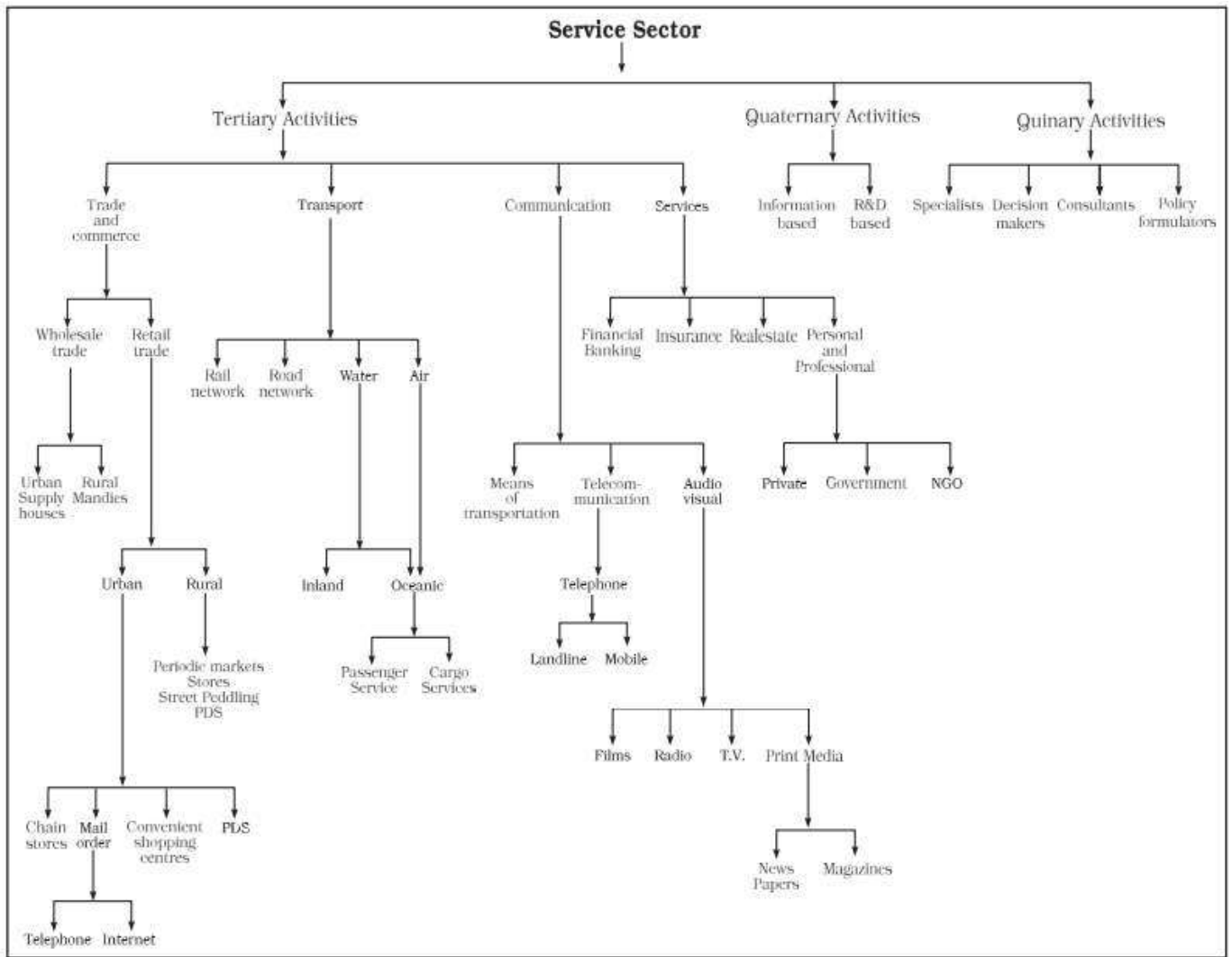
Select the correct code

- A. 1, 2 and 5 only
- B. 2, 4 and 5 only
- C. 3 and 5 only
- D. 1, 2, 3 and 5 only

Answer: C

Explanation

- Quinary activities are services that focus on the creation, re-arrangement and interpretation of new and existing ideas; data interpretation and the use and evaluation of new technologies.



10. Which of the following is not a closed Sea ?

1. Aegean Sea
2. Aral Sea
3. Red Sea

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: C

Explanation



11. Mixing zones of Cold and Warm Ocean Currents are the most productive fishing grounds on earth. In context with the same, which of the following mixing zones can be considered as “Fishing Grounds”?

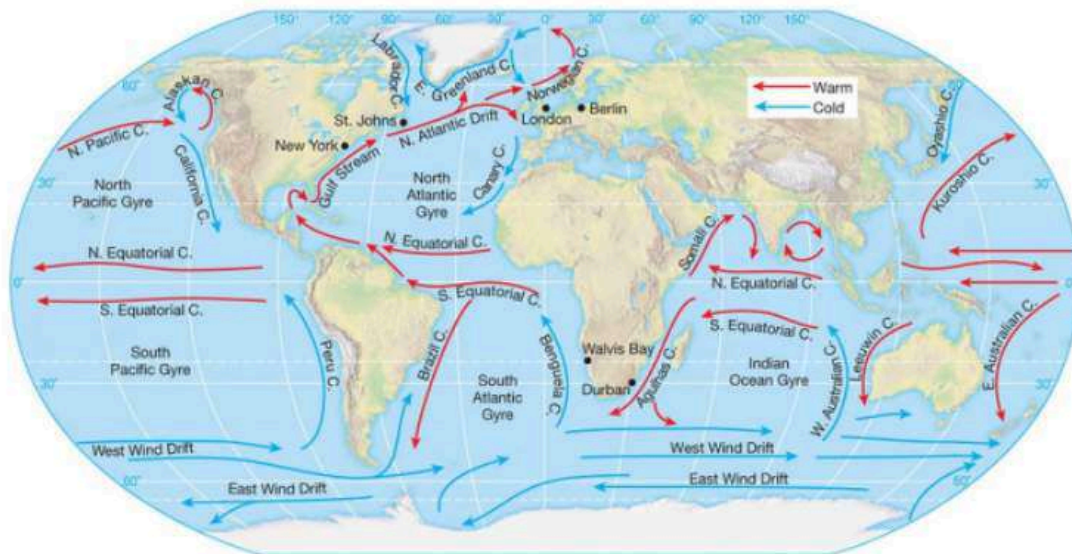
1. Kuroshio Current – Oyashio Current
2. Brazilian Current – Falkland Current
3. Labrador Current – Gulf Stream

A. 1 and 2 only

- B. 2 and 3 only
- C. 1 and 3 only
- D. 1,2 and 3 only

Answer: D

Explanation



12. Which of the following is true for North-east Gas Pipeline Grid Project?

1. It will be developed in North East in collaboration with Bangladesh and Myanmar .
 2. The pipeline will enable the supply of piped cooking gas to households and CNG to automobiles, besides fuel to industry.
- A. Only 1
 - B. Only 2
 - C. Both 1 and 2
 - D. Neither 1 nor 2

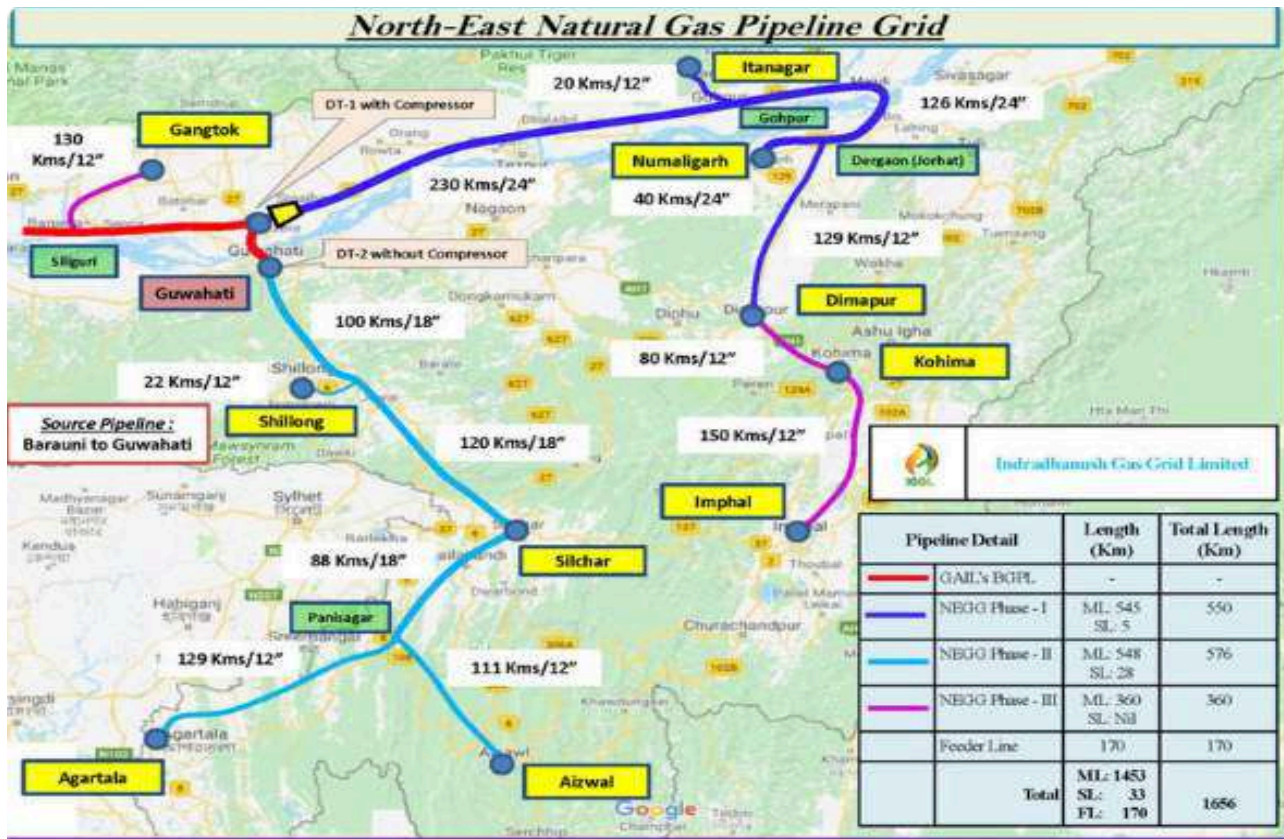
Answer: B

Explanation

- The 1,656-km North-East Natural Gas Pipeline Grid will connect Guwahati in Assam to major cities in the region such as Itanagar, Dimapur, Kohima, Imphal, Aizwal, Agartala, Shillong, Silchar, Gangtok, and Numaligarh.
- The pipeline will enable the supply of piped cooking gas to households and CNG to automobiles, besides fuel to industry.
- The North-East pipeline grid is to be implemented by Indradhanush Gas Grid, a joint venture of state-owned GAIL India, Indian Oil Corp (IOC), Oil and Natural Gas Corp (ONGC), Oil India Ltd (OIL) and

Numaligarh Refinery Ltd (NRL).

- The consortium had pitched for a 60 per cent funding support from the government and would raise the rest via equity and debt.



13. Consider the following statements with respect to The Economics of Ecosystems and Biodiversity (TEEB).

1. It focuses on the economic cost of biodiversity loss and ecosystem degradation.
2. It is an initiative of UNDP.

Which of the above statements is/are not correct?

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

Answer: B

Explanation

- Its objective is to highlight the growing cost of biodiversity loss and ecosystem degradation and to draw together expertise from the fields of science, economics and policy to enable practical actions.
- The TEEB study was launched by Germany and the European Commission in response to a proposal by the G8+5 Environment Ministers in Potsdam, Germany in 2007, to develop a global study on the

economics of biodiversity loss.

- The second phase of the TEEB study is hosted by the United Nations Environment Programme (UNEP) with support from a number of organizations, including the European Commission, German Federal Ministry for Environment, Nature Conservation and Nuclear Safety and the UK Department for Environment, Food and Rural Affairs.

14. Consider the following statements with regard to Extra-Tropical Cyclones?

1. They generally develop in the lower latitudes.
2. They can originate over both land and in sea.
3. They are formed along the polar front.
4. They move from west to east.

Which of the following are true ?

- A. 1, 3 and 4 only
- B. 2, 3, 4 only
- C. 3 and 4 only
- D. 1, 2, 3 and 4

Answer: B

Explanation

- They generally develop in the mid-latitudes in the regions extending between 35-65° latitudes in both the hemispheres due to the convergence of two contrasting air masses- warm tropical and cold polar air masses.

15. Which of the following best defines a Ghost Net?

- A. Dead zones are hypoxic areas in the world's oceans.
- B. They are the fishing nets that have been abandoned by fishermen or lost in the ocean.
- C. They are the fishing nets laced with poisons to kill the marine species.
- D. None of the above

Answer: B

Explanation

- Ghost nets are fishing nets that have been left or lost in the ocean by fishermen. These nets, often nearly invisible in the dim light, can be left tangled on a rocky reef or drifting in the open sea. They can entangle fish, dolphins, sea turtles, sharks, dugongs, crocodiles, seabirds, crabs, and other creatures, including the occasional human diver. Acting as designed, the nets restrict movement, causing starvation, laceration and infection, and suffocation in those that need to return to the surface to breathe.

2. History & Culture

Click on the links given below to watch the following questions on YouTube

- [Video 1](#)
- [Video 2](#)
- [Video 3](#)

1. Parakram Diwas is celebrated to commemorate which of the following freedom fighters?

- A. Subhas Chandra Bose
- B. Chandrashekhar Azad
- C. Rani Lakshmi Bai
- D. Bhagat Singh

Answer: A

Explanation

- Context: The Union Culture Ministry has announced that January 23, birth anniversary of Subhas Chandra Bose, would be celebrated as “Parakram Divas”, day of courage, every year.
- 2021 will be 125th birth anniversary of Subhas Chandra Bose.
- Netaji Subhash Chandra Bose had announced the establishment of the provisional government of Azad Hind in occupied Singapore
- Known as Arzi Hukumat-e-Azad Hind, it was supported by the Axis powers of Imperial Japan, Nazi Germany, the Italian Social Republic, and their allies.
- He had launched a struggle to free India from British rule under the banner of the provisional government-in exile during the latter part of the Second World War.
- Under his provisional government, the Indians living abroad had been united.
- Under the provisional government, Bose was the head of the state, the prime minister and the minister for war and foreign affairs.
- Subhash Chandra Bose was twice elected President of the Indian National Congress, (1938-Haripur and 1939-Tripuri).
- He resigned from the Congress Presidentship in 1939 and organized the All-India Forward Bloc a faction within the Congress in Bengal.

2. Based on the following statements identify the personality?

1. He was sentenced to 50 years in the Cellular Jail of Andamans, also known as Kala Pani for revolting against the Morley-Minto reforms (Indian Councils Act 1909).

