



# IAS PARLIAMENT

*Information is a Blessing*

A Shankar IAS Academy Initiative

## MONTHLY PRESTORMING

### JULY 2021

**Shankar IAS Academy™**

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## INDEX

01-07-2021 .....	3
02-07-2021.....	6
03-07-2021.....	10
05-07-2021.....	14
06-07-2021.....	18
07-07-2021.....	22
08-07-2021 .....	26
09-07-2021.....	30
10-07-2021 .....	34
12-07-2021 .....	38
13-07-2021 .....	43
14-07-2021 .....	47
15-07-2021 .....	51
16-07-2021 .....	56
17-07-2021 .....	61
19-07-2021 .....	65
20-07-2021.....	67
21-07-2021 .....	71
22-07-2021.....	75
23-07-2021.....	79
24-07-2021.....	82
27-07-2021.....	86
28-07-2021.....	90
29-07-2021.....	95
30-07-2021.....	99
31-07-2021 .....	103



**01-07-2021**

**1) Consider the following statements with respect to *Revamped Distribution Sector Scheme***

1. It seeks to improve operational efficiencies and financial sustainability of all DISCOMs including Private Sector DISCOMs.
2. Under the Scheme, conditional financial assistance will be provided to DISCOMs for strengthening of supply infrastructure.

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

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

**2) Which of the following statements regarding the GST is/are correct?**

1. Intra state supply of goods and services attract CGST, SGST and IGST.
2. GST aims to widen the tax base in the country.
3. GST will amalgamate all the existing Direct and Indirect Taxes in India.

**Select the correct answer using the code given below:**

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

**3) Why are children more susceptible to air pollution?**

- a. Children breathe slower than adults and so absorb more pollutants
- b. Children breathe more rapidly than adults and so absorb more pollutants
- c. Children have smaller lungs and so absorb pollutants of smaller size

d. Adults are more susceptible to air pollution than Children

**4) Consider the following statements with respect to *Patrode***

1. It is a delicacy made with colocasia leaves that is popular in coastal Karnataka and parts of Maharashtra, Goa and Gujarat.
2. It was recently granted Geographical Indication (GI) tag from the State of Karnataka.
3. Patrode is widely cooked during the rainy season.

**Which of the statements given above are correct?**

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

**5) Consider the following statements with respect to *National Hydrology Project***

1. It is a Central Sector Scheme with 100% grant to implementing agencies on pan India basis.
2. It is supported by the World Bank and has been implemented by the Ministry of Jal Sakthi.

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

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

**6) With reference to *Lucknow pact/session (1916)* consider the following statements**

1. Congress recognized the separate electorates for Muslims.
2. This session was presided by Annie Besant.



3. Tilak and Annie Besant played a key role in Lucknow pact.

Which of the given above statements is/are correct?

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

7) Consider the following statements with respect to *Chambal River*

- 1. It is the biggest tributary of Yamuna and largest of the rivers flowing through Rajasthan.
- 2. It is the natural habitat for Gangetic Dolphin and Freshwater Gharials.

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

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

8) Consider the following statements with respect to *Hispid Hare*

- 1. Its population is restricted only in protected areas (PAs), in southern Nepal and north and north-eastern India.
- 2. It is protected under CITES: Appendix II and listed as Vulnerable under IUCN Red List.

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

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

9) *Bhotia and Anwal* are Indigenous people of which of the following states?

- a. Himachal Pradesh
- b. Arunachal Pradesh
- c. Uttarakhand
- d. Sikkim

10) Consider the following statements with respect to *SMASH 2000 Plus Systems*

- 1. It can be fitted on a rifle and can target drones flying at high speeds.
- 2. It is jointly developed by DRDO and Bharat Electronics.

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

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

### Answers

1. b

- The Union Cabinet, chaired by the Prime Minister, Shri Narendra Modi has recently approved a Reforms-based and Results-linked, Revamped Distribution Sector Scheme.

### Revamped Distribution Sector Scheme

- The Scheme seeks to improve the operational efficiencies and financial sustainability of all DISCOMs/ Power Departments excluding Private Sector DISCOMs.
- The scheme provides conditional financial assistance to DISCOMs for strengthening of supply infrastructure.
- The assistance will be based on meeting pre-qualifying criteria as well as upon achievement of basic minimum benchmarks by the DISCOM evaluated on the basis of agreed evaluation framework tied to financial improvements.
- Implementation of the Scheme would be based on the action plan worked out for each state rather than a “one-size-fits-all” approach.



- Rural Electrification Corporation (REC) and Power Finance Corporation (PFC) have been nominated as nodal agencies for facilitating implementation of the Scheme.

2. a

### Goods & Services Tax

- Intra state supply of goods and services attract only CGST and SGST. While the interstate supply of goods and services attract IGST.
- It amalgamates only the indirect taxes levied by the Centre and States but not all the taxes (which includes direct taxes).

3. b

4. b

- Ministry of AYUSH has recently released a booklet *Traditional Food Recipes from Ayush Systems of Medicine*.
- Patrode is one among the 26 traditional recipes selected by the Ministry while preparing the booklet.

### Patrode

- It is a delicacy made with colocasia leaves that is popular in Malnad, coastal Karnataka and some other parts of the country.
- In addition to Kerala where Patrode is called 'chembila appam', the dish is also prepared in parts of Maharashtra, Goa, Himachal Pradesh, Gujarat and the North East region.
- Patrode is widely cooked in coastal and Malnad belts during the rainy season.
- A variant of colocasia leaves, which grows on tree trunks during the monsoon, is in huge demand for making the dish.
- Iron-rich colocasia leaves help in improving the hemoglobin level.
- The leaves contain phenols, tannins, flavonoids, glycosides and sterols, which help in reducing chronic inflammation such as rheumatoid arthritis.
- The leaves have significant amounts of vitamin C and beta carotene.
- Some among other traditional recipes selected by the Ministry are peya (medicated rice gruel), lajardraka (puffed paddy ginger

granules), amalaki panaka (Indian gooseberry drink), amla squash, takra (buttermilk), khalam' (medicated buttermilk), yusha (medicated soup), rasala (medicated curd), ragi and banana smoothie, and niger seeds laddu.

5. c

- The Secretary, Department of Space & Chairman of ISRO has recently launched the National Hydrology Project or NHP-Bhuvan portal of National Remote Sensing Centre (NRSC).
- The NHP-Bhuvan Portal is a repository of information on the initiatives undertaken by NRSC under NHP with a facility to download the reports and knowledge products being developed by NRSC.

### National Hydrology Project

- It is a Central Sector Scheme with 100% grant to implementing agencies on pan India basis that was started in 2016.
- It is implemented by the Department of Water Resources, River Development & Ganga Rejuvenation (DWR, RD & GR).
- It is supported by the World Bank.
- It aims to improve the extent, quality and accessibility of water resources information and to strengthen the capacity of targeted water resources management institutions in India.

6. b

- This session was presided by Ambica Charan Mazumdar.

7. c

### Chambal River

- The Chambal River, called Charmanvati in ancient times, It lies in the states of Madhya Pradesh, Uttar Pradesh and Rajasthan
- River Chambal, the biggest tributary of Yamuna rises in Vindhyan range near Mhow in Indore District of Madhya Pradesh.
- According to the latest census report prepared by the Madhya Pradesh forest department, the number of dolphins in Chambal river has been reduced by 13% in 4 years.



8. a

**Hispid Hare**

- It is found in Southern foothills of the central Himalayas.
- It is rarely found outside the shelter of the tall grassland habitats in its range.
- It is protected under CITES: Appendix I and Schedule I of Wildlife Protection Act of 1972, and listed as Endangered under IUCN Red list.
- Barnadi wildlife sanctuary was established specifically to protect the Pygmy Hog (*Sus salvanius*) and Hispid Hare (*Caprolagus hispidus*).

9. c

**Bhotia and Anwal**

- Their natural biome is forest and mountain and they involve mainly in cultivation, livestock and gathering.
- They follow the semi-nomadic and transhumance migration pattern.
- Recently these people had found mention in the Indigenous People food system report of Food and Agriculture Organization.
- According to report findings they have reduced access to wild edibles, and facing concerns due to reduced reliance on traditional medicine.

10. b

**SMASH 2000 plus Systems**

- It is manufactured by Israeli based company Sharp Shooter, they are anti-drone systems can be retrofitted onto an AK-47 or any other rifle of a similar make.
- The drone detection can be RF-based or via conventional radars tuned to detect drones or via electro-optic payloads that use thermal imaging.
- The DRDO has designated Bharat Electronics as the lead agency for development and production of much needed anti-drone system for the armed forces.

**02-07-2021****1) With respect to Report on United District Information System for Education Plus (UDISE+) 2019-20, which of the following statement is incorrect?**

- This system of online data collection from the schools was developed by the Department of School Education & Literacy (DoSEL)
- Gross Enrolment Ratio (GER) at all levels of school education has improved in 2019-20 compared to 2018-19
- Pupil Teacher Ratio (PTR) has improved at all levels of school education
- The Gender Parity Index (GPI) at Higher Secondary level has decreased between 2012-13 and 2019-20

**2) Consider the following statements with respect to Indian Ocean Naval Symposium (IONS)**

- It is a biennial event to enhance maritime cooperation among Navies of the littoral states of the Indian Ocean Region (IOR).
- The 7th edition of IONS, 2021 was hosted by the French Navy.
- India, Australia and United Kingdom are members of the forum.

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

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

**3) Consider the following statements with respect to Black carbon (BC)**

- It is a form of particulate matter that results from carbon emissions.
- The Indo-Gangetic plain has a high burden of black carbon with serious implications for regional climate and human health.





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

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

4) **Darbar Move**, a traditional practice which came to an end recently is associated with which of the following regions?

- a. Delhi
- b. Mysore
- c. Jammu & Kashmir
- d. Thiruvananthapuram

5) **Tillanchong Island**, sometimes seen in the news recently, is located in?

- a. Manipur
- b. Sagar Island
- c. Rann of Kutch
- d. Andaman & Nicobar Island

6) Consider the following statements with respect to **ZyCoV-D Vaccine**

1. It is a vaccine that uses a genetically engineered, non-replicating version of a type of DNA molecule known as a 'plasmid'.
2. It is jointly developed by Indian Council of Medical Research (ICMR) and Bharat Biotech

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

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

7) Which of the following statement(s) is/ are correct with respect to **Gravitational waves**

1. Gravitational waves are distortions or 'ripples' in the fabric of space-time caused by some of the most violent and energetic processes in the Universe.
2. They transport energy as gravitational radiation and pass through matter without interacting with it.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to **Hawksbill Turtle**

1. It is the first reptile recorded with the bio fluorescent characteristics.
2. It is listed as vulnerable under the IUCN Red List.

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

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

9) **Global Cybersecurity Index (GCI)** is released by which of the following organizations?

- a. Universal Postal Union (UPU)
- b. International Telecommunication Union (ITU)
- c. World Intellectual Property Organization (WIPO)
- d. Institute of Electrical and Electronics Engineers (IEEE)

10) Consider the following statements with respect to **Kalbeliya Dance**

1. It is generally performed for any joyous celebration.

2. It is only performed by women while the men play the musical instruments.

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

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

## Answers

1. d

- Union Education Minister, Shri Ramesh Pokhriyal 'Nishank' has recently released the Report on United Information System for Education Plus (UDISE+) 2019-20 for School Education in India.

## Highlights of the Report

- As per the UDISE+ report 2019-20, Gross Enrolment Ratio at all levels of school education has improved in 2019-20 compared to 2018-19.
- Pupil Teacher Ratio (PTR) has improved at all levels of school education.
- According to the report, in 2019-20, enrolment of girls from primary to higher secondary is more than 12.08 crore.
- This is a substantial increase by 14.08 lakh compared to 2018-19.
- Between 2012-13 and 2019-20, the Gender Parity Index (GPI) at both Secondary and Higher Secondary levels have improved.
- The UDISE+ report shows a remarkable improvement in the number of schools with functional electricity, with functional computers, internet facility in 2019-20 over the previous year.
- Another major improvement is seen in the number of schools with hand wash facility.
- In year 2019-20, more than 90% schools in India had hand wash facility as compared to only 36.3% in 2012-13.

## UDISE+ System

- It is a system of online data collection from the schools which was developed in the year 2018-19 to overcome the issues related to manual data filling in paper format and subsequent feeding at the block or district level, which was in practice in the UDISE data collection system from 2012-13.
- The present publication relates to UDISE+ data for the reference year 2019-20.

2. d

- The 7th edition of Indian Ocean Naval Symposium (IONS) was held recently.
- It is a biennial event hosted by the French Navy at La Reunion.

## Indian Ocean Naval Symposium (IONS)

- It was conceived by the Indian Navy in 2008.
- It seeks to enhance maritime cooperation among Navies of the littoral states of the IOR by providing an open and inclusive forum for discussion of regionally relevant maritime issues that would lead to common understanding on the way ahead.
- There are 24 members and 8 observers in IONS.
- Australia, United Kingdom, India, Saudi Arabia Timor Leste, UAE are members of the forum.
- China, Germany, Italy, Japan, Madagascar, Netherlands, Russian and Spain are observer Countries of IONS forum.
- The chairmanship of IONS has been held by India (2008-10), UAE (2010-12), South Africa (2012-14), Australia (2014-16), Bangladesh (2016-18) and Islamic Republic of Iran (2018-21).
- France has assumed the Chairmanship on 29 Jun 21 for a two-year tenure.
- IONS Conclave of Chiefs (CoC) is the decision-making body at the level of Chiefs of Navies, which meets biennially.
- 6th IONS and CoC was conducted by Iran Navy in April 2018 at Tehran.
- Owing to the pandemic, the CoC 2021, will be hosted by French Navy later this year.

3. c





- According to a recent study, black carbon emissions were most associated with premature mortality.
- The study was funded by the Department of Science and Technology (DST).

#### **Black carbon (BC)**

- It is a form of particulate matter that results from carbon emissions.
- The Indo-Gangetic plain has a high burden of black carbon with serious implications for regional climate and human health.
- Several cities in this belt routinely find themselves at the top of the list of the most polluted cities in India as well as the world.
- Black carbon results from incomplete burning of fossil fuel and studies have previously linked it to global warming.
- It's a relatively short-lived pollutant in the atmosphere but influences cloud formation and atmospheric heat absorption processes.

4. c

- *Darbar Move, which begins in the year 1872 has now come to an end.*
- The administration served notice to employees to vacate the 'Darbar Move' related accommodations in three weeks in Jammu and Srinagar.

#### **Darbar Move**

- It is a 149-year-old biannual tradition of shifting capitals between Srinagar and Jammu.
- By shifting, hundreds of official files were physically moved in trucks on the treacherous Jammu-Srinagar highway.
- It was started during the Dogra monarch Maharaja Ranbir Singh in 1872.
- The tradition was continued after 1947 by J&K's political class, as it acted as a major bridge and a space for interaction between two diverse linguistic and cultural groups of Kashmir and Jammu regions.

5. d

- *Indian Coast Guard (ICG) located and rescued a distressed fishing boat off the Tillangchong Island recently.*

#### **Tillangchong Island**

- It is an island in the Nicobar district of Andaman and Nicobar Islands, India.
- The island is a part of the Nicobar Islands chain, located in the northeast Indian Ocean between the Bay of Bengal and the Andaman Sea.

6. a

#### **ZyCov-D Vaccine**

- ZyCov-D is a "plasmid DNA" vaccine — or a vaccine that uses a genetically engineered, non-replicating version of a type of DNA molecule known as a 'plasmid'.
- The plasmids in this case are coded with the instructions to make the spike protein of SARS-CoV-2, the coronavirus that causes Covid-19.
- It is developed by Zydus Cadila with the support of the central government's Department of Biotechnology and the Indian Council of Medical Research (ICMR).
- If approved by the regulator, ZyCov-D will be the world's first DNA vaccine against infection with SARS-CoV-2.

7. c

#### **Gravitational waves**

- Gravitational waves were first predicted in 1916 by Albert Einstein on the basis of his Theory of General Relativity.
- Strongest sources of gravitational waves are among enigmatic objects in our universe like black holes, supernova, neutron stars and Big Bang.
- Recently researchers has discovery of a new source of gravitational waves that is collisions between Neutron Star and Black Hole.

8. a

#### **Hawksbill Turtle**

- There are five species in Indian waters i.e. Olive Ridley, Green turtle, Loggerhead, Hawksbill, Leatherback.
- Hawksbill sea turtles have a wide range, found predominantly in tropical reefs of the Indian, Pacific, and Atlantic Oceans.

- The Hawksbill turtle is listed as 'Critically Endangered' on the IUCN Red List of Threatened Species.
- They are protected in Indian Wildlife Protection Act of 1972, under Schedule I.

9. b

**Global Cybersecurity Index (GCI) 2020**

- It is a composite index produced, analysed and published by the International Telecommunication Union (ITU).
- It is a trusted reference that measures the commitment of countries to cybersecurity at a global level.
- The ranking is based on five pillars i.e. legal measures, technical measures, capacity building measures, cooperation and organisational measures.
- The US was ranked on the first spot, indicating highest commitment to cybersecurity.
- India improved its ranking from 47 and has entered the top 10 of a global cybersecurity ranking of countries.

10. c

**Kalbeliya Dance**

- It is associated with a Rajasthani tribe of the same name.
- It was included in the United Nations Educational, Scientific and Cultural Organizations (UNESCO) list of Intangible Cultural Heritage (ICH) in 2010.
- The dance form consists of swirling; graceful movements that make this dance a treat to behold.
- The movements associated with the Kalbeliya also make it one of the most sensuous forms of folk dance in India.

**03-07-2021**

**1) Archaeologists have recently encounter distinct traces of three cultural phases at the excavation site at Durgadevi village. The Durgadevi village is located in?**

- a. Kerala

- b. Odisha
- c. Tamil Nadu
- d. Andhra Pradesh

**2) Consider the following statements with respect to *Laboratory for the Conservation of Endangered Species (LaCONES)***

1. It is a part of Centre for Cellular and Molecular Biology (CCMB) under the Council of Scientific and Industrial Research (CSIR).
2. India's 1st National Wildlife Genetic Resource Bank (NWGRB) is being functioning at LaCONES, Hyderabad.

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

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

**3) Consider the following statements with respect to *Gender Samvaad***

1. It aims to generate greater awareness on gender related interventions under Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) across the country.
2. It was organised by the Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) and Ministry of Rural Development's DAY-NRLM.

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

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

**4) Consider the following statements with respect to *Asian elephants***



1. Adult male Asian elephants are less social than females.
2. Old males were found mostly in the company of their age peers and less frequently with young males.

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

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

5) Global Peace Index Report, 2021, was recently published by?

- a. Economist Intelligence Unit
- b. Stockholm International Peace Research Institute
- c. UN Interregional Crime and Justice Research Institute
- d. None of the above

6) Consider the following statements with respect to *Heat Dome*

1. It is essentially a mountain of warm air built into a very wavy jet stream, with extreme undulations.
2. It develops when there is a large poleward shift in the jet stream.

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

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

7) Which of the following statement(s) is/are *incorrect* with respect to *LEAF Coalition*

1. It offers the financial assurance needed for countries to start prioritizing policies that reduce deforestation.

2. It is an initiative with all the G20 Nations as its members.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Transgender Persons (Protection of Rights) Rules 2020*

1. Under the Rules, an application to declare gender is to be made to the District Magistrate.
2. Under the rules transgender persons needs to go through a medical examination for declaring their desired sex.

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

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

9) *Taal Volcano* is located in which of the following countries?

- a. Indonesia
- b. Japan
- c. Italy
- d. Philippines

10) Consider the following statements with respect to *Trojan Asteroids*

1. It is a type of Asteroid that share an orbit with a larger planet.
2. NASA has reported the presence of Jupiter, Neptune and Mars Trojans and an Earth Trojan as well.

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

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

## Answers

1. b

- The Odisha Institute of Maritime and South East Asian Studies (OIMSEAS), an archaeological wing of the State government, has recently discovered a 4,000-year-old settlement and ancient artifacts in **Durgadevi village** in Remuna tehsil, Balasore district, **Odisha**.
  - According to the ASI, the site has a circular mud fortification of about 4.9 km between the Sona River to the south and the Burahabalang River on its north-eastern margin.
  - Archaeologists have come across distinct traces of three cultural phases at the excavation site
1. The Chalcolithic (2000 BCE to 1000 BCE)
  2. The Iron Age (1000 BCE to 400 BCE) and
  3. The Early Historic Period (400 BCE to 200 BCE)

2. c

- The Vice President of India has recently visited CCMB's LaCONES (Laboratory for the Conservation of Endangered Species) facility.

### Project LaCONES

- In order to support effective conservation measures include both in situ and ex situ using biotechnological tools and techniques in an innovative manner, LaCONES was established.
- Project LaCONES was established in 1998 with the support from Dept. of Biotechnology (DBT), Central Zoo Authority of India (CZA), Council of Scientific and Industrial Research (CSIR) and Government of Andhra Pradesh.
- The laboratory was itself established in 2007.

- This laboratory would strive to promote excellence in conservation biotechnology and serve for conservation of endangered wildlife in India.
- National Wildlife Genetic Resource Bank (NWGRB) was established in 2018 at Centre for Cellular and Molecular Biology's (CCMB's) Laboratory of Conservation of Endangered Species (LaCONES) facility in Hyderabad, Telanagana.
- It is India's first genetic resource bank where genetic material will be stored for posterity which will further the cause of conservation of endangered and protected animals.

3. c

- The Second Gender Samvaad was recently organised by the Ministry of Rural Development.
- This edition of the Gender Samvaad, held virtually, focused on the best practices of various states and from women's collectives in responding to the COVID-19 crisis.

### Gender Samvaad Initiative

- It is a joint attempt between DAY-NRLM and the Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE).
- It aims to create a common platform to share experiences emerging from this effort and to generate greater awareness on gender related interventions under DAY-NRLM across the country.

4. c

- The Asian elephant is a charismatic species with a long history of co-existence with humans.
- Yet works on male societies of wild elephants based on long-term observations are rare.
- To fill this gap, researchers from Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), an autonomous Institute of the Department of Science and Technology studied associations of male Asian elephants Nagarhole and Bandipur National Parks.

### Highlights of the Study

- The time spent by male Asian elephants in all-male and mixed-sex groups depended on the age of the male.
- Adult Asian male elephants preferred to spend their time alone than in mixed-sex or in all-male groups.
- Besides, old males were found mostly in the company of their age peers and less frequently with young males (15 to 30 years of age).
- Also, young males did not disproportionately initiate associations with old males.
- Adult male Asian elephants are less social than females.
- They enter musth -- a mate-searching strategy for old (above 30 years of age) males, annually.
- The researchers hypothesised that when the adult males enter musth, dominance relationships may affect the number of mating opportunities they procure.
- Hence, it might be more crucial for old males than for young males to test strength with each other and settle dominance relationships during their nonmusth time.
- On the other hand, since young males associated less with females during musth than non-musth time, they might also be using their non-musth time to search for mating opportunities.

5. d

- *The Institute for Economics and Peace (IEP) has recently launched the Global Peace Index (GPI), 2021.*

#### **Global Peace Index (GPI), 2021**

- It is the 15th edition of the Global Peace Index (GPI), which ranks 163 independent states and territories according to their level of peacefulness.
- It was prepared by the Institute for Economics and Peace (IEP).
- Iceland remains the most peaceful country in the world, a position it has held since 2008.
- It is joined at the top of the index by New Zealand, Denmark, Portugal, and Slovenia.

- Afghanistan is the least peaceful country in the world for the fourth consecutive year, followed by Yemen, Syria, South Sudan, and Iraq.
- India has improved its ranking from 137 to 135 out of 163 countries.

6. c

#### **Heat Dome**

- The causes of heat dome can be understood by considering Pacific Ocean to a large swimming pool in which the heater is turned on.
- The portions of the pool close to the heating jets will warm up faster once the heater is on and therefore, the temperature in that area will be higher.
- In the same way, the western Pacific Ocean's temperatures have increased in the past few decades and are relatively more than the temperature in the eastern Pacific.
- The strong change in ocean temperature from the west to the east is what a team of scientists believe is the reason for the heat dome.

7. b

#### **LEAF Coalition**

- It is an ambitious new public-private initiative designed to accelerate climate action by providing results-based finance to countries committed to protecting their tropical forests.
- It is an initiative with initial participation from the governments of Norway, the United Kingdom, and the United States.
- It is a step towards concretising the aims and objectives of the Reducing Emissions from Deforestation and Forest Degradation (REDD+) mechanism.

8. a

#### **Transgender Persons (Protection of Rights) Rules 2020**

- In India, the rights of transgender persons are governed by the Transgender Persons (Protection of Rights) Act, 2019 and the Transgender Persons (Protection of Rights) Rules, 2020.
- Under the Rules, an application to declare gender is to be made to the District Magistrate,





Parents can also make an application on behalf of their child.

- District Magistrate will “subject to the correctness of the applicant’s particulars, get the application processed based on the affidavit submitted declaring the gender identity of any person, without any medical or physical examination.

9. d

### **Taal Volcano**

- It is located on south of Manila in Philippines.
- It is in a caldera system located in southern Luzon Island.
- It is one of the most active volcanoes in a nation hit periodically by eruptions and earthquakes due to its location on the Pacific "Ring of Fire".
- It is formed by the subduction of the Eurasian Plate underneath the Philippine Mobile Belt.

10. c

### **Trojan Asteroids**

- Asteroids are rocky objects that orbit the Sun, much smaller than planets.
  - They are also called minor planets, Asteroids are divided into three classes.
1. First group of Asteroids found in the main asteroid belt between Mars and Jupiter, which is estimated to contain somewhere between 1.1-1.9 million asteroids.
  2. The second group is that of trojans, which are asteroids that share an orbit with a larger planet.
  3. The third classification is Near-Earth Asteroids (NEA), which have orbits that pass close by the Earth.

**05-07-2021**

1) Consider the following statements with respect to **Bamboo Oasis on Lands in Drought (BOLD)**

1. The project serves the combined national objectives of reducing desertification and providing livelihood

and multi-disciplinary rural industry support.

2. It is a unique scientific exercise initiated by the Ministry of Tribal Affairs.

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

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

2) Consider the following statements with respect to **NIPUN Bharat**

1. It creates an enabling environment to accomplish that every child achieves the desired learning competencies in reading, writing and numeracy by the end of Grade 3, by 2026-27.
2. It will be implemented by the Department of School Education and Literacy under the aegis of the centrally sponsored Samagra Shiksha Scheme.

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

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

3) Consider the following statements with respect to **Clinical Trials Registry- India (CTRI) Portal**

1. It is an online, free and searchable system for the prospective registration of all clinical studies being conducted in India.
2. The portal, hosted at the ICMR's National Institute of Medical Statistics, is a primary register of Clinical Trials under WHO's International Clinical Trials Registry Platform (ICTRP).
3. The trial registration in the CTRI was initiated as a voluntary measure and has been made mandatory, since 2009 by





the Drugs Controller General India (DCGI).

Which of the statements given above are correct?

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

4) Consider the following statements with respect to *Sea Snot*

- 1. It is a thick, foamy layer of marine mucilage formed by the waste ammonia released from dead fishes present in the water.
- 2. The Marmara Sea which connects Adriatic Sea with the Mediterranean Sea was recently blanketed with this Sea snot.

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

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

5) *Panchmuli Lake*, sometimes seen in the news recently, was located near?

- a. Bhakra Nangal Dam
- b. Sardar Sarovar Dam
- c. Nagarjuna Sagar Dam
- d. Krishnarajasagar Dam

6) Consider the following statements with respect to *Ladakh Autonomous Hill Development Council*

- 1. The members of the council are elected and have executive powers over the allotment, use and occupation of land vested in them by the Centre.

- 2. The AHDCs have the powers to collect some local taxes, such as parking fees, taxes on shops etc.

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

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

7) Which of the following statement(s) is/are *incorrect* with respect to *Spinner Dolphin*

- 1. It is famous for its acrobatic displays in which it spun along its longitudinal axis as it leapt through the air.
- 2. They are categorised as 'Critically Endangered' on the International Union for the Conservation of Nature's (IUCN) Red List.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Fly Ash*

- 1. It is collected from the exhaust gases by electrostatic precipitators or bag filters.
- 2. Its chemical composition includes calcium silicates, calcium aluminate and calcium aluminoferrite.

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

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

9) **Valmiki Tiger Reserve (VTR)** is located in which of the following states?

- a. Uttar Pradesh
- b. West Bengal
- c. Himachal Pradesh
- d. Bihar

10) Consider the following statements with respect to **Financial Stability Report (FSR)**

1. It is an annual report jointly released by NITI Aayog and Department of Economic Affairs.
2. It highlights the Gross Non-Performing Asset (GNPA) ratio of India's Scheduled Commercial Banks (SCBs) may rise high.

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

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

## Answers

1. a

- *Project BOLD (Bamboo Oasis on Lands in Drought) has been recently launched by the Khadi and Village Industries Commission (KVIC).*
- It is the first of its kind exercise in India which was launched from the tribal village NichlaMandwa in Udaipur, Rajasthan.

### Project BOLD

- It is a unique scientific exercise serving the combined national objectives of reducing desertification and providing livelihood and multi-disciplinary rural industry support.
- It seeks to create bamboo-based green patches in arid and semi-arid land zones.
- 5000 saplings of special bamboo species – BambusaTulda and BambusaPolymorpha specially brought from Assam – have been

planted over 25 bigha (16 acres approx) of vacant arid Gram Panchayat land.

- KVIC has thus created a world record of planting the highest number of bamboo saplings on a single day at one location.
- The project is aligned with Prime Minister Shri Narendra Modi's call for reducing land degradation and preventing desertification in the country.
- The initiative has been launched as part of KVIC's "Khadi Bamboo Festival" to celebrate 75 years of independence "Azadi ka Amrit Mahotsav".

2. c

- *The Department of School Education and Literacy, Ministry of Education will launch National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat).*

### NIPUN Bharat

- The vision of NIPUN Bharat Mission is to create an enabling environment to ensure universal acquisition of foundational literacy and numeracy, so that every child achieves the desired learning competencies in reading, writing and numeracy by the end of Grade 3, by 2026-27.
- NIPUN Bharat will be implemented by the Department of School Education and Literacy and a five-tier implementation mechanism will be set up at the National- State- District-Block- School level in all States and UTs, under the aegis of the centrally sponsored scheme of Samagra Shiksha.

