

## Weekly Quiz Answers (4<sup>th</sup>-10<sup>th</sup> Feb)

Ans 1. A

**Explanation:**

- The 73rd Constitutional Amendment Act, 1992 bestowed constitutional status upon PRIs and established a uniform structure comprising gram sabhas, panchayat samithis, and zila parishads.
- Article 243G of the Constitution empowers state legislatures to provide PRIs with authority and powers to function as self-government institutions.
- Provisions in Article 243H, Article 280(3)(bb), and Article 243-I of the Constitution aim at financial empowerment of PRIs.
- The Ministry of Panchayati Raj, established in May 2004, oversees all matters relating to PRIs. Carbon monoxide does not react with water to form an acid. So, it would not contribute to acid rain.

Ans 2. D

**Explanation:**

- **Origin:** The term "ergosphere" originates from the Greek word 'ergon', meaning 'work', owing to its capability to yield energy and mass.
- **Definition:** An ergosphere is the region situated between the event horizon and the stationary limit.
- **Stationary Limit:** The stationary limit denotes a boundary encircling the exterior of a rotating black hole.
- **Event Horizon:** This is a sphere encompassing the singularity of a black hole, where objects cannot escape unless surpassing the speed of light.
- **Shape:** The ergosphere assumes the shape of an oblate spheroid, resembling a pumpkin, with points of contact with the event horizon at the top and bottom, extending further outwards towards the middle.
- **Features of Ergosphere**
  - a. **Size:** The ergosphere constitutes a larger sphere compared to the event horizon, enabling the entry and exit of objects moving at velocities below the speed of light.
  - b. **Extraction of Matter and Energy:** Matter and energy extraction is feasible within the ergosphere, distinct from beyond the event horizon.

Ans 3. B

**Explanation:**

- **Fiscal deficit** denotes the disparity between a government's revenue and its expenditure, wherein expenses surpass revenues, necessitating borrowing or asset sales to cover the shortfall.
- The **primary deficit** is calculated by subtracting interest payments for the borrowings from the current year's fiscal deficit. The fiscal deficit is calculated by determining the difference between the total income and total expenditure of the government.
- **Budget deficit** refers to the situation when a government's total expenditures exceed its total revenues during a specific period, typically a fiscal year.

Answer 4. A

**Explanation:**

- Article 243G of the Constitution empowers state legislatures to provide PRIs with authority and powers to function as self-government institutions.

- Provisions in Article 243H, Article 280(3)(bb), and Article 243-I of the Constitution aim at financial empowerment of PRIs.

Ans 5. A

**Explanation:**

- Recently, the Dusted Apollo (*Parnassius stenosemus*), a rare butterfly species found at high altitudes, was observed and photographed in Chamba, Himachal Pradesh, marking its first sighting in the region.
- Discovered in 1890, the Dusted Apollo inhabits regions ranging from Ladakh to West Nepal, typically flying at elevations between 3,500 to 4,800 meters within the inner Himalayas.
- Belonging to the snow Apollo genus (*Parnassius*) of the swallowtail family, the Dusted Apollo is characterized by its unique features.
- The species bears a striking resemblance to the Ladakh Banded Apollo (*Parnassius stoliczkanus*), yet can be distinguished by the completeness and extension of the discal band on the upper fore wing. In the Dusted Apollo, this band spans from costa to vein one, whereas in the Ladakh Banded Apollo, it extends only up to vein four.
- The sighting event also included another rare species, the Regal Apollo (*Parnassius charltonius*), which enjoys protection under Schedule II of the Wildlife Protection Act, 1972.

Ans 6. C

**Explanation:**

Scheme	Ministry
Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)	Ministry of New & Renewable Energy
Carbon Credit Trading Scheme, 2023	Ministry of Power
Suryamitra Skill Development Programme	Ministry of New & Renewable Energy
Jawaharlal Nehru National Solar Mission	Ministry of New & Renewable Energy

Ans 7. A

**Explanation:**

A conjugate vaccine, it combines a weak antigen with a strong antigen, known as a carrier protein, thereby stimulating a robust and effective immune response against the pathogen associated with the weak antigen.

Ans 8. D

**Explanation:**

- **Schedule I**
  - It covers endangered species that need rigorous protection.
  - A person is liable to the harshest penalties for violation of the law under this Schedule.
  - Species under this Schedule are prohibited to be hunted throughout India, except under threat to human life or in case of a disease that is beyond recovery.