2. Serving as the president of the Hindu Mahasabha political party, he opposed the Quit India movement in 1942.
 3. In his book 'The History of the War of Indian Independence', he analyzed the circumstances of 1857 uprising.
 4. The airport at Port Blair, Andaman and Nicobar's capital was renamed after him in 2002.
- A. Gopal Godse
B. K.B Hedgewar
C. Veer Savarkar
D. M.S. Golwalkar

Answer: C

Explanation

- Veer Savarkar or VD Savarkar was born on May 28, 1883 in Bhagur, a city in Maharashtra's Nashik. Born and brought up in a Marathi family, Savarkar grew up to be an Indian freedom fighter, activist, politician, lawyer, writer and formulator of the
 - Hindutva philosophy.
 - Savarkar advocated Hindu religion and Hindutva.
- ✓ In his teenage, Savarkar formed a youth organization known as Mitra Mela (Group of Friends) to bring in national and revolutionary ideas.
- ✓ Savarkar was against foreign goods and propagated the idea of Swadeshi. In 1905, he burnt all the foreign goods in a bonfire on Dussehra.
- ✓ Savarkar championed atheism and rationality and disapproved orthodox Hindu belief. In fact, he even dismissed cow worship as superstitious.
- ✓ Savarkar studied at Gray's Inn College in London.
- ✓ In his book, The History of the War of Indian Independence, Savarkar wrote about the guerilla warfare tricks used in 1857 Sepoy Mutiny. While the book was banned by Britishers, Madama Bhikaji Cama published the book in Netherlands, Germany and France, which eventually reached many Indian revolutionaries.
- ✓ Savarkar was arrested in 1909 on charges of plotting an armed revolt against the Morle-Minto reforms. He also tried to escape by diving in the water but was arrested. He was sentenced to two life sentences, i.e. 50 years in the cellular jail of Andamans, also known as Kala Pani, in 1911.
- ✓ Though Savarkar was released in 1924 under strict conditions of not participating in politics for 5 years, he decided to work on abolishment of untouchability in Ratnagiri. Dr Babasaheb Ambedkar also compared his work to Lord Buddha.
- ✓ Veer Savarkar also founded the two-nation theory in his book 'Hindutva' calling Hindus and Muslims two separate nations. In 1937, Hindu Mahasabha passed it as a resolution.

- ✓ It was in year 1964, when Savarkar declared his wish to attain Samadhi and started hunger-strike on February 1, 1966 and passed away on February 26, 1966. He believed that his purpose of life is solved as India has gained Independence.
- ✓ In 2002, Port Blair airport at Andaman and Nicobar's Island was renamed after Veer Savarkar International Airport.

3. Kanyasulkam was written by which of the following?

- A. Kandukuri Veeresalingam
- B. Gurajada Apparao
- C. Devulapalli Krishnasastri
- D. Vemana

Answer: B

Explanation

- Context: PM quoted eminent Telugu writer Gurajada Apparao in COVID-19 vaccine rollout speech.
- Sontha labham kontha manuko, porugu vadiki thodu padavoy. Desamante matti kadoyi, desamante manushuloy - The quote translates into English as 'Forego your self- interest to some extent and help neighbours. Nation does not mean just mud and soil, but people.'
- Gurajada Venkata Apparao (21 September 1862 - 30 November 1915) was a noted Indian playwright, dramatist, poet, and writer known for his works in Telugu theatre.



Born: September 21, 1862

Table 4: Subsidies in 2021-22 (Rs crore)

1171

	Actuals 2019-20	Budgeted 2020-21	Revised 2020-21	Budgeted 2021-22	Change (Annualised) (Actuals 2019-20 to BE 2021-22)
Food subsidy	1,08,688	1,15,570	4,22,618	2,42,836	49%
Fertiliser subsidy	81,124	71,309	1,33,947	79,530	-1%
Petroleum subsidy	38,529	40,915	39,055	14,073	-40%
Other subsidies	33,963	34,315	53,116	33,460	-1%
Total	2,62,304	2,62,109	6,48,736	3,69,899	19%

Sources: Expenditure Profile, Union Budget 2020-21; PRS.

- Rao wrote the play Kanyasulkam in 1892, which is often considered the greatest play in the Telugu language.
- One of the pioneers of Indian theatre, Rao holds the titles Kavisekhara and Abyudaya Kavitha Pithamahudu.
- In 1910, Rao scripted the widely known Telugu patriotic song "Desamunu Preminchumanna".
- Apparao (along with his brother Syamala Rao) wrote several English poems.
- His Sarangadhara, published in "Indian Leisure Hour", was well received.
- In 1891, Gurajada was appointed to the post of Epigraphist to the Maharaja of Vizianagaram.

4. Which of the following statements about Somnath Temple are incorrect?

1. It is also known as the Deo Patan.
 2. It is also mentioned in Yajur Veda.
 3. It is built in Chalukya style and has a spectacular display of the art of Sompura artisans of Gujarat.
- A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

Answer: B

Explanation

- Context: Prime Minister was unanimously chosen as the new chairman of the Somnath Temple trust which manages the world famous Somnath Temple at Prabhas Patan town in Gujarat's Gir-Somnath district, becoming the second PM to hold the post.
- After former PM Morarji Desai, Modi is the second Prime Minister who has been appointed the chairman of the temple trust.
- Somnath is a magnificent temple situated in Sagar Kant of Saurashtra in Gujarat state. It is also known as Deo Patan.
- One of the 12 holy Jyotirlingas of lord shiva is in jyotilinga here in Somnath.
- Somnath is also mentioned in Rigveda.
- This temple of Somnath has been very attractive in front of many destructive foreign invaders who want to lure and convert to the temple glory.
- Whenever the temple has tried to destroy it, then it all been built again.

Somnath

- Somnath's first temple is said to have existed 2000 years ago.

- In 649 CE, King Maitre of vallabhini built a second temple in place of the temple and renovated it.
- In 725, the old ruler of Sindh took his army and attacked the temple and destroyed the temple.
- Pratihtha King Nag Bhatt II constructed the temple for the third time in 815 using a red (Sandstone) stone.
- In 1026, Mahmud Ghazni lent the precious jewels and property of Somnath Temple.
- After looting, slaughtering innumerable pilgrims of the temple and burning the temple and destroying it.
- During 1026-1042 Solanki Raja Bhimdev built the fourth temple of Bhoj and Anhilwad Patan, Parmar King Malva.
- Somnath was destroyed when Delhi Sultanate occupied Gujarat in 1299.
- In 1394 it was destroyed again.
- In 1706 Mughal Ruler Aurangzeb again Demolished the temple.

Reconstruction

- Sardar Vallabhbhai Patel on November 13, 1947 promised to rebuild the temple.
- Today's Somnath Temple is built on its original site seventh time.
- The temples built under Shri Somnath Trust and this trust is now monitoring the temple.
- The Kailash Mahameru Prasad Temple, built by Chalukya style, has a spectacular display of the art of Sompura artisans of Gujarat.
- This type of construction has not happened in the last 800 years.
- According to the inscription written in Sanskrit on the coast, only the sea exists between the temple and the southern part of the planet and there is no land.

5. Khelo India Winter Sports and Youth Festival 2021 is being held

- A. Jammu and Kashmir
- B. Uttarakhand
- C. Ladakh
- D. Sikkim

Answer: C

Explanation

- The Union Sports and Youth Affairs Minister launched the first ever Khelo India Zaskar Winter Sports Festival at Padum in Zaskar of Kargil district
- The festival is being organized by the Ladakh UT Administration to promote Zaskar as winter tourists' destination
- The main features of the 13-day festival are Ice Climbing, trekking on frozen Zaskar River, Ice Hockey, snow sculpture and ethnic food festival.
- Zaskar Winter Sports and Youth festival is being introduced as an annual event in Zaskar to showcase its potential in adventure tourism and sports.
- It is one of the major events planned to promote winter tourism in Ladakh.

6. Monpa recently heard in news is associated with which of the following states?

- A. Arunachal Pradesh
- B. Manipur
- C. Karnataka
- D. Odisha

Answer: A

Explanation

- Context: Prime Minister mentioning the 'Monpa handmade paper' of Tawang in Arunachal Pradesh in his monthly radio programme 'Mann Ki Baat' in January has led to a boost in its sales.
- In a statement, the Khadi and Village Industries Commission (KVIC) said that on the very first day of its launch, more than 100 sheets of Monpa handmade paper were sold.
- The KVIC, which revived this ancient art in Tawang on December 25 last year, has made Monpa handmade paper available online through its e-portal.
- Monpa handmade paper is not only supporting environment protection but has also opened new avenues of income for the local artisans.
- The handmade paper sheet measuring 24-inch in length and 16-inch in width is priced economically at Rs 50 per sheet.
- Monpa handmade paper is made from the bark of Shugu Sheng tree grown locally in Tawang and is identified by its distinctive translucent fibrous texture.
- The paper is weightless but its natural fibers add great tensile strength to this paper making it apt for various art works.
- Monpa handmade paper has been used for writing Buddhist scriptures, manuscripts and for making prayer flags.
- Writing on this paper is also known to be tamper-proof.
- The Monpa handmade paper industry set up in Tawang aims at engaging the local youth with this art professionally.

7. Which of the following statements about Prabuddha Bharat are correct?

1. It is a festival organized by Ministry of culture and Tibetan Government In-Exile to celebrate influence of Buddha on both the countries.
 2. The event is being organised by Advaita Ashrama, Mayavati in Uttarakhand.
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: B

Explanation

- Context: Prime Minister addressed the 125th-anniversary celebrations of 'Prabuddha Bharata', a monthly journal of the Ramakrishna Order, started by Swami Vivekananda.
- The event is being organised by Advaita Ashrama, Mayavati in Uttarakhand.
- The publication of the journal 'Prabuddha Bharata' was started from Chennai (erstwhile Madras) in the year 1896 where it continued to be published for two years, after which it was published from Almora.
- This magazine was founded in the year 1896 by P. Aiyasami, B. R. Rajam Iyer, G. G. Narasimhacharya, and B. V. Kamesvara Iyer under the guidance of Swami Vivekananda.
- Later, in April 1899, the place of publication of the journal was shifted to Advaita Ashrama and it has been continuously published from there since then.
- The journal has been an important medium for spreading the message of India's ancient spiritual wisdom.
- Many eminent personalities like Netaji Subhas Chandra Bose, Bal Gangadhar Tilak, Sister Nivedita, Sri Aurobindo, former president Sarvepalli Radhakrishnan, among others have left their imprint over time in 'Prabuddha Bharata', through their writings on Indian culture, spirituality, philosophy, history, psychology, art, and other social issues.

8. Matuas recently heard in news are inhabitants of which of the following states?

- A. Odisha
B. Jharkhand
C. Assam
D. West Bengal

Answer: D

Explanation

- Context: The Matua community in West Bengal are upset about the cancellation of a rally by Union

Home Minister .

- The Matua community has members on either side of the Bengal border.
- It is associated with a religious movement that begun in the 1870s by Harichand Thakur of a Namasudra (SC) family, who hailed from Safaldanga in East Bengal.
- In the early 20th century, his son Guruchand organised the movement socially and politically.
- Peasant members of the community started migrating from East Bengal in droves after 1950, which continued after the formation of Bangladesh.
- Today, Matuas constitute the second largest SC population of West Bengal.
- Mostly concentrated in North and South 24-Parganas, they also have a presence in other border districts such as Nadia, Howrah, Cooch Behar, and Malda.
- Government sources put their number at around 17% of the state's electorate.

9. Based on the following statements identify the personality?

1. He was an Indian vocalist from Karnataka.
2. He is known for the khayal form of singing.
3. He belongs to the Kirana gharana of Hindustani Classical Music.
4. The event to celebrate his Birth Centenary is named as "SwarBhaskar 100".
5. He was awarded the Bharat Ratna in 2009.

- A. Pandit Ravi Shankar
- B. Jitendra Abhisheki
- C. Pandit Bhimsen Joshi
- D. Ustad Vilayat Khan

Answer: C

Explanation

- Context: PM pays homage to Pandit Bhimsen Joshi on his birth anniversary.
- Bhimsen Gururaj Joshi was born on February 4, 1922, in the Dharwad district of Karnataka, in a Kannada Madhwa Brahmin family, to Gururaj Joshi and Godavaribai. He was the eldest of the 16 children born to the couple.
- He is famous for his known for the khayal form of singing.
- He also used to sing popular renditions of devotional music.
- He belongs to the Kirana gharana of Hindustani Classical Music.
- His concerts were advertised by posters in New York. This happened for the first time for a musician from India.

- He also organised the Sawai Gandharva Music Festival annually. This was organised as homage to his guru, Pandit Sawai Gandharva.

- A purist by belief, he hardly ever moved from the traditional compositions of the Kirana Gharana, occasionally employing sargam and tihais.

- Though he tended to favour a lot of complex and serious ragas, he remained loyal to Shuddha Kalyan, Miyan Ki

Todi, Puriya Dhanashri, Multani, Bhimpalasi, Darbari, and Ramkali ragas which he employed fervently in his compositions.

- In addition to 'Mile Sur Mera Tumhara', he was part of the AR Rahman's 'Jana Gana Mana' feat which was created to celebrate the golden jubilee of Indian Republic.

- Throughout his life, he was conferred with numerous prestigious and highly esteemed awards, the most prolific amongst them being the national awards such as, 'Padma Shree', 'Padma Bhushan', 'Padma Vibhushan' and 'Bharat Ratna' in 1972, 1975, 1999 and 2009 respectively.



10. Which of the following statements about Non-Cooperation Movement are incorrect?

1. In September 1920, in Congress session in Nagpur, the party introduced the Non-Cooperation programme.
2. Earlier the objective of the Congress was to attain self-Government by constitutional and legal means. The new aim of Congress was attainment of Swaraj by legitimate and peaceful means.
3. The Rowlatt Act and the Jallianwala Bagh massacre were the major reasons which gave push to the movement.
4. Gandhiji called off the movement in February 1922 in the wake of the Chauri Chaura incident.

- A. 1 and 2 only
B. 2 only
C. 3 and 2 only
D. 1 only

Answer: D

Explanation

- The non-cooperation movement was launched on 5th September 1920 by the Indian National

Congress (INC) under the leadership of Mahatma Gandhi.

- In September 1920, in Congress session in Calcutta, the party introduced the Non-Cooperation programme
- The movement was essentially a peaceful and non-violent protest against the British government in India.
- Indians were asked to relinquish their titles and resign from nominated seats in the local bodies as a mark of protest.
- People were asked to resign from their government jobs.
- People were asked to withdraw their children from government-controlled or aided schools and colleges.
- People were asked to boycott foreign goods and use only Indian-made goods.
- People were asked to boycott the elections to the legislative councils.
- People were asked not to serve in the British army.
- It was also planned that if the above steps did not bring results, people would refuse to pay their taxes.
- The INC also demanded Swarajya or self-government.
- Only completely non-violent means would be employed to get the demands fulfilled.
- The non-cooperation movement was a decisive step in the independence movement because, for the first time, the INC was ready to forego constitutional means to achieve self-rule.
- Gandhiji had assured that Swaraj would be achieved in a year if this movement was continued to completion

11. Which of the following statements regarding Motion of Thanks are incorrect?

1. The Speaker makes an address to a joint sitting of Parliament at the start of the Budget session known as motion of thanks.
 2. It is also deemed to be as a no-confidence motion.
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: A

Explanation

- Context: About 50 speakers from 25 political parties participated in the debate in Rajya Sabha on the Motion of Thanks lasting over three days.