3. d

- *To make Ayurveda based clinical trials, a worldwide visibility, the Ayurveda dataset on CTRI Portal will be launched online by the Union AYUSH Minister Shri Kiren Rijiju.*
- This Ayurveda Dataset of CTRI has been jointly developed by ICMR and Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of Ayush.
- Until now the clinical trials in Ayurveda were dependent on terminology borrowed from modern medicine.

- The Minister will also launch four more Portals, AMAR, SAHI, e-MEDHA and RMIS.
- All of these four portals are primarily developed by CCRAS while RMIS is a collaborative effort of ICMR and CCRAS.

#### **Clinical Trials Registry - India (CTRI)**

- It was launched in July 2007 and has been managed by the ICMR-National Institute of Medical Statistics, New Delhi, India.
- It is an online, free and searchable system for the prospective registration of all clinical studies being conducted in India.
- In addition, the CTRI also registers clinical studies being conducted in countries which do not have a Primary Registry of their own.
- It is a primary register of Clinical Trials under WHO's International Clinical Trials Registry Platform (ICTRP).
- Initiated as a voluntary measure, since 15th June 2009, trial registration in the CTRI has been made mandatory by the Drugs Controller General India (DCGI).

4. d

- *Over the past few months, Turkey's Marmara sea has been facing an outbreak of sea snot.*
- The Marmara Sea that connects the Black Sea to the Aegean Sea has been blanketed with 'sea snot' causing new environmental concerns.

#### **Sea Snot**

- Sea-snot is a thick, foamy layer of marine mucilage formed from the algae present in the water.
- They are a threat to marine life and the fishing industry.
- It was first reported in Turkey in 2007.
- However, the current outbreak is the largest on record.
- The mucilage is now covering the surface of the sea and has spread to 80-100 feet below the surface, posing a threat to the marine ecosystem.

5. b

- *As many as 194 crocodiles have been relocated from the Panchmuli lake, near the*

*Statue of Unity in Narmada district, Gujarat, in the last two years for the safety of tourists who come to enjoy boat rides there.*

#### **Panchmuli Lake**

- The lake, also known as 'Dyke-3' of the Sardar Sarovar Dam, was developed for tourists visiting the Statue of Unity.
- The lake is situated near 182-metre tall statue of Sardar Vallabhbhai Patel in Kevadia.

6. c

#### **Ladakh Autonomous Hill Development Council**

- The Sixth Schedule is a provision of Article 224(A) of the Constitution, originally meant for the creation of autonomous tribal regions in Assam, Meghalaya, Mizoram and Tripura.
- The Hill councils under Article 224(A) provision have legislative powers.
- Leh and Kargil have separate Autonomous Hill Development Councils, set up under the Ladakh Autonomous Hill Development Councils Act, 1997, however this AHDC have no legislative powers.

7. b

#### **Spinner Dolphin**

- The spinner dolphin lives in nearly all tropical and subtropical waters between 40°N and 40°S.
- The species primarily inhabits coastal waters, islands, or banks.
- They are categorised as 'Data Deficient' on the International Union for the Conservation of Nature's (IUCN) Red List.
- They are also included in Appendix I of the Convention on International Trade in Endangered Species and in Appendix II of the Convention on Migratory Species.

8. c

#### **Fly Ash**

- It is a by-product from burning of coal in electric power generating plants.
- It is called fly ash because it is transported from the combustion chamber by exhaust gases.

- The Fly Ash generated at NTPC stations is ideal for use in the manufacture of Cement, Concrete, Concrete Products, Cellular Concrete products and for Bricks / Blocks / Tiles.

9. d

**Valmiki Tiger Reserve (VTR)**

- It is located at the India-Nepal border in the West Champaran district of Bihar.
- Situated in the Gangetic Plains bio-geographic zone of the country, the forest has a combination of bhabar and terai tracts.
- Tharu', a scheduled tribe, is the dominant community in the landscape of the Valmiki National Park.
- Recently, 150 vultures were seen in the Valmiki Tiger Reserve (VTR), Bihar, which has prompted a vulture conservation plan in the protected region of VTR.

10. b

**Financial Stability Report (FSR)**

- The FSR which is published biannually reflects the collective assessment of the Sub-Committee of the Financial Stability and Development Council (FSDC - headed by the Governor of RBI) on risks to financial stability and the resilience of the financial system.
- The Report also discusses issues relating to development and regulation of the financial sector.
- The Gross Non-Performing Asset (GNPA) ratio of India's Scheduled Commercial Banks (SCBs) may climb by the end of 2021-22 to as much as 11.2% under a severe stress scenario, from 7.48% in March 2021.
- The GNPA ratio of SCBs may increase to 9.8% by March 2022 under the baseline scenario.

**06-07-2021**

**1) Consider the following statements**

- Appointments and promotions of district judges in any State shall be made by the Governor of the State in consultation with the High Court.

- Parliament is empowered to make laws for the creation of one or more All-India Services, including an All India Judicial Service (AIJS).

- All India Judicial Service (AIJS) shall not include any post inferior to that of a district judge.

**Which of the statements given above are correct?**

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

**2) Consider the following statements with respect to Open Network for Digital Commerce (ONDC)**

- It seeks to digitize the entire value chain, standardize operations, and enhance value for consumers.
- It is an initiative of Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry.

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

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

**3) Consider the following statements with respect to Green Passport**

- It is in the form of a digital QR code which attests that a person has been vaccinated against COVID-19.
- It is an initiative of United States of America (USA) to ban the unvaccinated people of any country.

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

- 1 only
- 2 only



- c. Both 1 and 2
- d. Neither 1 nor 2

4) Which of the following are the main factors governing inter-annual variations of South West Monsoon?

1. Indian Ocean Dipole (IOD)
2. North Atlantic Oscillation (NAO)
3. Pacific Decadal Oscillations (PDO)
4. El Nino Southern oscillation (ENSO)

Select the correct answer using the codes given below:

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

5) Consider the following statements with respect to *Strobilanthes Reptans*, sometimes seen in the news recently

1. It is an invasive species in India, which belongs to the Indo-Pacific Islands.
2. It appears ornamental and has not had any adverse effect on indigenous flora so far.

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

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

6) Consider the following statements with respect to *Auroras*

1. Auroras are caused when charged particles ejected from the Sun's surface called the solar wind enter the Earth's atmosphere.
2. In the northern part of our globe, the polar lights are called aurora borealis

and in the south, they are called aurora australis.

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

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

7) Which of the following statement(s) is/ are correct with respect to *Arctic's Last Ice Area*

1. It expands from Greenland's northern coast to the western part of the Canadian Arctic Archipelago.
2. Penguins are dependant of this area to build dens for their offspring.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Independent Directors*

1. Independent directors can be appointed only through a special resolution passed by shareholders.
2. A listed company will be required to disclose the resignation letter of an independent director.

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

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

9) *Harit Dhara Feed Supplement* developed by ICAR can be used for which of the following purposes?



- a. Cut down cattle methane emissions
- b. Improve carbohydrate fermentation
- c. Promote digestion in Cattle
- d. Prevent microbial diseases in cattle

**10) Consider the following statements with respect to *Common Palm Civets***

- 1. They are native to regions within and around Asia, ranging as far east as the Philippines and as far west as Kashmir.
- 2. It is listed as Critically Endangered under IUCN Red list.

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

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

## Answers

1. d

- A dichotomy exists with regard to Articles 233 and 312.
- Article 233(1) of the Constitution lays down that “appointments of persons to be, and the posting and promotion of, district judges in any State shall be made by the Governor of the State in consultation with the High Court exercising jurisdiction in relation to such State”.
- The 42nd Constitutional amendment in 1976 amended Article 312 (1) empowering Parliament to make laws for the creation of one or more All-India Services, including an All India Judicial Service (AIJS), common to the Union and the States.
- However, Clause 3 of Article 312 places a restriction that such a service shall not include a post inferior to that of a district judge.
- The amendment also brought about a significant change in the Seventh Schedule — Entry 3 of List II in its entirety was placed as Entry 11A in List III.

2. c

- Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry has initiated a project on Open Network for Digital Commerce (ONDC).
- The task has been assigned to Quality Council of India (QCI).
- An advisory council has been recently constituted to advise the Government on measures needed to design and accelerate adoption of ONDC.
- Nandan M Nilekani, the co-founder and non-executive chairman of Infosys, has been included in the 9-member advisory council.

### **Open Network for Digital Commerce (ONDC)**

- It aims at promoting open networks developed on open sourced methodology, using open specifications and open network protocols independent of any specific platform.
- ONDC is expected to digitize the entire value chain, standardize operations, promote inclusion of suppliers, derive efficiencies in logistics and enhance value for consumers.

3. a

### **EU Digital COVID Certificate (EUDCC)**

- The European Union has recently implemented the EU Digital COVID Certificate (EUDCC) or the “Green Passport”.
- It allows ease of intra-European travel for passengers who have taken one of four vaccines ‘recognised’ by the European Medicines Agency (EMA).
- The certificate excludes Indian-made Covishield and Covaxin, among others.
- The move led to a sharp protest from India, as well as the African Union, as concerns grow over vaccine passports that discriminate against travellers from developing countries with limited access to vaccines.
- The “green pass” is not compulsory.
- However, those who don’t possess the certificate will be subject to the usual travel restrictions and quarantine rules which are in effect in every country.



4. b

### **Inter annual Variations of South West Monsoon**

- The southwesterly wind flow occurring over most parts of India and Indian Seas gives rise to southwest monsoon over India from June to September.
- Interannual variations are the variations on the annual cycle of the monsoon producing anomalously wet or dry years.
- The major factors governing interannual variation of south west monsoon are **El nino Southern oscillation (ENSO) and Indian Ocean Dipole (IOD)**.
- Other **contributing factors** are North Atlantic Oscillation (NAO) and Pacific Decadal Oscillations (PDO).

5. b

- A *species, Strobilanthes Reptans*, recorded in India as Plant was invasive weed elsewhere.
- The species was a new addition to the flora of India and appears ornamental.
- It has earned the Indian tag with the reputation of being an invasive weed in the Indo-Pacific islands.
- The plant has not had any adverse effect on indigenous flora as it is restricted to a single locality measuring less than 1 sq. km.
- Therefore, in the current scenario, no action needs to be taken to control its spread.

### **Strobilanthes Reptans**

- Researchers have come across this plant during a 2019 trip to Tipi in Arunachal Pradesh's West Kameng district.
- It was found growing up to 20 cm tall on grassy hill slopes at 150 metres above mean sea level.
- It sported tubular white or pale violet flowers with darker veins from June to September, and yielded fruit from July to December.
- Its cultivation in India could not be traced as the plant is a little-known ornamental.

- How the plant reached Tipi needs to be studied and because it was encountered in a semi-disturbed area, there is evidence for its escape (to other parts) and naturalisation.
- The researchers said the plant could possibly have escaped from cultivation from Myanmar, Thailand, Laos, Vietnam, Malaysia or Sri Lanka, where it has naturalised.
- The plant has also been recorded in Taiwan, Ryukyu islands of Japan, northern Australia, Singapore, Hawaii and a few other countries.

6. c

### **Auroras**

- Auroras has particles that are harmful, and our planet is protected by the geomagnetic field, which preserves life by shielding us from the solar wind.
- However, at the north and south poles, some of these solar wind particles are able to continuously stream down, and interact with different gases in the atmosphere to cause a display of light in the night sky.
- This display, known as an aurora, is seen from the Earth's high latitude regions (called the auroral oval), and is active all year round.

7. a

### **Arctic's Last Ice Area**

- The only place that would be able to withstand a warming climate would be that area of ice which is called the "Last Ice Area".
- It was thought to be able to help ice-dependent species as ice in the surrounding areas melted away.
- The area is used by polar bears to hunt for seals who use ice to build dens for their offspring.
- Penguins live almost exclusively in the Southern Hemisphere, with only one species, the Galápagos penguin, found north of the Equator.

8. c

### **Independent Directors**

- The Securities and Exchange Board of India (Sebi) has approved stricter norms related to appointment of independent directors.



- For appointment of Independent Directors a special resolution requires 75% of votes in favour to be passed.
- The Companies Act, 2013 has mandated all listed public companies to have at least one-third of the total Directors to be independent.

9. a

### **Harit Dhara Feed Supplement**

- ICAR has developed an anti-methanogenic feed supplement 'Harit Dhara' (HD), which can cut down cattle methane emissions by 17-20% and can also result in higher milk production.
- HD decreases the population of protozoa microbes in the rumen, responsible for hydrogen production and making it available to the archaea (structure similar to bacteria) for reduction of CO<sub>2</sub> to methane.
- It has been made from tannin-rich plant-based sources, Tropical plants containing tannins, bitter and astringent chemical compounds, are known to suppress or remove protozoa from the rumen.
- Fermentation after using HD will help produce more propionic acid, which provides more energy for lactose (milk sugar) production and body weight gain.

10. b

### **Common Palm Civets**

- The common palm civet is a small mammal belonging to the family Viverridae.
- According to the IUCN, Asian palm civets are of little concern because they have a wide distribution, large populations, are highly adaptable, and have a stable population trend.
- Their long, stocky body is covered with coarse, shaggy hair that is usually grey in colour.
- It is thought to lead a solitary lifestyle, except for brief periods during mating.

07-07-2021

**1) Which of the following countries are not parts of Organization of the Petroleum Exporting Countries Plus (OPEC+)?**

1. India
2. Russia
3. Malaysia
4. Australia
5. South Sudan

**Select the correct answer using the codes given below:**

- a. All except 1
- b. 1 and 4 only
- c. 1, 3 and 4 only
- d. 2, 3 and 5 only

**2) With respect to Matsya Setu App, consider the following statements:**

1. It is an application software that ensures seamless and effective dissemination of alerts and other important disaster-related information to the fishermen who venture out deeper into the seas.
2. It has been developed by the Indian National Centre for Ocean Information Services (INCOIS) and Airport Authority of India (AAI).

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

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

**3) In India, the Ministries/Departments of the Government are created by the President on the advice of the Prime Minister under which of the following?**

- a. Article 75 of Indian Constitution
- b. The Representation of Peoples Act, 1951
- c. Government of India (Allocation of Business) Rules, 1961
- d. Rules of Procedure and Conduct of Business in the Lok Sabha



4) With respect to Cobra Lily, consider the following statements:

1. It is an extinct plant species, once found in Shola grasslands of Western Ghats.
2. Podwarshk is an embroidery motif done by Khasi tribes of Meghalya, which resembles the cobra lily.

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

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

5) *Maitree Thermal Power project* is a coal-fired power station, jointly developed by India and?

- a. Nepal
- b. Sikkim
- c. Sri Lanka
- d. Bangladesh

6) Consider the following statements with respect to *Anti-Dumping Duty*

1. In the long-term, anti-dumping duties can reduce the international competition of domestic companies producing similar goods.
2. The use of anti-dumping measures as an instrument of fair competition is permitted by the World Trade Organisation.

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

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

7) Which of the following statement(s) is/are *incorrect* with respect to *Accredited Investors*

1. They are wealthy investors who will be allowed to invest in riskier products, not usually allowed to individuals.
2. They will be given the flexibility to invest in amount less than minimum investment mandated in SEBI rules.

Select the correct answer using the codes given below:

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

8) *Tillari Conservation Reserve* is located in which of the following states?

- a. Kerala
- b. Gujarat
- c. Madhya Pradesh
- d. Maharashtra

9) Consider the following statements with respect to *Sir Chettur Sankaran Nair*

1. In 1915, he became part of the Viceroy's Council, put in charge of the education portfolio.
2. In 1919, post the massacre of Jallianwala Bagh, he resigned from the Viceroy's Council in protest.

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

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

10) Consider the following statements with respect to *King Cobra*

1. They live mainly in the rain forests and plains of India, southern China, and Southeast Asia.
2. They are listed as least concern under IUCN Red list.

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

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

## Answers

1. b

- OPEC+ ministers called off oil output talks after the recent clash when the United Arab Emirates (UAE) balked at a proposed eight-month extension to output curbs.

### Organization of the Petroleum Exporting Countries (OPEC)

- It is an intergovernmental organization of 13 countries.
- Founded on 14 September 1960 in Baghdad by the five members constitutes Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela.
- In addition to formal OPEC members, 10 additional oil exporting countries form the OPEC+.

### OPEC+ countries excluding OPEC

- Russia, Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, South Sudan, and Sudan

2. d

- Union Minister for Fisheries, Animal Husbandry and Dairying, Shri Giriraj Singh, has recently launched the Online Course Mobile App "Matsya Setu".

### Matsya Setu App

- It is an online course app that aims to disseminate the latest freshwater aquaculture technologies to the aqua farmers of the country.

- The app was developed by the ICAR-Central Institute of Freshwater Aquaculture (ICAR-CIFA), Bhubaneswar, with the funding support of the National Fisheries Development Board (NFDB), Hyderabad.
- Matsya Setu app has species-wise/ subject-wise self-learning online course modules, where renowned aquaculture experts explain the basic concepts and practical demonstrations on breeding, seed production and grow-out culture of commercially important fishes like carp, catfish, scampi, murrel, ornamental fish, pearl farming etc.
- Better Management Practices to be followed in maintaining the soil & water quality, feeding and health management in aquaculture operations were also provided in the course platform.

### GEMINI

- It is the satellite-based alert system that ensures seamless and effective dissemination of alerts and other important disaster-related information to the fishermen who venture out deeper into the seas.
- It has been developed by the Indian National Centre for Ocean Information Services (INCOIS) and Airport Authority of India (AAI).

3. c

- The Union Government has recently created a new **Ministry of Cooperation**.
- The move aims to realize the vision of 'Sahkar se Samriddhi' (through cooperation to prosperity).
- This ministry will provide a separate administrative, legal and policy framework for strengthening the cooperative movement in the country.
- It will help deepen Co-operatives as a true people based movement reaching up to the grassroots.
- The Ministry will work to streamline processes for 'Ease of doing business' for co-operatives and enable development of Multi-State Co-operatives (MSCS).

### Creation of Ministries/Departments

- The **Government of India (Allocation of Business) Rules, 1961** are made by the

President of India under Article 77 of the Indian Constitution for the allocation of business of the Government of India.

- The Ministries/Departments of the Government are created by the President on the advice of the Prime Minister **under these Rules**.

4. d

- Arisaema Translucens*, popularly known as *Cobra Lilies* started blooming in Upper Nilgiris.
- These flowers bloom during peak monsoon season from June to August.

#### **Cobra Lily**

- The incredibly rare “*Arisaema Translucens*”, was rediscovered in 2017 in the western Nilgiris after 84 years when it was last collected in 1932.
- They can be found only in a small area measuring less than 10 square kilometres in the Nilgiris.
- The **Toda tribals of the Nilgiris**, who know the plant well, have an embroidery motif known as the ‘**podwarshk**’, which resembles it.
- The indigenous community could predict the early arrival of monsoon from the blooming of the cobra lily’s ‘translucens’.
- Prized for their beauty around the world, cobra lilies are at even greater risk of extinction from the commercial trade in exotic plants.
- Cobra lilies have vanished in the past decades along with the disappearance of the shola tree patches in which they were found.

5. d

#### **Maitree Super Thermal Power Project**

- It is a 2x660 MW coal-fired power station being developed at Rampal, Bangladesh.
- It is being developed by the Bangladesh-India Friendship Power Company (BIFPCL).
- BIFPCL is a 50:50 joint venture between India's state owned National Thermal Power Corporation (NTPC) and Bangladesh's Bangladesh Power Development Board (BPDB).

- The project is an environment friendly supercritical technology based thermal power plant.
- The first unit of this project would be commissioned in December 2021 that will coincide with the Golden Jubilee celebration of Victory Day of Bangladesh.

6. c

#### **Anti-Dumping Duty**

- Imposition of Anti-dumping duty is a measure to rectify the situation arising out of the dumping of goods and its trade distortive effect.
- WTO's Provisions Related to Anti-Dumping Duty are
  - Validity** - An anti-dumping duty is valid for a period of five years from the date of imposition unless revoked earlier.
  - Sunset Review** - It can be extended for a further period of five years through a sunset or expiry review investigation.

7. d

#### **Accredited Investors**

- SEBI has approved this new category of wealthy, well-informed investors who will be allowed to invest in riskier products, not usually allowed to individuals.
- These entities (accredited investors) could be individuals, family trusts, proprietorships, etc.
- They will enhance the attractiveness of alternative investment funds (AIFs).

8. d

#### **Tillari Conservation Reserve**

- Tillari is a reserve in Western Ghats, It is the seventh wildlife corridor in Maharashtra to be declared as a ‘conservation reserve’.
- It has semi-evergreen forest, tropical moist deciduous forests, and a number of unique trees, butterflies, and flowers.
- It connects Mhadei sanctuary in Goa and Bhimgad in Karnataka.
- Conservation reserves and community reserves are terms denoting protected areas of the country which typically act as buffer zones to



or connectors and migration corridors between established national parks, wildlife sanctuaries and reserved and protected forests.

9. c

**Sir Chettur Sankaran Nair**

- Born in the year 1857 in Palakkad district, he is known for being a passionate advocate for social reforms and a firm believer in the self-determination of India.
- In 1897, he became the youngest president of the INC in the history of the party till then, and the only Malayali to hold the post ever.
- In 1904, he was appointed as Companion of the Indian Empire by the King-Emperor and in 1912 he was knighted.
- He was appointed as a permanent judge in the Madras High Court in 1908.

10. a

**King Cobra**

- They are the only snakes in the world that build nests for their eggs, which they guard ferociously until the hatchlings emerge.
- They are comfortable in a variety of habitats, including forests, bamboo thickets, mangrove swamps, high-altitude grasslands, and in rivers.
- They are protected under IUCN Red List as Vulnerable and mentioned under CITES: Appendix II and Wildlife (Protection) Act, 1972: Schedule II.

**08-07-2021**

**1) The World Health Organization (WHO) has recently laid down guidelines for AI use in healthcare, titled “Ethics and Governance of Artificial Intelligence for Health”. Which of the following is correct regarding the guidelines?**

- The use of Artificial Intelligence (AI) shall ensure that it protects the human autonomy in medical decisions
- AI technologies should promote human well-being, human safety and public interest and shall not harm people

c. AI used in health care should be designed to encourage equitable use and access, irrespective of age, gender, income, and ability

d. The application of Artificial Intelligence should be designed to focus more on elderly, women and Children specific health issues

**2) Consider the following statements with respect to *Umling La***

- It is the world's highest motorable road, located in Ladakh at an altitude of 19,300ft.
- It was constructed by the Border Roads Organisation (BRO) as part of Project Himank.

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

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

**3) Consider the following statements with respect to *Bhalia wheat***

- The unique characteristic of the wheat variety is that, it is being grown in the rainfed condition without irrigation.
- The Bhalia variety of wheat from the State of Gujarat received GI certification in 2011.

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

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

**4) Assertion (A): Monsoon precipitation is sensitive to the choice of irrigation practices in South Asia.**

**Reason (R): Excess irrigation over Northern India shifts the September monsoon rainfall**





towards the North-Western part of the subcontinent.

Select the correct answer using the codes given below:

- Both A and R are true and R is the correct explanation of A
- Both A and R are true but R is not the correct explanation of A
- A is true but R is false
- A is false but R is true

5) Consider the following pairs:

*Places in News – Country*

- Port-au-Prince – Venezuela
- Qala-i-Naw – Afghanistan

Which of the pair(s) given above is/are correctly matched?

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

6) Consider the following statements with respect to *Black Panther*

- The Black colour of the animal is due to a genetic condition in which an animal overproduces melanin.
- It is listed as 'Vulnerable' under the IUCN Red List of Threatened Species.

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

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

7) Which of the following statement(s) is/are incorrect with respect to *GloLitter Partnerships Project*

- It is an initiative of Ocean Conservancy Organization and funded by World Bank.
- India has joined this global initiative to tackle marine litter.

Select the correct answer using the codes given below:

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

8) Which of the following statements is correct with respect to *Stoliczka Vanhuailianai*?

- It is a Parasite that causes skin disease in animals
- It is an extinct bird that existed during Pleistocene epoch
- It is an organic chemical used to control marine pollution
- It is a species of Snake found in North East India

9) Consider the following statements with respect to *Tele-Law programme*

- It was launched by the Ministry of Law and Justice in collaboration with the Ministry of Electronics and Information Technology (MeitY).
- It aims to address cases at the pre-litigation stage and free for those who are eligible for free legal Aid.

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

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

10) *Navegaon Nagzira Tiger Reserve* is located in which of the following states?

- Madhya Pradesh

- b. Maharashtra
- c. West Bengal
- d. Bihar

## Answers

1. d

- The World Health Organisation (WHO) has recently enlisted the key principles that must be followed while using artificial intelligence (AI) and other emerging technologies in healthcare.
- The report titled '**Ethics and governance of artificial intelligence for Health**' is a first comprehensive handbook of its kind.
- The WHO endorses these guidelines be used as a basis for governments, technology developers, companies, civil society and inter-governmental organisations to adopt ethical approaches to the use of AI.

### Six Principles of WHO

#### 1. Protect Autonomy

- The first principle is to ensure the use of AI protects the human autonomy in medical decisions.
- It must also warrant protection of privacy and confidentiality and obtaining valid consent through appropriate legal frameworks for data protection.

#### 2. Promote Human well-being, Human safety and Public Interest

- The second principle states that AI technologies must be used keeping safety,
- accuracy and efficacy in place and must not cause physical or mental harm.

#### 3. Ensure Transparency, Explainability and Intelligibility

- The third principle is to ensure transparency and explainability to AI technology by documenting sufficient information of the process.

#### 4. Foster Responsibility and Accountability

- The fourth principle highlights the need for accountability.

- Appropriate mechanisms should be available for questioning and redress for individuals and groups that are adversely affected by decisions based on algorithms.

#### 5. Ensure Inclusiveness and Equity

- The fifth principle focusses on ensuring inclusiveness and equity of all stakeholders irrespective of age, gender, income, race, ethnicity and ability.

#### 6. Promote artificial intelligence that is responsive and sustainable

- The final principle aims at promoting sustainable use of AI in health to minimise environmental consequences and maximise energy efficiency.

2. c

- The world's first solo motorcycle expedition undertaken by Miss Kanchan Ugusandi, covering 18 treacherous passes in Northern Himalayan ranges concluded recently at Seema Sadak Bhawan in New Delhi.
- The month-long expedition witnessed many firsts by a solo woman rider.
- Miss Ugusandi has become **the first solo woman biker to scale the Umlingla Pass, the first woman to cover the 18 passes** and also **the first woman to traverse a distance of 3,187 kilometre** from New Delhi-Manali-Leh - Umlingla-Delhi in one go.

#### Umling La

- The La, located at an altitude of 19,300ft, has overtaken Khardung La Pass to become the highest motorable road in the world.
- It was constructed by the Border Roads Organization (BRO) as part of "Project Himank".
- The 86-km-long strategic road through Umling La connects Chisumle and Demchok villages, located 230km from Leh.
- The Project Himank has already constructed roads like Khardung La at an altitude of 17,900 ft and Chang La Pass at 17,695 ft in Leh by connecting Nubra valley and Durbuk valley in the cold desert.

3. d

- In a major boost to wheat exports, the first shipment of Geographical Indication (GI) certified Bhalia variety of wheat was exported recently to Kenya and Sri Lanka from Gujarat.

#### **Bhalia Wheat**

- The GI certified wheat variety has high protein content and is sweet in taste.
- The crop is grown mostly across Bhal region of Gujarat which includes Ahmadabad, Anand, Kheda, Bhavanagar, Surendranagar, Bharuch districts.
- The unique characteristic of the wheat variety is that grown in the rainfed condition without irrigation and cultivated in around two lakh hectares of agricultural land in Gujarat.
- The Bhalia variety of wheat received GI certification in July, 2011.
- The registered proprietor of GI certification is Anand Agricultural University, Gujarat.

4. a

- Climate Researchers at Interdisciplinary Programme in Climate Studies (IDPCS), a Centre of Excellence at IIT Bombay supported by the Department of Science and Technology has recently investigated the impact of agricultural water use on the Indian Summer Monsoon using a climate model.
- From the study, it has been discovered that **excess irrigation over northern India shifts the September monsoon rainfall towards the north-western part of the subcontinent** and increases widespread weather extremes over Central India.
- These meteorological hazards expose the vulnerable farmers and their crops to risks of failure.
- The study which establishes that **monsoon precipitation is sensitive to the choice of irrigation practices** in South Asia can help plan agricultural practices in this region.

#### **Background**

- South Asia is one of the most heavily irrigated regions of the world, largely using

groundwater, and its major summer crop is paddy which is cultivated in water flooded fields.

- Hence it was pertinent to study how such practices can influence the monsoons which form the fulcrum of this agro-based economy.

5. b

#### **Port-au-Prince, capital city of the Republic of Haiti**

- Gunmen assassinated **Haitian President** Jovenel Moise and wounded his wife in their home, inflicting more chaos on the unstable Caribbean country that was already enduring an escalation of gang violence, anti-government protests and a recent surge in coronavirus infections.

#### **Qala-i-Naw, Badghis Province, Afghanistan**

- The Taliban has recently launched a major assault on Qala-i-Naw, capital of Badghis Province in Afghanistan.
- It is the first attack since the U.S. military began its final drawdown of troops from the country, as insurgents press on with a blistering offensive.

6. c

#### **Black Panther**

- Melanistic leopards are commonly called black panthers or black leopards.
- The black colour variants of cats like leopards, jaguars and ocelots are known by experts as melanism.
- They are found in the forests of the Western Ghats and north-east India and are black in colour due to the presence of excess melanin in their bodies.
- It is protected in Schedule I of the Indian Wildlife (Protection) Act, 1972.

7. a

#### **GloLitter Partnerships Project**

- It is launched by the International Maritime Organization (IMO) and the Food and Agriculture Organization of the United Nations (FAO) and initial funding from the Government of Norway.

- It aims to prevent and reduce marine plastic litter from shipping and fisheries.
- It will also assist developing countries in reducing marine litter, including plastic litter, from within the maritime transport and fisheries sectors, and to decrease the use of plastics in these industries.