- Some of the animals listed under Schedule I include the Black Buck, Snow Leopard, Himalayan Bear and Asiatic Cheetah.
- **Schedule II**
  - Animals under this list are also accorded high protection with the prohibition on their trade.
  - Some of the animals listed under Schedule II include Assamese Macaque, Himalayan Black Bear and Indian Cobra.
- **Schedule III & IV**
  - Species that are not endangered are included under Schedule III and IV.
  - This includes protected species with hunting prohibited but the penalty for any violation is less compared to the first two schedules.
  - Animals protected under Schedule III include Chital (spotted deer), Bharal (blue sheep), Hyena, and Sambhar (deer).
  - Animals protected under Schedule IV include Flamingo, Hares, Falcons, Kingfishers, Magpie, and Horseshoes Crabs.

Ans 9. B

**Explanation:**

- Article 162 of the Indian Constitution empowers state executives to legislate on matters within the jurisdiction of the state legislature, including those related to personal laws as per Entry 5 of the Concurrent List.
- Article 44 of the Constitution envisions a uniform civil code for all citizens of India, though its implementation is discretionary.
- Uttarakhand became the first state to implement the Uniform Civil Code (UCC). The UCC bill was passed by voice vote after a two-day debate in the Uttarakhand assembly. Besides Uttarakhand, only Goa had UCC which was implemented by Portuguese in 1867.
- The Supreme Court and the Law Commission have expressed differing views on the necessity and desirability of a UCC, with ongoing consultations seeking input from various stakeholders.

Ans 10. A

**Explanation:**

The Multi-Agency Centre (MAC) is a crucial component of India's counter-terrorism efforts. Established in 2001 after the Kargil war, it operates under the jurisdiction of the Intelligence Bureau (IB). This center serves as a hub for sharing intelligence inputs among various agencies, facilitating seamless communication and cooperation in the realm of national security.

**Structure and Location**

- The MAC's primary headquarters is situated in Delhi, functioning as the nerve center for intelligence coordination.
- In addition to the main center, subsidiary Multi-Agency Centers (SMACs) are located in state capitals. Daily meetings are conducted in these SMACs to analyse the intelligence inputs received within the previous 24 hours.
- The MAC also hosts focused group meetings where specific information related to particular theaters is discussed, with participation limited to concerned agencies.

## Membership

- The MAC includes all organisations involved in counter-terrorism efforts, ensuring comprehensive coverage and cooperation.
- Every Indian state has its own subsidiary multi-agency center (SMAC) located in the respective state capitals.

Ans 11. B

## Explanation:

- Delimitation involves fixing the number of seats and boundaries of territorial constituencies for the Lok Sabha and Legislative assemblies, including reserved seats for Scheduled Castes (SC) and Scheduled Tribes (ST).
- Under Article 82, the Parliament enacts a Delimitation Act after every Census.
- Under Article 170, States also get divided into territorial constituencies as per Delimitation Act after every Census.
- Once the Act is in force, the Union government sets up a Delimitation Commission.
- The first delimitation exercise was carried out by the President (with the help of the Election Commission) in 1950-51.
- The Delimitation Commission Act was enacted in 1952.
- Delimitation Commissions have been set up four times — 1952, 1963, 1973 and 2002 under the Acts of 1952, 1962, 1972 and 2002.
- There was no delimitation after the 1981 and 1991 Censuses.

Ans 12. A

## Explanation:

- **MISHTI:** The 'Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI)' was announced in the Union Budget 2023-24 to promote and conserve mangroves as a unique ecosystem with high biological productivity and carbon sequestration potential. It aims for restoration/reforestation covering approximately 540 km<sup>2</sup> across 9 States and 3 Union Territories.
- **MAC:** The "Mangrove Alliance for Climate" was launched by the UAE and Indonesia, aiming to establish an international mangrove research center in Indonesia to study ecosystem services such as carbon sequestration and ecotourism. Partner countries include India, Australia, Japan, Spain, and Sri Lanka.

Ans 13. B

## Explanation:

- The Black-necked Crane (*Grus nigricollis*) holds Schedule I status under the Wild Life (Protection) Act, 1972, affording them the highest level of protection.
- Additionally, the species is listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on the Conservation of Migratory Species (CMS).
- The IUCN Red List of Threatened Species categorizes the black-necked crane as near threatened.

Ans 14. B

**Explanation:**

- AISHE, initiated by the Ministry in 2011, encompasses all Higher Educational Institutions (HEIs) registered with AISHE across the nation.
- Established by the Ministry of HRD, AISHE conducts an annual web-based survey to portray the status of higher education in India.
- The survey encompasses various categories such as teachers, student enrolment, programs, examination results, education finance, and infrastructure.
- AISHE serves as a crucial tool for informed policy decisions and research for the advancement of the education sector.

Ans 15. D

**Explanation:**

- According to Article 82 of the Constitution, the Parliament by law enacts a Delimitation Act after every census. After the commencement of the Act, the Central Government constitutes a Delimitation Commission.