- The President makes an address to a joint sitting of Parliament at the start of the Budget session, which is prepared by the government and lists its achievements
- The address is followed by a motion of thanks moved in each House by ruling party MP
- During the session, political parties discuss the motion of thanks also suggesting amendments.
- Amendments to the “Motion of Thanks”:
 - ✓ Notices of amendments to Motion of Thanks on the President’s Address can be tabled after the President has delivered his Address.
 - ✓ Amendments may refer to matters contained in the Address as well as to matters, in the opinion of the member, the Address has failed to mention
 - ✓ Amendments can be moved to the Motion of Thanks in such form as may be considered appropriate by the Speaker.
 - ✓ The only limitations are that members cannot refer to matters which are not the direct responsibility of the Central Government and that the name of the President cannot be brought in during the debate since the Government and not the President is responsible for the contents of the Address.
 - ✓ President’s Address and Motion of Thanks are governed by Articles 86 (1) and 87 (1) of the Constitution and Rules 16 to 24 of the Rules of Procedure and Conduct of Business in Lok Sabha.
 - ✓ Members of Parliament vote on this motion of thanks. This motion must be passed in both of the houses.
 - ✓ A failure to get motion of thanks passed amounts to defeat of government and leads to collapse of government
 - ✓ This is why the Motion of Thanks is deemed to be a no-confidence motion.

12. Based on the following statements identify the UN Body?

1. It is an inter-governmental body within the UN system.
 2. The council was created in the year 2006 by the UN General Assembly Resolution 60/251.
 3. The member states are elected by the UNGA by a direct and secret ballot.
 4. It conducts the Universal Periodic Review.
- A. United Nations Human Rights Council
 - B. Committee on Economic, Social and Cultural Rights
 - C. Committee against Torture
 - D. Committee on the Elimination of Racial Discrimination

Answer: A

Explanation

- Context: The U.S. has announced plans to reengage with the UN Human Rights Council that former

President withdrew in this tenure in the office.

- UNHRC was reconstituted from its predecessor organisation, the UN Commission on Human Rights to help overcome the “credibility deficit” of the previous organisation.
- It is Headquartered in Geneva, Switzerland.
- The UNHRC has 47 members serving at any time with elections held to fill up seats every year, based on allocations to regions across the world to ensure geographical representation.
- Each elected member serves for a term of three years.
- Countries are disallowed from occupying a seat for more than two consecutive terms.
- The UNHRC passes non-binding resolutions on human rights issues through a periodic review of all 193 UN member states called the Universal Periodic Review (UPR).
- It oversees expert investigation of violations in specific countries (Special Procedures).

13. Which of the following statements are correct about Lokpal act of 2013?

1. The Act allows setting up of anti-corruption ombudsman called Lokpal at the Centre and Lokayukta at the State-level.
2. The Lokpal consists of a chairperson and a maximum of eight members.
3. The Lokpal has the power of superintendence and direction over any investigation agency including CBI for cases referred to them by the ombudsman.

- A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3 only

Answer: D

Explanation

- Context: The Centre has refused to disclose the minutes of the Lokpal selection committee's meetings, and its decision has now been upheld by the Central Information Commission (CIC).
- The Centre has invoked the exemption clause in Section 8(1)(e) of the RTI Act in its defence.
- The members are appointed by the president on the recommendation of a Selection Committee.
- The selection committee is composed of:
 - ✓ The Prime Minister who is the Chairperson
 - ✓ Speaker of Lok Sabha
 - ✓ Leader of Opposition in Lok Sabha,
 - ✓ Chief Justice of India or a Judge nominated by him/her and



✓ One eminent jurist

- The 2016 amendment enables the leader of the single largest opposition party in the Lok Sabha to be a member of the selection committee in the absence of a recognized Leader of Opposition.

Lokpal Act of 2013

- The Act allows setting up of anti-corruption ombudsman called Lokpal at the Centre and Lokayukta at the State-level.
- The Lokpal will consist of a chairperson and a maximum of eight members.
- The Lokpal will cover all categories of public servants, including the Prime Minister. But the armed forces do not come under the ambit of Lokpal.
- The Act also incorporates provisions for attachment and confiscation of property acquired by corrupt means, even while the prosecution is pending.
- The States will have to institute Lokayukta within one year of the commencement of the Act.
- The Act also ensures that public servants who act as whistleblowers are protected.
The Lokpal will have the power of superintendence and direction over any investigation agency including CBI for cases referred to them by the ombudsman.
- As per the Act, the Lokpal can summon or question any public servant if there exists a prima facie case against the person, even before an investigation agency (such as vigilance or CBI) has begun the probe. Any officer of the CBI investigating a case referred to it by the Lokpal, shall not be transferred without the approval of the Lokpal.
- An investigation must be completed within six months. However, the Lokpal or Lokayukta may allow extensions of six months at a time provided the reasons for the need of such extensions are given in writing.
- Special courts will be instituted to conduct trials on cases referred by Lokpal.

14. Which of the following pairs have been correctly matched?

- 1. Article 121 - Appointment of Judges**
 - 2. Article 105 - privileges and immunities of either House of the Indian Parliament**
 - 3. Article 127 - Court Martial**
 - 4. Article 194 - Privileges and immunities of the State Legislatures**
- A. 1, 2 and 3 only
 B. 1 and 3 only
 C. 2 and 4 only
 D. 1, 2, 3 and 4

Answer: C

Explanation

- Context: An MP issued a breach of privilege notice against another Congress MP in the Lok Sabha for her remarks against a former Chief Justice of India.
- While speaking on the Motion of Thanks on the President's address, she has cast some aspersions with respect to the conduct of a judge.
- So, the question is whether the conduct of a judge can be discussed on the floor of the House or not.
- (Article 121 of the Constitution does not allow allegations to be levelled against a sitting or former judge).
- Parliamentary privilege refers to the right and immunity enjoyed by legislatures, in which legislators are granted protection against civil or criminal liability for actions done or statements made in the course of their legislative duties.
- The powers, privileges and immunities of either House of the Indian Parliament and of its Members and committees are laid down in Article 105 of the Constitution.
- Similarly, Article 194 deals with the powers, privileges and immunities of the State Legislatures, their Members and their committee.
- There are no clear, notified rules to decide what constitutes a breach of privilege, and the punishment it attracts.
- Generally, any act that obstructs or impedes either House of the state legislature in performing its functions, or which obstructs or impedes any Member or officer of such House in the discharge of his duty, or has a tendency, directly or indirectly, to produce such results is treated as breach of privilege.
- It is also a breach of privilege and contempt of the House to make speeches or to print or publish libel reflecting on the character or proceedings of the House, or its Committees, or on any member of the House for or relating to his character or conduct as a legislator.

15. The President or the Governor shall not be answerable to any court for the exercise and performance of the powers and duties of his office is listed in which of the following ?

- A. Article 50
- B. Article 121
- C. Article 361
- D. Article 154

Answer: C

Explanation

- Context: Law Minister recently told the Lok Sabha that just as independence of the judiciary is a part of the basic structure of the Constitution, the principle of separation of powers is also a part of that basic structure.
- He asserted that governance and lawmaking should be left to the elected members of the legislature.
- He also urged the judiciary to exercise its discretion in accepting public interest litigations.



- It refers to the model of governance where the executive, legislative and judicial powers are not concentrated in one body but instead divided into different branches.
- It is not explicitly mentioned in the constitution.
- Article 50: State shall take steps to separate the judiciary from the executive. This is for the purpose of ensuring the independence of the judiciary.
- Article 122 and 212: Validity of proceedings in Parliament and the Legislatures cannot be called into question in any Court. Also, Legislators enjoy certain privileges with regard to speech and anything said in the Parliament cannot be used against them.
- Judicial conduct of a Judge of the Supreme Court and the High Court cannot be discussed in the Parliament and the State Legislature, according to Article 121 and 211 of the Constitution.
- Articles 53 and 154 respectively, provide that the executive power of the Union and the State shall be vested with the President and the Governor and they enjoy immunity from civil and criminal liability.
- Article 361: The President or the Governor shall not be answerable to any court for the exercise and performance of the powers and duties of his office.

3. Polity & Governance

Click on the links given below to watch the following questions on YouTube

- [Video 1](#)
- [Video 2](#)
- [Video 3](#)

1. Samatha and State of Andhra Pradesh (1997) case is related to which of the following ?

- A. Misuse of Article 356
- B. Hindu Marriage Act.
- C. Mining in Scheduled areas
- D. Right to die with dignity

Answer: C

Explanation

- The judgment was passed by the Supreme Court in 1997 on a petition filed by an Andhra Pradesh-based social organization of the tribal people, Samatha, against the state government for restricting transfer of government land to non-tribal people for mining and industrial purposes in the areas under Schedule V of the Constitution.
- This judgement nullified all mining leases granted by the Andhra Pradesh State government in the Scheduled areas and asked it to stop all mining operations.
- It declared that forest land, tribal land, and government land in scheduled areas could not be leased to private companies or non-tribal for industrial operations.
- Such activity is only permissible to a government undertaking and tribal people.

2. Article 87 deals with which of the following?

- A. President's address to both Houses of Parliament
- B. Duration of houses of parliament
- C. Assent to bills
- D. Council of ministers to aid and advise the president.

Answer: A

Explanation

- Context: As many as 18 Opposition parties have announced their decision to boycott President's address to the joint sitting of Parliament at the start of the Budget session, in solidarity with the farmers protesting against the three farm laws.

- Article 87(1) says: “At the commencement of the first session after each general election to the House of the People and at the commencement of the first session of each year the President shall address both Houses of Parliament assembled together and inform Parliament of the causes of its summons.”
- Originally, the Constitution required the President to address both Houses of Parliament at the commencement of “every session”.
- This requirement was changed by the First Amendment to the Constitution.
- The President’s speech essentially highlights the government’s policy priorities and plans for the upcoming year.
- It is drafted by the Cabinet, and provides a broad framework of the government’s agenda and direction.
- The address is followed by a motion of thanks moved in each House by ruling party MPs.
- During the session, political parties discuss the motion of thanks also suggesting amendments.
- After the President or Governor delivers the address, a debate takes place not only on the contents of the address but also the broad issues of governance in the country.
- This then paves the way for discussion on the Budget.
- The President or a Governor cannot refuse to perform the constitutional duty of delivering an address to the legislature. But there can be situations when they deviate from the text of the speech prepared by the government.

3. Which of the following is true about Election Commission?

1. Article 324 deals with a permanent and independent body established by constitution of India for control of elections in the country.
 2. Censure is a penalty which can only be imposed by the Election commission of India.
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: A

Explanation

- Context: The Andhra Pradesh government has “objected” to the censure notices issued by State Election Commissioner to two senior IAS officials over preparations for the local body elections.
- The State Election Commissioner had censured Panchayat Raj Principal Secretary and PR Commissioner for their ‘failure’ to publish 2021 electoral rolls.
- In the censure proceedings, compulsory retirement of the two IAS officers was recommended.
- The State government has argued that this power is not in the domain of state election commissioner.

- As per the guidelines, Election Commission is empowered to suspend
- Any officer or police personnel working under the Central government or public sector undertaking or an autonomous body fully or partially funded by the government for insubordination or dereliction of duty, besides making recommendations to the competent authority for taking disciplinary action, while engaged in preparation of electoral rolls or election duty.
- Censure is a penalty classified under minor penalties and the State government is the competent authority to impose the said penalty on a member of service serving with the affairs of the State and it has to be imposed by following the procedure laid down under Rule 10 of the AIS (D&A) Rules, 1969.

4. Which of the following statements hold true for Official Secrets Act?

1. A person prosecuted under this Act can be charged with the crime even if the action was unintentional and not intended to endanger the security of the state.
2. The Act does not say what a “secret” document is. It is the government’s discretion to decide what falls under the ambit of a “secret” document

- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: C

Explanation

- Context: Complaints have been filed with the Mumbai Commissioner of Police demanding action against a news channel Editor under the Official Secrets Act.
- There has been also a demand for registering cases for sedition against him for leak of sensitive information related to national security through WhatsApp chat.
- Official Secrets Act:
 - ✓ Originally enacted during the time of Lord Curzon, Viceroy of India from 1899 to 1905.
 - ✓ One of the main purposes of the Act was to muzzle the voice of nationalist publications.
 - ✓ The Act replaced the earlier Act, and was extended to all matters of secrecy and confidentiality in governance in the country.
- It broadly deals with two aspects:
 - ✓ Spying or espionage, covered under Section 3.
 - ✓ Disclosure of other secret information of the government, under Section 5.
- Punishments under the Act range from three to life imprisonment (if the intent is to declare war against India – section 5)

- A person prosecuted under this Act can be charged with the crime even if the action was unintentional and not intended to endanger the security of the state.
- The Act only empowers persons in positions of authority to handle official secrets, and others who handle it in prohibited areas or outside them are liable for punishment.
- The Act does not say what a “secret” document is.
- It is the government’s discretion to decide what falls under the ambit of a “secret” document.

5. Based on the following statements identify the scheme?

1. It is world’s largest health insurance/ assurance scheme fully financed by the government.
2. It provides cover of 5 lakhs per family per year, for secondary and tertiary care hospitalization across public and private empaneled hospitals in India.
3. Covers up to 3 days of pre-hospitalization and 15 days post-hospitalization expenses such as diagnostics and medicines.
4. Benefits of the scheme are portable across the country.
5. Services include approximately 1,393 procedures covering all the costs related to treatment, including but not limited to drugs, supplies, diagnostic services, physician’s fees, room charges, surgeon charges, OT and ICU charges etc.

- A. Atal Bima Yojna
- B. Aam Aadmi Bima Yojana
- C. Central Government Health Scheme
- D. Pradhan Mantri Jan Arogya Yojana

Answer: D

Explanation

- Context: Ayushman CAPF’ scheme was launched recently, extending the benefit of the central health insurance programme to the personnel of all armed police forces in the country.
- Under this scheme, around 28 lakh personnel of CAPF, Assam Rifles and National Security Guard (NSG) and their families will be covered by ‘Ayushman Bharat: Pradhan Mantri Jan Arogya Yojana’ (AB PM-JAY)

PM-JAY

- The world’s largest health insurance/ assurance scheme fully financed by the government.
- It provides cover of 5 lakhs per family per year, for secondary and tertiary care hospitalization across public and private empaneled hospitals in India.
- Coverage: Over 10.74 crore poor and vulnerable entitled families (approximately 50 crore beneficiaries) are eligible for these benefits.
- Provides cashless access to health care services for the beneficiary at the point of service.

Eligibility

- No restrictions on family size, age or gender.
- All pre-existing conditions are covered from day one.
- Covers up to 3 days of pre-hospitalization and 15 days post-hospitalization expenses such as diagnostics and medicines.
- Benefits of the scheme are portable across the country.
- Services include approximately 1,393 procedures covering all the costs related to treatment, including but not limited to drugs, supplies, diagnostic services, physician's fees, room charges, surgeon charges, OT and ICU charges etc.
- Public hospitals are reimbursed for the healthcare services at par with the private hospitals.

6. Which of the following statements regarding The Medical Termination of Pregnancy (MTP) Amendment Bill, 2020 are correct?