8. d

***Stoliczka Vanhnuailianai***

- It is a new species of snake found in Mizoram.
- It was named *Stoliczka vanhnuailianai*, in honour of Vanhnuailiana, a famous Mizo warrior.
- It was a new species of the *Stoliczka* genus and only the third species of *Stoliczka* from India.
- This is one of the most important discoveries of this century because the last time its sister species *Stoliczka khasiensis* was found was more than a century ago in 1904.

9. c

***Tele-Law programme***

- Under this programme, smart technology of video conferencing, /instant calling facilities available at the vast network of Common Service Centres at the Panchayat level.
- It is used to connect the vulnerable, unreached groups and communities with the Panel Lawyers for seeking timely and valuable legal advice.
- Its success is dependent on the working of field functionaries comprising Village Level Entrepreneurs (VLEs), Para Legal Volunteers (PLVs), State Coordinators and Panel Lawyers.
- The service is free for those who are eligible for free legal Aid as mentioned under Section 12 of the Legal Services Authority Act, 1987, for all others a nominal fee is charged.

10. b

***Navegaon Nagzira Tiger Reserve***

- It was notified as 46th tiger reserve of India in 2013 and the 5th tiger reserve of Maharashtra.
- It is situated in Gondia and Bhandara districts of Maharashtra.

- The major forest type found in NNTR is Southern Tropical Dry Deciduous Forest.
- It has connectivity with major tiger reserves in central India like
  1. Kanha and Pench Tiger Reserve in Madhya Pradesh
  2. Tadoba-Andhari Tiger Reserve in Maharashtra
  3. Indravati Tiger Reserve in Chhattisgarh.

**09-07-2021**

**1) With respect to recent modifications in the Agriculture Infrastructure Fund (AIF), consider the following statements:**

1. It extends the interest subvention scheme and guarantee for a loan up to Rs. 2 crore for each project for a maximum of 25 projects.
2. The eligibility has now been extended to Primary Agricultural Credit Societies (PACS), Self Help Groups (SHGs) and Farmer Producers Organizations (FPOs).

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

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

**2) Consider the following statements with respect to Zika Virus Disease**

1. It is a mosquito-borne flavivirus caused primarily by Aedes mosquitoes, which bite during the day.
2. Symptoms are generally mild and include fever, rash, and conjunctivitis.
3. Zika virus infection during pregnancy can cause infants to be born with microcephaly and other congenital malformations, known as congenital Zika syndrome.

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



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

3) Consider the following pairs:

**Products – Origin**

- 1. Madurai Malli – Kerala
- 2. Mishri Cherries – Arunachal Pradesh

Which of the pair(s) given above is/are correctly matched?

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

4) Bonalu is a popular religious festival celebrated in which of the following states?

- a. Mizoram
- b. Telangana
- c. West Bengal
- d. Himachal Pradesh

5) Naitwar Mori Hydro Electric Project is located in which of the following?

- a. Odisha
- b. Ladakh
- c. Uttarakhand
- d. Arunachal Pradesh

6) Consider the following statements with respect to Albinism

- 1. Albinism is caused due to the heritable absence of functional tyrosinase enzyme in pigment cells affecting skin and hair.
- 2. Albinism in plants interferes with photosynthesis, which can reduce survivability.

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

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

7) Which of the following statement(s) is/are incorrect with respect to Maize Cultivation in India

- 1. It is predominantly a rabi crop which is mostly sown during October-December and harvested during April-June.
- 2. It can be grown in old alluvial soil, and the ideal temperature should be between 21-27°C, with High rainfall.

Select the correct answer using the codes given below:

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

8) Buxwaha Protected Forest Region is located in which of the following states?

- a. West Bengal
- b. Chhattisgarh
- c. Jharkhand
- d. Madhya Pradesh

9) Consider the following statements with respect to Indrajaal Weapon

- 1. It is a multiple rocket launcher produced in India with a maximum range of 40 km.
- 2. It is indigenously developed by Grene Robotics, a Hyderabad based company.

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

- a. 1 only
- b. 2 only



- c. Both 1 and 2  
d. Neither 1 nor 2

**10) Ramgarh Vishdhari Sanctuary is located in which of the following states?**

- a. Gujarat  
b. Haryana  
c. Rajasthan  
d. Punjab

## Answers

1. b

- The Union Cabinet chaired by Hon'ble Prime Minister Shri Narendra Modi has recently gave its approval to the modifications in Central Sector Scheme of Financing Facility under 'Agriculture Infrastructure Fund'.

### Agriculture Infrastructure Fund (AIF)

- The Union Cabinet in 2020 has approved a new pan India Central Sector Scheme called Agriculture Infrastructure Fund (AIF).
- The scheme shall provide a medium - long term debt financing facility for investment in viable projects for post-harvest management Infrastructure and community farming assets through interest subvention and financial support.
- Under the scheme, Rs. 1 Lakh Crore will be provided by banks and financial institutions as loans to Primary Agricultural Credit Societies (PACS), Marketing Cooperative Societies, Farmer Producers Organizations (FPOs), Self Help Group (SHG), Farmers, Joint Liability Groups (JLG), Multipurpose Cooperative Societies, Agri-entrepreneurs, Startups, Aggregation Infrastructure Providers and Central/State agency or Local Body sponsored Public Private Partnership Project.

### Recent Modifications

#### Eligibility

- The eligibility has now been extended to State Agencies/APMCs, National & State Federations of Cooperatives, Federations of

Farmers Producers Organizations (FPOs) and Federations of Self Help Groups (SHGs).

### Interest Subvention Criteria

- At present Interest subvention for a loan up to Rs. 2 crore in one location is eligible under the scheme.
- In case, one eligible entity puts up projects in different locations then all such projects will be now be eligible for interest subvention for loan upto Rs. 2 crore.
- However, for a private sector entity there will be a limit of a maximum of 25 such projects.
- This limitation of 25 projects will not be applicable to state agencies, national and state federations of cooperatives, federations of FPOs and federation of SHGs.

### Various Infrastructure Projects

- For APMCs, interest subvention for a loan up to Rs. 2 crore will be provided for each project of different infrastructure types e.g. cold storage, sorting, grading and assaying units, silos, et within the same market yard.

### Restrictions

- The power has been delegated to Hon'ble Minister of Agriculture & Farmers Welfare to make necessary changes with regard to addition or deletion of beneficiary in such a manner so that basic spirit of the scheme is not altered.

### Extension

- The period of financial facility has been extended from 4 to 6 years upto 2025-26 and overall period of the scheme has been extended from 10 to 13 upto 2032-33.

2. d

- Zika Virus has been officially confirmed for the first time in Kerala.

### Zika Virus

- is a mosquito-borne flavivirus that was first identified in Uganda in 1947 in monkeys.
- Zika virus disease is caused by a virus transmitted primarily by Aedes mosquitoes, which bite during the day.



- Symptoms are generally mild and include fever, rash, conjunctivitis, muscle and joint pain, malaise or headache.
- Symptoms typically last for 2–7 days. Most people with Zika virus infection do not develop symptoms.
- Zika virus infection during pregnancy can cause infants to be born with microcephaly and other congenital malformations, known as congenital Zika syndrome.
- Infection with Zika virus is also associated with other complications of pregnancy including preterm birth and miscarriage.
- An increased risk of neurologic complications is associated with Zika virus infection in adults and children, including Guillain-Barre syndrome, neuropathy and myelitis.

3. d

#### **Madurai Malli – Tamil Nadu**

- *For ensuring that Indians living abroad get supplies of fresh flowers to deities at home and temples, consignments of Geographical Indications (GI) certified Madurai malli and other traditional flowers such as button rose, lily, chamanthi and marigold were exported recently to USA and Dubai from Tamil Nadu.*
- Jasmine (*Jasminum Officinale*) is one of the most popular flowers found across the world.
- The scent of Jasmine is synonymous with the splendor of Madurai's Meenakshi temple.
- Madurai has emerged as a major market for the malligai grown in its neighbourhood, and has evolved into the 'jasmine capital' of India.

#### **Mishri Cherry – Jammu & Kashmir**

- *In a step towards boosting horticultural crops exports, a first commercial shipment of Mishri variety of luscious cherries from Kashmir valley has been recently exported to Dubai from Srinagar.*
- Mishri varieties of Cherries are not only taste delicious but also contain vitamins, minerals and plant compound with health benefits.
- The union territory of Jammu and Kashmir produces more than 95% of the total country's production of commercial varieties of cherries in the country.

- It produces four varieties of cherry — Double, Makhmali, Mishri and Italy.

4. b

- *The State of Telangana is preparing for the Bonalu festival which will be celebrated from July 11 according to the Hindu calendar month of Aashadam with the religious procession starting from Langar Houz to the temple near Bala Hissar on top of the Golconda Fort.*
- The annual festival of Bonalu has increased in importance after the formation of Telangana State with government sponsorship and enthusiastic participation of several ministers in the State Cabinet.

#### **Bonalu**

- It is a Hindu festival where Goddess Mahakali is worshiped.
- It is an annual festival celebrated in the twin Cities Hyderabad and Secunderabad and other parts of Telangana state, India.
- The festival is being celebrated usually during Ashada Masam that falls in July/August.
- Special poojas are performed for goddess Yellamma during the first and last day of the festival.
- The festival is considered as a form of thanksgiving to the Goddess after the fulfillment of vows.
- Bonam literally means Meal in Telugu, which is an offering to the Mother Goddess.
- Women folk in household prepare rice that is cooked along with Milk, Jaggery in a New Earthen or Brass Pot, which is adorned with Neem Leaves, Turmeric and Vermilion.
- Women carry these pots on their heads and make an offering of Bonam, including Bangles and Saree to the Mother Goddess at Temples.
- Bonalu involves worship of Kali in her various forms such Mysamma, Pochamma, Yellamma, Dokkalamma, Pedamma, Poleramma, Ankamma, Maremma, Nookamma etc.

5. c

#### **Naitwar Mori Hydro Electric Project**

- It is a 60MW hydro electric power project under construction in the State of Uttarakhand.
- This is proposed as a run-of-river Scheme on the river Tons.
- It is being constructed by the Satluj Jal Vidyut Nigam Ltd (SJVN), a CPSE under Ministry of Power.
- The project has the potential to generate 265.5 million units of electricity every year and the State of Uttarakhand will get 12% free Power as a Royalty.

6. c

### **Albinism**

- Albinism is a hypo-pigmentary disorder with a total lack of both melanins in hair, eyes and skin, this resulting in a total white plumage / fur with red eyes.
- Albinism is controlled via inheritance by an autosomal recessive gene in all animal species.
- In plants, albinism is characterised by partial or complete loss of chlorophyll pigments and incomplete differentiation of chloroplast membranes.
- Aberrant colouration has been reported widely in pelage of mammals and can vary due to environmental and geographical variations.

7. a

### **Maize Cultivation in India**

- India is the seventh largest producer worldwide, it is used both as food and fodder.
- It is predominantly a Kharif crop with 85 per cent of the area under cultivation in the season.
- It is sown during June-July and harvested during September-October.
- Maize is the third most important cereal crop in India after rice and wheat.
- Top Maize Producing States are Karnataka > Maharashtra > Madhya Pradesh > Tamil Nadu > Telangana

8. d

### **Buxwaha Protected Forest Region**

- Madhya Pradesh has proposed diamond mining project in the Buxwaha Protected Forest Region.
- It will be spread across an area of 364 hectares in the Buxwaha forests that is about 225 km northeast of Bhopal, Madhya Pradesh's capital.
- The block is estimated to have 34 million carats of rough diamonds.

9. b

### **Indrajaal Weapon**

- Indrajaal is an autonomous defence weapon system that uses technologies such as Artificial Intelligence, cyber security and robotics to identify and counter threats.
- It is India's first 100 percent indigenous unified, distributed and wide-area Autonomous Drone Defense Dome.
- Each system is capable of protecting a large area of 1000 to 2000 sq. km against threats from Unmanned Aerial Vehicles or UAVs and incoming weapons.
- Indrajaal is a paradigm shift in the drone warfare system including Low Radar cross-section (RCS) threat warfare.

10. c

### **Ramgarh Vishdhari Sanctuary**

- It is located in Rajasthan, It was notified in the Year 1982 and is spread over an area of 252.79 Sq. Km.
- Its flora consists of Dhok, Khair, Salar, Khirni trees with some Mango and Ber trees.
- The Fauna consists of birds and animals like Leopard, Sambhar, Wild boar, Chinkara, Sloth bear, Indian Wolf, Hyena, Jackal, Fox, deer and Crocodile.

**10-07-2021**

**1) With respect to dbGENVOC, sometimes seen in the news recently, consider the following statements:**

1. It is the world's first of its kind database of genomic variations in oral cancer.
2. It was created by the National Institute of Biomedical Genomics (NIBMG)



which has been funded by the Department of Biotechnology.

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

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

2) Consider the following statements with respect to *India Industrial Land Bank (IILB)*

1. It is a GIS-based one-stop repository of all industrial infrastructure related information.
2. It is an initiative of Ministry of Commerce & Industry.

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

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

3) Consider the following statements with respect to *National Green Tribunal (NGT)*

1. All the zonal benches of NGT, including the north zone bench in New Delhi, are equally powerful and their orders are applicable across India.
2. The orders of National Green Tribunal are final and cannot be challenged in any court in India.

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

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

4) *Bhumi Panduga* is a festival celebrated by which of the following tribes?

- a. Koyas
- b. Seharias
- c. Marram Nagas
- d. Kattu Nayakans

5) The Indian External Affairs Minister has recently handed over the holy relics of 17th century Queen St. Ketevan to which of the following countries?

- a. France
- b. Georgia
- c. Romania
- d. Portugal

6) Consider the following statements with respect to *Gamma Ray Burst (GRB)*

1. GRBs are short lived explosions of highly energetic gamma rays lasting from less than a second to several minutes.
2. GRBs are thought to be generated during the formation of black holes, they shine about a million trillion times as bright as the sun.

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

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

7) Which of the following statement(s) is/are *incorrect* with respect to *Methanogens*

1. Microorganisms called methanogens are capable of generating methane as a metabolic by product.
2. Methanogens do not require oxygen to live and are widely distributed in nature.

Select the correct answer using the codes given below:

- a. 1 only

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

**8) Lemru Elephant Reserve has been proposed in which of the following states?**

- a. Maharashtra
- b. Jharkhand
- c. Chhattisgarh
- d. Telangana

**9) Consider the following statements with respect to Special Purpose Acquisition Companies (SPACs)**

1. They are listed Shell companies created with sole purpose to acquire unlisted or private companies and then merge with the latter.
2. They have a business operation on their own both domestic and overseas and can raise capital through venture capital.

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

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

**10) Enceladus is the moon of which of the following planets?**

- a. Venus
- b. Saturn
- c. Jupiter
- d. Mars

## Answers

1. c

- DBT-National Institute of Biomedical Genomics (NIBMG) has recently created a

*database of genomic variations in oral cancer named dbGENVOC.*

### dbGENVOC

- It is the world's first of its kind database of genomic variations in oral cancer created by National Institute of Biomedical Genomics (NIBMG).
- dbGENVOC has a built-in powerful search engine. So, it is a browsable free resource.
- It contains somatic and germline variants derived from whole exome sequences of oral cancer patients and also whole genome sequences of patients from India, the USA and analyzed by TCGA-HNSCC project.
- It allows a reasonable extent of statistical and bioinformatic analysis to be carried out online.
- The repository will be updated annually with variation data from new oral cancer patients from different regions of India and Southeast Asia.

### National Institute of Biomedical Genomics

- The DBT-National Institute of Biomedical Genomics (NIBMG), Kalyani (West Bengal) has been established as an autonomous institution by the Government of India.
- It is funded by the Department of Biotechnology (DBT), Ministry of Science and Technology.
- It is the first institution in India explicitly devoted to research, training, translation & service and capacity-building in Biomedical Genomics.

2. c

### India Industrial Land Bank (ILLB)

- It is a GIS-based one-stop repository of all industrial infrastructure-related information – connectivity, infra, natural resources & terrain, plot-level information on vacant plots, line of activity, and contact details.
- The portal was developed by the Department for promotion of Industry & Internal Trade, Ministry of Commerce & Industry.
- As an additional tool for investors, for making industrial parks and related information easily accessible, the DPIIT developed first version of



India Industrial Land Bank (IILB) Mobile App in collaboration with MeitY and Invest India.

- Currently, the IILB has approximately 4000 industrial parks mapped across an area of 5.5 lakh hectare of land, serving as a decision support system for investors scouting for land remotely.
- The system has been integrated with industry-based GIS systems of 17 states to have details on the portal updated on a real-time basis and will achieve pan-India integration by December 2021.

3. a

- *The Madras High Court has recently disapproved a 2017 Union notification, which terms the north zone bench in New Delhi as the Principal Bench.*
- They observed that all the five zonal Benches of the National Green Tribunal (NGT) are equally powerful and their orders are applicable across India.

#### **National Green Tribunal (NGT)**

- The Tribunal has a presence in five zones viz, North, Central, East, South and West.
- The Principal Bench is situated in the North Zone, headquartered in Delhi.
- The Central zone bench is situated in Bhopal, East zone in Kolkata, South zone in Chennai and West zone in Pune.
- The Tribunal is headed by the Chairperson who sits in the Principal Bench and has at least ten but not more than twenty judicial members and at least ten but not more than twenty expert members.
- The decisions of the Tribunal are binding.
- The Tribunal's orders are enforceable as the powers vested are the same as in a civil court under the Code of Civil Procedure, 1908.
- The Tribunal has powers to review its own decisions. If this fails, the decision can be challenged before the Supreme Court within 90 days.

4. a

- *Koya Tribes in the Chintoor Agency of East Godavari district is preparing to celebrate*

*last 'Bhumi Panduga' festival in their ancestral villages.*

- The Koya tribes say this is the last time they are celebrating the festival in their ancestral villages in the close vicinity of the Polavaram irrigation project as they are evacuees now and the government is preparing to shift them to the rehabilitation colonies.

#### **Bhumi Panduga Festival**

- As traditions have it, the tribals go hunting as part of the 'Bhumi Panduga' celebrations, marking the beginning of farm operations every year.
- Koyas are an Indian tribal community found in the states of Telangana, Andhra Pradesh, Chhattisgarh and Odisha.

5. b

- *In heeding to a long-standing request of Georgia, Indian External Affairs Minister S. Jaishankar has recently handed over to the country the holy relics of 17th century Georgian Queen St. Ketevan nearly 16 years after they were found in Goa.*

#### **St. Ketevan of Georgia**

- St. Queen Ketevan was a 17th century Georgian Queen.
- Her relics were found in 2005 at the St. Augustine Convent in Old Goa, on the basis of medieval Portuguese records, people aware of the matter said.
- The relics are believed to have been brought to Goa in 1627 and interred in St. Augustine Complex.

6. c

#### **Gamma Ray Burst**

- Gamma rays can have over a billion times the energy of the type of light visible to our eyes.
- They are known to occur at huge distances from Earth towards the limits of the observable universe.
- On Earth, gamma rays are generated by nuclear explosions, lightning, and the less dramatic activity of radioactive decay.
- The gamma rays possess high energy they can pass right through any lens or mirror, making





it very difficult to focus them in a visible-light telescope.

7. d

### **Methanogens**

- They are found in swamps, dead organic matter, and even in the human gut.
- They are known to survive in high temperatures and simulation studies have shown that they can live in Martian conditions.

8. c

### **Lemru Elephant Reserve**

- It is a natural elephant habitat with very few human habitations and has been an elephant bearing area from ancient times.
- The reserve is in a coal-bearing area with an estimated value of Rs 100,000 crore.
- The identified reserve area has very good availability of elephant food and has approximately 27 perennial rivulets of water present inside the forest for the elephants.

9. b

### **Special Purpose Acquisition Companies (SPACs)**

- SPACs don't have business operation of their own and raise capital through an IPO.
- SPACs are currently not allowed to raise capital through IPO in India
- These are also called blank cheque companies as SPAC investors have no idea about where and how their capital will be utilised

10. b

### **Enceladus**

- It is the sixth-largest moon of Saturn. It is about 500 kilometers (310 mi) in diameter, about a tenth of that of Saturn's largest moon, Titan.
- Enceladus is mostly covered by fresh, clean ice, making it one of the most reflective bodies of the Solar System.
- Despite its small size, Enceladus has a wide range of surface features, ranging from old, heavily cratered regions to young, tectonically deformed terrains.

- Methane could be formed by the chemical breakdown of organic matter present in Enceladus' core.

**12-07-2021**

**1) Consider the following statements with respect to *SuperLuminous Supernova (SLSNe)***

1. It is a type of stellar explosion generally originated from very massive stars with minimum mass limit 25 times more than that of the sun.
2. It occurs very rare because the number distribution of such massive stars in our galaxy or in nearby galaxies is sparse.

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

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

**2) With respect to *Avicennia Marina*, sometimes seen in the news recently, consider the following statements:**

1. It is a salt-secreting and extraordinarily salt-tolerant mangrove species that grows optimally in 75% seawater and tolerates >250% seawater.
2. It is one of the most prominent mangroves species found in all mangrove formations in India.

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

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

**3) Consider the following pairs:**

1. Fazli – Bihar
2. Zardalu – West Bengal

**3. Dusshheri – Uttar Pradesh**

Which of the pair(s) given above is/are correctly matched?

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

4) With respect to *Hardware Wallet*, consider the following statements:

- 1. They are physical devices that stores, manages and secures a user's crypto assets.
- 2. The passwords are protected by a PIN, making it difficult for hackers to extract private keys as the information is not exposed to the Internet.

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

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

5) Consider the following statements with respect to *Ramappa Temple*

- 1. It was built under the patronage of the Nizam ruler Nizam-ul-Mulk.
- 2. The temple's chamber is crowned with a shikharam and is surrounded by pradakshinapatha.

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

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

6) Consider the following statements with respect to *Central Information Commission (CIC)*

- 1. It is a constitutional body chaired by Minister of Information and Broadcasting.
- 2. It consists of a Chief Information Commissioner and not more than ten Information Commissioners.

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

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

7) Which of the following statement(s) is/are *incorrect* with respect to *Lymphatic Filariasis*

- 1. It is a mosquito-borne viral disease occurring in tropical and subtropical areas.
- 2. It is usually acquired in childhood and the infection damages the lymphatic system.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Himalayan Yak*

- 1. It is a high-altitude animal, usually found 2,000-5,000 metres above sea level.
- 2. It is listed as 'Vulnerable' under the IUCN Red List of Threatened Species.

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

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

9) Which of the following pairs are matched *incorrectly* with respective to *International Chemical Conventions*

Conventions	Banned Pollutants
1. Minamata Convention - Persistent Organic Pollutants (POPs)	
2. Chemical Weapons Convention (CWC) - Only Mercury based pollutants	
3. Rotterdam Convention - Hazardous Chemicals and Pesticides	

Select the correct answer using the codes given below:

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

10) *National Dolphin Research Centre* is set to be established in which of the following states?

- a. Uttar Pradesh
- b. West Bengal
- c. Bihar
- d. Odisha

## Answers

1. c

- Indian researchers have recently spotted an extremely bright, hydrogen deficient, fast-evolving supernova that shines with the energy borrowed from an exotic type of neutron star with an ultra-powerful magnetic field.
- Such type of supernovae called Super Luminous Supernova (SLSNe).
- SN 2020ank, which was first discovered by the Zwicky Transient Facility on 2020, was studied by scientists from Aryabhata Research Institute of Observational Sciences (ARIES) Nainital.
- The apparent look of the SN was very similar to other objects in the field.

- However, once the brightness was estimated, it turned out as a very blue object reflecting its brighter character.
- Deep study of such ancient spatial objects can help probe the mysteries of the early universe.

### Supernova (SNe)

- Supernovae are highly energetic explosions in the universe releasing an enormous amount of energy.

### Super Luminous Supernova (SLSNe)

- It is a type of stellar explosion with luminosity 10 or more times higher than that of standard supernovae.
- They occur very rare because they are generally originated from very massive stars (minimum mass limit is more than 25 times to that of the Sun), and the number distribution of such massive stars in our galaxy or in nearby galaxies is sparse.
- Among them, SLSNe-I has been counted to about 150 entities spectroscopically confirmed so far.
- These ancient objects are among the least understood SNe because their underlying sources are unclear, and their extremely high peak luminosity is unexplained.

2. c

- Scientists at the DBT-Institute of Life Sciences, Bhubaneswar and SRM-DBT Partnership Platform for Advanced Life Sciences Technologies, SRM Institute of Science and Technology, Tamil Nadu have reported for the first time a reference-grade whole genome sequence of *Avicennia marina*.

### Avicennia Marina

- It is one of the most prominent mangroves species found in all mangrove formations in India.
- It is a salt-secreting and extraordinarily salt-tolerant mangrove species that grows optimally in 75% seawater and tolerates >250% seawater.
- It is among the rare plant species, which can excrete 40% of the salt through the salt glands in the leaves, besides its extraordinary capacity to exclude salt entry to the roots.

### **Mangroves**

- Mangroves are a unique group of species found in marshy intertidal estuarine regions and survive a high degree of salinity through several adaptive mechanisms.
- Mangroves are important resources for the coastal region and are of great ecological and economic value.
- They form a link between marine and terrestrial ecosystems, protect shorelines, provide habitat for a diverse array of terrestrial organisms.

3. a

### **GI certified Mangoes**

- Khirsapati (Malda, West Bengal)
- Lakkhanbhog (Malda, West Bengal)
- Fazli (Malda, West Bengal)
- Dusshheri (Maliabad, Uttar Pradesh)
- Amrapali and Chausa (Malda, West Bengal)
- Langda (Nadiya, West Bengal)
- Zardalu (Bihar)

4. c

- *Twitter CEO Jack Dorsey has recently announced his payments firm Square would soon build a hardware wallet to store bitcoin.*
- The wallet will be a type of plug-in device, much like a USB pendrive that stores, manages and secures a user's crypto assets.
- Each digital asset is linked to a cryptographic password called a 'private key' to allow users to access it.
- This key safeguards cryptocurrencies from theft and unauthorised access.
- The asset owner, with the help of a secure hardware wallet, can access the private key to buy and sell crypto assets from anywhere.
- Most hardware wallets allows users to manage multiple accounts; some even allow users to connect to their Google or Facebook accounts.
- Popular hardware wallets include Trezor, Ledger, KeepKey and Prokey.

### **Hardware Vs Software Wallet**

- Cryptocurrency keys can be stored in two kinds of wallets - software and hardware.
- Software wallets are like smartphone apps that digitally store private keys.
- Most software wallets don't charge users to store private keys, but may collect commission for trading via the app.
- These wallets can be vulnerable to malware.
- Hardware wallets are physical devices act like cold storage for confidential keys.
- The passwords are protected by a PIN, making it difficult for hackers to extract private keys as the information is not exposed to the Internet.

5. b

- *The decision to examine Ramappa Temple for a World Heritage Site inscription has been deferred by the World Heritage Committee.*

### **Ramappa Temple**

- The Ramalingeswara Temple which is popularly known as the Ramappa temple is one such amazing piece of art that stands as a testimony of the royal Kakatiyas.
- The temple got its name Ramappa because of its chief sculptor Ramappa.
- It's probably the only temple in the country to be known by the name of its sculptor.
- The medieval Deccan Ramappa Temple which dates back to 1213 AD, was built by the patronage of the Kakatiya ruler Kakati Ganapathi Deva under the authority of his Chief Commander Rudra Samani at the place known as Ranakude in the Atukuru province.
- The Ramappa temple is the right destination for people who admire architectural brilliance and have a panoramic view of true scenic beauty.
- The temple is situated in Palampet village of the Venkatapur Mandal, in Mulug Taluq of Warangal.
- The Ramappa temple finds its hold on a 6 feet high platform on a cruciform plan.
- The temple's chamber is crowned with a shikharam and is surrounded by pradakshinapatha.



- At the entrance of the temple, we can find a Nandi mandapam. An imposing Nandi vigraha stands on it.

6. b

### **Central Information Commission (CIC)**

- It was constituted through an Official Gazette Notification under the provisions of the Right to Information Act (2005), It is not a constitutional body.
- It is a high-powered independent body which inter alia looks into the complaints made to it and decides the appeals.
- They are appointed by the President on the recommendation of a committee consisting of:
  - The Prime Minister as Chairperson,
  - The Leader of Opposition in the Lok Sabha and
  - A Union Cabinet Minister nominated by the Prime Minister

7. a

### **Lymphatic Filariasis**

- It is a parasitic disease caused by microscopic, thread-like worms.
- There are 3 types of these thread-like filarial worms:
  - Wuchereria bancrofti, which is responsible for 90% of the case
  - Brugia malayi, which causes most of the remainder of the cases
  - Brugia timori, which also causes the disease
- The adult worms only live in the human lymph system and the lymph system maintains the body's fluid balance and fights infections.
- It is spread from person to person by mosquitoes.
- It causes enlargement of body parts such as hydrocele (abnormal swelling of the scrotum) and lymphedema (swelling in the limbs).

8. c

### **Himalayan Yak**

- It is a high-altitude bovine cousin of the cow grazes across the grasslands of the Tibetan Plateau.

- It is a long-haired bovine found throughout the Himalayan region of India.
- It is found throughout the Himalayan region of the Indian subcontinent, the Tibetan Plateau, Northern Myanmar, Yunnan, Sichuan and as far north as Mongolia and Siberia.
- It is a "flagship species" and indicates the health of the ecosystem within which it lives.

9. b

### **International Chemical Conventions**

- The Chemical Weapons Convention (CWC) is an arms control treaty prohibiting the development, production, acquisition, stockpiling, retention, transfer or use of chemical weapons by States Parties.
- India is a signatory and party to the Convention.
- The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury and its compounds.
- The following conventions are ratified by India
  - Stockholm Convention on Persistent Organic Pollutants (POPs): To protect human health and the environment from the harmful effects of POPs (i.e. toxic chemicals).
  - Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
  - Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

10. c

### **National Dolphin Research Centre (NDRC)**

- India's and Asia's first National Dolphin Research Centre is set to be established in Patna.
- It will play an important role in strengthening conservation efforts and research to save the endangered mammal.
- Dolphins prefer water that is at least 5-8 feet deep, the mammal's presence signals a healthy river ecosystem.



