



CURRENT AFFAIRS MCQs 09-02-2024

Q1:

Consider the following statements regarding selection of Election Commissioners in India:

- 1. Until now the Ministry of Parliamentary Affairs shortlisted candidates and the Prime Minister finalized the appointment, which was formally ratified by the President.**
- 2. The Supreme Court has called for a consultative process for the selection of Election Commissioners of India.**
- 3. The Election Commission of India has always been a 3 member body since independence.**

How many of the statements given above are correct?

- A: Only one**
- B: Only two**
- C: All three**
- D: None**

Answer: (a)

Explanation:

Before a Supreme Court ruling, the Executive, led by the Union government, held the authority to appoint Election Commissioners. The Law Ministry curated a candidate shortlist from a pool of active and retired officers, with the Prime Minister making the final selection, ratified by the President. **Hence statement 1 is incorrect.**

However, on March 2, 2023, the Supreme Court mandated a consultative process for appointments. This process involves the Prime Minister, Leader of the Opposition (or leader of the largest opposition party), and the Chief Justice of India. **Hence statement 2 is correct.**

Originally established in 1950 with a single Chief Election Commissioner, the Commission transitioned to a three-member body in 1989, only to revert to a



single Commissioner temporarily before reinstating the three-member structure in 1993. **Hence statement 3 is incorrect.**

Q2:

Consider the following statements regarding Altermagnets:

- 1. Altermagnets defy convention, blending characteristics of antiferromagnets and ferromagnets with unique spin behaviour.**
- 2. They can be used to study spin caloritronics.**
- 3. The Crystal Nernst Effect (CNE) found in altermagnets arises from their unique magnetic properties.**

How many of the statements given above are correct?

A: Only one

B: Only two

C: All three

D: None

Answer: (c)

Explanation:

Altermagnets, distinguished by their unique magnetic properties, challenge conventional classifications by exhibiting traits of both antiferromagnets and ferromagnets. **Hence statement 1 is correct.**

This duality, arising from intricate atomic interactions within their crystal structure, is pivotal in spin caloritronics, a field exploring spin-heat interplay unattainable with typical magnetic materials. **Hence statement 2 is correct.**

Promising for information technologies, altermagnets, exemplified by rubidium dioxide (RuO₂), manifest phenomena like the crystal Nernst and crystal thermal Hall effects. These observations shed light on their magnetic behaviour, particularly the crystal Nernst effect (CNE), underscoring the potential of altermagnets in advancing spin-based applications. **Hence statement 3 is correct.**

Hence option (c) is correct.



Q3:

Consider the following statements regarding Aadi Mahotsav:

- 1. The Aadi Mahotsav, a yearly National Tribal Festival, has been celebrated since 2017.**
- 2. It is a collaborative effort between the Ministry of Tribal Affairs and the Ministry of Cooperation.**

Which of the statements given above is/are correct?

A: 1 only

B: 2 only

C: Both 1 and 2

D: Neither 1 nor 2

Answer: (a)

Explanation:

The Aadi Mahotsav, an annual National Tribal Festival inaugurated in 2017, showcases India's tribal culture, heritage, and artisanal products. **Hence statement 1 is correct.**

A collaborative effort between the Ministry of Tribal Affairs and the Tribal Cooperative Marketing Development Federation of India (TRIFED), it serves as a platform for tribal artisans to exhibit their talent and craftsmanship. **Hence statement 2 is incorrect.**

Scheduled for February 10th to 18th, 2024, the event fosters interaction, learning, and empowerment within tribal communities.

Hence option (a) is correct.

Q4:

Consider the following:

- 1. Precision measurement of constants, gravitational forces, and fields.**
- 2. High-resolution imaging and sensing of magnetic and electric fields.**
- 3. Modelling and production of topological insulators.**



4. Implementation of processing tasks such as cryptography and networking.

How many of the above are the applications of **ultracold** atoms?

A: Only one

B: Only two

C: Only three

D: All four

Answer: (d)

Explanation:

Ultracold atoms have diverse applications:

- **Quantum Computing:** Supports tasks like cryptography and networking.
- **Precision Measurements:** Enhances precision in measuring constants and fields.
- **Biological Simulation:** Aids in understanding biomolecular interactions.
- **Sensing and Imaging:** Enables high-resolution imaging of fields.
- **Cosmological Simulation:** Helps simulate complex cosmological phenomena.
- **Material Research:** Models quantum materials like superconductors.
- **Chemistry and Dynamics:** Studies chemical reactions and dynamics.

Hence option (d) is correct.

Q5:

Consider the following description:

The smallest and most abundant sea turtles globally are primarily inhabitants of tropical and subtropical waters in the Pacific and Indian Oceans. Notably, countries like India, Mexico, and Costa Rica host significant nesting sites for these creatures. A distinctive behaviour



displayed by these turtles is the "arribada," typically occurring at night. Omnivorous in nature, their diet mainly consists of jellyfish, crustaceans, and small fish.

The above paragraph talks about which of the following?

A: Asian Box Turtles

B: European Pond Turtle

C: Indian Tent Turtle

D: Olive Ridley Turtle

Answer: (d)

Explanation:

Olive ridley turtles, the smallest and most abundant sea turtles, are known for their olive-coloured carapace.

They exhibit mass nesting, called Arribada, where thousands lay eggs simultaneously on the same beach.

Habitat: Found in Pacific, Atlantic, and Indian oceans; Odisha's Gahirmatha Marine Sanctuary hosts the world's largest rookery.

Protection Status: Listed as Vulnerable on the IUCN Red List and under Schedule 1 of the Wildlife Protection Act, 1972.

Conservation Initiatives:

- **Operation Olivia:** Indian Coast Guard's annual operation protects turtles during breeding and nesting.
- **Mandatory TEDs:** Odisha mandates trawls to use Turtle Excluder Devices to prevent accidental turtle deaths.
- **Tagging:** Turtles are tagged to monitor movements and protect habitats.

Hence option (d) is correct.