1. The permissible termination of pregnancy's limit has been increased from 20 to 24 weeks in any given case.
2. It also states that the "name and other particulars of a woman whose pregnancy has been terminated shall not be revealed", except to a person authorised in any law that is currently in force.

- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: B

Explanation

- Context: The Medical Termination of Pregnancy (MTP) Amendment Bill, 2020 was passed in Lok Sabha in March 2020, and is likely to be brought before Rajya Sabha during the ongoing Budget Session.
- The Bill proposes several amendments, including the constitution of a Medical Board in every State and UT.
- The board will decide on pregnancies beyond 24 weeks in cases of foetal abnormalities.
- Each board will have one gynaecologist, one radiologist or sonologist, one paediatrician, and other members prescribed by the State/UT government.
- As per the latest study, creation of this board is "unfeasible" as 82% of posts are lying vacant in the country.
- Highlights of the Medical Termination of Pregnancy (MTP) Amendment Bill, 2020:

- ✓ It seeks to extend the upper limit for permitting abortions from 20 weeks to 24 under special circumstances.
- ✓ The “special categories of women” include rape survivors, victims of incest, the differently abled and minors.
- ✓ The Bill proposes requirement of opinion of one registered medical practitioner (RMP) for termination of pregnancy up to 20 weeks of gestation.
- ✓ It also provides for the requirement of opinion of two RMPs for termination of pregnancy of 20 to 24 weeks.

MTP Act 1971	MTP amendment Bill 2020
<p>One registered and recognized Medical Practitioner in opinion to terminate the pregnancy along with the consent of the mother is required to Terminate the pregnancy till 12th Week</p>	<p>One registered and recognized Medical Practitioner in opinion to terminate the pregnancy along with the consent of the mother is required to Terminate the pregnancy till 20th Week</p>
<p>Two or more registered and recognized Medical Practitioner in opinion to terminate the pregnancy along with the consent of the mother is required to Terminate the pregnancy 12th to 20th Week (In case of Vulnerable women)</p>	<p>Two or more registered and recognized Medical Practitioner in opinion to terminate the pregnancy along with the consent of the mother is required to Terminate the pregnancy from 20th to 24th Week (in case of vulnerable women)</p>
<p>It doesn't mention clearly about the confidentiality and privacy of the women and the case</p>	<p>This amendment emphasizes to protect the women's privacy and confidentiality of the data related to termination of pregnancy</p>

7. Corruption Perception Index 2020 is released by which of the following ?

- A. Transparency International
- B. Anti- Corruption Commission
- C. United States Inspector General
- D. Economic Crime Office

Answer: A

Explanation

- Context: Corruption Perception Index 2020 has been released by Transparency International.
- It is a composite index that draws from 12 surveys to rank nations around the globe
- It has become a benchmark gauge of perceptions of corruption and is used by analysts and investors.
- The index is also based on expert opinions of public sector corruption and takes note of range of

factors like whether governmental leaders are held to account or go unpunished for corruption, the perceived prevalence of bribery, and whether public institutions respond to citizens' needs.

- It ranks 180 countries and territories by their perceived levels of public sector corruption, according to experts and business people.
- It uses a scale of zero to 100, where zero is highly corrupt and 100 is very clean.
- India slipped six places to 86th position this year.
- India's score is below the average score of the Asia-Pacific region (31 countries) and global average.
- India's overall score is also two points less than that of China, which docked at 78th position.
- The list was topped by New Zealand and Denmark (88 each).
- South Sudan and Somalia were at the bottom of the global ranking, with scores of 12 each.
- The latest edition of CPI highlighted the impact of corruption on government responses to COVID-19, comparing countries' performance in the index to their investment in health care and the extent to which democratic norms and institutions have been weakened during the pandemic.

8. Which of the following conditions must hold true for a party to be a recognised party in India?

1. If it secures ten per cent of valid votes polled in any four or more states at a general election to the Lok Sabha or to the legislative assembly; and, in addition, it wins four seats in the Lok Sabha from any state or states
 2. If it is recognised as a state party in at least six states.
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: D

Explanation

- Context: As per Association For Democratic Reforms (ADR)'s latest report:
- The contribution reports of only 78 (3.39%) of the total 2,301 registered unrecognised political parties are available in the public domain for 2018-19.
- The reports of only 82 such parties (3.56%) for 2017-18 are uploaded on the respective State Chief Electoral Officers' websites.
- The number of these parties increased two-fold in the last 10 years, from 1,112 in 2010 to 2,301 in 2019.
- Unrecognised political parties: Either newly registered parties or those which have not secured enough percentage of votes in Assembly or General Elections to become a State party or those which



have never contested in elections since being registered are considered unrecognised parties. Such parties don't enjoy all the benefits extended to the recognised parties.

- There are 2,360 political parties registered with the Election Commission of India and 2,301 or 97.50% of them are unrecognised.
- Registration of Political parties is governed by the provisions of Section 29A of the Representation of the People Act, 1951.
- A party seeking registration under the said Section with the Election Commission has to submit an application to the Commission within a period of 30 days following the date of its formation as per guidelines prescribed by the Election Commission of India in exercise of the powers conferred by Article 324 of the Commission of India and Section 29A of the Representation of the People Act, 1951.
- Conditions to be eligible for a 'National Political Party' of India:
 - It secures at least six percent of the valid votes polled in any four or more states, at a general election to the House of the People or, to the State Legislative Assembly.
 - In addition, it wins at least four seats in the House of the People from any State or States.
 - It wins at least two percent seats in the House of the People (i.e., 11 seats in the existing House having 543 members), and these members are elected from at least three different States.
- To be eligible for a 'State Political Party':
 - ✓ It secures at least six percent of the valid votes polled in the State at a general election, either to the House of the People or to the Legislative Assembly of the State concerned
 - ✓ In addition, it wins at least two seats in the Legislative Assembly of the State concerned.
 - ✓ It wins at least three percent (3%) of the total number of seats in the Legislative Assembly of the State, or at least three seats in the Assembly, whichever is more.

9. Munshi - Ayangar Formula, recently heard in news, is related to which of the following?

- A. Long Term Food Policy
- B. Army Pay Scales
- C. National Language
- D. Small Scale Industries

Answer: C

Explanation

- In response to a question filed under RTI, Ministry of Home Affairs has said that the policy of three languages is not applicable to the offices of the central government.
- The issue at Shimoga district at Karnataka came up when the foundation stone was laid for the 97th battalion of the Rapid Action Force in Bhadravati on January 16.
- The content on the plaques were only in Hindi and English.

- Kannada was completely ignored as the banner for the occasion was also printed in Hindi.
- RTI was filed by questioning the reason for this to which ministry replied stating that, 'as per the provision of the Official Language Act, 1963, and the Official Language Rules, 1976, the provision of bilingual policy is applicable in the offices of the Central government.'
- Due to this an amendment has been demanded from article 343 to 351 that declare Hindi as an official language.
- The enforcement of the Hindi language is a subject matter that has great historical baggage in India.
- Anti-Hindi agitations had taken over south India from the 1930s to early 1960s. They went on to become one of the most important political tools for Dravidian parties at that time.
- The constituent assembly that framed the Indian Constitution to a great extent debated over whether Hindi could become a national language.
- However, it eventually settled for what is known as the "Munshi-Ayyanagar formula" that included Hindi as one of the many official languages of India.
- The two members of the assembly, K.M. Munshi and Gopalaswami Ayyangar, observed that the Hindi language not only has a limited appeal in large parts of India but also is comparatively inefficient to capture the technicalities of law and legislations being framed then for an independent India.
- However, the debate that was thought of as an issue that had been resolved came back with the release of the draft NEP with a controversial clause that called for compulsory teaching of Hindi.

10. The Rome Statute governs which of the following?

- A. International Criminal Court
- B. International Court of Justice
- C. International Court of Human Rights
- D. International Court of Crime

Answer: A

Explanation

- Context: The International Criminal Court convicted a former commander (Dominic Ongwen) in the notorious Ugandan rebel group the Lord's Resistance Army of dozens of war crimes and crimes against humanity ranging from multiple murders to forced marriages.
- The International Criminal Court (ICC), located in The Hague, is the court of last resort for prosecution of genocide, war crimes, and crimes against humanity.
- It is the first permanent, treaty based, international court established to help end impunity for the perpetrators of the most serious crimes of concern to the international community.
- Its founding treaty, the Rome Statute, entered into force on July 1, 2002.
- Although the Court's expenses are funded primarily by States Parties, it also receives voluntary contributions from governments, international organisations, individuals, corporations and other

entities.

- The Court's management oversight and legislative body, the Assembly of States Parties, consists of one representative from each state party.
- Each state party has one vote and "every effort" has to be made to reach decisions by consensus. If consensus cannot be reached, decisions are made by vote.
- The Assembly is presided over by a president and two vice-presidents, who are elected by the members to three-year terms.
- It does not have the capacity to arrest suspects and depends on member states for their cooperation.
- Critics of the Court argue that there are insufficient checks and balances on the authority of the ICC prosecutor and judges and insufficient protection against politicized prosecutions or other abuses.
- The ICC has been accused of bias and as being a tool of Western imperialism, only punishing leaders from small, weak states while ignoring crimes committed by richer and more powerful states.

ICJ vs. ICC

	International Court of Justice (ICJ) La Cour Internationale de Justice (CIJ)	International Criminal Court (ICC) La Cour pénale internationale (CPI)
Year Court Established	1946	2002
UN-Relationship	Official court of the U.N., commonly referred to as the "World Court."	Independent. May receive case referrals from the UN Security Council.
Location	The Hague, The Netherlands	The Hague, The Netherlands
Types of Cases	Contentious between parties & Advisory opinions	Criminal prosecution of individuals
Subject Matter	Sovereignty, boundary, & maritime disputes, trade, natural resources, human rights, treaty violations, treaty interpretation, and more.	Genocide, crimes against humanity, war crimes, crimes of aggression
Funding	UN-funded.	Assessed contribution from state parties to the Rome Statute; voluntary contributions from the U.N.; voluntary contributions from governments, international organizations, individuals, corporations and other entities.

4. Economy

Click on the links given below to watch the following questions on YouTube

- [Video 1](#)
- [Video 2](#)

1. MITRA Scheme, recently in news, is meant for:

- A. Automobile Sector
- B. Construction Sector
- C. Agriculture Sector
- D. None of the above

Answer: D

Explanation

- The Government has proposed a scheme of Mega Investment Textiles Parks (MITRA) to enable the textile industry to become globally competitive, attract large investments, boost employment generation and exports.
- In Union Budget 2021-22, Union Finance announced that this will create world class infrastructure with plug and play facilities to enable create global champions in exports.
- MITRA will be launched in addition to the Production Linked Incentive Scheme(PLI).



Textile - Mega Investment Textiles Parks (MITRA)

Aims at making Textile Industry:

1. Globally competitive
2. Attract large investments
3. Boost employment generation & exports

Main features:

- To create a world class infrastructure with plug and play facilities to enable create global champions in exports
- 7 Textile Parks will be established over 3 years

2. Which of the following is correct in context of Development Financial Institutions (DFI):

1. They provide long term finance for development.
 2. NABARD, ICICI are DFIs.
- A. 1 only
 - B. 2 only
 - C. Both are correct
 - D. None is correct

Answer: A

Explanation

- A DFI is defined as 'an institution promoted or assisted by Government mainly to provide development finance to one or more sectors or sub-sectors of the economy'.
- A Development Financial Institution (DFI) is an institution that provides long-term finance for development.
- The DFIs played a very significant role in rapid industrialisation of the Continental Europe and Japan.
- The success of these institutions provided strong impetus for creation of DFIs in India after independence in the context of the felt need for raising the investment rate.
- RBI was entrusted with the task of developing an appropriate financial architecture through institution building so as to mobilise and direct resources to preferred sectors as per the plan priorities.
- While the reach of the banking system was expanded to mobilise resources and extend working capital finance on an ever-increasing scale to different sectors of the economy, DFIs were established mainly to cater to the demand for long-term finance by the industrial sector.
- DFIs can be broadly categorised as All-India or State / regional level institutions depending on their geographical coverage of operation.
- Functionally, All-India institutions can be classified as
 - ✓ Term-lending institutions (IFCI Ltd., IDBI, IDFC Ltd., IIBI Ltd.) extending long-term finance to different industrial sectors
 - ✓ Refinancing institutions (NABARD, SIDBI, NHB) extending refinance to banking as well as non-banking intermediaries for finance to agriculture, SSIs and housing sector, respectively
 - ✓ Sector-specific / specialised institutions (EXIM Bank, TFCI Ltd., REC Ltd., HUDCO Ltd., IREDA Ltd., PFC Ltd., IRFC Ltd.),
 - ✓ Investment institutions (LIC, UTI, GIC, IFCI Venture Capital Funds Ltd., ICICI Venture Funds Management Co Ltd.). State / regional level institutions are various SFCs, SIDCs and NEDFi Ltd.
- Narasimham Committee on Financial Sector Reforms in the 1990s noted that the DFIs may not be viable, since these institutions were raising funds at the current market rates and lending to businesses with long gestation and often high risk of failure with high credit cost.
- Accordingly, the committee recommended that the DFIs be converted either into banks or NBFCs and should be subject to the full rigour of RBI regulations as applicable to the respective categories. Consequently, both ICICI and IDBI were converted into commercial banks and IFCI into an NBFC.
- The New Development Bank (NDB) and Asian Infrastructure Investment Bank (AIIB), the world's youngest DFIs with participation from India, are a step in this direction.

3. Asset Reconstruction Company Limited and Asset Management Company will be set up to:

1. Consolidate existing stressed debt

2. Take over existing stressed debt

- A. 1 only
- B. 2 only
- C. Both are correct
- D. None is correct

Answer: C

Explanation

- Asset Reconstruction Company Limited and Asset Management Company will be set up to consolidate and take over existing stressed debt, and manage and dispose assets.
- It is like a bad bank that will mop up all the NPAs of the public sector banks.

4. In the year 2019-20, the highest proportion of subsidies has been allocated to:

- A. Fertiliser
- B. Food
- C. Petroleum
- D. None of the above

Answer: B

Explanation

Table 4: Subsidies in 2021-22 (Rs crore)

	Actuals 2019-20	Budgeted 2020-21	Revised 2020-21	Budgeted 2021-22	Change (Annualised) (Actuals 2019-20 to BE 2021-22)
Food subsidy	1,08,688	1,15,570	4,22,618	2,42,836	49%
Fertiliser subsidy	81,124	71,309	1,33,947	79,530	-1%
Petroleum subsidy	38,529	40,915	39,055	14,073	-40%
Other subsidies	33,963	34,315	53,116	33,460	-1%
Total	2,62,304	2,62,109	6,48,736	3,69,899	19%

Sources: Expenditure Profile, Union Budget 2020-21; PRS.

5. Which of the following is/are incorrect?

1. Out of the total tax collections under GST, 84% is expected to come from central GST and 16% from the GST compensation cess.
2. In the year 2019-20 Corporation Tax was lower than Taxes on Income.