**13-07-2021**

1) Consider the following statements with respect to *River Cauvery*

1. The River Cauvery rises at Talakaveri on the Brahmagiri range in the Western Ghats in Karnataka and drains into the Bay of Bengal.
2. The disputed Mekedatu Dam Project is being proposed to be built across River Cauvery.
3. Harangi, Shimsha and the Arkavati River are the important tributaries of the River Cauvery.

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. 1, 2 and 3

2) Consider the following statements with respect to *International Trade Finance Services (ITFS) Platform*

1. It is a dedicated electronic platform for facilitating the trade finance requirements of Exporters and Importers, through multiple Financiers.
2. It will enable Exporters and Importers to avail various types of trade finance facilities at competitive terms, for their international trade transactions.

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

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

3) Consider the following statements with respect to *Immunity Debt*

1. It is a situation where people failed to develop immunity against viruses that comes from normal contact.

2. It arises mainly due to Non-Pharmaceutical Interventions (NPIs) put in place to reduce the spread of the SARS-CoV-2 virus.

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

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

4) Consider the following statements with respect to *Respiratory Syncytial Virus (RSV)*

1. It is a common respiratory illness that causes inflammation of the small airways in the lungs (bronchiolitis) and pneumonia.
2. It mainly infects adults and make them extremely ill, or even be fatal, with a very mild symptoms.

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

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

5) Consider the following statements with respect to *National Bank for Agriculture and Rural Development (NABARD)*

1. It was established on the recommendations of B.Sivaraman Committee by an Act of the Parliament.
2. NABARD is wholly owned by the Government of India.

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

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



6) Consider the following statements with respect to *Flexible Fuel Vehicles (FFVs)*

1. It is a modified version of vehicles that could run both on gasoline and doped petrol with different levels of ethanol blends.
2. It will allow vehicles to use all the blends and also run on unblended fuel.

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

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

7) Which of the following statement(s) is/ are correct with respect to *Speaker of the house*

1. Constitution has prescribed specific qualifications for a person being elected as Speaker.
2. Any one even outside the respective house can become a speaker.
3. The Constitution provides that the office of the Speaker should never be empty.

Select the correct answer using the codes given below:

- a. 1 & 2 only
- b. 2 only
- c. 2 & 3 only
- d. 3 only

8) Consider the following statements with respect to *NASA's VIPER Mission*

1. It aims to explore the Moon's South Pole region and plans to create lunar resource maps.
2. It will evaluate the concentration of water as well as other potential resources on moon's surface.

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

- a. 1 only

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

9) *Kesaria Buddha Stupa* is located in which of the following states?

- a. Bihar
- b. Uttar Pradesh
- c. Odisha
- d. Madhya Pradesh

10) Consider the following statements with respect to *Mahananda River*

1. It originates from the Himalayas in Sikkim.
2. The river flows through Bihar, West Bengal, and then continues south-eastward to join the Ganga

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

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

## Answers

1. d

### *Cauvery River*

- It is one of the major rivers of the peninsular India.
- It rises at an elevation of 1,341 m at Talakaveri on the Brahmagiri range near Cherangala village of Kodagu district of Karnataka and drains into the Bay of Bengal.
- The total length of the river from origin to outfall is around 800 km.
- In size, it is smaller than the Godavari, the Mahanadi and the Krishna.
- Its important tributaries joining from left are the Harangi, the Hemavati, the Shimsha and

the Arkavati whereas the Lakshmantirtha, the Kabbani, the Suvarnavati, the Bhavani, the Noyil and the Amaravati join from right.

2. c

- *International Financial Services Centres Authority (IFSCA) has recently issued a framework for Setting up and operating International Trade Finance Services Platform (ITFS).*

#### **International Trade Finance Services Platform (ITFS)**

- It refers to an electronic platform for facilitating the trade finance requirements of Exporters and Importers, through multiple Financiers.
- It provides Trade Finance Services at International Financial Services Centres (IFSCs).
- The framework will enable Exporters and Importers to avail various types of trade finance facilities at competitive terms, for their international trade transactions through a dedicated electronic platform viz, ITFS.
- This will help in their ability to convert their trade receivables into liquid funds and to obtain short term funding.
- This framework will provide an opportunity to the participants to avail trade finance facilities for trade transactions such as Export Invoice Trade Financing, Reverse Trade Financing, Bill discounting under Letter of Credit, Supply Chain Finance for Exporters, Export Credit (Packing Credit), Insurance/ Credit Guarantee, Factoring and any other eligible product, on the ITFS platform.

#### **International Financial Services Centres Authority (IFSCA)**

- It has been set up vide IFSCA Act, 2019 to develop and regulate the financial products, financial services and financial institutions in the International Financial Services Centres (IFSCs).

3. c

- *As countries start lifting curbs imposed on societies due to the COVID-19 pandemic, news reports have indicated higher rates of respiratory infections, even unseasonal*

*diseases such as influenza and the Respiratory Syncytial Virus (RSV).*

- Doctors have called this the “immunity debt” brought on by non-pharmaceutical interventions (NPIs) put in place to reduce the spread of the SARS-CoV-2 virus.

#### **Immunity Debt**

- It is a situation where people avoided each other during the pandemic lockdowns, they failed to build up the immunity against viruses that comes from normal contact.
- The phenomenon occurs because measures like lockdowns, hand-washing, social distancing and masks are not only effective at controlling Covid-19, but it also suppress the spread of other illnesses that transmit in a similar way, including the flu, common cold, and lesser-known respiratory illnesses like RSV.

4. a

- *New Zealand hospitals are experiencing the payoff of “Immunity Debt” created by Covid-19 lockdowns, with wards flooded by **babies** with a potentially-deadly respiratory virus Respiratory Syncytial Virus (RSV)*

#### **Respiratory Syncytial Virus (RSV)**

- It is a common respiratory illness.
- It causes symptoms such as trouble breathing.
- It's the most common cause of inflammation of the small airways in the lungs (bronchiolitis) and pneumonia.
- It is spread when a child comes into contact with fluid from an infected person's nose or mouth.
- This can happen if a child touches a contaminated surface and touches his or her eyes, mouth, or nose.
- It may also happen when inhaling droplets from an infected person's sneeze or cough.
- In adults, it generally only produces very mild symptoms, but it can make young children extremely ill, or even be fatal.

5. c

- *The Union Minister for Agriculture and Farmers Welfare, Shri Narendra Singh Tomar has recently addressed the 40th foundation day of NABARD.*

**National Bank for Agriculture and Rural Development (NABARD)**

- It was established on 12 July 1982 by an Act of the Parliament.
- NABARD is wholly owned by the Government of India.
- NABARD, as a Development Bank, is mandated for providing and regulating credit and other facilities for the promotion and development of agriculture, small scale industries, cottage and village industries, handicrafts and other rural crafts and other allied economic activities in rural areas with a view to promoting integrated rural development and securing prosperity of rural areas, and for matters connected therewith or incidental thereto.
- It aims to promote sustainable and equitable agriculture and rural development through participative financial and non-financial interventions, innovations, technology and institutional development for securing prosperity.

6. d

**Flexible Fuel Vehicles (FFVs)**

- Union govt will issue new guidelines for use of flexible fuel vehicles (FFVs) using flex engines by October.
- The guidelines will specify engine configuration and other changes required in vehicles to conform to stipulated changes in fuel mix.
- FFVs have compatible engines to run on more than 84 per cent ethanol blended petrol.
- FFVs are aimed at reducing the use of polluting fossil fuels and cutting down harmful emissions.
- For India, FFVs will present a different advantage as they will allow vehicles to use different blends of ethanol mixed petrol available in different parts of the country.

7. d

**Speaker of the house**

- The Speaker holds Office from the date of his/her election till immediately before the first meeting of the next Lok Sabha.
- The Constitution of India requires the Speaker to be a member of the House.
- Although there are no specific qualifications prescribed for being elected the Speaker, an understanding of the Constitution and the laws of the country is considered a major asset for the holder of the Office of the Speaker.
- Usually, a member belonging to the ruling party is elected Speaker.
- The Speaker (along with the Deputy Speaker) is elected from among the Lok Sabha members by a simple majority of members present and voting in the House.

8. c

**NASA's VIPER Mission**

- NASA has announced that it will launch its Volatiles Investigating Polar Exploration Rover, or VIPER, in 2023.
- NASA is undertaking the mission to understand if it is possible for human life to sustain there, by using locally available resources.
- VIPER is a mobile robot, it is the first resource mapping mission on any other celestial body.
- VIPER's findings will inform "future landing sites under the Artemis program by helping to determine locations where water and other resources can be harvested" to sustain humans over extended stays.

9. a

**Kesaria Buddha Stupa**

- The world-famous Kesaria Buddha stupa is located in east Champaran district of Bihar.
- The ASI (Archaeological Survey of India) has declared it a protected monument of national importance.
- The stupa is said to be the tallest and the largest Buddhist stupa in the world.



- The first construction of the Stupa is dated to the 3rd century BCE.
- The original Kesaria stupa probably dates to the time of Ashoka (circa 250 BCE), as the remains of a capital of a Pillar of Ashoka were discovered there.
- The current stupa dates to the Gupta Dynasty between 200 AD and 750 AD and may have been associated with the 4th century ruler Raja Chakravarti.

10. b

### **Mahananda River**

- The Mahananda River is a trans-boundary river that flows through the Indian states of Bihar and West Bengal, and Bangladesh.
- The river flows through Bihar, West Bengal, and then continues south-eastward to join the Ganga at Godagari in Bangladesh.

**14-07-2021**

1) With respect to *Cairo Consensus*, sometimes seen in the news recently, consider the following statements:

1. It is associated with population control and focuses on meeting the needs of individual women and men, rather than on achieving demographic targets.
2. It introduced the concepts of sexual and reproductive health and reproductive rights.
3. It was adopted at the International Conference on Population and Development (ICPD) held in 1994 at Cairo, Egypt.

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. 1, 2 and 3

2) Consider the following statements with respect to *Beresheet-2*

1. The mission aims for a double landing on Mars and the installment of the lightest ever landers, each weighing 60 kg without fuel.
2. The mission is an initiative of SpaceIL, the non-profit organization based in Israel.

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

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

3) Consider the following statements:

1. The State was called as the 'Jewel of India' by Jawaharlal Nehru, the former Prime Minister of India.
2. The Meiteis are an ethnic group native to this State located in the North-Eastern India.
3. Lai Haraoba is one of the main festivals still performed in this State which has its roots in the pre-Vaishnavite period.

Identify the State which correctly matches with the description given above:

- a. Tripura
- b. Manipur
- c. Mizoram
- d. Nagaland

4) Consider the following pairs:

1. India's single largest solar park – Ladakh
2. India's largest Floating Solar project – Rann of Kutch
3. India's first Green Hydrogen Mobility project – Visakhapatnam

Which of the pair(s) given above is/are correctly matched?

- a. 1 only
- b. 1 and 3 only





- c. 2 and 3 only  
d. None of the above

5) Which of the following is the first country in our immediate neighbourhood to accept mobile based payments through the *BHIM App*?

- a. Nepal  
b. Bhutan  
c. Maldives  
d. Sri Lanka

6) Consider the following statements with respect to *RBI Retail Direct Scheme*

1. It allows retail investors to buy and sell Treasury Bills, G-Secs, Sovereign Gold Bonds and State Development Loans.
2. Under the scheme, Non-Resident retail investors are also eligible to invest in Government Securities.

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

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

7) Which of the following statement(s) is/are correct with respect to *Arctic Amplification*

1. The phenomenon highlights that over the past 30 years, the Arctic has warmed at roughly twice the rate as the entire globe.
2. Iodic acid ( $\text{HIO}_3$ ) is one of the aerosol particles responsible for Arctic Amplification or Arctic Warming.

Select the correct answer using the codes given below:

- a. 1 only  
b. 2 only  
c. Both 1 and 2

- d. Neither 1 nor 2

8) Consider the following statements with respect to *Carbon capture and Sequestration*

1. It is the process of capturing waste  $\text{CO}_2$  from large point sources, such as fossil fuel power plants, and transporting it to a storage site.
2. There is only artificial process to capture and store Carbon dioxide which includes Industrial & Technological methods.

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

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

9) *Bryum Bharatiensis*, recently in news, is related to?

- a. It is a new fish species discovered in Assam.  
b. It is an extinct bird species found during Pleistocene epoch.  
c. It is a native moss species discovered in Antarctica.  
d. It is a new virus that affects Arctic animals.

10) Consider the following statements with respect to *Human Papilloma Virus (HPV)*

1. It poses a higher risk for HIV-infected persons, smokers, and people dependent on hormonal contraceptives.
2. It can cause throat or rectum cancer in both men and women.
3. The vaccines for this virus are available in India.

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

- a. 1 only
- b. 1 & 2 only
- c. 2 & 3 only
- d. All of the above

## Answers

1. d

- The Uttar Pradesh government has recently released the draft Uttar Pradesh Population (Control, Stabilisation and Welfare) Bill, 2021.
- Incentives and penalties form an integral component of the draft bill.
- These steps are aimed at reducing U.P.'s total fertility rate (TFR), recorded as 2.7 by the National Family Health Survey-4 in 2016, a figure only lower than that of neighbouring Bihar (3.1 as of 2020 in NFHS-5).
- Instead of taking steps towards the Cairo Consensus which calls for promotion of reproductive rights, empowering women, universal education, maternal and infant health, the draft bill have taken the beaten path of a mixture of incentives and penalties to tackle what is a socio-economic issue as a demographic one.

### Cairo Consensus

- The International Conference on Population and Development (ICPD) was convened in 1994 under the auspices of the United Nations and was organized by a secretariat composed of the Population Division of the then UN Department for Economic and Social Information and Policy Analysis (now the Department of Economic and Social Affairs) and UNFPA.
- The Conference adopted the Programme of Action by consensus, also known as the Cairo Consensus, which emphasized the fundamental role of women's interests in population matters and **introduced the concepts of sexual and reproductive health and reproductive rights**.
- The Programme of Action, adopted by acclamation on 13 September 1994, emphasizes the integral linkages between

population and development and focuses on meeting the needs of individual women and men, rather than on achieving demographic targets.

- The Programme of Action builds upon the World Population Plan of Action, adopted at the World Population Conference held in Bucharest in 1974, and the recommendations adopted at the International Conference on Population, held in Mexico City in 1984.

2. b

- SpaceIL, the nonprofit Israeli initiative whose spacecraft crashed on the moon two years ago has recently said that it has secured \$70 million in funding to make a second attempt at a lunar landing.
- The first "Beresheet" or "Genesis spacecraft" built by SpaceIL and state-owned Israel Aerospace Industries, crashed into the moon moments before touchdown in April 2019, falling short in its attempt to become the first privately funded lunar landing.

### Beresheet 2

- The new mission, to be called "Beresheet 2", was first announced in late 2020.
- It plans to set new global space records through a double landing on the moon and the installment of the lightest ever moon landers, each weighing 60 kg without fuel.
- It will be composed of three spacecraft — an orbiter and two landers — with the mission hoping to follow China in becoming only the second to successfully land on the far side of the moon.
- The orbiter, known as the mothership, is set to remain in space for years serving as a platform for educational science activities through a remote connection that allows students from around the world to participate in deep-space research.

3. b

### Lai Haraoba Festival

- It is a religious festival celebrated by the Meitei people who are largely settled in and around Manipur.

- It is one of the main festivals still performed in Manipur which has its roots in the pre-Vaishnavite period.

### Meiteis

- They live mostly in the Imphal Valley and make up the majority of the Manipur's population.
- While the Nagas have mostly converted to Christianity, the Meiteis are predominantly Hindus.
- Politically, Manipur may have been under the suzerainty of Burmese rulers but culturally it remained well-connected with mainland India.

### Manipur

- Called the 'jewel of India' by Jawaharlal Nehru, Manipur is geographically a small valley surrounded by hills where the Nagas live.
- It was under the control of the Burmese kings until 1826 when under the Yandabo Treaty with the British East India Company, the king of Ava (Burma) recognised the British-supported Gambhir Singh as the king of Manipur.
- In 1891, Manipur came under the British rule as a princely state.
- Manipur became a part of Independent India on October 15, 1949.

4. d

- *NTPC Renewable Energy Ltd (NTPC-REL), a 100% subsidiary of NTPC, signed a MoU recently with Union Territory of Ladakh to set up the country's first green Hydrogen Mobility based project in the region.*
- Leh is soon to become India's first city to implement a green hydrogen based mobility project with zero emission.
- *NTPC REL has also received the go-ahead from Ministry of New and Renewable Energy (MNRE) to set up 4750 MW renewable energy park at Rann of Kutch in Khavada, Gujarat.*
- This will be India's largest solar park to be built by the largest power producer of the country.

- NTPC has recently revised its target of achieving 60GW renewables capacity by 2032, almost doubling the earlier target.

- Recently, NTPC has commissioned India's largest floating solar project of 10MW at Vishakhapatnam.

1. India's single largest solar park – Rann of Kutch
2. India's largest Floating Solar project – Visakhapatnam
3. India's first Green Hydrogen Mobility project – Ladakh

5. b

- *Union Minister of Finance & Corporate Affairs Smt. Nirmala Sitharaman, along with her counterpart, the Hon'ble Finance Minister of Bhutan, Mr Lyonpo Namgay Tshering, jointly launched BHIM-UPI in Bhutan recently.*
- This launch fulfils the commitment made by the two countries during the Hon'ble Prime Minister of India's State visit to Bhutan in 2019.
- Following that visit, India and Bhutan have already enabled inter-operability in acceptance of Rupay cards in each other's countries in two phases.
- With today's launch of BHIM-UPI in Bhutan, the payment infrastructures of the two countries are seamlessly connected and will benefit a large number of tourists and businessmen from India who travel to Bhutan each year.
- This will enhance the ease of living and ease of travelling through cashless transactions at the touch of a button.
- ***Bhutan*** is the first country to adopt UPI standards for its QR deployment, and the ***first country in our immediate neighbourhood to accept mobile based payments through the BHIM App.***

6. c

### RBI Retail Direct Scheme

- Recently, the Reserve Bank of India (RBI) had announced the 'RBI Retail Direct' scheme.



- It is a one-stop solution to facilitate investment in Government Securities by individual investors.
- Retail investors (individuals) will have the facility to open and maintain the 'Retail Direct Gilt Account' (RDG Account) with RBI.
- RDG Account can be opened through an 'Online portal' provided for the purpose of the scheme.
- The Non-Resident retail investors eligible to invest in Government Securities under Foreign Exchange Management Act, 1999 are eligible under the scheme.
- The scheme allows that an investor would be able to bid in G-Secs auctions and buy them in the secondary market as well.

7. c

### Arctic Amplification

- Global warming and climate change are impacting the Arctic more than the rest of the world.
- A team of scientists have identified iodic acid (HIO<sub>3</sub>) as a novel driver of new aerosol particle formation in the Arctic which is responsible for Arctic Amplification or Arctic Warming.
- Presence of Iodic acid in the region had not been observed previously, these aerosol particles influence the formation of clouds.
- As these clouds reflect solar radiation (known as Aerosol Radiative Forcing) but also retain heat on the Earth's surface, they have an influence on the warming of the Arctic.

8. a

### Carbon capture and Sequestration

- Carbon capture and sequestration is the process of capturing waste carbon dioxide (CO<sub>2</sub>) from large point sources, such as fossil fuel power plants, transporting it to a storage site, and depositing it where it will not enter the atmosphere, normally an underground geological formation.
- Carbon dioxide is naturally captured from the atmosphere through biological, chemical, and physical processes.

- These changes can be accelerated through changes in land use and agricultural practices, such as converting crop and livestock grazing land into land for non-crop fast-growing plants.
- There are different types of
  1. Biological Carbon Sequestration
  2. Geological Carbon Sequestration
  3. Industrial Carbon Sequestration
  4. Technological Carbon Sequestration

9. c

### Bryum Bharatiensis

- Indian Scientists have discovered a native moss species in Antarctica named Bryum bharatiensis.
- This is the first time a plant species has been discovered in the four decades of the Indian Antarctic mission.

10. d

### Human Papilloma Virus (HPV)

- 'Human Papilloma Virus (HPV)' causes penile cancer in men and cervical, vaginal, anal & vulvar cancer in women.
- The virus is transmitted through intimate contact like - sexual intercourse, oral or anal sex.
- The Vaccine - In India, two vaccines namely "Gardasil" & "Cervarix" are available.
- These vaccines protect against almost 90% of genital warts in men and women.

15-07-2021

### 1) Consider the following statements with respect to Centrally Sponsored Scheme (CSS) for Development of Infrastructure Facilities for Judiciary

1. The Scheme aims at improving the physical infrastructure of the Subordinate Courts all over India.
2. The primary responsibility of infrastructure development for the subordinate judiciary rests with the State Governments.



3. Under the Scheme, fund sharing between Union & States are in the ratio of 60:40 for all States & UTs.

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

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

2) Consider the following statements with respect to *RBI Retail Direct Scheme*

1. It is a one-stop solution to facilitate investment in Government Securities (G-secs) by retail investors (individuals).
2. Non-resident retail investors are also eligible to invest in government securities through Foreign Exchange Management Act, 1999.

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

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

3) With respect to *Gram Nyayalayas*, consider the following statements:

1. It was established based on the recommendations of 114th Law Commission of India Report.
2. The Gram Nyayalayas will only try civil suits and not criminal cases.
3. The Gram Nyayalaya shall not be bound by the rules of evidence provided in the Indian Evidence Act, 1872.

Which of the statements given above are correct?

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

- d. 1, 2 and 3

4) With respect to *Moon's wobble*, which of the statements given below is *incorrect*?

- a. When the moon orbits the Earth its angle relative to the Sun changes over time and it is called as Moon Wobble
- b. The wobble in the moon's orbit takes about 18.6 years to complete
- c. In the first half of the cycle, Earth's regular daily tides are suppressed, making the high tides lower and the low tides higher and in the second half, the tides are amplified
- d. The lunar wobble combining with rising sea levels caused by the ongoing climate change will increase coastal flooding in many Coastal Cities

5) Consider the following statements with respect to *Karman Line*

1. It is an imaginary boundary between the Earth's Atmosphere and the Outer Space, 100 kilometers above the mean sea level. .
2. It has been recognised as the legal boundary in the Outer Space Treaty adopted in 1967.

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

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

6) Consider the following statements with respect to *Net Stable Funds Rate (NSFR)*

1. It is one of the liquidity ratios created by RBI based on the recommendations of NITI Aayog.
2. The minimum NSFR requirement is 100%, therefore it measures medium-term (1 year) resilience.





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

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

7) Which of the following statement(s) is/are correct with respect to *Electron Bubble*

- 1. An electron bubble is the empty space created around a free electron in a cryogenic gas or liquid, such as neon or helium.
- 2. They are typically very small, about 2 nm in diameter at atmospheric pressure.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Cryptogams*

- 1. Cryptogams consist of seedless plants and plant-like organism, they reproduces with the help of spores.
- 2. India's first cryptogamic garden was inaugurated in Thrissur, Kerala.

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

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

9) *Gravellyia Boro*, recently in news, is related to?

- a. It is a newly discovered virus that affects Asiatic Lions

- b. It is a newly discovered tree frog in Arunachal Pradesh
- c. It is a newly discovered fish species discovered in Mizoram
- d. It is a newly discovered burrow spider in Assam

10) *State of Food Security and Nutrition in the World 2021* report is released by which of the following Organizations?

- a. World Health Organization (WHO)
- b. UN-Children's Emergency Fund (UNICEF)
- c. Food and Agriculture Organization (FAO)
- d. UN-Human Rights Council (UNHRC)

## Answers

1. b

- The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has recently approved the continuation of the Centrally Sponsored Scheme (CSS) for Development of Infrastructure Facilities for Judiciary for further five years from 01.04.2021 to 31.03.2026 at a total cost of Rs.9000 crore.
- The Cabinet also approved the decision to support the Gram Nyayalayas by providing recurring and non-recurring grants for a period of 5 years with a total outlay of Rs 50 crores.

### ***Centrally Sponsored Scheme (CSS) for Development of Infrastructure Facilities for Judiciary***

- Though the primary responsibility of infrastructure development for the subordinate judiciary rests with the State Governments, the Central Government through this CSS takes part in the activity.
- It aims at improving the physical infrastructure of the Subordinate Courts as also the housing needs for judicial officers of District and Subordinate Courts in the country with a view to facilitate better justice delivery.
- The Scheme covers all States & Union Territories (UTs)



- The fund sharing pattern between the Union & States will be in the ratio of 60:40 except Arunachal Pradesh, Assam, Mizoram, Meghalaya, Tripura, Nagaland, Manipur, Sikkim, Himachal Pradesh and Uttarakhand, where the ratio would be 90:10.
- The Scheme has been in operation since 1993-94.

2. c

- *RBI has recently announced the 'RBI Retail Direct Scheme'.*

### **RBI Retail Direct Scheme**

- It is a one-stop solution to facilitate investment in Government Securities (G-secs) by retail investors (individuals).
- Under the scheme, the investors will have the facility to open and maintain the 'Retail Direct Gilt Account' (RDG Account) with the RBI.
- A "Gilt Account" means an account opened and maintained for holding Government securities. Instead of money, the account is debited or credited with treasury bills or government securities.
- RDG account can be opened through an online portal provided for the purpose of the scheme.
- The online portal will give registered users access to primary issuance of G-secs and access to Negotiated Dealing System-Order Matching system (NDS-OM).
- NDS-OM is an electronic, screen-based, anonymous, order-driven trading system for dealing in government securities. It was introduced by the RBI in 2005.

### **Retail Investor**

- They are non-professional investors who buy and sell securities or funds that contain a basket of securities such as mutual funds and exchange traded funds (ETFs).
- They execute their trades through traditional or online brokerage firms.
- They purchase securities for their own personal accounts and often trade in dramatically smaller amounts as compared to institutional investors.

### **Institutional Investor**

- It is an umbrella term for larger-scale investments by professional portfolio and fund managers.
- They are the big players in the market who move big money.
- Examples - Pension funds, Mutual funds, Money managers, Insurance companies, Investment banks, Commercial trusts, Endowment funds for a university or college, Hedge funds, Private equity firms or investors, etc

3. b

- *The Cabinet has recently approved the decision to support the Gram Nyayalayas by providing recurring and non-recurring grants for a period of 5 years with a total outlay of Rs 50 crores.*
- However, funds will be released to the states only after the notified Gram Nyayalayas are operationalised and Nyayadhikaris have been appointed and reported on the Gram Nyayalaya portal of Department of Justice.
- A review will be undertaken after one year to assess whether Gram Nyayalaya Scheme has successfully achieved its objective of providing speedy and affordable justice to the rural marginalized.

### **Gram Nyayalayas**

- The Law Commission of India, in its 114th Report, had suggested establishment of Gram Nyayalayas for providing affordable and quick access to justice to the citizens at their doorsteps.
- The Gram Nyayalayas Act came into force with effect from 2009.
- They are aimed at providing inexpensive justice to people in rural areas at their doorsteps.
- They are to be established for every Panchayat at intermediate level or a group of contiguous Panchayats at intermediate level or for a group of contiguous Gram Panchayats.
- The Nyayadhikari shall periodically visit villages and may hear the parties and dispose of the cases at the place other than its headquarters.



- The Gram Nyayalayas will try criminal cases, civil suits, claims or disputes which are specified in the First Schedule and the Second Schedule to the Act.
- They are to follow summary procedure in criminal trial.
- Disputes are to be settled as far as possible by bringing about conciliation between the parties and for this purpose, the Gram Nyayalayas will make use of the conciliators to be appointed for this purpose
- The Gram Nyayalaya shall not be bound by the rules of evidence provided in the Indian Evidence Act, 1872 but shall be guided by the principles of natural justice subject to any rule made by the High Court.

4. a

- *In the mid-2030s, many coastal cities in the United States and across the world will experience an increase in high-tide floods, notes a new study by NASA researchers.*
- The study noted that the alignment of rising sea levels with the lunar cycle will cause a dramatic increase in coastal flooding.
- The combinations of the Moon's gravitational pull, rising sea levels, and climate change will continue to exacerbate coastal flooding in the United States and across the world.

### Moon Wobble

- The moon's wobble is not a new or dangerous thing and was first reported in 1728.
- According to the NASA's website, when the Moon makes its elliptical orbit, its velocity varies and alters causing our perspective of the light side to appear at slightly different angles.
- This is what it calls the Moon's wobble or that is how it appears to our eyes.
- In other words, when the moon orbits the Earth its **angle relative to the equator changes over time**. This is called the Moon Wobble.
- The wobble in the moon's orbit takes about 18.6 years to complete.
- During half of the Moon's orbit of 18.6 years, the Earth's regular tides are suppressed, (i.e)

high tides are lower than normal and low tides higher than normal.

- In the other half, the effect is reversed, which is called the tide-amplifying phase of the Moon.

5. a

- *A British entrepreneur Richard Branson hurtled into space aboard his own winged rocket ship recently, beating out fellow billionaire Jeff Bezos.*
- The nearly 71-year-old Branson and five crewmates from his Virgin Galactic space-tourism company reached an altitude of about 53 miles (88 kilometers) over the New Mexico desert enough to experience three to four minutes of weightlessness and see the curvature of the Earth and then safely glided to a runway landing.
- But experts and space enthusiasts are in doubt whether the height to which he travelled can be termed 'space'.

### Karman Line

- It is an attempt to define a boundary between Earth's atmosphere and outer space.
- The **most widely accepted boundary** of space is known as the Karman line, 100km above mean sea level.
- But the United States uses 80km as the cutoff point.
- The Karman line has been compared to international waters, as there are no national boundaries and human laws in force beyond the line.
- It was named after aerospace pioneer Theodore von Karman.
- But, various countries and entities define space boundary differently for various purposes.
- International law does not define the edge of space, or the limit of national airspace.
- Defining a legal boundary of what and where space is can help avoid disputes and keep track of space activities and human space travel.
- Some countries, including the United States, believe that defining or delimiting outer space is not necessary.