- A. 1 only
- B. 2 only
- C. Both are incorrect
- D. None is incorrect

Answer: B

Explanation

Table 2 : Break up of central government receipts in 2021-22 (Rs crore)

	Actuals 2019-20	Budgeted 2020-21	Revised 2020-21	Budgeted 2021-22	Change (Annualised) (Actuals 2019-20 to BE 2021-22)
Gross Tax Revenue	20,10,059	24,23,020	19,00,280	22,17,059	5%
<i>of which:</i>					
Corporation Tax	5,56,876	6,81,000	4,46,000	5,47,000	-1%
Taxes on Income	4,92,654	6,38,000	4,59,000	5,61,000	7%
Goods and Services Tax	5,98,750	6,90,500	5,15,100	6,30,000	3%
Customs	1,09,283	1,38,000	1,12,000	1,36,000	12%
Union Excise Duties	2,40,615	2,67,000	3,61,000	3,35,000	18%
Service Tax	6,029	1,020	1,400	1,000	-59%
A. Centre's Net Tax Revenue	13,56,902	16,35,909	13,44,501	15,45,397	7%

6. KAPILA recently heard in news is related to which of the following?

- A. Income tax
- B. Patents
- C. GST
- D. Spectrum auctions

Answer: B

Explanation

- Recently, the Union Minister of Education launched Kalam Program for Intellectual Property Literacy and Awareness Campaign (KAPILA).
- It is an intellectual property literacy campaign for creating patent awareness.
- The objectives of the scheme include:
 - ✓ Creating awareness regarding Intellectual Property Rights (IPR) in Higher Education Institutions (HEIs);

- ✓ Enabling of IP protection of inventions originating from faculty and students of HEIs;
 - ✓ Development of Credit Course on IPR;
 - ✓ Training program on IPR for faculty and students of HEIs; and
 - ✓ Sensitization and development of vibrant IP filing system
- Under this campaign, students pursuing education in higher educational institutions will get information about the correct system of application process for patenting their invention and they will be aware of their rights.
 - The government has insisted upon that it is necessary not only to invent for the self-sufficiency of the country, but also to patent the inventions.
 - India has a proud history of Nalanda and Takshila Universities and patent of inventions will lead India towards Self-Reliance.
 - The recognition of international standards of copyright protection and incentives for intellectual property have helped India jump eight places to 36th position on the International Intellectual Property (IP) Index 2018.

7. Which of the following is incorrect about Limited Liability Partnership (LLP) Act?

1. An LLP is a body corporate and legal entity separate from its partners.
2. LLP falls under the provisions of Indian Partnership Act, 1932.

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Explanation

- A Limited Liability Partnership (LLP) is a partnership in which some or all partners have limited liability. It therefore exhibits elements of partnerships and corporations
- In an LLP, one partner is not responsible or liable for another partner's misconduct or negligence.
- An LLP is a body corporate and legal entity separate from its partners. It has perpetual succession.
- Being the separate legislation (i.e. LLP Act, 2008), the provisions of Indian Partnership Act, 1932 are not applicable to an LLP and it is regulated by the contractual agreement between the partners.
- Every Limited Liability Partnership shall use the words "Limited Liability Partnership" or its acronym "LLP" as the last words of its name.
- Every LLP shall have at least two designated partners being individuals, at least one of them being resident in India and all the partners shall be the agent of the Limited Liability Partnership but not of other partners.

- LLP format is an alternative corporate business vehicle that provides the benefits of limited liability of a company but allows its members the flexibility of organizing their internal management on the basis of a mutually arrived agreement, as is the case in a partnership firm.
- This format would be quite useful for small and medium enterprises in general and for the enterprises in services sector in particular.
- Internationally, LLPs are the preferred vehicle of business particularly for service industry or for activities involving professionals.
- Recently the Corporate Affairs Ministry has planned to decriminalise 12 offences as well as omit a provision entailing criminal liability under the Limited Liability Partnership (LLP) Act, 2008, for greater ease of doing business for law-abiding LLPs.

8. Which of the following statements are correct about Atal Bimit Vyakti Kalyan Yojna?

1. The payment of relief has been reduced to 25% of average of wages from earlier 50% of average wages payable upto maximum 90 days of unemployment.
 2. Instead of the relief becoming payable 30 days after unemployment, it shall become due for payment after 90 days.
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: D

Explanation

● **ABVKY**

- ✓ It is a welfare measure being implemented by the Employee's State Insurance (ESI) Corporation.
- ✓ It offers cash compensation to insured persons when they are rendered unemployed.
- ✓ The Scheme was introduced in 2018.

● **The issue**

- ✓ It was brought to the notice of ESIC that in some cases employers have struck off their employees from the rolls few months after actually terminating them from service.
- ✓ During this period, ESI contribution was also not filed by the employers for these employees in the system.
- ✓ As the relief under Atal Beemit Vyakti Kalyan Yojana is available only in case of unemployment of the Insured Persons, such employees though terminated from service became ineligible for relief under this scheme.

- In 2020, eligibility criteria for availing the relief were relaxed, as under:

- ✓ The payment of relief has been enhanced to 50% of average of wages from earlier 25% of average wages payable upto maximum 90 days of unemployment.
- ✓ Instead of the relief becoming payable 90 days after unemployment, it shall become due for payment after 30 days.
- ✓ The Insured Person can submit the claim directly to ESIC Branch Office instead of the claim being forwarded by the last employer and the payment shall be made directly in the bank account of IP.
- ✓ The Insured Person should have been insurable employment for a minimum period of 2 years before his/her unemployment and should have contributed for not less than 78 days in the contribution period immediately preceding to unemployment and minimum 78 days in one of the remaining 3 contribution periods in 02 years prior to unemployment.
- Recently: Employee's State Insurance Corporation (ESIC) has decided that in cases where the employer has shown "Zero" contribution in respect of an employee for some months before exiting him from the system, the relief under ABVKY for such period of "Zero" contribution, shall also be allowed.

Enhancing quantum of relief
being provided to eligible workers under

Atal Bimit Vyakti Kalyan Yojana



Enhanced benefit and relaxation in eligibility conditions under Atal Bimit Vyakti Kalyan Yojana (ABVKY)

**Rate of relief enhanced from 25% to 50% of
the average daily wages**

**Relief amount to be credited to the bank
account of the Insured person directly**

**Scheme extended upto 30th June, 2021 with enhancement in relief
and relaxation in eligibility conditions upto 31.12.2020**

**Insured Person can apply online and thereafter submit hard copy
of their claim directly to their designated ESIC Branch Office**

**For more information and claiming relief under the scheme,
please visit www.esic.in**



Ministry of Labour & Employment
Government of India



Employees' State Insurance Corporation

For more information please visit nearest /designated ESIC Branch Office or call toll free number 1800 11 2526

9. The Neptune Declaration recently heard in news is related to which of the following?

- A. Outer space treaty
- B. Intellectual property rights
- C. Cryptocurrency
- D. Maritime Vision

Answer: D

Explanation

- The Neptune Declaration was signed by more than 300 organizations.
- The declaration highlights the main actions that are required to be taken in order to resolve the crew change crisis.
- The daily lives and wellbeing of seafarers was highly impacted due to COVID-19 pandemic. It led to a humanitarian crisis at sea.
- This declaration has mentioned four main actions that is needful to address the crew change crisis:
 - ✓ To recognize the seafarers as the key workers and provide them priority access to Covid-19 vaccines.
 - ✓ To establish and implement the gold standard health protocols which are based on the existing best practice.
 - ✓ To increase the collaboration between the ship operators and charterers so as to facilitate the crew changes.
 - ✓ To ensure the air connectivity between the key maritime hubs for seafarers.
- The Marine Union of India is the oldest marine office.
 - ✓ It represents the Merchant Navy Officers who are its members.
 - ✓ The office is affiliated to the International Transport Workers' Federation (ITF), London, United Kingdom
 - ✓ It has around 700 unions that represents over 4.5 million transport workers from 150 countries.
 - ✓ The office is also affiliated to the Hind Mazdoor Sabha (HMS), New Delhi.
 - ✓ The office work with the primary objective of working for and ensuring the fairness of work and wage conditions for the members.
 - ✓ It also has Branch office in Kolkata, Chandigarh, Chennai, Visakhapatnam, and Tuticorin.
 - ✓ The office also looks after the implementation of the international regulations such as Maritime Labour Convention (MLC), 2006

Recently, the Maritime body MUI urged the government to take cognisance of Neptune Declaration on Seafarer Wellbeing and Crew Change in order to formulate the Maritime India Vision 2030.

- The "Maritime India Vision 2030" will be formulated by the Ministry of Ports, Shipping and Waterways of India.

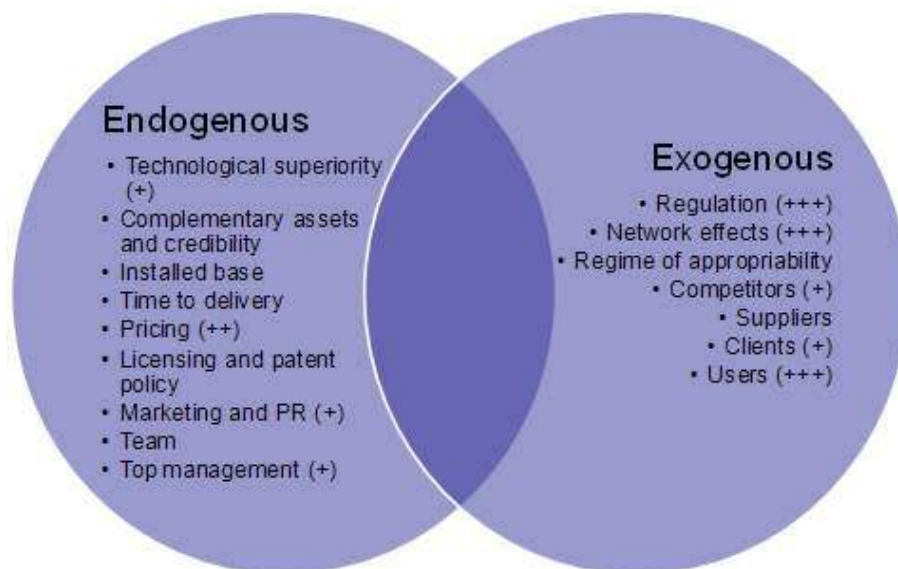
10. The growth theory in which growth is fueled by technological progress independent of economic forces is known as:

- A. Exogenous growth
- B. Endogenous growth
- C. Classical Growth Theory
- D. None of the above

Answer: A

Explanation

- Exogenous growth, a key tenet of neoclassical economic theory, states that growth is fueled by technological progress independent of economic forces.
- Both the exogenous growth and endogenous growth theories are part of the neoclassical growth models.
- The exogenous growth model factors in production, diminishing returns of capital, savings rates, and technological variables to determine economic growth.
- While both the exogenous and endogenous growth models stress the role of technological progress in achieving sustained economic growth, the former posits that this key variable is born outside the economic system, whereas the latter suggests that the activities within the economic system result in its creation.



11. Which of the following statements regarding Open Market Operations are correct?

1. These are directly conducted by RBI through public auctions to infuse liquidity in the monetary system.
2. It is one of the qualitative monetary policy tools which is employed by the central bank of a country.

A. 1 only

- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

Explanation

- Context: RBI announces ₹20,000 crore open market operations on February 10.
- Open market operations is the sale and purchase of government securities and treasury bills by RBI or the central bank of the country.
- The objective of OMO is to regulate the money supply in the economy.
- It is one of the quantitative monetary policy tools.
- RBI carries out the OMO through commercial banks and does not directly deal with the public.
- When the central bank wants to infuse liquidity into the monetary system, it will buy government securities in the open market. This way it provides commercial banks with liquidity.
- When it sells securities, it curbs liquidity.
- Thus, the central bank indirectly controls the money supply and influences short-term interest rates.
- RBI employs two kinds of OMOs:
 - ✓ Outright Purchase (PEMO) – this is permanent and involves the outright selling or buying of government securities.
 - ✓ Repurchase Agreement (REPO) – this is short-term and are subject to repurchase.

12. Which of the following statements regarding National Safety Council are correct?

1. Its work under Ministry of labour & Employment.
 2. The NSC is working on the safety rating of establishment based on their Occupational Safety, Health and Working Conditions Code, 2020 (OSH Code, 2020) readiness and performance.
- A. 1 only
 - B. 2 only
 - C. Both 1 and 2
 - D. Neither 1 nor 2

Answer: C

Explanation

- Context: The CEO and Managing Director of L&T Ltd, SN Subrahmanyam has been appointed Chairman of the National Safety Council for a period of three years.

- National Safety Council has a major role to play to ensure safety in workplaces under the new Occupational Safety, Health and Working Conditions Code, 2020 (OSH Code, 2020).
- The National Safety Council will assist Directorate General, Factory Advice and Labour Institutes (DGFASLI) in re-writing the regulations governing OSH in the country which have not been updated for over 50 years.
- The DGFASLI is an attached office of the Ministry of Labour & Employment, Government of India and serves as a technical arm to assist the Ministry in formulating national policies on occupational safety and health in factories and docks. It also advises factories on various problems concerning safety, health, efficiency and well - being of the persons at work places.
- The NSC will also be involved in framing the scheme for third party audit and certification under the OSH Code.
- The NSC is already working on the safety rating of establishments based on their OSH readiness and performance which can be extended through the country and linked to the inspection system.
- National Safety Council is a non-profit, self-financing apex body at the national level in India. Its Objective is to generate, develop and sustain a voluntary movement on Safety, Health, and Environment (SHE) at the national level. It is an autonomous body. Set was setup by Ministry of Labour and Employment in 1965.
- It was registered as a Society under the Societies Registration Act, 1860 and subsequently, as a Public Trust under the Bombay Public Trust Act, 1950.

13. Which of the following statements regarding landlord port model are incorrect?

1. In the landlord port model, the publicly governed port authority acts as a regulatory body and as landlord while private companies carry out port operations—mainly cargo-handling activities.

2. It is a Hybrid Model of Port Governance.

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: B

Explanation

- In the landlord port model, the publicly governed port authority acts as a regulatory body and as landlord while private companies carry out port operations—mainly cargo-handling activities.
- Here, the port authority maintains ownership of the port while the infrastructure is leased to private firms that provide and maintain their own superstructure and install own equipment to handle cargo.
- In return, the landlord port gets a share of the revenue from the private entity.
- The role of the landlord port authority would be to carry out all public sector services and operations such as the award of bids for cargo terminals and dredging.

- Currently, most major port trusts in India carry out terminal operations as well, resulting in a hybrid model of port governance.
- The involvement of the port authorities in terminal operations leads to a conflict of interest and works against objectivity
- The neutrality of the landlord port authority is a basic requirement for fair competition between port service providers, particularly the terminal operators.

14. Central banks and Governments engage in this type of monetary settlement.

1. It is done with foreign counterparts to meet short term foreign exchange liquidity requirements.
2. At times it is also done to ensure adequate foreign currency to avoid Balance of Payments (BOP) crisis till longer arrangements can be made.

It is known as:

- A. FX swaps
- B. Currency Swap
- C. Free Trade Agreement
- D. Devaluation

Answer: B

Explanation

- Context: The Reserve Bank of India has agreed to a USD 400 million currency swap facility for Sri Lanka till November 2022 to boost the foreign reserves and ensure the financial stability of the country.
- Currency Swaps are used to obtain foreign currency loans at a better interest rate than could be obtained by borrowing directly in a foreign market.
- Central banks and Governments engage in currency swaps with foreign counterparts to meet short term foreign exchange liquidity requirements or to ensure adequate foreign currency to avoid Balance of Payments (BOP) crisis till longer arrangements can be made.
- The word swap means exchange.
- A currency swap between the two countries is an agreement or contract to exchange currencies with predetermined terms and conditions.
- India and Japan in the year 2018 signed a bilateral currency swap agreement.
- RBI will get a certain amount of yen and the Bank of Japan will get an equivalent amount in Indian rupees on a decided swap rate.
- After a specified period, both the countries will repay the amount at the same swap rate.
- The decision comes five months after Sri Lankan Prime Minister Mahinda Rajapaksa had visited New Delhi and a recent bilateral discussion on rescheduling Colombo's outstanding debt repayment to India.

- Sri Lanka owes USD 960 million to India.

15. The penal rate at which banks can borrow money from the central bank over and above what is available to them through the Liquidity Adjustment Facility window is known as:

- A. Marginal Standing Facility
- B. Repo Rate
- C. Bank Rate
- D. Marginal Cost of Fund based Lending Rate

Answer: A

Explanation

- Marginal standing facility (MSF) is a window for banks to borrow from the Reserve Bank of India in an emergency when inter-bank liquidity dries up completely.
- The Marginal standing facility is a scheme launched by RBI while reforming the monetary policy in 2011-12.
- It is a penal rate at which banks can borrow money from RBI when they are completely exhausted of all borrowing assistance.
- The Marginal Standing facility allows banks to borrow money with an interest rate above the repo rate and can be termed as the Marginal standing facility rate.
- Banks borrow from the RBI by pledging government securities at a rate greater than the repo rate under LAF (liquidity adjustment facility).
- The MSF rate is pegged 100 basis points or a percentage point above the repo rate.
Under MSF, banks can borrow funds up to one percent of their net demand and time liabilities (NDTL).
- The minimum amount for which RBI receives application is Rs.1 Crore, and afterward in multiples of Rs.1 Crore.

5. Environment & Ecology

Click on the links given below to watch the following questions on YouTube

- [Video 1](#)
- [Video 2](#)

1. Naku la recently heard in news is situated in

- A. Jammu and Kashmir
- B. Sikkim
- C. Ladakh
- D. Arunachal Pradesh

Answer: B

Explanation

- Naku La is a mountain pass in the Himalayas in North Sikkim .
- It connects the Sikkim with Tibet Autonomous Region.



2. Which of the following statements about SUNDERBANS are correct?

1. Sundarbans Jungle has been named after the large mangrove trees Sundari (*Heritiera littoralis*).

2. It has unique Tidal Phenomenon twice a day – there are high tides when water level seems to rise around 6-10 feet and low tides when one can see the huge mud land area lying flat.

3. Sunderbans comprise of more than 100 islands.

A. 1 and 2 only

B. 3 only

C. 1, 2, 3

D. 1 and 3 only

Answer: C

Explanation

- The name Sundarban (Sundarban) is derived from the number of Sundari pardo found in the Sunderbans, and in the Bengali language, it was named Sundarban, using Shundor.
- The history of the Sundarbans is believed to be around 200-300 AD, its evidence shows the remains found in Bagmara Forest Block..
- In 1757, East India Company took all rights of Sundarbans from Mughal Emperor Alamgir II. After this, after the establishment of forest department in Bengal after 1860, the British preserved the Sundarbans.
- The main rivers falling in the Bay of Bengal, through the Sundarbans, are the Ganges, Brahmaputra, Padma, and Meghna.
- The Sundarbans is spread over 10,000 sq km area, out of which 6000 sq km comes to Bangladesh. Out of this, 4110 sq km is coming from India.
- The Sundarbans is the world's largest Mangrove forest, meaning that this forest is always surrounded by swamps.
- Sundarban is the world's largest delta. This delta also called the Bengal Delta or Green Delta, is made from the integration of both the Ganga and Brahmaputra rivers
- The Sunderbans Delta is the world's widest, deepest and most active delta associated with the Bengal Basin, due to which there is variety in flora and fauna.
- The Sunderbans has the largest Fishery Board in India, where Sunderban Development Board runs Fishery Project in the area of 50 hectares.

3. Based on the following statements identify the (NP/BR/WLS)

1. In 1879 it was declared a reserve forest.

2. Hallon and Banjar were two sanctuaries into which this conservation reserve was earlier divided in the 1930s.

3. It is located in the Maikal Range of Satpuras.

4. Rudyard Kipling's 'The Jungle Book' is said to be inspired by it.

5. The two famous tribes of Gonda and Baigas originally inhabited the forest.
6. It is the first reserve of India to announce a mascot – 'Bhoorsingh, The Barasingha.'

- A. Kanha Tiger Reserve
- B. Madhav National Park
- C. Pench National Park
- D. Sanjay-Dubri Tiger Reserve

Answer: A

Explanation

- Context: A tigress has died after getting stuck in a wire trap allegedly laid by poachers at Madhya Pradesh's Kanha Tiger Reserve.
- The feline, around two years old, was found dead on by some beat guards in Khapa forest range of the Kanha Tiger Reserve (KTR)
- A case has been registered against unidentified persons under the Wildlife Protection Act.
- An autopsy was conducted as per rules of the National Tiger Conservation Authority
- According to the 2018 tiger census, Madhya Pradesh is home to the highest number of tigers in the country, giving it the tag of "tiger state."
- The state has a number of tiger reserves, including Kanha, Bandhavgarh, Pench, Satpura and Panna.

4. India's first Lichen Park is situated in

- A. Tamil Nadu
- B. Kerela
- C. Uttarakhand
- D. Punjab

Answer: C

Explanation

- Indicator of pollution levels in the Himalayas, Uttarakhand forest department has claimed to have developed country's first lichen park in Kumaon's Munsiyari area, spread over 1.5 acres with over 80 species of lichens collected from across the Himalayan state.
- Considered most significant bio-indicator of ecosystem fluctuations as they are more sensitive towards habitat and climate changes, lichen species are facing many threats and continue to decline



from some areas of Himalayan regions because of overexploitation of natural resources, mounting pressures of urbanization, habitat-destruction, deforestation and increasing pollution.

- Lichens found in the Himalayas up to 5000 metres, are important species as they are the best bioindicators of the pollution levels.
- Lichen need pure air to grow.
- If pollution levels increase in a certain area, the lichen species decline there.
- So it serves as a natural indicator of pollution levels in an area. And they are important to study in the Himalayas, given various threats to Himalayan environment and ecology
- Uttarakhand has more than 600 species of lichens followed by Himachal Pradesh and Jammu and Kashmir with 503 and 386 species respectively.
- In Uttarakhand lichens are found in Chamoli, Champawat, Pithoragarh, Nainital, Dehradun region.
- Some lichen species found in the state include Parmotrema pertatum, Usnea lognissima, Lecanora subfuseescens, Sarcogyne privigna, Arthonia impolitella, Acarospora fusca, Acarospora oxytona, Polysporina dubia etc
- What is a lichen?
 - ✓ A lichen is a composite organism that arises from algae or cyanobacteria living among filaments of multiple fungi species in a mutualistic relationship. They come in many colours, sizes and forms.
 - ✓ The properties are sometimes plant-like but lichens are not plants. Lichens may have tiny, leafless branches, flat leaf-like structures.

5. Which of the following statements are correct about Meghalayan Age?

1. It is the most recent unit of the Geologic Time Scale in the 4.6 billion-year history of the Earth.
 2. It began 4,200 years ago and experienced an abrupt mega- drought and cooling around the globe.
 3. It resulted in the collapse of civilisations in Egypt, Greece, Syria, Palestine, Mesopotamia, the Indus Valley, and the Yangtze River Valley.
- A. 1 and 2 only
B. 2 and 3 only
C. 1 and 3 only
D. 1, 2 and 3

Answer: D

Explanation

- Topic From 2018.
- Geologists have decided to classify the past 4,200 years as the Meghalayan Age.
- It is the most recent unit of the Geologic Time Scale in the 4.6 billion-year history of the Earth.



- Following this, the International Chronostratigraphic Chart, which depicts the timeline for Earth's history will be updated.

What is Meghalayan Age?

- The “Meghalayan Age” began 4,200 years ago and experienced an abrupt mega- drought and cooling around the globe.
- The drought and the cooling lasted two centuries and severely impacted agricultural-based societies that developed in several regions after the end of the last Ice Age.
- It resulted in the collapse of civilisations in Egypt, Greece, Syria, Palestine, Mesopotamia, the Indus Valley, and the Yangtze River Valley.
- Evidence of the 4,200-year climatic event has been found on all seven continents.
- This age is considered unique as this was the only age which began with a global cultural event produced by a global climatic event.

6. Based on the following statements identify the water body?

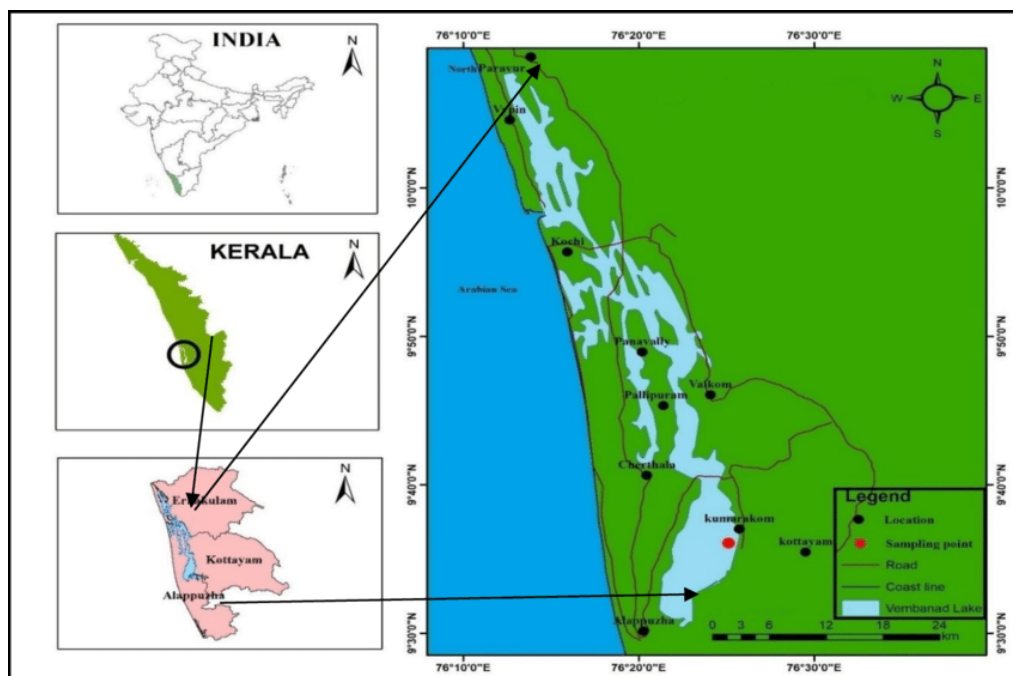
1. It is the longest lake in India
 2. India's famous Nehru Trophy Boat Race is hosted on the waters of this lake, pulling in enthusiasts from all over the country and the world.
 3. This is the lake is also known as Punnamada Lake.
 4. The government of India has recognised the wetland under the National Wetlands Conservation Programme.
- A. Chilika Lake
B. Cholamu Lake
C. Bahour Lake
D. Vembanad Lake

Answer: D

Explanation

- Context: During Mann ki Baat address, Prime Minister has praised the efforts of a Kerala man. He engages in cleaning the Vembanad Lake despite his physical challenges.
- Vembanad Lake is the longest lake in India and the largest lake in the state of Kerala. The lake is situated at sea level and is separated from the Laccadive Sea by a narrow barrier island.
- The lake has its source in four rivers, Meenachil, Achankoil, Pampa and Manimala.
- The Vembanad Wetland System spans a mammoth area of 2033.02 sq km, and is thus the largest wetland system in India.

- It actually spans across several districts and is known by different names in different parts of Kerala. In Kottayam, it is called Vembanadu lake while those in Kuttanad call it the Punnamada lake. The part of Vembanad lake that is near Kochi is called Kochi lake.
- Significance: Vallam Kali (Nehru Trophy Boat Race) is a Snake Boat Race held every year in the month of August in Vembanad Lake.
- In 2002, the lake was included in the list of wetlands of international importance, as defined by the Ramsar Convention. It is the second-largest Ramsar site in India, only after the Sunderbans in West Bengal.
- The Kumarakom Bird Sanctuary is located on the east coast of the lake.
- Currently, the lake is declining in size and is facing a major ecological crisis, owing to land reclaiming. It is estimated to have reduced by 37% of its original size.¹⁰
- One of the most outstanding features of this lake is the 1252 m long saltwater barrier, Thanneermukkom, which was built to stop saltwater intrusion into Kuttanad.
- According to a study that maps the most polluted marine places in the world, it was found that microplastics were present in all the sediment samples taken from the Vembanad Lake.⁽²⁰¹⁷⁾
- The researchers stated that this poses a risk of contaminating the food chain since the locals consume fishes and clams from the lake.
- A study conducted by the National Centre for Earth Science Studies (NCESS) in 2016 stated that Vembanad lake may vanish in 50 years



7. India's first Centre for Wetland Conservation and Management (CWCM) on the occasion of World Wetland Day has been established in

- Odisha
- West Bengal
- Kerala

D. Tamil Nadu

Answer: D

Explanation

- Context: The Union government has announced to establish India's first Centre for Wetland Conservation and Management (CWCM) on the occasion of World Wetland Day.
- The CWCM would be annexed to the National Centre for Sustainable Coastal Management (NCSCM), Chennai, an institution under the Ministry of Forest and Climate Change (MoF&CC).
- The dedicated centre would address specific research needs and knowledge gaps and will aid in the application of integrated approaches for conservation, management and wise use of the wetlands
- As per records, nearly 4.6 per cent of the total land in India are identified as wetlands, covering an area of 15.26 million hectares.
- As many as 42 sites have been designated as wetlands of international importance, also called Ramsar sites, with a surface area of 1.08 million hectares.
- The CWCM will play a significant role to design and implement the regulatory frameworks and policies. It will also help in monitoring, management planning and targeted research in a bid to conserve the wetlands.
- The conservation centre will also act as a knowledge hub.
- It will enable the exchange between the wetland authorities in States or Union Territories, managers, wetland researchers, practitioners, policy-makers and users.
- The centre will further help in building the networks and partnerships with the relevant international and national agencies.