6. b

**Net Stable Funds Rate (NSFR)**

- Basel-III created two liquidity ratios namely Liquidity Coverage Ratio (LCR) and Net Stable Funds Rate (NSFR).
- The liquidity coverage ratio (LCR) will require banks to hold a buffer of high-quality liquid assets sufficient to deal with the cash outflows encountered in an acute short term stress scenario as specified by supervisors.
- This is to prevent situations like “Bank Run”, the goal is to ensure that banks have enough liquidity for a 30-days stress scenario if it were to happen.
- The Net Stable Funds Rate (NSFR) requires banks to maintain a stable funding profile in relation to their off-balance-sheet assets and activities.
- NSFR requires banks to fund their activities with stable sources of finance (reliable over the one-year horizon).
- The minimum NSFR requirement is 100%. Therefore, LCR measures short-term (30 days) resilience, and NSFR measures medium-term (1 year) resilience.

7. c

**Electron Bubbles**

- An electron injected into a superfluid form of helium creates a Single Electron Bubble (SEB), a cavity that is free of helium atoms and contains only the electron.
- The shape of the bubble depends on the energy state of the electron.
- Super fluidity is the frictionless flow and other exotic behaviour observed in liquid helium at temperatures near absolute zero ( $-273.15^{\circ}\text{C}$ ), and similar frictionless behaviour of electrons in a superconducting solid.

8. a

**Cryptogams**

- Plant kingdom can be divided into two sub-kingdoms viz. Cryptogams and phanerogams.
- Cryptogams consist of seedless plants and plant-like organisms whereas phanerogams consist of seed-bearing plants.

- A cryptogam is a plant that reproduces with the help of spores, they do not produce any reproductive structure, seed, or flower.
- They need a moist environment to survive and these are also present in aquatic and terrestrial places.
- Algae, bryophytes, lichens, ferns and fungi are the best-known groups of cryptogams.
- Recently, India's first cryptogammic garden was inaugurated in the Chakrata town of Dehradun, Uttarakhand.

9. d

**Gravelia Boro**

- It was found in the Jharbari range of western Assam's Chirang Reserve Forest.
- Its name has been derived from the bodo community one of the largest ethno-linguistic group in Assam.

10. c

**State of Food Security and Nutrition in the World 2021**

- It has quoted a study done in 63 low- and middle-income countries covering a population of 3.5 billion on changes in the income of people.
  - It has extrapolated its impact on choice of diets, few report findings are as follows
1. Undernourishment due to the pandemic has impacted children the most, also a global goal to fix by 2030.
  2. Nearly 12% of the global population faced severe levels of food insecurity or they ran out of food and in worst situations, must have a day without food.
  3. In 2020, some 2.37 billion people couldn't access adequate food, an increase of 320 million people in comparison to the 2019 figure.

**16-07-2021****1) Who among the following acts as the 'Residual Legatee' at the Central level?**

- a. Prime Minister

- b. Cabinet Secretary
- c. Principal Secretary to the Prime Minister
- d. Secretary to Ministry of Home Affairs

2) Consider the following statements with respect to *Legal Information Management & Briefing System (LIMBS)*

- 1. It is a web based portal developed by Department of Legal Affairs, Ministry of Law & Justice.
- 2. It aims to facilitate delivery of legal advice through an expert panel of lawyers, with special focus on those pending for more than 10 years.

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

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

3) Consider the following statements with respect to *School Innovation Ambassador Program*

- 1. It aims at training school teachers across the country on Ideation, IPR, product development, design thinking, problem solving and critical thinking.
- 2. It is being implemented by the Ministry of Commerce & Industry in association with University Grants Commission (UGC).

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

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

4) Consider the following statements with respect to *Gaganyaan programme*

- 1. It is a Space based Augmentation programme which will provide the best possible navigational services over Indian Flight Information Region (FIR) with the capability of expanding to neighbouring FIRs.
- 2. The mission's objectives will be accomplished using ISRO's latest generation Launch Vehicle, LVM3 with the liquid stage Vikas Engine.

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

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

5) Consider the following statements with respect to *Chemotaxis*

- 1. It is the directed motion of an organism toward environmental conditions it deems attractive and/or away from surroundings it finds repellent.
- 2. White blood cells that are needed for healing injuries find the site of injury or inflammation by chemotaxis.

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

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

6) Consider the following statements with respect to *Ultra Violet C Radiation*

- 1. Ultra Violet- C (UV-C) radiation can destroy the outer protein coating of the SARS-Coronavirus.
- 2. Far-UVC light in the range of 207–222 nm can highly damage mammalian skin as it can penetrate through the outer dead-cell layer.

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



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

7) Which of the following statement(s) is/are correct with respect to *Article 311*

1. Under the article, no civil servant can be dismissed or removed or reduced in rank except after an inquiry.
2. Under the article, the safeguard of an inquiry provided to a Civil servant does not apply in cases of conviction on a criminal charge.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Rewilding of Wild Animals*

1. It a systematic, scientifically planned re-establishment of viable populations of tigers in this historical range over the longer term.
2. The chances of success of re-wilding of hand reared carnivores in the wild is 80 % more when compared with the herbivores animals.

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

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

9) Which of the following countries is first to harvest from *Space Rice Cultivation*?

- a. South Korea

- b. China
- c. Russia
- d. Japan

10) Consider the following statements with respect to *Critically Important Antimicrobials*

1. It is used to formulate and prioritize risk assessment of antimicrobial resistance.
2. It is used both in human and veterinary medicine.
3. Collistin is marked as 'Highest Priority Critically Important Antimicrobials' in the WHO list.

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

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

## Answers

1. c

### *Residual Legatee*

- It deals with all such subjects that are not allotted to any ministry/department.
- The Residual Legatee, at the central level is performed by the Principal Secretary to the Prime Minister who is the administrative head of the PM office (PMO).
- The Chief Secretary is the Residual Legatee at the state level, while the Cabinet Secretary does not perform this legal function at the Centre.

2. a

### *Legal Information Management & Briefing System (LIMBS)*

- It is a web based portal developed by Department of Legal Affairs, Ministry of Law & Justice for monitoring and handling of various



court cases of Govt. Departments and Ministries.

- It aims to create a National Portal of all cases pending in various courts/ Tribunals as a part of the e-Governance initiative.
- **Tele-law service:** It is aimed at facilitating delivery of legal advice through an expert panel of lawyers stationed at the State Legal Services Authorities (SLSA).
- **Nyaya Mitra:** It is aimed at reducing pendency of cases across selected districts, with special focus on those pending for more than 10 years.

3. a

- *Union Education Minister Shri Dharmendra Pradhan and Tribal Affairs Minister Shri Arjun Munda will jointly launch the 'School Innovation Ambassador Training Program' for 50,000 School Teachers.*
- It aims at training 50,000 school teachers on Innovation, Entrepreneurship, IPR, Design Thinking, Product development, Idea generation etc.
- The trained teachers will be designated as Innovation Ambassador of Ministry of Education.
- They will nurture the young school students on Ideation, IPR, product development, design thinking, problem solving and critical thinking.
- The program has been conceptualised by the Ministry of Education and All India Council for Technical Education (AICTE).
- The program will be implemented by the Ministry of Education's Innovation Cell, AICTE and CBSE.

4. d

- *The Indian Space Research Organisation (ISRO) has successfully conducted the third long-duration hot test of the liquid propellant Vikas engine for the Gaganyaan programme, the country's first manned mission to space.*
- The test was done for the core L110 liquid stage of the human rated GSLV MkIII vehicle.

### Gaganyaan Programme

- The objective of the Gaganyaan programme is to demonstrate the capability to send humans to Low Earth Orbit (LEO) onboard an Indian launch vehicle and bring them back to earth.
- ISRO's heavy-lift launcher GSLV Mk III has been identified for the mission.
- ISRO's GSLV Mk III, which successfully carried the Chandrayaan-2 mission to space in its first operational flight, has three stages – the two solid S200 boosters fired at the launch, the core L110 liquid stage, and the upper C-25 cryogenic stage.

### GAGAN

- It is an acronym for GPS Aided GEO Augmented Navigation.
- It is a Space Based Augmentation System (SBAS) jointly developed by ISRO and AAI to provide the best possible navigational services over Indian FIR (Flight Information Region) with the capability of expanding to neighbouring FIRs.

5. c

- E.coli, bacterial resident of the human intestine, show chemotaxis in response to different chemicals present in human gastrointestinal tract.
- Chemotaxis is the directed motion of an organism toward environmental conditions it deems attractive and/or away from surroundings it finds repellent.
- Scientists have now found the condition that is most suitable for getting the best chemotactic performance.
- This finding will help track behavior of E-Coli bacteria in response to chemical signals.

### Chemotaxis in other Organisms

- A sperm cell finds the ovum using chemotaxis.
- White blood cells that are needed for healing injuries find the site of injury or inflammation by chemotaxis.
- Butterflies also track flowers, and male insects reach their targets by using chemotaxis.
- Understanding chemotaxis involves how it is affected by various conditions present inside the cell or in the environment.

6. b

**Ultra Violet C Radiation**

- The UV is divided into three bands: UV-C (100-280 nm), UV-B (280-315 nm) and UV-A (315-400 nm).
- The UV-A and UV-B rays from the Sun are transmitted through our atmosphere and all UV-C is filtered by the ozone layer.
- UV-C irradiation was highly effective in inactivating SARS-CoV-2 replication.
- Far-UVC light (207–222 nm) does not harm mammalian skin.
- The Far-UVC light has a very limited range and cannot penetrate through the outer dead-cell layer of human skin or the tear layer in the eye.

7. c

**Article 311**

- Article 311 of the Constitution deals with 'Dismissal, removal or reduction in rank of persons employed in civil capacities under the Union or a State'.
- Under the article no civil servant can be "dismissed or removed or reduced in rank except after an inquiry in which he has been informed of the charges and given a reasonable opportunity of being heard in respect of those charges".
- The safeguard of an inquiry also does not apply "where the authority is satisfied that for some reason, to be recorded by that authority in writing, it is not reasonably practicable to hold such inquiry".
- It also shall not apply "where the President or the Governor, as the case may be, is satisfied that in the interest of the security of the State it is not expedient to hold such inquiry".
- Only available remedy to terminated employees under this article is to challenge the government's decision in the High Court.

8. a

**Rewilding of Wild Animals**

- Under National Tiger Conservation Authority (NTCA) reintroduction of the cub into the wild after a certain time when it appears that the cub is capable of surviving in the wild

independently and this is what is known as 'Re-wilding'.

- The NTCA stresses that the tiger cub should be reared in an in situ enclosure for a minimum of two years, and during this time, each cub should have a successful record of at least 50 'kills'.
- The process of re-wilding of a wild animal after rearing it in captivity is very complicated, and fraught with risks.
- There are 50-50 chances of success and failure of re-wilding of hand reared carnivores in the wild.
- The chance of success is less than 1 per cent if we look at all the failures of reintroductions and failures have led to deaths of many tigers as well as serious livestock depredations, and even man-eating problems.

9. b

**Space Rice Cultivation**

- China has harvested the first batch of Space rice from seeds that went to a 23-day lunar voyage with China's Chang'e-5 in November 2020.
- After being exposed to cosmic radiation and zero gravity, these seeds weighing around 40 gram returned and were harvested at the space breeding research centre of the South China Agricultural University in Guangdong province.

10. d

**Critically Important Antimicrobials**

- It is certain antimicrobial classes classified as "Highest Priority Critically Important Antimicrobials" for human medicine by the World Health Organisation (WHO) in the so called WHO list of critically important antimicrobials for human medicine (WHO CIA list).
- It is intended as a reference to help formulate and prioritize risk assessment and risk management strategies for containing antimicrobial resistance mainly due to non-human antimicrobial use.
- "Highest Priority Critically Important Antimicrobials" are



1. Quinolones
2. 3rd and higher generation cephalosporins
3. Macrolides and ketolides
4. Glycopeptides
5. Polymyxins (Colistin)

- c. Both 1 and 2
- d. Neither 1 nor 2

**17-07-2021**

**1) Consider the following statements with respect to *National Commission for Women (NCW)***

1. It was initially constituted as a statutory body and has been accorded Constitutional Status later through Article 338B in the Indian Constitution.
2. The Chairperson and the members of NCW will be removed by the Union Government.
3. The Union Government places annual reports before each House of Parliament, along with a memorandum explaining the action taken on the recommendation.

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

- a. 3 only
- b. 2 and 3 only
- c. 1, 2 and 3
- d. None of the above

**2) Consider the following statements with respect to *Kisan Sarathi***

1. It was launched to facilitate farmers to get 'right information at right time' in their desired language.
2. It was launched jointly by the Ministry of Agriculture and Farmers Welfare and Ministry of Electronics and Information Technology.

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

- a. 1 only
- b. 2 only

**3) Consider the following statements with respect to *Non-Fungible Tokens***

1. It is a digital asset that represents real-world object and allows people to trade the ownership of digital entities.
2. Each non-fungible token is uniquely identifiable and are not interchangeable in nature.

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

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

**4) Consider the following statements with respect to *Caterpillar Slug***

1. It is a species, native to South America, has now spread to several parts of India and could soon become an invasive species.
2. It feeds on the leaves and bark of mulberry plants and was also sighted on neem trees, papaya, and calotropis plants.

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

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

**5) Consider the following statements with respect to *Vaquita Porpoises***

1. It is a small porpoise found only in the northern Gulf of California, Sea of Cortez in Mexico.
2. It is a critically endangered species with fewer than 20 of these animals remain.



3. The most significant threat to the vaquita's survival is accidental entanglement in gill-nets, as by-catch.

Which of the statements given above are correct?

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

6) Consider the following statements with respect to *Longevity Derivatives*

- 1. These derivatives are designed to deliver increasingly high pay-outs as a selected population group lives longer than originally expected or calculated.
- 2. They come in the form of survivor bonds, forward contracts, options, and swaps.

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

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

7) Which of the following statement(s) is/are correct with respect to *Solar Energy Corporation of India Limited (SECI)*

- 1. It is the only Central Public Sector undertaking dedicated to the solar energy sector under the administrative control of Ministry of Power.
- 2. It is the single largest Green Financier in the country.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Nonylphenol*

- 1. It is a hazardous chemical present in detergents which is known to enter water bodies and the food chains.
- 2. It is associated with reproductive and developmental effects in rodents.

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

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

9) *Mangerbani Cave Paintings* are found in which of the following states?

- a. Punjab
- b. Gujarat
- c. Haryana
- d. Madhya Pradesh

10) Consider the following statements with respect to *Geomagnetic Storms*

- 1. It refers to major or minor disturbances occurring in Earth's magnetosphere.
- 2. It is due to the efficient exchange of energy from solar winds entering Earth's space environment.
- 3. The frequency of geomagnetic storms increases and decreases with the sunspot cycle.

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

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



## Answers

1. b

- The National Commission for Women (NCW) has recently signed an MoU with Bureau of Police Research and Development (BPR&D) for gender sensitization of police personnel across the country.
- The objective of the programme is to ensure gender sensitization of police personnel with respect to legislation and policies concerning women and bringing attitudinal and behavioural changes in police officers while dealing with crimes against women.

### National Commission for Women

- It was set up as statutory body in 1992 under the National Commission for Women Act, 1990.
- Its objective is to review the Constitutional and legal safeguards for women; recommend remedial legislative measures, facilitate redressal of grievances and advise the Government on all policy matters affecting women.
- The Chairperson and every Member shall hold office for such period, not exceeding three years, as may be specified by the Central Government in this behalf.
- **Chairperson and members are removed by the Central Government.**
- The **Central Government** places annual reports before each House of Parliament, along with a memorandum explaining the action taken on the recommendation.

2. c

- Government of India has recently launched a digital platform Kisan Sarathi, to facilitate farmers to get right information at right time in their desired language.
- The platform Kisan Sarathi was jointly launched by the Ministry of Agriculture and Farmers Welfare and Ministry of Electronics and Information Technology on the occasion of 93rd ICAR Foundation Day.
- This initiative will empower farmers with the technological interventions and reach farmers in remote areas.

3. c

- Non-Fungible Tokens are creating a new idea of patronage and empowering everyone from musicians and artists to TikTok creators and meme makers.

### Non-Fungible Tokens

- They are transaction records captured on the blockchain - the web version of a physical ledger.
- NFTs allow people to trade the ownership of digital entities such as memes, media, tweets, arts, articles in 'token' form.
- As NFTs are supported by blockchain, these transaction records are permanent, verified multiple times and cannot be erased or changed.
- It is not interchangeable in nature. It means that the NFT is not replaceable by another 'identical' item.
- In other words, each non-fungible token is uniquely identifiable. So, no two digital entities can have the same token.
- **Rights** - An NFT is a certificate of authenticity, or a digital autograph that can be attached to digital property.
- Buying an NFT doesn't convey copyright or usage rights unless there is an explicit licence mentioning it.
- **Earning** - NFTs don't offer any cash flow and are not real assets.
- The only way one can make money is by luring others into buying your NFT.
- To sell an NFT, a new NFT needs to be created by the seller.
- Creating an NFT will require spending real money which will go into the crypto economy.
- **Importance** - The Covid pandemic has further devastated the poorly-paid lives of innumerable artists, musicians and creators.
- The digital world offers a creative outlet, but in it, any creation can be easily duplicated.
- With NFTs, any creation can be tokenised to create a digital ownership certificate, helping creators get good price for their art.

4. b

- A study has recently found that the caterpillar slug has now spread to several parts of India and predicted that it could soon become an invasive species attacking western and Peninsular India.

#### **Purcell's hunter slug or caterpillar slug**

- The slug, *Laevicaulis haroldi*, is native to South Africa.
- It is listed as an endangered species and was first described in 1980.
- Not much is known about its ecology and according to studies, it entered India around 2010-2012 accidentally, through international trade via Mumbai.
- Now, there are over 60 records from all over the country.
- It has been reported to feed on the leaves and bark of mulberry plants.
- The slug was also sighted on neem trees, papaya, and calotropis plants.

5. d

- The Mexican government's decision to loosen its policy of keeping a fishing free zone around a protected area in the Gulf of California region was a setback to keeping alive a near-extinct porpoise species.
- Mexico had previously banned boats entering the species' last sanctuary off the coast of Mexico, known as the "zero tolerance zone".
- But the Ministry of Agriculture recently announced plans to regulate how many fishing boats can enter the area.
- Some fishing vessels had already been flouting the ban.

#### **Vaquita Porpoise**

- The vaquita is a small porpoise found only in the northern Gulf of California (Sea of Cortez) in Mexico.
- Fewer than 20 of these animals remain, making the vaquita the most endangered marine mammal in the world.

- Like many other species of porpoise, vaquita tend to be shy and elusive, avoiding boats when approached.
- They tend to prefer turbid, nutrient-rich coastal waters which attract their preferred prey: small fish, cephalopods and crustaceans.
- The single most significant threat to the vaquita's survival is accidental entanglement.
- Nearly one out of every five vaquita get entangled and drown in gillnets intended for other marine species like the totoaba, a critically endangered fish also found in the upper Gulf of California.

#### **Porpoises**

- They are among the smallest members of the cetacean family (whales, porpoises and dolphins).
- They are only distant relatives of dolphins.
- There are only seven species of porpoise; the most popular being the widely distributed harbour porpoise.

6. c

#### **Longevity derivatives**

- They are a class of securities that provide a hedge for parties exposed to longevity risks through their businesses, such as pension plan managers and insurers.
- The first and most prevalent form of longevity derivatives is the longevity or survivor bond.
- These fixed-income instruments pay a coupon based on the "survivorship" of a stated population group, which is usually determined by a nominated index responsible for measuring a certain demographic's lifespan.
- As the mortality rate of the stated population group rises, coupon payments drop until they eventually reach zero.

7. d

#### **Solar Energy Corporation of India Limited (SECI)**

- It is a CPSU under the administrative control of the Ministry of New and Renewable Energy (MNRE).

- It is the only CPSU dedicated to the Solar energy sector.
- It aims to carry on business of generation, forecasting, purchasing, producing, manufacturing, importing, exporting, exchanging, selling and trading in power products and services in India and abroad.
- SECI is established to facilitate the implementation of the National Solar Mission (NSM).
- It also has a power-trading licence and is active in this domain through trading of solar power from projects set up under the schemes being implemented by it.
- Indian Renewable Energy Development Agency Limited (IREDA) is the single largest "Green Financier" in the country.

8. c

### **Nonylphenol**

- Nonylphenols can come in numerous structures, all of which may be considered alkylphenols.
- They are used in manufacturing antioxidants, lubricating oil additives, laundry and dish detergents, emulsifiers, and solubilizers.
- It bio-accumulates and can pose serious environmental and health risks.
- It has been detected in human breast milk, blood and urine, and is associated with reproductive and developmental effects in rodents.

9. c

### **Mangerbani Cave Paintings**

- It was discovered at the prehistoric site of Mangerbani hill forest, Faridabad (Haryana).
- It may be one of the biggest Palaeolithic sites in the Indian sub-continent, where Stone Age tools were recovered from open-air sites as well as from rock shelters.
- It is for the first time that a prehistoric site, along with cave paintings and rock art of a large magnitude, has been found in Haryana.
- The paintings are yet to be dated but at least some of them belong to the Upper Palaeolithic period in all likelihood.

10. d

### **Geomagnetic Storms**

- A geomagnetic storm or commonly referred to as a solar storm is a temporary disturbance of the Earth's magnetosphere.
- It is caused by a solar wind shock wave and/or cloud of magnetic field that interacts with the Earth's magnetic field.
- The disturbance that drives the magnetic storm may be a solar coronal mass ejection (CME) or a co-rotating interaction region (CIR), a high-speed stream of solar wind originating from a coronal hole.

**19-07-2021**

**1) Consider the following statements with respective to *Vikas Engine***

- 1. It is a family of Solid-propellant rocket engines which will be used in Aditya-L1 Mission.**
- 2. It is used in both Polar Satellite Launch Vehicle (PSLV) and the Geosynchronous Satellite Launch Vehicle (GSLV).**

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

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

**2) Which of the following statement(s) is/are correct with respect to *District Mineral Foundation (DMF)***

- 1. It is established by Ministry of Coal in all the mining districts.**
- 2. Mining companies contribute 10-30% on the royalty amount that they pay to the government to DMF Trust.**

**Select the correct answer using the codes given below:**

- 1 only
- 2 only



- c. Both 1 and 2
- d. Neither 1 nor 2

**3) Consider the following statements with respect to *Hubble Space Telescope***

1. It is a large telescope in space, built by NASA & European Space Agency.
2. It uses cameras that can see across the entire optical spectrum from infrared to ultraviolet.

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

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

**4) Fit for 55 Package is a proposal of which of the following organizations?**

- a. World Health Organization (WHO)
- b. UN-Developmental Program (UNDP)
- c. World Trade Organization (WTO)
- d. European Union (EU)

**5) Which of the following cities is formerly known as *Bhelsa* or *Besnagar* in ancient times?**

- a. Varanasi, Uttar Pradesh
- b. Vidisha, Madhya Pradesh
- c. Nasik, Maharashtra
- d. Jaisalmer, Rajasthan

## Answers

1. a

### **Vikas Engine**

- It is a family of liquid fuelled rocket engines which will be used in Gaganyaan Mission.
- Vikas engine is used to power the second stage of PSLV, boosters and second stage of GSLV

Mark I and II and also the core stage of GSLV Mark III.

- The propellant loading for Vikas engine in PSLV, GSLV Mark I and II is 40 tons, while in GSLV Mark III is 55 tons.
- ISRO recently conducted the third long-duration hot test of the liquid propellant Vikas Engine for the core L110 liquid stage of the human-rated GSLV Mk III vehicle for the Gaganyaan Mission.

2. b

### **District Mineral Foundation**

- As per the Mine and Minerals Development Regulation (Amendment) Act, 2015, in every district affected by mining-related operations, the state government shall, by notification, establish a trust as a non-profit body to be called the District Mineral Foundation.
- Mining companies contribute 10-30% on the royalty amount that they pay to the government to DMF Trust in the district they are operating in.
- DMFs have been set-up in 572 districts of the country, with a cumulative accrual of more than Rs. 40,000 crore so far as per Ministry of Mines (MoM) data.

3. c

### **Hubble Space Telescope**

- Hubble is the only telescope designed to be serviced in space by astronauts.
- It was built by the United States space agency NASA, with contributions from the European Space Agency.
- The Hubble Space Telescope makes one orbit around Earth every 95 minutes.
- It has helped in discovering the moons around Pluto and made observations of small concentrations of black holes.

4. d

### **Fit for 55 Package**

- The new package attempts to deliver the Nationally Determined Contribution (NDC) and carbon neutrality goal through proposed changes that would impact the economy, society and industry, as well as ensure a fair,



competitive and green transition by 2030 and beyond.

- It claims to achieve a balance between “regulatory policies” and market-based carbon pricing to avoid the pitfalls of each.
- It must be cut by 55% by 2030 and by 100% by 2035, which means a phase out of petrol and diesel vehicles by 2035.
- Fit for 55 Package could put Europe at the forefront of new technologies like electric car batteries, offshore wind generation or aircraft engines that run on hydrogen.

5. b

### Vidisha

- Vidisha is formerly known as Bhelsa and known as Besnagar in ancient times is a city in the state of Madhya Pradesh.
- The name "Vidisha" is derived from the nearby river "Bais", mentioned in the Puranas.
- Vidisha is considered to be Puranakshetras Jain tirtha. Vidisha is believed to be the birthplace of Shitalanatha, the tenth tirthankar.
- The Heliodorus pillar a stone column that was erected around 113 BCE in located near Vidisha.

**20-07-2021**

1) Consider the following statements with respect to *NISHTHA Programme*

1. It is a capacity building programme that aims to build competencies among all the teachers and school principals at the elementary stage.
2. The programme is being organized by constituting Resource Groups at both National and State level.

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

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

2) With respect to *Pegasus*, sometimes seen in the news recently, consider the following statements:

1. It is a spyware that infects devices and spies on the victim by transferring data to a master server in an unauthorised manner.
2. It was built and marketed by the Israel based NSO Group.

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

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

3) Arrange the following countries in descending order based on the *forex reserve holdings*:

1. China
2. Japan
3. Switzerland
4. Russia
5. India

Select the correct answer using the codes given below:

- a. 1-2-4-3-5
- b. 4-1-2-5-3
- c. 1-2-3-4-5
- d. 1-4-2-5-3

4) With respect to *Policy on Vintage Vehicles*, consider the following statements:

1. The Central Motor Vehicle Rules (CMVR), 1989 does not define what vintage vehicles are.
2. Under the policy, vintage motor vehicles shall not be driven on roads for regular/commercial purposes.

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





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

5) Consider the following statements with respect to *Data localisation*

1. It is the storing of data on a device physically present within the borders of the country where the data was generated.
2. As per the RBI rules, foreign debit & credit card companies had to store complete information about transactions made by all Indian customers in servers located within India.

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

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

6) Consider the following statements with respect to *Conjugal Rights*

1. It recognizes the rights in criminal law requiring payment of maintenance and alimony to a spouse.
2. Rakhmabai case of 1884 revolved around restitution of conjugal rights.

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

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

7) Which of the following statement(s) is/are correct with respect to *Monkey B virus*

1. It is a type of neuro invasive viruses that establish lifelong infections in the peripheral nervous system of humans.
2. It can be can be transmitted via direct contact and exchange of bodily secretions of monkeys and has a fatality rate of 70% to 80%.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Adjournment Motion*

1. It can be introduced either in Loksabha or in Rajya Sabha to draw the attention on urgent public importance.
2. The discussion on this motion should last for not less than two hours and thirty minutes.
3. It should not revive discussion on a matter that has been discussed in the same session of the house.

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

- a. 1 & 2 only
- b. 2 only
- c. 1 & 3 only
- d. 2 & 3 only

9) *Generation Equality Forum* is a civil society convened by which of the following organizations?

- a. World Health Organization (WHO)
- b. UN-Women
- c. UN-Children's Emergency Fund (UNICEF)
- d. UN-Human Settlement Programme (UN-Habitat)

**10) Near-Earth Asteroid Scout mission is announced by which of the following space agencies?**

- National Aeronautics and Space Administration (NASA)
- European Space Agency (ESA)
- Indian Space Research Organisation (ISRO)
- Japan Aerospace Exploration Agency (JAXA)

## Answers

1. d

- National Education Society for Tribal Students (NESTS), an autonomous body under the Ministry of Tribal Affairs has collaborated with National Council of Educational Research and Training (NCERT) for conduct of National Initiative of School Heads' and Teachers' Holistic Advancement (NISHTHA) Capacity Building Program for EMRS teachers and Principals.*

**National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA)**

- It is a capacity building programme for "Improving Quality of School Education through Integrated Teacher Training".
- It aims to build competencies among all the teachers and school principals at the elementary stage.
- The functionaries (at the state, district, block, cluster level) shall be trained in an integrated manner on learning outcomes, school based assessment, learner – centred pedagogy, new initiatives in education, addressing diverse needs of children through multiple pedagogies, etc.
- This is being organized by constituting National Resource Groups (NRGs) and State Resource Groups (SRGs) at the National and the State level who will be training 42 lakhs teachers subsequently.
- A robust portal/Management Information System (MIS) for delivery of the training, monitoring and support mechanism has been infused with this capacity building initiative.

2. c

- A global collaborative investigative project has recently discovered Israeli spyware Pegasus was used to target thousands of people across the world.*

### **Pegasus Spyware**

- It is a spyware that infects victims and spies on the victim by transferring data to a master server in an unauthorised manner.
- It was built and marketed by the Israel based company, NSO Group.
- The company claims to sell it only to Vetted foreign governments worldwide.
- Pegasus is the very basic form, can infect devices that are connected to the Internet.
- Some updated versions can also infect phones even without the victim clicking on any links or messages.
- The software can, based on instructions from a remote server, automatically turn on the microphone and Camera and look into chats, contacts and data backup.

3. c

- With India's forex reserves at \$608.99 billion as on June 25, 2021 stood, India has emerged as the fifth largest foreign exchange reserves holder in the world after China, Japan, Switzerland and Russia.
- This was stated by Minister of State for Finance Shri Pankaj Chaudhary in a written reply to a question in the Lok Sabha recently.