8. Which of the following schemes are correct about Gobardhan Scheme?

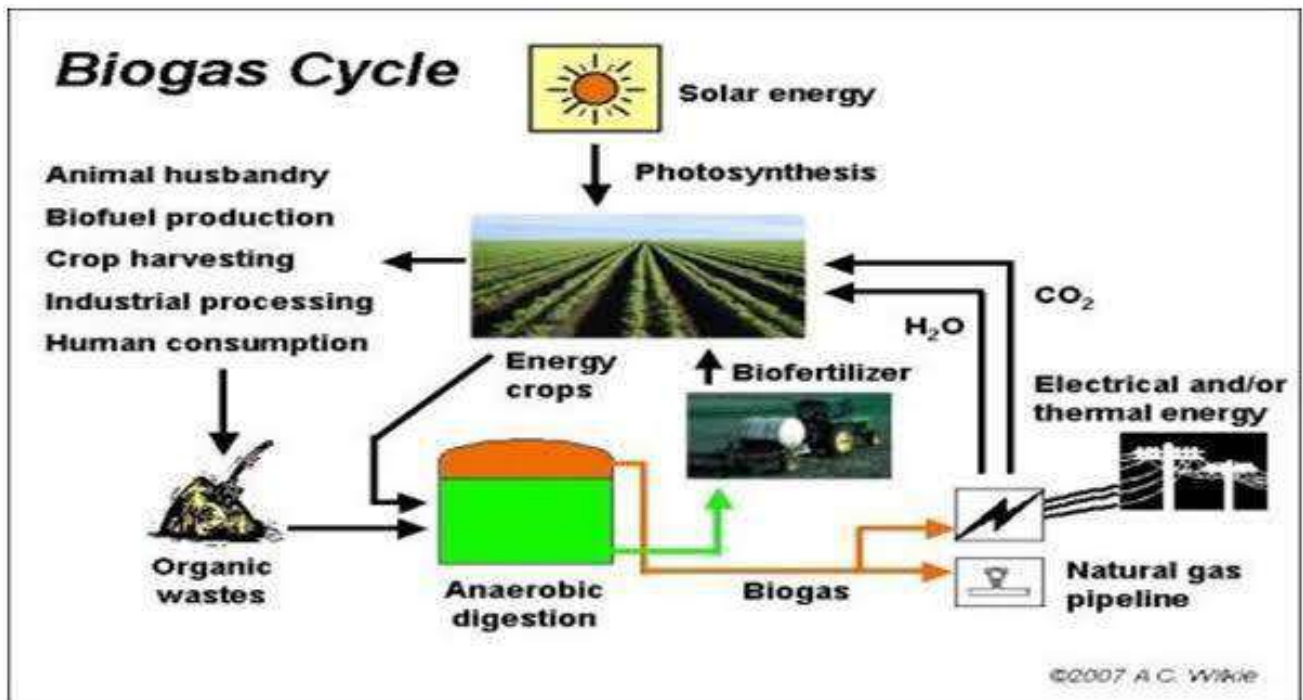
1. The Jal Shakti Ministry recently launched a unified portal on the 'Gobardhan' scheme.
 2. The scheme is being pursued as a priority programme under the Rashtriya Gram Swaraj Abhiyan (RGSA)
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: A

Explanation

- Context: The Ministry of Jal Shakti has launched a unified portal on the government's 'Gobardhan' scheme.
- Farmers can earn Rs 1 lakh cr in 5 yrs from Jal Shakti ministry's Gobardhan scheme: Govt.

- The Galvanizing Organic Bio-Agro Resources Dhan (GOBAR-DHAN) scheme is implemented under the Swachh Bharat Mission Gramin-Phase 2, by the Department of Drinking Water and Sanitation under the Jal Shakti ministry.
- It was launched in 2018.
- The scheme aims to augment income of farmers by converting biodegradable waste into compressed biogas (CBG).
- The initiative aims at attracting entrepreneurs for establishing community-based CBG plants in rural areas.
- Benefits:
 - ✓ Helpful for the country as India is home to the highest cattle population in the world, close to 300 million in number, with a daily output of 3 million tonnes of dung.
 - ✓ Encourage farmers to consider dung and other waste not just as a waste but as a source of income.
 - ✓ Benefits to the rural people. It will be easier to keep the village clean and sanitized, livestock health will improve and farm yields will increase.
 - ✓ Increase self-reliance in energy utilized for cooking and lighting.
 - ✓ Provides a stable fuel supply in the market for oil companies and accessible credit in the market through government schemes and banks for entrepreneurs.



9. Which of the following statements about Wildlife Crime Control Bureau are correct?

1. It is a statutory multi-disciplinary body, established under the Ministry of Environment and Forests, to combat organized wildlife crime in the country.
2. The Bureau has its headquarters in New Delhi.

3. Under Wild Life (Protection) Act, 1972, it is mandated to establish a centralized wildlife crime data bank.

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1, 2 and 3
- D. 1 and 2 only

Answer: C

Explanation

- Context: In an unprecedented intelligence operation of the Wildlife Crime Control Bureau (WCCB), New Delhi, two epicenters of illegal wildlife poaching and trade were identified in Anantnag area of Srinagar valley and Manwal in the Jammu region.
- In a joint operation of WCCB officers and officers of Jammu and Kashmir, Chief Wildlife Warden and Police, simultaneous raids were conducted in both these places.
- In the raid in Anantnag, 08 leopard pelts, 38 bear biles, 04 musk pods were seized
- 05 Leopard pelts, 07 leopard nails, 08 canines, 02 molars, 02 leopard skulls and leopard bones (04 Jaw bones, 140 bones pieces), 01 musk teeth were seized in Manwal of Jammu region.
- The present seizure is one of the largest seizures in the recent past.
- Musk deer and Himalayan Black bear are endangered species and poached for musk pods, bear bile, which is used in Traditional Chinese Medicines (TCM).
- These poached animals – leopard, bear and musk deer are listed in Schedule I of the Wildlife (Protection) Act, 1972.
- As per the provisions of the Act, poaching of these animals and trading their by parts is punishable with minimum 03 years of imprisonment extendable up to 07 years.
- A case has been registered in police station Anantnag.

WCCB

- WCCB is statutory multi-disciplinary body under the Union Ministry of Environment, Forests and Climate Change (MoEFCC) to combat organized wildlife crime in the country.
- It was established in June 2007 by amending the Wildlife (Protection) Act (WLPA), 1972, a special Act to protect the wildlife and fauna in the country.
- It is headquartered in New Delhi and has five regional offices at Delhi, Mumbai, Kolkata, Chennai and Jabalpur; three sub-regional offices at Amritsar, Guwahati, and Cochin; and five border.
 - ✓ Functions: Under Section 38 (Z) of WLPA, 1972, it is mandated to collect and collate intelligence related to organized wildlife crime and disseminate it to state and other enforcement agencies for immediate action.
 - ✓ It assist foreign authorities and international organization concerned to facilitate co-ordination and universal action for wildlife crime control.



- ✓ It is tasked with capacity building of the wildlife crime enforcement agencies for scientific and professional investigation into wildlife crimes and assist states to ensure success in wildlife crimes prosecutions.
- ✓ It advises Union Government on issues relating to wildlife crimes having national and international ramifications, relevant policy and laws.
- It also assists and advises the Customs authorities in inspection of the consignments of flora & fauna as per the provisions of Wild Life Protection Act, CITES and EXIM Policy governing such an item.

10. Which of the following pairs have been incorrectly matched ?

1. 1st generation biofuels - produced from things like sugar, starch, or vegetable oil
2. 2nd generation biofuels- produced from sustainable feedstock
3. 3rd generation biofuels - crops that are genetically engineered

- A. 3 only
- B. 2 and 3 only
- C. 2 only
- D. 1 and 2 only

Answer: A

Explanation

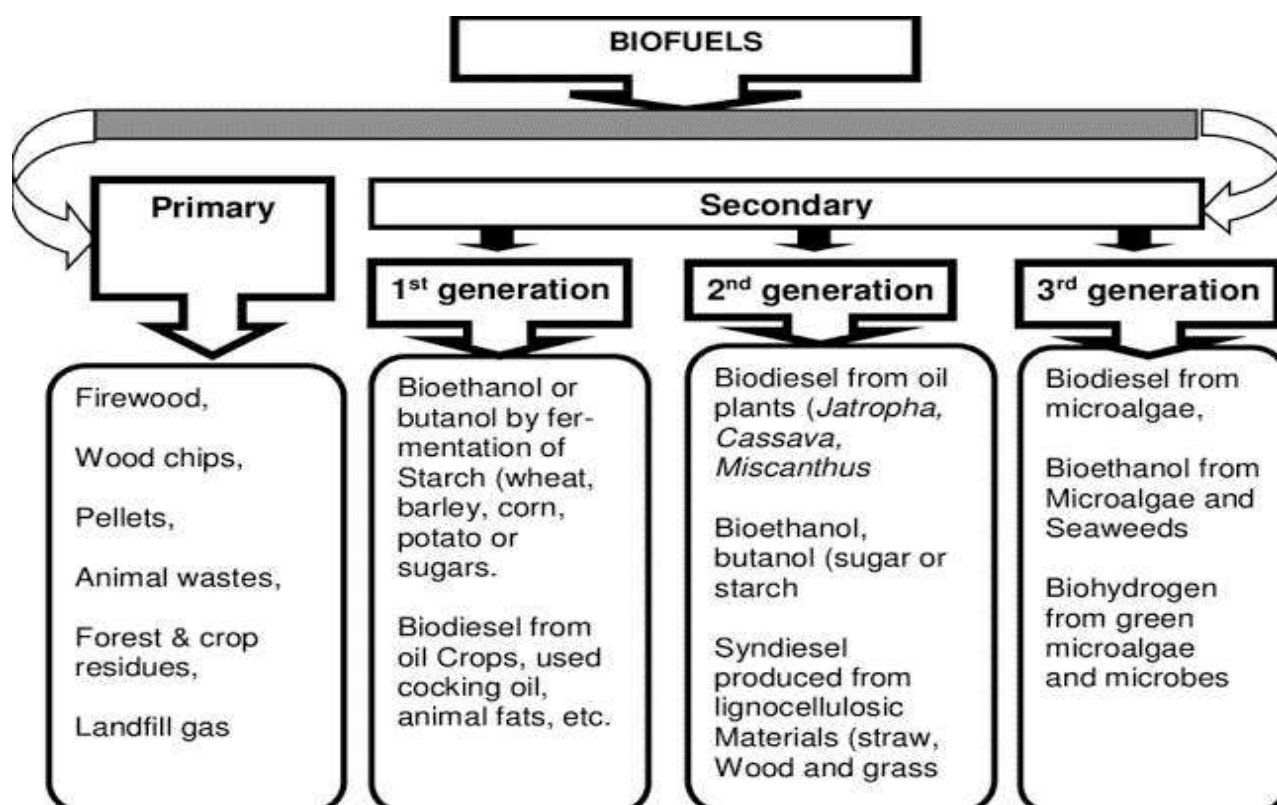
- Context: Stardust 1.0 was launched on Jan 31st from Loring Commerce Centre in Maine, US.
- It has become the first commercial space launch powered by biofuel, which is non-toxic for the environment as opposed to traditionally used rocket fuels.
- Stardust 1.0 is a launch vehicle suited for student and budget payloads.

What are Biofuels?

- Any hydrocarbon fuel that is produced from an organic matter (living or once living material) in a short period of time (days, weeks, or even months) is considered a biofuel.
- Biofuels may be solid, liquid or gaseous in nature.
 - ✓ Solid: Wood, dried plant material, and manure.
 - ✓ Liquid: Bioethanol and Biodiesel.
 - ✓ Gaseous: Biogas.

Classification of Biofuels:

- 1st generation biofuels are also called conventional biofuels. They are made from things like sugar, starch, or vegetable oil. Note that these are all food products. Any biofuel made from a feedstock that can also be consumed as a human food is considered a first-generation biofuel.
- 2nd generation biofuels are produced from sustainable feedstock. The sustainability of a feedstock is defined by its availability, its impact on greenhouse gas emissions, its impact on land use, and by its potential to threaten the food supply. No second generation biofuel is also a food crop, though certain food products can become second generation fuels when they are no longer useful for consumption. Second generation biofuels are often called “advanced biofuels.”
- 3rd generation biofuels are biofuel derived from algae. These biofuels are given their own separate class because of their unique production mechanism and their potential to mitigate most of the drawbacks of 1st and 2nd generation biofuels.
- 4th generation biofuels: In the production of these fuels, crops that are genetically engineered to take in high amounts of carbon are grown and harvested as biomass. The crops are then converted into fuel using second generation techniques.



- Government of India initiatives to promote the use of Biofuels:
- Since 2014, the Government of India has taken a number of initiatives to increase blending of biofuels.
 - ✓ The major interventions include administrative price mechanism for ethanol, simplifying the procurement procedures of OMCs, amending the provisions of Industries (Development & Regulation) Act, 1951 and enabling lignocellulosic route for ethanol procurement.
 - ✓ The Government approved the National Policy on Biofuels-2018 in June 2018. The policy has the objective of reaching 20% ethanol-blending and 5% biodiesel-blending by the year 2030.
 - ✦ Among other things, the policy expands the scope of feedstock for ethanol production and has provided for incentives for production of advanced biofuels.
 - ✓ The Government has also increased the price of C-heavy molasses-based ethanol.

6. Science & Technology

Click on the links given below to watch the following questions on YouTube

- [Video 1](#)
- [Video 2](#)
- [Video 3](#)

1. Which of the following is/are correct about Traditional Knowledge Digital Library (TKDL)?

1. TKDL is an Indian digital knowledge repository of medicinal plants and formulations used in Indian systems of medicine
 2. It is set up as a collaboration between CSIR and Directorate of Plant Protection Quarantine & Storage.
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: A

Explanation

- TKDL completes two decades of safeguarding India's Traditional Knowledge
- In 2001, CSIR jointly with Department of Indian Systems of Medicine & Homeopathy (now Ministry of AYUSH) developed TKDL
- The initiative was a follow-up action to thwart misappropriation of India's valuable traditional knowledge, based on learnings from the patent battles with international
- patent offices over the grant of intellectual property rights on turmeric, neem,
- basmati rice and other such ancient knowledge and practices of the country.
- Its database contain around 4 lakh formulations from Indian systems of medicine (Ayurveda, Siddha, Unani, Sowa Rigpa) and Yoga.
- TKDL aims to promote traditional knowledge and emerge as a global repository, apart from safeguarding the information from misappropriation.

2. Which of the following is correct about 'Rudram'?

1. It is India's first indigenous Anti Radiation missile.
2. It is integrated on Rafale fighter aircraft as the launch platform.
3. The missile has INS-GPS navigation with Passive Homing Head for the final attack .

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1,2 and 3

Answer: C

Explanation

- The New Generation Anti-Radiation Missile (Rudram-1) is India's first indigenous anti-radiation missile developed by DRDO for the Indian Air Force.
- It is integrated on SU-30 Mkl fighter aircraft as the launch platform.
- It has the capability of covering varied ranges based on the launch condition.
- The missile has INS-GPS navigation with Passive Homing Head for the final attack.
- The Passive Homing Head enables it to detect, classify and engage with targets across a wide band of programmed frequencies.
- The Rudram missile is a significant weapon for the Indian Air Force for suppression of enemy air defence effectively from large standoff ranges.

3. What is "Virtual Private Network"?

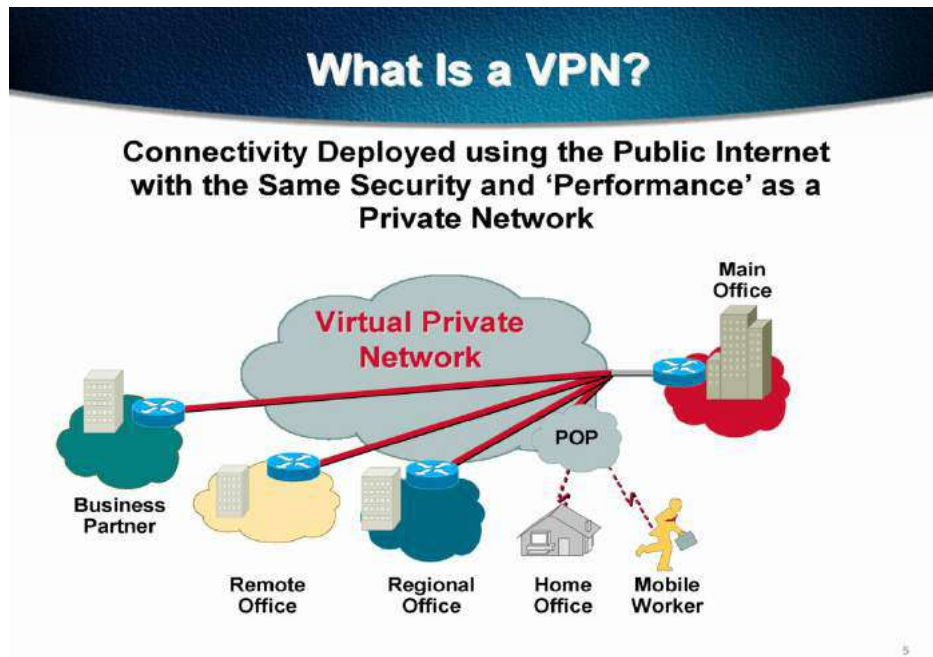
- A. It is a private computer network of an organization where the remote users can transmit encrypted information through the server of the organization
- B. It is a computer network across a public internet that provides users access to their organization's network while maintaining the security of the information transmitted
- C. It is a computer network in which users can access a shared pool of computing resources through a service provider.
- D. None of the statements (a), (b) and (c) given above is a correct description of Virtual Private Network

Answer: B

Explanation

- A virtual private network (VPN) extends a private network across a public network and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network.
- Applications running across a VPN may therefore benefit from the functionality, security, and management of the private network.
- Encryption is a requirement of a VPN
- VPN technology was developed to provide access to corporate applications and resources to remote users, mobile users, and to branch offices.

- For security, the private network connection may be established using an encrypted layered tunneling protocol, and users may be required to pass various authentication methods to gain access to the VPN.



4. Which of the following pairs have been *incorrectly* matched?

1. eOffice : An integrated eService Delivery Framework
2. Darpan : Government Dashboard Platform
3. Service Plus : A Digital workplace solution
4. TEJAS : The visual intelligence tool

- A. 1 and 2 only
- B. 2 only
- C. 2 and 4 only
- D. 1 and 3 only

Answer: D

Explanation

- National Informatics Centre Services Incorporated (NICSI), a Public Sector Enterprise under National Informatics Centre (NIC), Ministry of Electronics & Information Technology (MeitY), celebrated 25 years of its establishment During the event, following were launched:
 - ✓ TEJAS – The visual intelligence tool, through the collaborative effort of NIC and NICSI (CEDA), is completely developed in-house using open source technologies and bringing together the best features comparable to market leading BI tools. The tool would be primarily used by Government Departments at various levels in the centre and state. It will provide State-of-the-art and powerful data analysis for officials to design analytical reports and turn data into accurate analysis and smart visualizations.

✓ e-Auction India – It caters to the electronic forward and reverse auction requirements of the Government departments and organizations. It aims at transparency and non-discrimination amongst bidders, by allowing free access to auction documents, clarifications, online submission of quotes from any place on 24×7 basis, in a secured environment, adopting industry standard open technologies.

- Work from AnyWhere Portal – WAW (Work from AnyWhere) Portal will ease and enhance accessibility of key applications to the Government employees. WAW portal is built upon core workplace experience and creates a highly extensible environment for users to dynamically adapt to changing needs.
- The virtual work environment, provisioned by WAW portal, will empower employees with all the key resources enabling them to access organizations' applications and data and communicate with fellow officials. With the following objectives to achieve, WAW portal will facilitate quick transition to remote workplace environment, while maintaining secured access to departmental applications.
- NIC Products Portfolio- for International Offering to augment Digital India branding through promotion of productized software applications at global level. Product Offerings include, i) eOffice – A Digital workplace solution; ii) GePNIC – Government eProcurement System; iii) Service Plus – An integrated eService Delivery Framework; iv) e- Hospital – Simplifying Healthcare Service Delivery; v) BhuNaksha – A Solution for Cadastral Mapping; vi) ePrisons – IT Solution for Prison Management; vii) eCourts – A Justice Delivery System; viii) Darpan – Government Dashboard Platform.

5. Which of the following statements about Fission reactions are incorrect?

1. It is a reaction in which two or more atomic nuclei are combined to form one or more different atomic nuclei and subatomic particles (neutrons or protons).
2. It is a radioactive decay process
3. In this type of reaction released neutrons can induce a chain reaction.

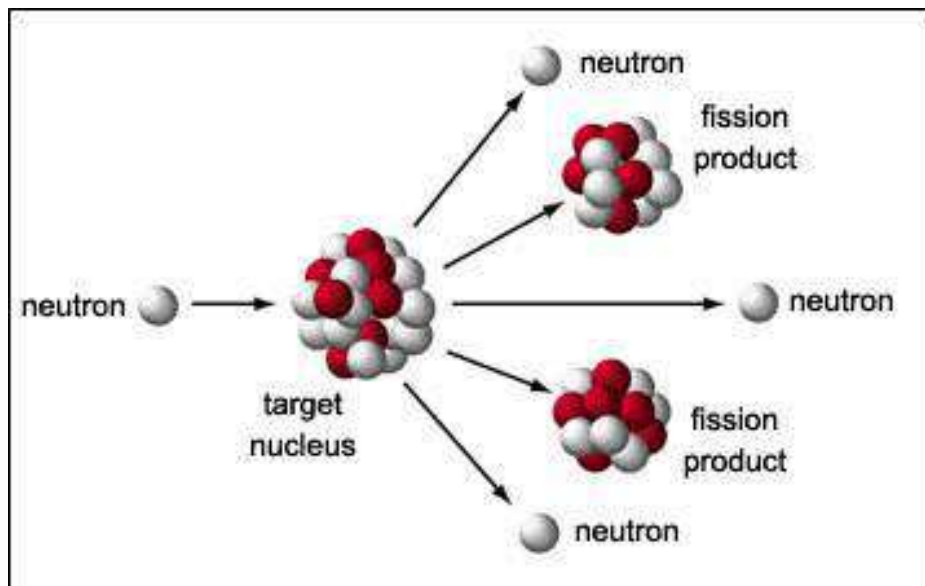
- A. 1 and 2 only
- B. 3 only
- C. 1 only
- D. 2 only

Answer: C

Explanation

- In nuclear physics, nuclear fission is a radioactive decay process in which the nucleus of an atom splits into smaller parts [lighter nuclei].
- The fission process often produces free neutrons and gamma photons [gamma rays], and releases a very large amount of energy [exothermic reaction].
- The nuclear fission process may take place spontaneously in some cases or may be
- induced by the excitation of the nucleus with a variety of particles (neutrons, protons, deuterons, or alpha particles) or with electromagnetic radiation in the form of gamma rays.

- In the fission process, radioactive products are formed, and several neutrons are emitted.
- These neutrons can include fission in a nearby nucleus of fissionable material and release more neutrons causing a chain reaction.



6. Which of the following statements are incorrect regarding LCA Tejas?

1. It can attain a maximum speed of 1.8 Mach and is enabled with air-to-air refuelling capacity
 2. It is developed by Aeronautical Development Agency
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: D

Explanation

- Both the statements are corrects
- Government will procure 83 Tejas Light Combat Aircraft from Hindustan Aeronautics Ltd.
- It is the smallest lightweight, multi-role, single-engine, supersonic tactical fighter aircraft •in the world and is being developed in single-seat fighter and twin seat trainer variants
- for the Indian Air Force and Indian Navy
- LCA programme was started by the Government of India in 1984 when they established the Aeronautical Development Agency (ADA) to manage the LCA programme
- It is designed by Aeronautical Development Agency under the Department of Defence •Research and Development and manufactured by State-owned Hindustan Aeronautics Limited (HAL)

- It is capable for air to air refuelling, can attain maximum speed of 1.8 Mach and payload capacity of 4000 kg

7. India's first thunderstorm research testbed will

- A. Tamil Nadu
- B. Karnataka
- C. Odisha
- D. Puducherry

Answer: C

Explanation

- India's first thunderstorm research testbed will be established in Balasore, Odisha
 - ✓ It will be established in a collaboration among the Defence Research and Development Organisation (DRDO), Ministry of Earth Sciences, Indian Space Research Organisation (ISRO) and India Meteorological Department (IMD).
- Objective : Minimise human fatalities and loss of property because of the lightening strikes.
- A monsoon Testbed will also be set up near Bhopal in Madhya Pradesh. The monsoon testbed would also be first -of-its -kind.

8. Orobanche is a serious hidden parasitic weed found in

- A. Mustard
- B. Brinjal
- C. Cotton
- D. Rice

Answer: A

Explanation

- It is a hidden parasitic weed in mustard and can cause severe yield loss up to 50% and there is no absolute control measures developed so far.

9. Which of the following statements are correct regarding RNA?

1. It may have been the molecule used to store genetic blueprints in primitive organisms.
2. It is a double-stranded molecule consisting of long chain of nucleotides.
3. It is susceptible to UV damage.
4. It is self replicating.

- A. 1 and 2 only
- B. 1 only
- C. 3 and 4 only
- D. 1, 2, 3 and 4

Answer: B

Explanation

- Only statement id correct.
- RNA is used to transmit genetic information in some organisms and may have been the molecule used to store genetic blueprints in primitive organisms
- It is a single strain helix consisting of shorter chains of nucleotides as compared to DNA
- It is synthesised from DNA on an as-needed basis
- It is relatively resistant to UV damage as compared to DNA

10.Which of the following statement(s) is/are correct?

1. Engorgement is a condition of insufficient breast milk production in women
 2. Kerala is the first state to get a milk bank
- A. 1 only
 - B. 2 only
 - C. Both 1 and 2
 - D. Neither 1 nor 2

Answer: D

Explanation

- Both the statements are incorrect
- Engorgement is when the breast tissue overfills with milk, blood and other fluids. This causes your breasts to feel very full, to become hard and painful and your nipples to appear flattened and tight. Breast engorgement can be severe. It usually occurs if the baby is not feeding properly, so the milk builds up .
- The initiative of the Kerala government is to ensure that breast milk is made available to new born and infants who couldn't be breastfed by their mothers due to various reasons •such as sickness or low production of milk. This is a state-of-art facility that will be opened at the Ernakulam general hospital
- The concept of milk bank had come to India 32 years back but Kerala did not have a milk bank until now. The first human milk bank in the country, it was started on November 27, 1989. The first human milk bank in Asia was established in 1989 in Lokmanya Tilak General Hospital, Mumbai, India, by Dr. Armida Fernandez. Today, the country has 21 milk banks, mostly in the western region.

11. Kufri Sahyadri and Kufri Karan are related to which of the following?

- A. Apples
- B. Walnuts
- C. Potatoes
- D. Saffron

Answer: C

Explanation

- ICAR - CPRI, Ooty developed two disease-resistant potatoes — Kufri Sahyadri and Kufri Karan — hybrid varieties.
- Both these varieties are resistant to commonly affecting diseases like Potato Cyst (Nematode) and Late Blight.

12. Which of the following statement(s) regarding INS Viraat are correct?

1. It was originally a British ship known as HMS Hermes.
2. It participated in Operation Jupiter as a part of Indian Peacekeeping Force in Sri Lanka.
3. It is the world's longest serving warship.

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: D

Explanation

- All statements are correct.
- Supreme Court stayed dismantling of the decommissioned aircraft carrier INS Viraat
- It was in the service of Indian Navy for 30 years before being decommissioned in March 2017
- It was originally a British ship known as HMS Hermes, which was commissioned into the Royal Navy in 1959
 - ✓ India purchased it in 1986
- She had participated in Operation Jupiter as part of the Indian Peacekeeping Force in Sri Lanka. She also took part in various international joint military ex

13. Which of the following statements regarding Vigyan Jyoti Programme are correct

1. The programme was launched by ISRO in December 2019 to encourage girls to take interest in space sciences and build a career in the same
 2. It addresses the underrepresentation of women in various areas of STEM. The programme at first cater to the girls at school level of Class IX to Class XII in order to encourage and empower them to pursue STEM courses
- A. 1 only
B. 2 only
C. Both 1 and 2
D. Neither 1 nor 2

Answer: B

Explanation

- Both the statements are correct
- The second phase of Vigyan Jyoti programme was commenced on the occasion of International Day of Women and Girls in Science on February 11, 2021, which will spread the programme for encouraging girls to take interest in science and build a career in STEM
- The programme has been started at school level for meritorious girls of Class IX to Class XII to encourage and empower them to pursue STEM courses in reputed institutions of the country
- Other women-oriented programmes by DST:
 - ✓ Women Scientists Scheme to help women with career-break
 - ✓ Indo-US Fellowship for Women in STEMM (WISTEMM) program where women scientists can work in research labs of USA.
 - ✓ Consolidation of University Research for Innovation and Excellence in Women Universities (CURIE) programme for improving R&D infrastructure and establishing state-of-the-art research facilities in order to create excellence in S&T in women universities.
 - ✓ Gender Advancement for Transforming Institutions (GATI) program.
 - ✓ Artificial Intelligence (AI) labs in women universities with the goal to foster AI.
 - ✓ innovations and to prepare skilled manpower for AI-based jobs in future.

14. Which of the following is correct about Compressed Natural Gas (CNG)?

1. It is an odourless, colourless and tasteless compound with non-corrosive and non-toxic properties.
 2. Ethane is the main component of CNG.
 3. It is derived from natural gas wells, coal wells, bed methane wells and oil wells.
- A. 1 and 2 only

- B. 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer: C

Explanation

- 2nd statement is correct.
- It is an odourless, colourless and tasteless compound with non-corrosive and non-toxic properties
- Methane is the main component of CNG
- It is very healthy as it easily scatters into the air
- It is derived mainly from natural gas wells, coal wells, bed methane wells and oil wells
- It's more environmentally friendly as it releases less toxic and unnecessary gases than other alternatives, i.e. petrol & diesel
- Union Road Minister launched India's first CNG tractor

15. A group of hereditary diseases that progressively destroys motor neurons leading to muscle weakness is

- A. Down syndrome
- B. Alzheimer's disease
- C. Systemic Lupus Erythematosus
- D. Spinal Muscular Atrophy

Answer: D

Explanation

- Motor neurons are the nerve cells in the brain stem that control essential skeletal muscle activity such as speaking, walking, breathing and swallowing
- Spinal Muscular Atrophy (SMA) is a degenerative neuromuscular genetic disorder that causes progressive weakening of muscles used for head and neck control, sitting, crawling, walking and swallowing
- While considered rare, it is found in 1-in-10000 infants and is the second most common autosomal recessive disorder after cystic fibrosis
- Drug treatments for SMA exist, but require hospital visits for affected children, are administered through a spinal tap, and require maintenance dosing several times a year