4. c

- Minister of Road Transport and Highways Shri Nitin Gadkari has said with an aim to preserve and promote the heritage of vintage vehicles, the registration process of Vintage Motor Vehicles has been formalized.*
- In a tweet he said with no existing rules for regulating the process of registration across different states, the new rules shall provide a hassle-free process along with salient features such as retention of old number for already registered vehicles and a "VA" series (Unique Registration Mark) for fresh registrations.

### **Policy on Vintage Vehicles**

- The government is framing a new policy to regulate the vintage motor vehicles (2-wheeler or 4-wheeler).
- **Definition** - Currently, the Central Motor Vehicle Rules (CMVR), 1989 do not define what vintage vehicles are.
- The new policy will insert new clauses to bring a standard definition and how such vehicles cannot be used.
- The term will cover any vehicle, 2-wheeler or 4-wheeler, which is more than 50 years old from the date of first registration after first sale, including any vehicle imported into India.
- **Conditions** - This will be subject to the condition that such vehicles should be maintained in its original form.
- These vehicles should not have undergone any substantial overhaul that includes any modification in chassis or body shell, and/or engine.
- The new policy seeks to mandate that such vehicles cannot be used for commercial purposes or put to regular use. Other than that, the owners can use their vintage cars in any way wish.
- **Registration** - Old vehicles already carry their registration numbers, which will continue.
- For new ones, like imported vintage vehicles or old Indian cars over 50 years old seeking to enter the vintage category, a new numbering system will come into effect.
- These vehicles will carry a registration plate displaying the state code in two letters followed by VA for vintage, then a 2-letter series and finally a 4-digit series (0001 to 9999) allotted by the state registering authority.
- Registration information will be on the Parivahan portal of the Ministry of Road Transport and Highways.
- New vintage vehicles can be registered for Rs. 20,000; re-registration/ renewal will cost Rs 5,000. The registration certificate will be valid for 10 years, renewable thereafter.
- Sale and purchase of vehicles registered as vintage is permissible; the buyer and seller

have to inform their respective State Transport Authorities.

- **Application of Scrappage Policy** - The upcoming vehicle scrappage policy will not apply to these vehicles.
- If a vehicle is more than 15 years old but within 50 years, the owner can continue to keep it by passing fitness tests every 5 years.

5. c

- *The RBI has recently banned the U.S. card-issuer Mastercard from issuing new debit and credit cards to customers in India as Mastercard has failed to comply with the RBI's local data storage rules announced in 2018.*

#### **Data localisation**

- It is storing of data on a device physically present within the borders of the country where the data was generated.
- As per the RBI's rules, foreign card companies had to store complete information about transactions made by all Indian customers in servers located within India.
- This local storage would help the RBI to have unfettered supervisory access.
- In April, 2018, the RBI gave six months time to global payment companies to comply with these rules.

6. c

#### **Conjugal Rights**

- Conjugal rights are rights created by marriage, i.e. right of the husband or the wife to the society of the other spouse.
- The law recognizes the rights i.e. both in personal laws dealing with marriage, divorce etc., and in criminal law requiring payment of maintenance and alimony to a spouse.
- Section 9 of the Hindu Marriage Act recognizes one aspect of conjugal rights i.e. the right to consortium and protects it by allowing a spouse to move court to enforce the right.

7. c

#### **Monkey B virus**

- Monkey B virus is an alpha herpesvirus enzootic (endemic) in macaques and it was initially isolated in 1932.
- Till date, only one case has been documented of an infected person spreading B virus to another person.
- The first indications of B virus infection are typically flu-like symptoms such as fever and chills, muscle ache, fatigue and headache, following which an infected person may develop small blisters in the wound or area on the body that came in contact with the monkey.
- In the later stage, the virus can lead to the loss of muscle coordination and neurological damage.

8. d

#### **Adjournment Motion**

- It can be introduced only in Lok Sabha to draw the attention of the House to a definite matter of urgent public importance.
- It involves an element of censure against the government, therefore Rajya Sabha is not permitted to make use of this device
- It is regarded as an extraordinary device as it interrupts the normal business of the House.
- It needs the support of 50 members to be admitted.

9. b

#### **Generation Equality Forum**

- The Generation Equality Forum is a civil society-centered, global gathering for gender equality, convened by UN Women.
- The Generation Equality Forum took place in Mexico City in March and in Paris from 30 June – 2 July 2021.
- The Forum launched a 5-year action journey to achieve irreversible progress towards gender equality, founded on a series of concrete, ambitious and transformative actions, including \$40 Billion in financial commitments.

10. a

#### **Near-Earth Asteroid Scout**

- Near-Earth Asteroid Scout, or NEA Scout, is a small spacecraft, about the size of a big shoebox.
- Its main mission is to fly by and collect data from a near-Earth asteroid.
- It will be America's first interplanetary mission using a special solar sail propulsion.
- This type of propulsion is especially useful for small, lightweight spacecraft that cannot carry large amounts of conventional rocket propellant.

**21-07-2021**

**1) Consider the following pairs:**

States	Monuments	
1. Fort at Gandikota	Tamil Nadu	—
2. Monuments at Nagarjunakonda	Andhra Pradesh	—
3. Buddhist Remains at Salihundam	Telangana	—
4. Veerabhadra Temple at Lepakshi	Karnataka	—

**Which of the pair(s) given above is/are correctly matched?**

- 2 only
- 2 and 3 only
- 1, 2 and 4 only
- 1, 2, 3 and 4

**2) Consider the following statements with respect to Adarsh Smarak**

- Under the scheme, government invites public sector companies, private sector firms as well as individuals, to develop selected monuments and heritage and tourist sites across India.
- There is no financial bid involved and the corporate sector is expected to use Corporate Social Responsibility (CSR) funds for the upkeep of the site.



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

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

3) With respect to *AMLEX Device*, sometimes seen in the news recently, consider the following statements:

1. It is a first-of-its-kind oxygen rationing device that increases the life of medical oxygen cylinders by reducing unnecessary wastage.
2. The device supplies a required volume of oxygen to the patient during inhalation and trips when the patient exhales Carbon Dioxide (CO<sub>2</sub>).

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

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

4) Consider the following statements with respect to *Support for Marginalized Individuals for Livelihood and Enterprise (SMILE)*

1. This scheme covers several comprehensive measures including welfare measures for rehabilitation of persons who are engaged in the act of begging.
2. It is an initiative of Ministry of Social Justice & Empowerment.

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

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

5) Consider the following statements with respect to *One District One Focus Product (ODOFP) Programme*

1. The programme covers products of agriculture and allied sectors which will be promoted in a cluster approach to increase the farmers' income and value of the products.
2. The Ministry of Agriculture & Farmer's Welfare provides financial support under the National Agriculture Infra Financing Facility.

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

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

6) Consider the following statements with respect to *Dragon Fruit Cultivation*

1. Flowering and fruiting of dragon fruits coincide with the monsoon season in India, i.e. between June to November.
2. In India dragon fruit is cultivated only in North Eastern States, particularly in Sikkim, Arunachal Pradesh & Assam.

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

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

7) Which of the following statement(s) is/are correct with respect to *Floating Constituency*

1. It is reserved for particular cultural groups, since no reservation is allowed on religious grounds in India.
2. Srinagar is the only floating constituency reserved for Kashmiri Pandits, in India which is backed by Articles 371.



Select the correct answer using the codes given below:

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

8) Consider the following statements with respective to *Commission for Air Quality Management (CAQM)*

1. It is a statutory authority formed after dissolving Environment Pollution (Prevention and Control) Authority.
2. It will supersede central and state pollution control boards of Delhi, and adjoining states.
3. It will have experts from the Central Pollution Control Board (CPCB), Indian Space Research Organisation (ISRO) and Civil Society.

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. 1, 2 and 3

9) *Start-up India Showcase Platform* is launched by which of the following ministries?

- a. Ministry of Skill Development and Entrepreneurship
- b. Ministry of Commerce and Industries
- c. Ministry of Corporate Affairs
- d. Ministry of Micro, Small and Medium Enterprises

10) Which of the following organization has published the *Inequality report 2021*?

- a. Food and Agriculture organization
- b. Amnesty International
- c. World Economic Forum

d. Oxfam International

## Answers

1. a

- Three monuments of Andhra Pradesh have been recently identified as Adarsh Smarak for providing additional facilities like Wi-Fi, Cafeteria, Interpretation centre, Brail signages, Illumination, etc.

- The monuments are:

1. Monuments at Nagarjunakonda, District Guntur
2. Buddhist Remains at Salihundam, District Srikakulam, and
3. Veerabhadra Temple at Lepakshi in District Anantapuram

- Further, Fort at Gandikota has been included in the Adopt-a-Heritage scheme of Ministry of Tourism, which is PPP mode.

2. d

- Three monuments of Andhra Pradesh have been recently identified as Adarsh Smarak.
- Further, Fort at Gandikota has been included in the Adopt-a-Heritage scheme of Ministry of Tourism, which is PPP mode.

### Adarsh Smarak

- Archaeological Survey of India has identified 100 monuments as Adarsh Monument.
- Adarsh Monuments will be provided tourist amenities and other facilities like toilets, drinking water, wi-fi services, cafeteria, interpretation centre, etc.

### Adopt-a-Heritage scheme

- It is an initiative of the Ministry of Tourism, in collaboration with the Ministry of Culture and the Archaeological Survey of India.
- Under the scheme, government invites public sector companies, private sector firms as well as individuals, to develop selected monuments and heritage and tourist sites across India.
- Selected firms and individuals will be appointed as Monument Mitras for the development of tourist amenities in the

selected heritage sites for an initial period of 5 years.

- There is no financial bid involved and the corporate sector is expected to use Corporate Social Responsibility (CSR) funds for the upkeep of the site.

3. c

- *Indian Institute of Technology (IIT), Ropar has recently developed a first-of-its-kind Oxygen Rationing Device – AMLEX.*

#### **AMLEX**

- It will increase the life of medical oxygen cylinders three fold.
- The device supplies a required volume of oxygen to the patient during inhalation and trips when the patient exhales CO<sub>2</sub>.
- This process saves oxygen which otherwise unnecessarily get wasted.
- The device can operate on both portable power supply (battery) as well as line supply (220V-50Hz).

#### **Oxygen Wastage**

- So far, during exhalation, the oxygen in the oxygen cylinder/pipe is pushed out along with the exhaled CO<sub>2</sub> by the user.
- This leads to wastage of a large volume of oxygen in long run.
- In addition to this, a large volume of oxygen escapes from the openings of the mask to the environment in the resting period (between inhalation and exhalation) due to continuous flow of life saving gas in the mask.

4. c

- *The Ministry of Social Justice and Empowerment has formulated a scheme Support for Marginalized Individuals for Livelihood and Enterprise (SMILE).*
- The Ministry has also initiated pilot projects on Comprehensive Rehabilitation of Persons engaged in the act of Begging in ten cities namely Delhi, Bangalore, Chennai, Hyderabad, Indore, Lucknow, Mumbai, Nagpur, Patna and Ahmadabad.

#### **Support for Marginalized Individuals for Livelihood and Enterprise (SMILE)**

- The scheme includes subscheme - 'Central Sector Scheme for Comprehensive Rehabilitation of persons engaged in the act of Begging'.
- This scheme covers several comprehensive measures including welfare measures for persons who are engaged in the act of begging.
- Several comprehensive measures include survey and identification, mobilization, basic hygiene and medical facilities, providing basic documentation, counselling, rehabilitation, education, skill development and sustainable settlement of persons engaged in begging.
- The scheme would be implemented with the support of State/UT Governments/Local Urban Bodies, Voluntary Organizations, Community Based Organizations (CBOs), institutions and others.
- Scheme provides for the use of the existing shelter homes available with the State/UT Governments and Urban local bodies for rehabilitation of the persons engaged in the act of Begging.
- In case of non-availability of existing shelter homes, new dedicated shelter homes are to be set up by the implementing agencies.

5. a

- *The Government has decided to converge resources from ongoing centrally sponsored schemes such as Mission for Integrated Development of Horticulture (MIDH), National Food Security Mission (NFSM), Rashtriya Krishi Vikas Yojana (RKVY), Paramparagat Krishi Vikas Yojana (PKVY), schemes of Ministry of Fisheries, Animal Husbandry and Dairying for One District One Focus Product (ODOFP) programme.*

#### **One District One Focus Product (ODOFP) programme**

- The programme covers products of agriculture and allied sectors for 728 districts of the country.
- The Ministry of Food Processing Industries (MoFPI) provides financial support under Centrally Sponsored Pradhan Mantri Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme) for One District One Focus Product.

- PMFME provides financial, technical and business support for upgradation of existing micro food processing enterprises etc.
- The scheme adopts One District One Product (ODOP) approach to reap the benefits of scale in terms of procurement of inputs, availing common services and marketing of products.
- The identified products have potential for both domestic demand and export.

6. a

### **Dragon Fruit Cultivation**

- It is hardy and grows in diverse climatic conditions with varied soils, especially in the semi-arid and arid regions of India.
- It prefers slightly acidic soil and can tolerate some salts in soil too.
- The low maintenance and high profitability of dragon fruits has attracted the farming community throughout India.
- This has led to a steep increase in dragon fruit cultivation in Maharashtra, Karnataka, Andhra Pradesh, West Bengal, Telangana, Tamil Nadu, Odisha, Gujarat and the Andaman and Nicobar Islands, as well as in many north eastern states.
- India produces approximately 12,000 tonnes of the fruit every year.

7. a

### **Floating Constituency**

- Kashmiri pandits have proposed a floating constituency which would be reserved for contesting and voting only for kashmiri pandit migrants from J&K on similar lines as in Sikkim.
- The only floating constituency of India sangha model for Lama sanghas in Sikkim is backed in the constitution of India under Articles 371(F)
- It is a constituency without any geographical boundaries and one for which only Buddhist monks registered with 51 monasteries within the state can contest and vote.

8. d

### **Commission for Air Quality Management (CAQM)**

- The Commission was first formed by an ordinance in October 2020.
- Recently CAQM bill was presented in parliament to establish the commission and replace an ordinance.
- The government has decriminalised the act of stubble burning and withdrawn the clause for possible jail time.
- However, environmental compensation fees are levied on those who are found to be engaged in stubble burning, including farmers.

9. b

### **Start-up India Showcase Platform**

- It is an online discovery platform for start-ups of the country.
- It exhibits the finest start-ups of the country that have been handpicked through various DPIIT and Start-up India programs.
- It hosts most promising start-ups of the country chosen through various DPIIT and Start-up India programs exhibited in a form of virtual profiles.
- All DPIIT-recognized start-ups under Start-up India are eligible to apply for the Showcase.

10. d

### **Inequality Report 2021**

- Oxfam India's Inequality Report 202 reveals growing socio-economic inequalities in India are disproportionately affecting health outcomes of marginalised groups due to the absence of Universal Health Coverage (UHC).
- It provides a comprehensive analysis of the health outcomes across different socioeconomic groups to gauge the level of health inequality that persists in the country.
- The report shows the general category performs better than SCs and STs; Hindus perform better than Muslims.

**22-07-2021****1) Consider the following pairs:**

- | <i>Places</i>          | <i>– Country</i> |
|------------------------|------------------|
| 1. Dresden Elbe valley | – Germany        |



2. Liverpool Waterfront – United Kingdom

3. Arabian Oryx Sanctuary – United Arab Emirates

Which of the pairs given above are correctly matched?

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

2) Consider the following statements with respect to *Man Portable Antitank Guided Missile (MPATGM)*

- 1. It is a low weight man portable missile which follows fire and forgets principle.
- 2. It has been developed indigenously by the Defence Research & Development Organisation (DRDO).

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

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

3) Consider the following statements with respect to *New Generation Akash Missile (Akash-NG)*

- 1. It is an air-to-air Missile developed by the Defence Research & Development Laboratory (DRDL), Hyderabad in collaboration with other DRDO laboratories.
- 2. It is a hypersonic missile that can strike targets at a distance of around 60 km and fly at speeds higher than Mach 5.

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

- a. 1 only
- b. 2 only
- c. Both 1 and 2

d. Neither 1 nor 2

4) With respect to *Gondi Language*, consider the following statements:

- 1. It is one of the 22 languages listed in the Eighth Schedule of Indian Constitution.
- 2. It is in the 'vulnerable' category on UNESCO's Atlas of the World's Languages in Danger.

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

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

5) *Etikoppaka Toys*, sometimes seen in the news recently, belongs to which of the following regions?

- a. Karnataka
- b. Tamil Nadu
- c. Uttar Pradesh
- d. Andhra Pradesh

6) Consider the following statements with respective to *Sessions of Parliament*

- 1. Prorogation means the dissolution of the house in case of Lok Sabha, which can be done only by President of India.
- 2. Quorum refers to the minimum number of the members required to be present for conducting a meeting of the house.

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

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



7) Which of the following statement(s) is/are correct with respect to **Benchmark Lending Rates**

1. RBI repo rate and Treasury-bill yield are options of External Benchmarking mechanisms.
2. Internal Benchmark Lending Rates are calculated after considering factors like the bank's current financial overview, deposits and non-performing assets (NPAs).

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to **Lokpal**

1. First Administrative Reforms Commission (ARC) of India has recommended setting up of Lokpal.
2. It is free from political influence and given a strong constitutional backing.
3. It has jurisdiction over all Members of Parliament and central government employees in cases of corruption.

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. 1, 2 and 3

9) **Harela Festival** is celebrated in which of the following Himalayan States?

- a. Himachal Pradesh
- b. Uttarakhand
- c. Arunachal Pradesh
- d. Sikkim

10) **Dairy Investment Accelerator** is setup by which of the following ministries?

- a. Ministry of Fisheries, Animal Husbandry and Dairying
- b. Ministry of Agriculture and Farmers' Welfare
- c. Ministry of Commerce and Industry
- d. Ministry of Rural Development

## Answers

1. a

- The English city of Liverpool has been removed from UNESCO's list of world heritage sites after the United Nations' cultural agency found new buildings, including a football stadium, undermined the attractiveness of its Victorian docks.
- Liverpool was named a World Heritage Site in 2004, joining cultural landmarks such as the Great Wall of China, the Taj Mahal, and the Leaning Tower of Pisa.
- The city is only the third place to be removed from the prestigious list.
- The only other sites stripped previously of the title are Arabian Oryx Sanctuary in Oman in 2007 after poaching and habitat loss and the Dresden Elbe valley in Germany in 2009 when a four-lane motorway bridge was built over the river.

2. c

- In a major boost towards AatmaNirbhar Bharat and strengthening of Indian Army, Defence Research and Development Organisation (DRDO) successfully flight-tested indigenously developed Man Portable Antitank Guided Missile (MPATGM).
- It is a low weight, fire & forgets Man Portable Antitank Guided Missile (MPATGM).
- The missile was launched from a man portable launcher integrated with thermal site and the target was mimicking a tank.
- The test has validated the minimum range successfully.
- The missile has already been successfully flight tested for the maximum range.



- The missile is incorporated with state-of-the-art Miniaturized Infrared Imaging Seeker along with advanced avionics.
- The test brings the development of indigenous third generation man portable Anti-Tank Guided Missile close to completion.

3. d

- *The Defence Research and Development Organisation (DRDO) have successfully flight-tested the latest Akash **surface-to-air** missile system recently.*
- The ministry claims that the new version of the Akash missile (Akash-NG) can strike targets at a distance of around 60 km and fly at a speed of up to **Mach 2.5**.
- Speeds greater than five times the speed of sound (Mach 5) are often referred to as hypersonic.
- The new missile system has been developed by the Defence Research & Development Laboratory (DRDL), Hyderabad.
- It has been built in collaboration with other wings of the defence research organisation.

4. c

- *People belonging to the Koya tribe have recently observed the Gond Language Day in the Agency areas of East Godavari district, and sought inclusion of their language in the Eighth Schedule of the Constitution.*
- According to an official document of the Ministry of Home Affairs, there are demands for the inclusion of 38 languages, including Gond, in the Eighth Schedule.
- In 2004, four languages – Bodo, Dogri, Maithili, and Santhali – were added to the Eighth Schedule, which comprised of 22 languages.

### **Gondi Language**

- Gond is a language spoken in six States of Madhya Pradesh, Gujarat, Telangana, Maharashtra, Chhattisgarh and Andhra Pradesh.
- Gond has more speakers than many official languages listed in the Eighth Schedule of the Constitution.

- Despite so many people speaking the language, Gond is in the 'vulnerable' category on UNESCO's Atlas of the World's Languages in Danger.
- Most of the Gond dialects are still inadequately recorded and described.
- The more important dialects are Dorla, Koya, Madiya, Muria, and Raj Gond.

5. d

### **Etikoppaka Toys**

- It is a small village located on the banks of the river Varaha in Vishakhapatnam district of Andhra Pradesh.
- Made in the Etikoppaka region of Andhra Pradesh, these toys are made with lacquer color and are traditionally known as Etikoppaka toys or Etikoppaka Bommalu.
- The village is very famous for its toys made of wood.
- The toys are also called as lacquer toys because of application of lacquer coating.

6. a

### **Sessions of Parliament**

- **Prorogation** - It is the end of session and not the dissolution of the house, it is done by the President of India.
- **Quorum** - It refers to the minimum number of the members required to be present for conducting a meeting of the house.
- The Constitution has fixed one-tenth strength as quorum for both Lok Sabha and Rajya Sabha.
- Thus, to conduct a sitting of Lok Sabha, there should be at least 55 members present while to conduct a sitting of Rajya Sabha, there should be at least 25 members present.

7. c

### **Benchmark Lending Rates**

- The Internal Benchmark Lending Rates are a set of reference lending rates which are calculated after considering factors like the bank's current financial overview, deposits and non-performing assets (NPAs) etc.



- BPLR, Base rate, MCLR are the examples of Internal Benchmark Lending Rate.
- External Benchmark Rates - RBI has offered banks the options to choose from 4 external benchmarking mechanisms:
  1. The RBI repo rate
  2. The 91-day T-bill yield
  3. The 182-day T-bill yield
  4. Any other benchmark market interest rate as developed by the Financial Benchmarks India Pvt. Ltd.
- Financial Benchmarks India Pvt. Ltd was recognised by the Reserve bank of India as an independent Benchmark administrator on 2nd July 2015.

8. b

**Lokpal**

- The Lokpal is responsible for enquiring into corruption charges at the national level while the Lokayukta performs the same function at the state level.
- Apart from this, Lokpal can also inquire into anti-graft complaints regarding any member of an institution which is wholly or partially financed by the central government or controlled by it.
- Lokpal is a multi-member body that consists of one chairperson and a maximum of 8 members.
- Lokpal is not free from political influence as the appointing committee itself consists of members from political parties.
- The biggest lacunae is the exclusion of the judiciary from the ambit of the Lokpal.
- The Lokpal is not given any constitutional backing and there is no adequate provision for appeal against the Lokpal.

9. b

**Harela Festival**

- Villagers across Uttarakhand celebrate Harela, a festival of greenery, peace, prosperity and environmental conservation.
- Harela means 'day of green' and is celebrated in the month of Shravan (the fifth month of the

Hindu lunar calendar) to worship Lord Shiva and Goddess Parvati.

- Harela is also linked to the Barahnaza system (12 types of crops), a crop diversification technique followed in the Kumon region.

10. a

**Dairy Investment Accelerator**

- It is set up by the Department of Animal Husbandry & Dairying (DAHD), Ministry of Fisheries, Animal Husbandry and Dairying.
- The aim is to provide dedicated focus towards promoting & facilitating investments in the Indian dairy sector.
- It will also generate awareness among investors about the Animal Husbandry Infrastructure Development Fund (AHIDF).

**23-07-2021**

**1) Bhartiya Prakritik Krishi Padhati (BPKP) is a sub scheme of which of the following?**

- a. Paramparagat Krishi Vikas Yojana
- b. Pradhan Mantri Kisan Samman Nidhi
- c. Pradhan Mantri Bhartiya Janaushadhi Pariyojana
- d. Pradhan Mantri Annadata Aay Sanraks Han Abhiyan

**2) Consider the following statements with respect to Protection of Plant Varieties and Farmers' Rights Authority (PPVFRA)**

1. It is a statutory body established through an Act of Parliament.
2. It is affiliated with the Ministry of Agriculture and Farmers Welfare.
3. It does not accommodate protection of a plant variety through patenting of a plant or its components or parts.

**Which of the statements given above are correct?**

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



d. 1, 2 and 3

**3) Researchers at IIT Madras have recently developed an AI tool called NB Driver (Neighbourhood Driver) for use in the analysis of?**

- a. Public Driverless Cars
- b. Cancer causing Mutations
- c. Usage of forged documents
- d. Inflation and Unemployment

**4) Consider the following statements with respect to *Chrysilla Volupe Spiders***

- 1. It is a rare jumping spider believed to be exists only in the North Eastern parts of India.
- 2. It is an extinct species in India and was first discovered in Pariej Lake in Gujarat in 1868.

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

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

**5) Assertion (A): Mercury has a big-sized core relative to its mantle.**

**Reason (R): Hit-and-run collisions with other bodies during the formation of our solar system resulted in much of Mercury's rocky mantle being removed.**

**Select the correct answer using the codes given below:**

- a. Both A and R are true and R is the correct explanation of A
- b. Both A and R are true but R is not the correct explanation of A
- c. A is true but R is false
- d. R is true but A is false

## Answers

1. a

- Government is implementing *Bhartiya Prakritik Krishi Padhati (BPKP)* as a sub scheme of *Paramparagat Krishi Vikas Yojana (PKVY)* since 2020-21.
- It aims for the promotion of traditional indigenous practices.
- The scheme mainly emphasizes on exclusion of all synthetic chemical inputs and promotes on-farm biomass recycling with major stress on:
  1. biomass mulching
  2. use of cow dung-urine formulations
  3. plant-based preparations
  4. time to time working of soil for aeration
- Under BPKP, financial assistance of Rs 12200/ha for 3 years is provided for cluster formation, capacity building and continuous handholding by trained personnel, certification and residue analysis.

2. a

- Union Minister of Agriculture and Farmers Welfare Shri Narendra Singh Tomar had recently laid the foundation stone of the Plant Authority building at Pusa, New Delhi.

## **Protection of Plant Varieties and Farmers' Rights Authority (PPVFRA)**

- It is a statutory body established through Protection of Plant Varieties and Farmers' Rights Act, 2001.
- To implement the provisions of the Act the Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare established the Protection of Plant Varieties and Farmers' Rights Authority in 2005.
- The Plant Authority protects the rights of farmers.
- With this, the farmers can get rights over their traditional varieties and the seeds of any other variety produced by them.
- It also ensures that the farmers are not exploited by infringement of intellectual property rights.

3. b

- Researchers at IIT Madras have recently developed an AI tool called NB Driver (neighbourhood driver) for use in analysing cancer-causing mutations in cells.
- By looking at the neighbourhood, or context, of a mutation in the genome, it can look at harmful “driver” mutations and distinguish them from neutral “passenger” mutations.
- This technique of looking at the genomic neighbourhood to make out the nature of the mutation is a novel and largely unexplored one.
- The major challenge faced by cancer researchers involves the differentiation between driver and Passenger mutations.

#### **Driver & Passenger Mutations**

- Driver mutations are relatively in smaller number than passenger mutations.
- Driver Mutations enable the cancer cells to grow but Passenger Mutations does not have any effect on the progression of the disease.
- This AI tool explains that the nature of mutation depends on the neighbourhood and there is a line between driver and passenger mutations.

4. d

- A pair of *Chrysilla volupe* spiders, a rare species, was recently spotted at Puttenahalli lake, Karnataka.
- The *Chrysilla volupe* was believed to be extinct for 150 years, until it was discovered at the Wayanad Wildlife Sanctuary (WWS) in 2018.
- A species that is not seen for more than 100 years is considered extinct.

#### **Description**

- The spider belongs to the family of jumping spiders (Salticidae) and scientifically named *Chrysilla volupe*.
- There are iridescent bluish scales present in the top of head region of female and orange bands on both sides of the head.
- Dorsal surface of abdomen is shiny bluish black.

- There are black annulations on the yellowish legs.
- Eight black eyes are arranged in the front and sides of head region.
- Compared to the female, the male is lean.
- There are two transverse bands in the dorsal side of orange coloured head region.
- Abdomen is interspersed by orange and blue colours.
- Legs are characterized by glossy blue appearance.
- This spider makes retreats in between green leafs of small plants and female usually lays five to six eggs.

5. c

- A study by researchers from the University of Maryland disputes the prevailing hypothesis on why Mercury has a big-sized core relative to its mantle (the layer between its core and crust).
- Scientists had argued that hit-and-run collisions with other bodies during the formation of our solar system resulted in much of Mercury’s rocky mantle being removed, leaving behind the big, dense, metal core inside.
- But new research reveals that the Sun’s magnetism is the reason for this and not the collisions.
- The researchers developed a model showing that the density, mass and iron content of a rocky planet’s core is influenced by its distance from the Sun’s magnetic field.
- There is a gradient in which the metal content in the core drops off as the four inner planets of our solar system get further from the Sun.
- The current work explains this by showing that the distribution of raw materials in the early forming solar system was controlled by the Sun’s magnetic field.
- The new model shows that during the early formation of our solar system, when the young Sun was surrounded by a swirling cloud of dust and gas, grains of iron were drawn toward the centre by the Sun’s magnetic field.



- When the planets began to form from clumps of that dust and gas, planets closer to the sun incorporated more iron into their cores than those further away.

**24-07-2021**

1) Consider the following statements with respect to *Yarn Supply Scheme (YSS)*

- It aims to make available all type of yarns at mill gate price to the handloom weavers.
- It is being implemented by the National Handloom Development Corporation throughout the country.
- It increases weavers' net income through transport subsidies and reduced cost of good quality raw material.

Which of the statements given above are correct?

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

2) With respect to *Kinnaram*, consider the following statements:

- It is a traditional single string instrument made from a type of Bottle Gourd.
- It is an instrument used by folk singers of Tamil Nadu.

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

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

3) Consider the following statements with respect to *Global Survey on Digital and Sustainable Trade Facilitation*

- It is an annual survey conducted by the United Nation's Economic and Social Commission for Asia Pacific (UNESCAP).
- India's score for the year 2021 has found to be greater than many OECD countries including France, UK, Norway and Finland.

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

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

4) The Kanal Project was recently launched by the Kerala's Department of Women and Child Development. Its main objective is?

- To end all domestic and dowry abuse against women
- To act against substance abuse prevalent among Children
- To replace non-renewable energy production with solar power generation
- None of the above

5) Consider the following statements:

- He is known as the Father of Swarajya and made Swaraj as a part of the independence movement.
- He was called the 'Father of Indian Unrest' and authored the book "Gita Rahasya".
- He organised Deccan Education Society along with Gopal Ganesh Agarkar and Mahadev Ballal Namjoshi.

Identify the correct personality using the description given above:

- Rash Behari Ghosh
- Bal Gangadhar Tilak
- Lala Har Dayal Singh
- Vishnushastri Chiplunkar



## Answers

1. d

### Yarn Supply Scheme (YSS)

- It is being implemented throughout the country through National Handloom Development Corporation, Ministry of Textiles.
- It aims to make available all types of yarn at Mill Gate Price.
- Under the Scheme, freight charges are reimbursed for all types of yarn and component of 10% price subsidy also exists on hank yarn, which is available for cotton, domestic silk, wool and linen yarn with quantity caps.
- It reduces cost of good quality raw material and transport subsidies have helped the weavers to a large extent to sell their product at a competitive price and hence increase and regularise their net income.

2. c

### Kinnaram

- It is a single string music instrument.
- It is one among the few folk art forms in Tamil Nadu in its last stages.
- The Kinnaram is made from a type of *surakkai* (Bottle Gourd/calabash).

3. b

- Global Survey on Digital and Sustainable Trade Facilitation
- It a survey conducted every two years by United Nation's Economic and Social Commission for Asia Pacific (UNESCAP).
- India has scored 90.32% in the latest Survey for the year 2021.
- The Survey hails this as a remarkable jump from 78.49% in 2019.
- After evaluation of 143 economies, the 2021 Survey has highlighted India's significant improvement in the scores on all 5 key indicators, as follows:

1. Transparency: 100% in 2021 (from 93.33% in 2019)

2. Formalities: 95.83% in 2021 (from 87.5% in 2019)

3. Institutional Arrangement and Cooperation: 88.89% in 2021 (from 66.67% in 2019)

4. Paperless Trade: 96.3% in 2021 (from 81.48% in 2019)

5. Cross-Border Paperless Trade: 66.67% in 2021 (from 55.6% in 2019)

- The Survey notes that India is the best performing country when compared to South and South West Asia region (63.12%) and Asia Pacific region (65.85%).

- The overall score of India has also been found to be greater than many OECD countries including France, UK, Canada, Norway, Finland etc. and the overall score is greater than the average score of EU.

- India has achieved a 100% score for the Transparency index and 66% in the "Women in trade" component.

4. a

- Kerala Chief Minister Pinarayi Vijayan has recently inaugurated 'Kanal' project.

- It is an initiative of Kerala's Department of Women and Child Development.

- The project has been formulated with an aim to end all domestic and dowry abuse, to empower women and to create awareness among the entire population.

- As part of the launching of 'Kanal', Integrated Child Development Services supervisors and anganwadi workers have been provided training.

- Awareness campaigns are being organised in colleges.

- Over a lakh awareness posters will be displayed in various parts of the State.

5. b

### Lokmanya Bal Gangadhar (23 July 1856)

- Bal Gangadhar Tilak or Lokmanya Tilak was an Indian nationalist, social reformer and lawyer.

- The Britishers called him, 'The Father of the Indian unrest'.

- He was given the honorary title of 'Lokmanya', which means admired (or accepted) by the people.
- He is known as the 'Father of Swarajya' and made 'Swaraj' as a part of the independence movement and he was the strongest advocates of 'Swaraj' (self-rule).
- He started the Swadeshi movement.
- He joined the Indian National Congress (INC) in the year 1890.
- He started two Newspaper, 'Kesari' in Marathi and 'Mahratta' in English (referred as 'Maratha').
- He had a political regime with Bipin Chandra Pal and Lala Lajpat Rai and they were referred as 'Lal-Bal-Pal triumvirate'.
- He organised 'Deccan Education Society' along with Gopal Ganesh Agarkar, Mahadev Ballal Namjoshi and Vishnushastri Chiplunkar.
- It was set up to teach young Indians, the nationalist ideas through an emphasis on Indian culture.
- He founded the 'All India Home Rule League' in 1916 along with Joseph Baptista, Annie Besant and Muhammad Ali Jinnah.
- He transformed the household worshipping of Ganesha into a grand public event 'Sarvajanik Ganeshotsav' in 1894.
- Today, 'Ganesh Chaturthi', started by Tilak, is considered as the prime festival in Maharashtra and adjacent states.
- Tilak was the pioneer for the celebration of "Shiv Jayanti", the birth anniversary of Chhatrapati Shivaji.
- In 2007, the Government of India released a coin to commemorate Tilak on his 150th birth anniversary.
- Gita Rahasya and the Arctic Home of the Vedas were the books written by Tilak.

**25-07-2021**

**1) Consider the following statements with respect to *Geospatial Technology***

- 1. Remote sensing and GNSS (Global Navigation Satellite System) are part of Geospatial technology.**
- 2. In India Jal Jeevan Mission, Atal Bhujal Yojana have set up projects using Geospatial technology.**

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

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

**2) Which of the following statement(s) is/are incorrect with respect to UNESCO Heritage Sites**

- 1. Ahmedabad and Jaipur has been selected by UNESCO under Historic Urban Landscape Project.**
- 2. English Port city Liverpool has been removed from list of world heritage sites due to concerns of overdevelopment.**

**Select the correct answer using the codes given below:**

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

**3) Consider the following statements with respect to *National Security Council***

- 1. It is a three-tiered organization that oversees political, economic, energy and security issues of strategic concern.**
- 2. Prime Minister of India presides over the council with Defence Minister as a co-chair.**
- 3. The Ministers of Home Affairs, Defence, External Affairs and Finance are its members.**

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

- a. 1 & 2 only
- b. 2 & 3 only
- c. 1 & 3 only
- d. All of the above

**4) Viswamitri River originates from which of the following states?**

- a. Madhya Pradesh
- b. Chhattisgarh
- c. Jharkhand
- d. Gujarat

**5) Renewable Integration in India Report is launched by NITI Aayog along with which of the following organizations?**

- a. Organisation for Economic Co-operation and Development (OECD)
- b. International Renewable Energy Agency (IREA)
- c. International Energy Agency (IEA)
- d. Energy Information Administration (EIA)

## Answers

1. c

### Geospatial Technologies

- The term 'geospatial' refers not to one single technology, It is a collection of technologies that help to collect, analyse, store, manage, distribute, integrate, and present geographic information.
- It is a range of modern tools contributing to the geographic mapping and analysis of the Earth and human societies.
- Broadly speaking, it consists of the following technologies:
  1. Remote Sensing
  2. GIS (Geographic Information System)
  3. GNSS (Global Navigation Satellite System)
  4. Survey & 3D modelling

2. a

### UNESCO Heritage Sites

- A World Heritage Site is a place that is listed by UNESCO for its special cultural or physical significance.
- The list of World Heritage Sites is maintained by the international 'World Heritage Programme', administered by the UNESCO World Heritage Committee.
- Recently Gwalior and Orchha cities have been selected by UNESCO under Historic Urban Landscape Project for inclusive development.
- The project focuses on involving more people in preservation efforts, raise levels of awareness and seek innovative schemes.
- Liverpool has been removed from the list due to concerns over new buildings that are being planned in the city, which will undermine the Victorian heritage of the site.
- Only two sites have been dropped from the UNESCO World Heritage List previously, which include a wildlife sanctuary in Oman in 2007 after poaching and habitat loss and the Dresden Elbe valley in Germany in 2009 after a four-lane bridge was built over the river.

3. c

### National Security Council

- The National Security Advisor (NSA) presides over the NSC, and is also the primary advisor to the prime minister.
- NSC comprises the three tier structure- Strategic Policy Group (SPG), the National Security Advisory Board (NSAB) and the National Security Council Secretariat.
- The SPG chaired by the Cabinet Secretary is the principal forum for inter-ministerial coordination and integration of the relevant inputs.
- The NSAB undertakes long-term analysis and provides perspectives on issues of national security.

4. d

### Viswamitri River

- It originates from Pavagadh in the Panchmahal District of Gujarat.



- the Vishwamitri River flows mainly through the west of the city of Vadodara.
- Two other tributaries namely Dhadhar and Khanpur merge into it before it amalgamates with the Gulf of Khambhat.
- Human settlement dating back to 1000 B.C has been found on the bank of river Vishwamitri which ascertains the existence of Stone Age Era.

5. c

### **Renewable Integration in India Report**

- Key findings of the report are as follows
1. India is the third largest energy consuming country in the world
  2. Per capita electricity consumption is still around a third of the world average.
  3. Majority of India's renewable capacity additions take the form of solar and wind.
  4. Renewable energy penetration is highly variable within states of India.

**27-07-2021**

### **1) Consider the following statements with respect to National Aquifer Mapping and Management program (NAQUIM)**

1. The program envisages mapping of aquifers, their characterization and development of Aquifer Management Plans to facilitate sustainable management of Ground Water Resources.
2. The program is being implemented by the Central Ground Water Board (CGWB).

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

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

### **2) Consider the following statements with respect to Indian Green Building Council (IGBC) Platinum Rating**

1. It has been awarded for green master planning, policy initiatives and implementation of green infrastructure by Confederation of Indian Industry's (CII's) IGBC.
2. Kandla SEZ (KASEZ) is the First Green SEZ to achieve the IGBC Green Cities Platinum Rating for Existing Cities.

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

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

### **3) Arrange the following States in descending order based on resources of gold ore (primary):**

1. Bihar
2. Rajasthan
3. Karnataka
4. West Bengal

**Select the correct answer using the codes given below:**

- a. 1-2-3-4
- b. 4-3-2-1
- c. 2-1-4-3
- d. 1-4-3-1

### **4) Consider the following statements with respect to Gross Environment Product (GEP)**

1. It reflects the aggregated annual value of goods and services provided by ecosystems to people in a given region.
2. Karnataka is the first state in India to introduce Gross Environment Product (GEP).

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



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

**5) Consider the following statements with respect to Technical Education Quality Improvement Programme**

1. It aims to improve the quality of technical education system in India.
2. It is a project implemented by the Ministry of Education in association with World Bank.

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

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

**6) Consider the following statements with respect to Special Economic Zones**

1. Board of Approval is the apex body of SEZ and is headed by the Secretary, Department of Commerce.
2. The Baba Kalyani led committee was constituted to evaluate the SEZ policy towards making it WTO compatible.

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

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

**7) Which of the following statement(s) is/are correct with respect to Dying Declaration**

1. Supreme Court noted that dying declaration made through signs, gestures or by nods are admissible as evidence.

2. A dying declaration cannot be relied upon as the solitary piece of evidence unless recorded by a Judicial or Executive Magistrate.

**Select the correct answer using the codes given below:**

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

**8) Consider the following statements with respect to Biological Oxygen Demand (BOD)**

1. It is the amount of dissolved oxygen needed by microorganisms to decompose organic matter under aerobic reaction.
2. The quality of water increases with an increase in Dissolved Oxygen levels.
3. The more organic matter like sewage and polluted bodies of water means the lesser is the BOD.

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

- a. 1 & 2 only
- b. 2 & 3 only
- c. 1 & 3 only
- d. All of the above

**9) Which of the following explanations are correct for Gatekeeper Model?**

- a. It is developed to block malicious software
- b. It is proposed to avoid strikes in public companies
- c. It aims to prevent suicides in Prison
- d. It is used by farmers to prevent Human-Wild animal conflict

**10) Kakatiya Ramappa Temple is located in which of the following states?**

- a. Andhra Pradesh



- b. Karnataka
- c. Maharashtra
- d. Telangana

## Answers

1. c

- *Information on traces of palaeochannels found in parts of the Rajasthan, Haryana, Punjab, Gujarat and Uttar Pradesh have been generated as part of various studies carried out by Central Ground Water Board (CGWB).*

### **National Aquifer Mapping and Management program (NAQUIM)**

- It envisages mapping of aquifers (water bearing formations), their characterization and development of Aquifer Management Plans to facilitate sustainable management of Ground Water Resources.
- Central Ground Water Board (CGWB) is implementing National Aquifer Mapping and Management program (NAQUIM) in the country
- Further, CGWB also takes up various studies with respect to palaeochannels as part of the same program as per requirement.
- Water being a State subject, initiatives on water management including study and recharge of Palaeo-channels in the Country is primarily States' responsibility.

2. c

- *Kandla SEZ (KASEZ) was awarded IGBC Platinum Rating recently.*
- It is the First Green SEZ to achieve the IGBC Green Cities Platinum Rating for Existing Cities.
- IGBC Platinum rating has been awarded for 'Green master planning, policy initiatives and implementation of green infrastructure' by CII's Indian Green Building Council (IGBC).
- The recognition is set to pave way for all the other SEZs in the country to emulate the green initiative and efforts of Kandla SEZ.

3. a

- As per National Mineral Inventory data, the total reserves/resources of gold ore (primary) in the country have been estimated at 501.83 million tonnes.
- In India, largest resources of gold ore (primary) are located in Bihar (44%) followed by Rajasthan (25%), Karnataka (21%), West Bengal (3%), Andhra Pradesh (3%), Jharkhand (2%).
- The remaining 2% resources of ore are located in Chhattisgarh, Madhya Pradesh, Kerala, Maharashtra and Tamil Nadu.

4. b

- *The Uttarakhand government announced that it will initiate valuation of its natural resources in the form of 'Gross Environment Product' (GEP), said to be along the lines of Gross Domestic Product (GDP).*
- **Uttarakhand** is the first State in India to introduce the Gross Environment Product (GEP).

### **Gross Environment Product (GEP)**

- Gross Environment Product (GEP) is an assessment system to measure the ecosystem services of any area.
- It reflects the aggregated annual value of goods and services provided by ecosystems (forests, water bodies, oceans, etc.) to people in a given region, such as at district levels, state, and country.
- It entails the establishment of a natural capital accounting framework by integrating ecological benefits into common measures of economic growth such as GDP.
- It summarizes the value of ecosystem services in a single monetary metric.

5. c

- *The World Bank-supported Technical Education Quality Improvement Programme (TEQIP) Phase-III - started by the Ministry of Education in 2017 - is going to conclude on 30th September 2021.*

### **Technical Education Quality Improvement Programme-III**

- TEQIP Phase-III aims to improve the quality of engineering education.

- Rs 10 crore has been provided for Multidisciplinary Education Research Improvement in Technical Education (MERITE) in the budget 2021-22 to start preparatory works.

The measures under TEQIP-III include,

- Institution-based** - Accreditation of the courses through NBA, governance reforms, improving the processes, digital initiatives, securing autonomy for the colleges.
- Student-based** - Improving the quality of teaching, teacher training, equipping the class rooms, revision of syllabus, etc.,
- The focus is on the most backward states like Jharkhand, Chhattisgarh, Bihar, North-East, Rajasthan, Madhya Pradesh, etc.
- The Government of India has been making continuous efforts to ensure that the focus State Governments prepare a sustainability plan for the TEQIP-III to avoid any academic standstill beyond the project period.

6. c

#### **Special Economic Zones**

- An SEZ is a territory within a country that is typically duty-free (Fiscal Concession) and has different business and commercial laws chiefly to encourage investment and create employment.
- The Special Economic Zones Act was passed in 2005, It into force along with the SEZ Rules in 2006.
- SEZs are created also to better administer these areas, thereby increasing the ease of doing business.
- Asia's first EPZ (Export Processing Zones) was established in 1965 at Kandla, Gujarat.

7. c

#### **Dying Declaration**

- The Section 32 of the Indian Evidence Act, 1872 deals with cases in which statement of relevant fact is made by a person who is dead or cannot be found.
- The general rule under Section 60 of the Act is that all oral evidence must be direct i.e. he heard it, saw it or perceived it.

- Dying declarations can be recorded by
- Anyone can record the dying declaration of the deceased as per law.
  - The law does not compulsorily require the presence of a Judicial or Executive Magistrate to record a dying declaration.
  - A dying declaration cannot be relied upon as the solitary piece of evidence unless recorded by a Judicial or Executive Magistrate.
  - A dying declaration recorded by a Judicial or Executive Magistrate will muster additional strength to the prosecution case though.
  - A dying declaration may in several cases be the primary piece of evidence to prove the genesis of occurrence.
  - The person who records the dying declaration must be satisfied that the victim is in a fit state of mind.

8. a

#### **Biological Oxygen Demand (BOD)**

- The more organic matter there is (e.g., in sewage and polluted bodies of water), the greater is the BOD.
- Greater BOD, the lower the amount of dissolved oxygen available for higher animals such as fishes.
- The quality of water increases with an increase in Dissolved Oxygen levels, A DO level of 5 mg/l or above is the recommended level for bathing in a river.
- One of the main reasons for treating wastewater prior to its discharge into a water resource is to lower its BOD i.e. to reduce its need of oxygen and thereby lessen its demand from the streams, lakes, rivers, or estuaries into which it is released.

9. c

#### **Gatekeeper Model**

- National Institute of Mental Health and Neuro Sciences (NIMHANS) issued guidelines on the management of mental health issues of the prisoners and prison staff.
- It recommended the gatekeeper model where selected inmates trained to identify prisoners

at risk of suicide, would refer them to treatment or supportive service.

10. d

### **Kakatiya Ramappa Temple**

- It was built during the rule of Kakatiya dynasty, located in the State of Telangana, declared as UNESCO's World Heritage site.
- It is the main Shiva temple in a walled complex built during the Kakatiyan period (1123–1323 CE) under rulers Rudradeva and Recharla Rudra.
- Its sculptures of high artistic quality illustrate regional dance customs and Kakatiyan culture.
- It is nominated under UNESCO's Criterion i (Masterpiece of human creative genius) and Criterion iii (bearing a unique or at least an exceptional testimony to a cultural tradition, which is living or which has disappeared).

**28-07-2021**

**1) Consider the following statements with respect to Marine Aids to Navigation Bill, 2021**

1. The bill which replaces the Lighthouse Act, 1927 applies to the whole of India including territorial waters, continental shelf, and exclusive economic zone.
2. The Bill provides that no person shall be allowed to operate on any aid to navigation or any vessel traffic service in any place unless he holds a valid training certificate.

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

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

**2) Which of the following languages are *not* listed under the Eighth Schedule of the Indian Constitution?**

1. Bodo

2. Khasi

3. Dogri

4. English

5. Rajasthani

**Select the correct answer using the codes given below:**

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

**3) Consider the following statements with respect to Trafficking in Persons (Prevention, Care and Rehabilitation) Bill, 2021**

1. Under the bill, the National Investigation Agency (NIA), a counter-terrorism agency, has been made the nodal investigative agency for trafficking crimes.
2. The Bill proposed a provision of separate protection and rehabilitation homes for transgender.
3. Under the bill, consent of the victim shall be irrelevant and immaterial in determination of the offence of trafficking in persons.

**Which of the statements given above are correct?**

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

**4) With respect to *Nauka*, sometimes seen in the news recently, consider the following statements:**

1. It is the biggest space laboratory and primary research facility of China.
2. It is a part of Harmony of the Heaven, the core module of Tiangong Space Station.

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

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

5) Consider the following statements about Dholavira

- 1. It is the second largest metropolis of IVC.
- 2. Graves in Dholavira have no mortal remains of humans.
- 3. The decline of Dholavira also coincided with the collapse of Mesopotamia.

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

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

6) Consider the following statements with respect to *Hill Area Development Program*

- 1. It was launched during the Fifth Five Year Plan (area based planning), which modified Gadgil formula for central assistance to states.
- 2. Temperate Gene pool garden was established under the program in Sikkim.

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

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

7) Which of the following statement(s) is/are correct with respect to *Anthraquinone*

- 1. It is a naturally occurring pollutant or a hydrocarbon and not a pesticide.

2. It is known as a bird repellent used in paint textile and paper industries.

Select the correct answer using the codes given below:

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

8) Consider the following statements with respect to *Insolvency and Bankruptcy Code (Amendment Bill)*

- 1. It introduced an alternate insolvency resolution process for MSMEs called the Pre-packaged Insolvency Resolution Process (PIRP).
- 2. Distressed Corporate Debtors (CDs) are permitted to initiate a PIRP with the approval of two-thirds of their creditors.
- 3. The PIRP allows for a Swiss challenge to the resolution plan submitted in case operational creditors are not paid 100 % of their outstanding dues.

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

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

9) *Sela Tunnel* recently in news is located in which of the Himalayan states?

- a. Assam
- b. Sikkim
- c. West Bengal
- d. Arunachal Pradesh

10) Which of the following statement(s) is/are correct with respect to *Azithromycin*

1. It is a broad-spectrum antibiotic that is prescribed for various chest infections such as pneumonia.
2. Food and Drug Administration has approved the drug for treatment of Covid-19 due to its high proven evidence of treating the disease.

Select the correct answer using the codes given below:

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

## Answers

1. c

- Indian Parliament has recently passed the landmark 'Marine Aids to Navigation Bill 2021.

### **The Marine Aids to Navigation Bill, 2021**

- It repeals the Lighthouse Act, 1927, which provides for the maintenance and control of lighthouses in India.
- The Bill seeks to provide a framework for the development, maintenance, and management of aids to navigation in India.

### **Key features of the Bill include:**

- The Bill applies to the whole of India including various maritime zones including territorial waters, continental shelf, and exclusive economic zone.
- The Bill provides that the central government will appoint a Director General and she/he will advise the central government on matters related to aids to navigation, among others.
- The Bill provides that no person shall be allowed to operate on any aid to navigation (including any ancillary activities), or any vessel traffic service in any place unless he holds a valid training certificate.
- The central government may designate any aid to navigation under its control as a heritage lighthouse.

- In addition to their function as aids to navigation, such lighthouses will be developed for educational, cultural, and tourism purposes.

2. c

- There have been demands from time to time for inclusion of Khasi in the Eighth Schedule to the Constitution.
- As the evolution of dialects and languages is a dynamic process, influenced by socio-cultural, economic and political developments, it is difficult to fix any criteria for languages, whether to distinguish them from dialects, or for their inclusion in the Eighth Schedule to the Constitution.
- The earlier attempts, through the Pahwa (1996) and Sitakant Mohapatra (2003) Committees, to evolve such fixed criteria have been inconclusive.

### **Eighth Schedule Languages**

- (1) Assamese, (2) Bengali, (3) Gujarati, (4) Hindi, (5) Kannada, (6) Kashmiri, (7) Konkani, (8) Malayalam, (9) Manipuri, (10) Marathi, (11) Nepali, (12) Oriya, (13) Punjabi, (14) Sanskrit, (15) Sindhi, (16) Tamil, (17) Telugu, (18) Urdu (19) **Bodo**, (20) Santhali, (21) Maithili and (22) **Dogri**.

### **Demands of other Languages**

- At present, there are demands for inclusion of 38 more languages in the Eighth Schedule to the Constitution.
- (1) Angika, (2) Banjara, (3) Bazika, (4) Bhojpuri, (5) Bhoti, (6) Bhotia, (7) Bundelkhandi (8) Chhattisgarhi, (9) Dhatki, (10) **English**, (11) Garhwali (Pahari), (12) Gondi, (13) Gujar/Gujjari (14) Ho, (15) Kachachhi, (16) Kamtapuri, (17) Karbi, (18) **Khasi**, (19) Kodava (Coorg), (20) Kok Barak, (21) Kumaoni (Pahari), (22) Kurak, (23) Kurmali, (24) Lepcha, (25) Limbu, (26) Mizo (Lushai), (27) Magahi, (28) Mundari, (29) Nagpuri, (30) Nicobarese, (31) Pahari (Himachali), (32) Pali, (33) **Rajasthani**, (34) Sambalpuri/Kosali, (35) Shaurseni (Prakrit), (36) Siraiki, (37) Tenyidi and (38) Tulu.

3. d

- There has been considerable debate over the Trafficking in Persons (Prevention, Care and



*Rehabilitation) Bill, 2021, which is likely to be introduced in the ongoing monsoon session of the Parliament.*

**Trafficking in Persons (Prevention, Care and Rehabilitation) Bill, 2021**

- The objective of the bill is to prevent and counter trafficking in persons, especially women and children, to provide for care, protection, and rehabilitation to the victims, while respecting their rights, and creating a supportive legal, economic and social environment for them.
- The National Investigation Agency, a counter-terrorism agency, has been made the nodal investigative agency for trafficking crimes.
- The Bill also states that the consent of the victim could be immaterial, leading to concerns that it would criminalise consensual adult sex work.
- Other concerns raised include draconian penal provisions, including death for some offences, and a heavy-handed approach that does not adequately address the root cause of trafficking - poverty.

4. d

- *Russia's space agency Roscosmos had recently launched the Nauka module.*
- Nauka was launched from the Baikonur Cosmodrome in Kazakhstan using a Proton rocket, is scheduled to be integrated with the ISS.
- Pirs, a Russian module on the International Space Station (ISS) used as a docking port for spacecraft and as a door for cosmonauts to go out on spacewalks.
- It was detached recently and in its place, Nauka will serve as the country's main research facility on the space station.
- Nauka — meaning “science” in Russian — is the biggest space laboratory Russia has launched to date, and will primarily serve as a research facility.
- It is also bringing to the ISS another oxygen generator, a spare bed, another toilet, and a robotic cargo crane built by the European Space Agency (ESA).

- The ISS is a pathbreaking collaborative effort between five participating space agencies: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe) and CSA (Canada).

5. c

- After Mohen-jo-Daro, Ganweriwala and Harappa in Pakistan and Rakhigarhi in Haryana of India, Dholavira is the 5th largest metropolis of IVC.
- The site has a fortified citadel, a middle town and a lower town with walls made of sandstone or limestone instead of mud bricks in many other Harappan sites.
- While unlike graves at other IVC sites, no mortal remains of humans have been discovered at Dholavira.
- The memorials that contain no bones or ashes but offerings of precious stones, etc. add a new dimension to the personality of the Harappans.
- The beads peculiar to the Harappan workmanship have been found in the royal graves of Mesopotamia, indicating Dholavira used to trade with the Mesopotamians.
- Its decline also coincided with the collapse of Mesopotamia, indicating the integration of economies.
- Harappans, who were maritime people, lost a huge market, affecting the local mining, manufacturing, marketing and export businesses once Mesopotamia fell.

6. a

**Hill Area Development Program**

- Hill Area Development Program also focused on socio-economic development of tribal communities along with conservation of soil and water resources.
- Hill Area Development Program focuses on people's participation especially women with following objectives:
  1. Eco-restoration
  2. Eco-development
  3. Eco-preservation
- As per Gadgil formula, special central assistance needs to be given to certain areas

- which need more financial support due to their backward situation.
- The financial assistance will constitute 90% assistance by Central government and 10% by State Government.
- Gudalur Tropical Gene Pool Garden (Tamil Nadu) is an example of participatory forest management (PFM).
- It was established in 1989 under hill area development programme in the gudalur forest division, Nilgiris districts of Tamil Nadu.

### **Gadgil Formula**

- The Gadgil formula was formulated with the formulation of the third five-year plan for the distribution of plan transfers amongst the states.
- The National Development Council (NDC) approved the following formula:
  1. Special Category states like Assam, Jammu and Kashmir and Nagaland were given preference. Their needs should first be met out of the total pool of Central assistance.
  2. The remaining balance of the Central assistance should be distributed among the remaining states on the basis of the following criteria:
    - i. 60 per cent on the basis of population;
    - ii. 7.5 per cent on the basis of tax effort, determined on the basis of individual State's per capita tax receipts as percentage of the State's per capita income;
    - iii. 25 per cent on the basis of per capita state income, assistance going only to States whose per capita incomes are below the national average;
    - iv. 7.5 per cent for special problems of individual states.

7. c

### **Anthraquinone**

- It is ubiquitous in the environment, it has been naturally detected in the air, water, soil, plants, fish / seafood and animal tissue
- Anthraquinone is used in the manufacture of dyes, in the textile and pulp industries, and as a bird repellent.

- India has raised concerns at a WTO meeting regarding European Union's decision to classify anthraquinone as a pesticide (found in tea) and labelling it as a non-tariff barrier

8. d

### **Insolvency and Bankruptcy Code (Amendment Bill)**

- It introduced an alternate insolvency resolution process for Micro, Small and Medium Enterprises (MSMEs) with defaults up to Rs 1 crore called the Pre-packaged Insolvency Resolution Process (PIRP).
- Distressed Corporate Debtors (CDs) are permitted to initiate a PIRP with the approval of two-thirds of their creditors to resolve their outstanding debt under the new mechanism.
- The PIRP also allows for a Swiss challenge to the resolution plan submitted by a CD in case operational creditors are not paid 100 % of their outstanding dues.
- A Swiss Challenge is a method of bidding, often used in public projects, in which an interested party initiates a proposal for a contract or the bid for a project.
- Pre-packs are largely aimed at providing MSMEs with an opportunity to restructure their liabilities and start with a clean slate while still providing adequate protections so that the system is not misused by firms to avoid making payments to creditors.

9. d

### **Sela Tunnel**

- It will be the longest bi-lane road tunnel in the world at an altitude above 13,000 feet, located in Arunachal Pradesh
- It will provide all weather connectivity to Tawang.

10. a

### **Azithromycin**

- Azithromycin is a generic prescription medication use to treat bacterial Infections.
- The Food and Drug Administration (FDA) has approved it to treat certain bacterial infections in adults and children.



- It had shown to reduce exacerbations in chronic airway diseases, it was widely prescribed for Covid-19 initially, including in India.
- A new study has shown that azithromycin does not have a role in the treatment of Covid-19; it only has a placebo effect.
- India has taken it out of national state guidelines for treatment of Covid-19.

- c. Both 1 and 2
- d. Neither 1 nor 2

**3) Which of the following statements is incorrect?**

- a. India had signed the UN Convention against Torture but not ratified it
- b. India acceded to the International Covenant on Civil and Political Rights (ICCPR)
- c. India is not a signatory to the 1951 UN Convention relating to the Status of Refugees
- d. All of the above statements are correct

**29-07-2021**

**1) Consider the following statements with respect to Khagolshala Asteroids Search Campaign (KASC)**

1. It is an International research program to promote public participation in space studies by providing training to non-technical people.
2. It is an initiative of the Office of Principal Scientific Adviser, Government of India and SPACE Foundation.

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

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

**2) Consider the following statements with respect to National Mineral Exploration Trust**

1. It is a non-profit autonomous body established through Mines and Minerals (Development & Regulation) Amendment Act, 2015.
2. The objective of the trust is to use the accrued funds for taking up regional and detailed exploration, for both coal and non-coal minerals.

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

- a. 1 only
- b. 2 only

**4) Consider the following statements with respect to Secured Logistics Document Exchange (SLDE)**

1. It aims to replace the present manual process of generation, exchange and compliance of logistics documents with a digitized document exchange system.
2. It was launched by the Ministry of Commerce & Industry.

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

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

**5) Consider the following pairs:**

**Products – States**

1. Raja Mircha – Karnataka
2. Kaji Nemu – Uttarakhand
3. Mithila Makhana – Bihar

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

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

6) Consider the following statements with respect to *Monkey Pox*

1. It is a viral zoonotic disease endemic to Nigeria.
2. It can be transmitted to humans with no specific treatment or vaccine available.

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

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

7) Which of the following statement(s) is/are *incorrect* with respect to *Gharib Nawaz Employment Scheme*

1. It was launched by Ministry of Minority Affairs.
2. It offers monthly stipend during job training and post placement support even after getting employment.

Select the correct answer using the codes given below:

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

8) Which of the following pairs are matched correctly with respect to *Forest Acts in India*

1. The word 'forest' is not defined in any Central Forest Act, namely the Indian Forest Act (1927), or the Forest Conservation Act (1980).
2. The Indian Forest Act, 1927 gives states the rights to notify Reserved Forests in their areas.
3. 42nd Amendment Act, 1976 transferred Forests and Protection of Wild Animals and Birds from State to Concurrent List.

Select the correct answer using the codes given below:

- a. 1 & 2 only
- b. 2 only
- c. 2 & 3 only
- d. All of the above

9) Which of the following pairs are matched correctly with respect to *Evolution of the Collegium System*

Outcome	Case
1. First Judges Case (1981)	- Introduced the Collegium System
2. Second Judges Case (1993)	- Primacy over the Judiciary in judicial appointments
3. Third Judges Case (1998)	- Expanded the Collegium to a five-member body

Select the correct answer using the codes given below:

- a. 1 & 2 only
- b. 2 only
- c. 1 & 3 only
- d. 3 only

10) Consider the following statements with respect to *Ganymede Moon*

1. It is the moon of Jupiter, largest moon in the solar system, contains more water than all of Earth's oceans.
2. Its surface is so hot that water on the surface is always found in the vapour form which represent evaporation of ocean.

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

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

## Answers

1. b

- Eight asteroids detected by sixteen students of Jawahar Navodaya Vidyalayas, under the Khagolshala Asteroid Search Campaign 2021 were conferred the “Provisional Status” by the International Astronomical Search Collaboration (IASC) recently.

### **Khagolshala Asteroid Search Campaign (KASC)**

- It is the India chapter of an international student research program that has got students involved in the search for asteroids.
- The aim of this campaign is to train students of Jawahar Navodaya Vidyalayas to detect asteroids.
- It is an initiative of the Office of Principal Scientific Adviser, Government of India, and SPACE Foundation.
- High-quality astronomical data sets are distributed to students for analysis and identification of asteroids.
- Students analyze the data using software which then leads to potential discoveries.

### **SPACE Foundation**

- It was established in 2001, to popularize science and inculcate scientific temperament among the masses especially students in India.
- SPACE is working to create citizen scientists through various programs on science and astronomy education, and innovation in India.
- These programs have the larger goal of fostering scientific temperament in society, especially among the youth.

2. c

### **National Mineral Exploration Trust**

- It has been set up by the Central Government in pursuance of powers conferred by Section 9C (1) of **Mines and Minerals (Development & Regulation) Amendment Act, 2015** to enhance mineral exploration activities in the country.
- Now, as per the recent amendment in the Mines and Minerals (Development and

Regulation) Amendment Act, 2021, NMET has to be established as a “**non-profit Autonomous Body**”.

- The objective of the trust is to use the accrued funds for taking up regional and detailed exploration, for **coal and non-coal minerals**.
- The NMET should give priority to strategic and critical minerals, funding special studies & projects.

3. d

- India is not a signatory to the 1951 UN Convention relating to the Status of Refugees and the 1967 Protocol thereon.
- India signed the Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment on 14 October 1997.
- However, India has not ratified the Convention.
- India acceded to the International Convention on Civil and Political Rights (ICCPR) on 10.04.1979.

4. c

- With an aim to further improve ease of doing business, Union Government had recently launched the Secured Logistics Document Exchange (SLDE).
- A Calculator for Green House Gas Emissions was also launched along with the SLDE Platform.

### **SLDE platform**

- It is a solution to replace the present manual process of generation, exchange and compliance of logistics documents with a digitized, secure and seamless document exchange system.
- This will enable generation, storage and interchange of logistics-related documents digitally using Aadhaar and blockchain-based security protocols for data security and authentication.
- It will also provide a complete audit trail of document transfer, faster execution of transaction, lower cost of shipping and overall carbon footprint, easy verification of





authenticity of documents, lowered risk of fraud, etc.

### **Green House Gas Emission calculator**

- It is an efficient, user-friendly tool and provides for calculating and comparing GHG emissions across different modes.
- It allows for commodity-wise comparison of GHG emissions and total cost of transportation, including their environmental cost, between movement by road and rail.
- The tool is intended to facilitate appropriate modal choice for all concerned.

5. a

- *In a major boost to exports of Geographical Indications (GI) products from the north-eastern region, a consignment of 'Raja Mircha' also referred as king chilli from Nagaland was recently exported to London via Guwahati by air for the first time.*
- King Chilli is also considered as the World's hottest based on the Scoville Heat Units (SHUs).
- The chilli from Nagaland is also referred as *Bhoot Jolokia* and *Ghost pepper*.
- It got GI certification in 2008.
- In 2021, APEDA has facilitated exports of Jackfruits from Tripura to London and Germany, Assam Lemon (Gol Nemu and Kaji Nemu) to London, Red rice of Assam to the United States and Leteku 'Burmese Grape' to Dubai.

### **Mithila Makhana**

- Bihar's agriculture minister had recently informed the Legislative Council that the state government was pursuing the application for allocation of geographical indication (GI) tag for makhana, produced in the Mithila region.

6. c

### **Monkey Pox**

- It was first reported in 1958, in monkeys in the Democratic Republic of Congo (DRC) and in humans in 1970, also in the DRC.
- In 2017, Nigeria experienced the largest documented outbreak, 40 years after the last confirmed case.

- The natural host of the virus remains undefined. But the disease has been reported in many animals.
- Infected people break out in a rash that looks a lot like chicken pox.
- But the fever, malaise, and headache from Monkeypox are usually more severe than in chicken pox infection.
- There is no specific treatment or vaccine available for Monkeypox infection.
- In the past, the anti-smallpox vaccine was shown to be 85% effective in preventing Monkeypox.

7. d

### **Gharib Nawaz Employment Scheme**

- It was launched by the Ministry of Minority Affairs in 2017.
- Maulana Azad Education Foundation, an autonomous body under the aegis of Ministry of Minority Affairs, implements the Scheme.
- The main aim of this scheme is to provide short term job oriented skill development courses to minorities' youth in order to enable them for skill based employment.
- The monthly stipend for maximum of three months and post placement support for maximum of two months after getting employment are also being paid to the beneficiaries directly into their account.

8. d

### **Forest Acts in India**

- The Central government has not laid down any criterion to define forest.
- States are responsible for determining their definition of forests; this prerogative stems from a Supreme Court order called the T.N. Godavarman Thirumulpad vs the Union of India 1996 judgment.
- In the judgement, the Supreme Court interpreted that the word "forest" must be understood according to its "dictionary meaning".
- This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise.



- Forests are included in the Concurrent List in the (Seventh Schedule) of the Constitution of India.
- Through the 42nd Amendment Act, 1976 Forests and Protection of Wild Animals and Birds were transferred from State to Concurrent List.
- India's forests are currently governed by the National Forest Policy, 1988 which has environmental balance and livelihood at its centre.

9. d

### Evolution of the Collegium System

- Collegium System is the system of appointment and transfer of judges that has evolved through judgments of the SC, and not by an Act of Parliament or by a provision of the Constitution.
- The evolution of the Collegium System is as follows
- **First Judges Case (1981):** It declared that the "primacy" of the Chief Justice of India (CJI) recommendation on judicial appointments and transfers can be refused for "cogent reasons."
- The ruling gave the Executive primacy over the Judiciary in judicial appointments for the next 12 years.
- **Second Judges Case (1993):** SC introduced the Collegium system, holding that "consultation" really meant "concurrence".
- It added that it was not the CJI's individual opinion, but an institutional opinion formed in consultation with the two senior-most judges in the SC.
- **Third Judges Case (1998):** SC on President's reference expanded the Collegium to a five-member body, comprising the CJI and four of his senior-most colleagues (for example for the transfer of HC judges).

10. a

### Ganymede

- Ganymede is located half a billion miles (over 600 million km) away, and Hubble can follow changes on the moon and reveal other

characteristics at ultraviolet and near-infrared wavelengths.

- However, temperatures there are so cold that water on the surface is frozen solid.
- Ganymede's ocean would reside roughly 100 miles below the crust; therefore, the water vapor would not represent the evaporation of this ocean.
- Scientists used new and archival datasets from NASA's Hubble Space Telescope and found first evidence of Water vapor at Jupiter's Moon Ganymede.

30-07-2021

### 1) Consider the following statements about Air Pollutants

1. **Black Carbon is a short-lived pollutant with its impact are particularly strong in Asia.**
2. **The incidence of coronavirus infection is correlated with the increase in air pollution.**
3. **Black Carbon and other PM 2.5 particles carries the virus to other places during biomass burning.**

Which of the statements given above is/are correct?

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

### 2) Consider the following statements about Carbon Border Adjustment Mechanism

1. **It is a form of carbon tax proposed by Australia to meet its target of curbing carbon emission by atleast 55% by 2030 from 1990 levels.**
2. **It aims to address carbon leakage by imposing carbon tax on imported goods from countries with less strict climate policies.**
3. **India is opposed to this mechanism calling it discriminatory.**



Which of the statements given above are correct?

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

3) Deposit Insurance Credit Guarantee Corporation (DICGC) provides insurance cover on bank deposits in which of the following financial institutions?

- 1. All Scheduled Commercial Banks
- 2. All Cooperative Societies
- 3. All Foreign Banks
- 4. All Regional Rural Banks
- 5. All Non-Banking Financial Institutions

Select the correct option from the following

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

4) Consider the following statements about Nano Liquid Urea Fertilizers

- 1. Nano Liquid Urea Fertilizers reduces the use of urea by upto 50%.
- 2. India is the first country globally to start commercial production of Nano Urea.

Which of the statements given above is/are correct?

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

5) With respect to ISRO's EOS-03 Satellite, consider the following statements:

- 1. It is a geo-imaging satellite for Earth Observation from Geostationary Orbit.

- 2. It is capable of imaging the whole country four-five times daily and would enable near real-time monitoring of natural disasters like floods and cyclones.

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

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

6) Consider the following statements with respective to *Emigration Bill 2021*

- 1. It launches a new emigration policy division in (MEA) which will be referred to as the Central Emigration Management Authority.
- 2. It permits government authorities to punish workers by cancelling or suspending their passports for violating any of the Bill's provisions.

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

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

7) Which of the following statement(s) is/are *incorrect* with respect to *Right to be Forgotten*

- 1. It has been recognised as a statutory right in the European Union under the General Data Protection Regulation (GDPR).
- 2. In India Information Technology Act, 2000 specifically provides for the right to be forgotten.

Select the correct answer using the codes given below:

- a. 1 only
- b. 2 only

- c. Both 1 and 2  
d. Neither 1 nor 2

**8) Which of the following statement(s) is/are correct with respect to Appellate Tribunal for Electricity (APTEL)**

1. It is a statutory body located in Delhi, established by virtue of Section 110 of The Electricity Act, 2003.
2. Chairperson of APTEL can constitute a bench that shall consist of at least one Judicial Member and one Technical Member.

**Select the correct answer using the codes given below:**

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

**9) Consider the following statements with respective to Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021**

1. The Bill empowers District Magistrate and Additional District Magistrate to issue adoption orders.
2. The Bill made that an offence which is punishable with imprisonment between three to seven years will be non-cognizable.

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

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

**10) Consider the following statements with respective to Periodic Labour Force Survey**

1. It has been constituted based on the recommendation of a committee headed by Amitabh Kundu.

**2. According to recent survey the unemployment rate raised to 7% and Worker Population Rate fell to 20% in 2019-20.**

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

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

### Answers

1. c

- Black carbon is a short-lived pollutant. It is found worldwide but its presence and impact are particularly strong in Asia.
- PM<sub>2.5</sub> consists of black carbon, often called soot, and polycyclic aromatic hydrocarbons, among others.
- A study in Italy correlated the incidence of coronavirus cases with increase in PM<sub>2.5</sub> levels.
- Another recent study concluded that the COVID-19 virus piggybacks only black carbon emitted during biomass burning, and not all PM<sub>2.5</sub> particles.
- It also found that the concentration of black carbon directly corresponds to the speed at which infections spread after the onset of winter and stubble burning period and then reduced with a declining trend in BC with reduction in stubble fire counts.

2. c

- Carbon Border Adjustment Mechanism is proposed by EU to meet its target of curbing carbon emission by atleast 55% by 2030 from 1990 levels.
- It proposed to impose a carbon tax on imported goods from countries with less strict climate policies.
- It aims to create a level playing field between imports and domestic production.
- India, china and other developing countries opposed to this mechanism.

3. c

- DICGC covers all Scheduled commercial banks, foreign bank branches, regional rural banks, cooperative Banks except primary cooperative societies.
- It does not cover Non-Banking Financial Companies (NBFC).

4. c

- Two state-owned fertilizer firms, National Fertilisers Limited (NFL) and Rashtriya Chemicals and Fertilisers Ltd (RCF) signed a MoU with fertilizer cooperative, IFFCO to push production of Nano urea liquid.
- India has become the first country globally to start commercial production of Nano urea.
- There is an imbalanced use of fertilizers in India and this is deteriorating the health of soil.
- Imbalanced use is also causing water and air pollution.
- More production of Nano urea liquid will help in reducing the use of urea by up to 50% and it will also protect the health of the soil.
- The Nano urea liquid is expected to potentially replace 137 lakh tonnes of conventional urea usage by 2023.
- Even cost wise, this is cheaper than the conventional urea.

5. c

- ISRO has realised a geo-imaging satellite, "EOS-03", for Earth Observation from Geostationary Orbit.
- It is scheduled for launch in the third quarter (Q3) of 2021.

### EOS-03

- It is capable of imaging the whole country four-five times daily and would enable near real-time monitoring of natural disasters like floods and cyclones.
- In addition to natural disasters, EOS-03 would also enable monitoring of water bodies, crops, vegetation condition, and forest cover changes.

6. c

### Emigration Bill 2021

- The Bill intends to replace the Emigration Act of 1983.
- The bill proposes a three-tier institutional framework:
  1. It launches a new emigration policy division in (MEA) which will be referred to as the Central Emigration Management Authority.
  2. It proposes a Bureau of Emigration Policy and Planning, and a Bureau of Emigration Administration shall handle day-to-day operational matters and oversee the welfare of emigrants.
  3. It proposes nodal agencies under a Chief Emigration Officer to ensure the welfare and protection of the emigrants.
- It permits government authorities to punish workers by cancelling or suspending their passports and imposing fines up to Rs 50,000 for violating any of the Bill's provisions.
- When enforced, it can be used as a tool to crackdown on workers who migrate through unregistered brokers or via irregular arrangements such as on tourist visas.

7. b

### Right to be Forgotten

- It is the right to have publicly available personal information removed from the internet, search, databases, websites or any other public platforms, once the personal information in question is no longer necessary, or relevant.
- In India, there is no law that specifically provides for the right to be forgotten. However, the Personal Data Protection Bill 2019 recognised this right.
- Information Technology Act, 2000 provides for safeguard against certain breaches in relation to data from computer systems.
- It contains provisions to prevent the unauthorized use of computers, computer systems and data stored therein.
- Personal Data Protection Bill introduced in Lok Sabha in 2019, aims to set out provisions meant for the protection of the personal data of individuals.



- Clause 20 under Chapter V of this draft bill titled “Rights of Data Principal” mentions the “Right to be Forgotten.”

8. c

### ***Appellate Tribunal for Electricity (APTEL)***

- It has been established by the Union Ministry of Power in 2004, it has jurisdiction throughout India.
- The Appellate Tribunal shall consist of a Chairperson and three other Members.
- It is a statutory body located in Delhi, established by virtue of Section 110 of The Electricity Act, 2003.
- Its mandate is to hear appeals or original petitions against the orders of the Adjudicating officer or The Central Regulatory Commission or State Regulatory Commission or Joint Commission constituted under Section 76(i) or 82 or 83 of the Act.
- The Tribunal is conferred with original jurisdiction to hear petitions under Section 121 of the Act and issue directions to any Appropriate Commission for the performance of its statutory functions.

9. c

### ***Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021***

- Juvenile Justice Act 2015 replaced the Hindu Adoptions and Maintenance Act with more universally accessible adoption law.
- The Act made the Central Adoption Resource Authority (CARA) the statutory body for adoption-related matters.
- Recently, the Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021, was passed in the Rajya Sabha.
- The present Act provides that an offence which is punishable with imprisonment between three to seven years to be cognizable (where arrest is allowed without warrant) and non-bailable.
- The Bill amends this to provide that such offences will be non-cognizable

- Presently, the adoption order issued by the court establishes that the child belongs to the adoptive parents.
- The Bill provides that instead of the court, the District Magistrate (including Additional District Magistrate) will issue such adoption orders.

10. a

### ***Periodic Labour Force Survey***

- It is India's first computer-based survey launched by the NSO in 2017.
- It essentially maps the state of employment in the country.
- In doing so, it collects data on several variables such as the level of unemployment, the types of employment and their respective shares, the wages earned from different types of jobs, the number of hours worked etc.
- According to recent survey the unemployment rate fell to 4.8% in 2019-20. In 2018-19, it stood at 5.8% and 6.1% in 2017-18.
- Worker Population Rate improved to 38.2% in 2019-20 compared with 35.3% in 2018-19 and 34.7% in 2017-18.
- Labour Force Participation Ratio increased to 40.1% in 2019-20 from 37.5% and 36.9%, respectively, in the last two years.
- Gender Based Unemployment Rate data showed the jobless rate for both male and female fell to 5.1% and 4.2%, respectively, in 2019-20 from 6% and 5.2% in 2018-19.

**31-07-2021**

**1) Which of the following statement is correct regarding a recent report titled, “Status of Leopards, Co-predators and Megaherbivores in India, 2018”:**

- a. It was launched by the International Union for Conservation of Nature (IUCN)
- b. Srivilliputhur Grizzled Squirrel Wildlife Sanctuary in TN had the largest leopard population in India
- c. Indian Leopard has been listed as “Near Threatened” under the IUCN Red List of Threatened Species



d. None of the above

**2) Consider the following statements with respect to Small Satellite Launch Vehicle (SSLV)**

1. It is a 3-stage all solid vehicle designed to meet Launch on Demand requirements in a cost-effective manner.
2. It has the capability to launch up to 500 kg satellite mass into 500 km Sun Synchronous Polar Orbit.

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

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

**3) Consider the following statements with respect to DivyaNayan**

1. It is a personal reading machine for visually impaired through which any printed or digital document can be accessed in the form of speech output.
2. It has been developed by the Defence Research and Development Organization (DRDO).

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

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

**4) Consider the following statements with respect to Biotech-PRIDE Guidelines**

1. It deals with generation of biological data and enables exchange of information to promote research and innovation in different research groups across the country.

**2. It will be implemented through Indian Biological Data Centre (IBDC).**

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

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

**5) Consider the following statements with respect to NISAR Mission**

1. It aims to make global measurement of all land masses including the Polar cryosphere and the Indian Ocean region using advanced radar imaging.
2. It is a joint Earth-Observation mission between ISRO and U.S. space agency NASA.

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

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

**6) Consider the following statements with respective to Minorities**

1. The term Minority is well defined in the constitution however constitution recognises only linguistic minorities.
2. Article 350-B provides for a Special Officer for Linguistic Minorities appointed by the President of India.

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

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

7) Which of the following statement(s) is/are incorrect with respect to Kendu leaf

1. It is one of the Minor Forest Produce and a nationalised product like bamboo and sal seed.
2. Odisha is largest producer of kendu leaf, followed by Maharashtra and Jharkhand.

Select the correct answer using the codes given below:

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

8) Which of the following statement(s) is/are correct with respect to Circumplanetary Disc

1. It is ring-shaped accumulation of matter composed of gas, dust, asteroids or collision fragments in orbit around a planet.
2. The disc around PDS 70c Exoplanet possesses enough mass to produce up to three moons the size of Earth's moon.

Select the correct answer using the codes given below:

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

9) Consider the following statements with respect to Near-Surface Shear Layer (NSSL)

1. It is the region very close to the visible solar surface, where there is a change in the rotation profile of the Sun.
2. It plays a significant role in defining the nature of large-scale convective patterns that drive the Sun's magnetism.

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

- a. 1 only

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

10) Consider the following statements with respect to Earth Overshoot Day

1. UN-Environment Programme (UNEP) partnered with World Wide fund for Nature to launch the first global Earth Overshoot Day campaign.
2. Earth Overshoot Day is computed by dividing the planet's bio capacity by humanity's Ecological Footprint and multiplying by 365.

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

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

## Answers

1. d

- Union Ministry of Environment, Forest & Climate Change has recently released a report titled "Status of Leopards, Co-predators and Megaherbivores in India, 2018" on Global Tiger Day 2021.

## Highlights of the report

- Panna Tiger Reserve in Madhya Pradesh had the largest leopard population in India at about 273 leopards followed by Sariska (at about 231 leopards).
- Buxa and Palamau which recorded no presence of tigers during 2018 estimation, had sizeable populations of leopards.
- Srivilliputhur Grizzled Squirrel Wildlife Sanctuary had the highest leopard density of 20.43 in the entire Western Ghats landscape.

## Indian Leopard

- Indian Leopard was listed as Vulnerable under the IUCN Red List of Threatened Species.

- It is also listed in Appendix I of the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) and in Schedule I of the Wildlife (Protection) Act 1972 in India providing it with the highest level of protection.

2. a

- The first developmental flight of the Small Satellite Launch Vehicle (SSLV) is scheduled for the fourth quarter of 2021 from the Satish Dhawan Space Centre, Sriharikota.

### Small Satellite Launch Vehicle (SSLV)

- It is a three stage and all-solid launch vehicle.
- It has the payload capability of 500 kg to 500 km planar orbit or 300 kg to Sun Synchronous Polar Orbit.
- The SSLV is ideal for the on-demand, quick turn-around launch of small satellites.
- The major technologies developed as part of the realisation of the SSLV are flexible nozzle control with electro-mechanical actuators for all stages, miniaturised avionics and a velocity trimming module in the upper stage for precise satellite injection.

3. a

- Union Minister of State (Independent Charge) Science & Technology, Dr Jitendra Singh has recently launched the DivyaNayan.

### DivyaNayan

- It is a personal reading machine for visually impaired developed by CSIR-Central Scientific Instruments Organisation (CSIO), Chandigarh.
- Through this any printed or digital document can be accessed in the form of speech output.
- It is currently available in Hindi, English, Bengali, Telugu, Tamil, Kannada, and Punjabi but is further compatible for other Indian and foreign languages.
- It has interfaces such as USB, Bluetooth, Wifi, LAN, Headphone etc.

### Working

- Based on the principle of contact scanning, it can analyse a multi column document and provide seamless reading.

- User can place the device over the document to be read and manually scan it.
- The reading device uses language dependent optical character recognition to convert the image into text and a text to speech converter, further converts the text into audio.
- Audio files are stored in the machine and can be listened back.
- The device is handheld, standalone, portable, completely wireless and IoT enabled.

Some of the such other significant devices developed by CSIR for the benefit of the common man are as below:

1. Myoelectric Hand for the persons having below elbow amputation;
2. Electronic Knee for the persons having above knee amputation;
3. Electronic Control Module for powered wheelchair; and
4. 3D Printed Orthosis for children with congenital hemiparesis.

4. b

- Union Minister of State (Independent Charge) Science & Technology, Dr Jitendra Singh has recently released "Biotech-PRIDE (Promotion of Research and Innovation through Data Exchange) Guidelines".
- It has been developed by Department of Biotechnology (DBT), Ministry of Science and Technology.
- The Minister also launched the website of Indian Biological Data Centre, IBDC.

### Biotech PRIDE Guidelines

- The guidelines will enable exchange of information to promote research and innovation in different research groups across the country.
- It aims at providing a well-defined framework and guiding principle to facilitate and enable sharing and exchange of biological knowledge, information and data.
- It is specifically applicable to high-throughput, high-volume data generated by research groups across the country.

- These guidelines do not deal with generation of biological data per se but an enabling mechanism to share and exchange information and knowledge generated as per the existing laws, rules, regulations and guidelines of the country.
- Initially, these Guidelines will be implemented through Indian Biological Data Centre (IBDC) at Regional Centre for Biotechnology supported by Department of Biotechnology.
- Other existing datasets/ data centres will be bridged to this IBDC which will be called Bio-Grid.
- This Bio-Grid will be a National Repository for biological knowledge, information and data and will be responsible for enabling its exchange, developing measures for safety, standards and quality for datasets and establishing detailed modalities for accessing data.

5. c

- NISAR Mission is proposed to be launched in early 2023.

#### **NISAR (NASA-ISRO Synthetic Aperture Radar) Mission**

- It aimed at making global measurement of land surface changes for global observations over all land masses including the Polar cryosphere and the Indian Ocean region using advanced radar imaging.
- It is a joint Earth-Observation mission between ISRO and U.S. space agency NASA.
- It is a dual-band (L-band and S-band) radar imaging mission with the capability of full polarimetric and interferometric modes of operation to observe minor changes in land, vegetation and cryosphere.
- NASA is developing L-band SAR and associated systems while ISRO is developing S-band SAR, spacecraft bus, the launch vehicle and associated launch services.
- The major scientific objectives of the mission are to improve understanding of the impact of climate change on Earth's changing ecosystems, land and coastal processes, land deformations and cryosphere.

- NISAR is one of the crucial collaborations of the ISRO and NASA.
- India and the U.S. had agreed upon this mission during then President Barack Obama's visit to India in 2015.

6. b

#### **Minorities**

- The term "Minority" is not defined in the Indian Constitution. However, the Constitution recognises only religious and linguistic minorities.
- 6 Minority Communities in India: Jain, Parsi, Buddhist, Christian, Sikh and Muslim (notified by the Government).
- **Article 29:** It provides that any section of the citizens residing in any part of India having a distinct language, script or culture of its own, shall have the right to conserve the same.
- It grants protection to both religious minorities as well as linguistic minorities.
- **Article 30:** Under the article, all minorities shall have the right to establish and administer educational institutions of their choice.
- The protection under Article 30 is confined only to minorities (religious or linguistic) and does not extend to any section of citizens (as under Article 29).
- **Article 350-B:** The 7th Constitutional (Amendment) Act 1956 inserted this article which provides for a Special Officer for Linguistic Minorities appointed by the President of India.

7. b

#### **Kendu Leaf**

- Kendu leaf is called the green gold of Odisha, It is a nationalised product like bamboo and sal seed.
- It is one of the most important non-wood forest products in Odisha.
- The leaves are used to wrap bidis, a popular smoke among the locals.
- The states producing bidi leaves in India comprises mainly Madhya Pradesh, Chhattisgarh, Odisha, Andhra Pradesh, Jharkhand, Gujarat and Maharashtra.



- Odisha is the third-largest producer of kendu leaf, after Madhya Pradesh and Chhattisgarh.
- The Uniqueness of Odisha's Tendu (kendu) leaf is in processed form whereas the rest of the states in India produce in Phal Form.

8. c

### **Circumplanetary Disc**

- Around the planets, they are the reservoirs of material out of which moons (or exomoons or subsatellites) may form.
- Such a disk can manifest itself in various ways.
- Recently, scientists for the first time have spotted a Moon-Forming Region around a planet beyond our solar system (Exoplanet).
- Scientists detected a disc of swirling material accumulating around two exoplanets seen orbiting a young star called PDS 70.
- The disc around PDS 70c (The Exoplanet), with a diameter about equal to the distance of the Earth to the sun, possesses enough mass to produce up to three moons the size of Earth's moon.

9. c

### **Near-Surface Shear Layer (NSSL)**

- Apart from differentiation rotation between equator and poles, the helioseismology has revealed that the Sun has a Near-Surface Shear Layer (NSSL).
- Helioseismology is a technique of using sound waves to peek inside the Sun.
- The NSSL is the region very close to the visible solar surface, where there is a change in the rotation profile of the Sun.
- This layer exists very close to the solar surface, within which the angular velocity decreases rapidly with radius.
- This NSSL is thought to play a significant role in defining the nature of large-scale convective patterns that drive the Sun's magnetism.
- Recently, Indian astronomers from Aryabhata Research Institute of Observational Sciences (ARIES), and Indian Institute of Science, Bangalore, have for the first time given the theoretical explanation of the existence of a near-surface shear layer (NSSL) in the Sun.

10. a

### **Earth Overshoot Day**

- The day marks the date when humanity's demand for ecological resources (fish and forests, for instance) and services in a given year exceeds what the Earth can regenerate in that year.
- UK think tank New Economics Foundation, partnered with Global Footprint Network in 2006 to launch the first global Earth Overshoot Day campaign.
- The Ecological Footprint is a metric that comprehensively compares human demand on nature against nature's capacity to regenerate.
- Earth Overshoot Day is computed by dividing the planet's biocapacity (the amount of ecological resources Earth is able to generate that year), by humanity's Ecological Footprint (humanity's demand for that year), and multiplying by 365, the number of days in a year:
- $(\text{Earth's Biocapacity} / \text{Humanity's Ecological Footprint}) \times 365 = \text{Earth Overshoot Day}$