Daily Current Affairs Prelims Quiz 16-06- 2026

1) consider the following statements

1. Nipah is a Zoonotic virus.
2. Fruit bats acts as a natural host for this virus.

Select the correct statements using the codes below:

a. 1 only

b. 2 only

c. Both 1 and 2

d. Neither 1 nor 2

Answer : c

Explanation

- **Statement 1 is correct** – The Nipah virus is a zoonotic virus, meaning it naturally spreads from animals to humans.
- Spillovers occur through direct contact with infected animals, their body fluids, or contaminated food
- **Statement 2 is correct** – Fruit bats (specifically from the family Pteropodidae, genus Pteropus, commonly known as flying foxes) serve as the natural reservoir and host for the virus.
- They harbor the virus asymptomatically without falling ill.

2) Which country has the largest Uranium reserves in the world?

a. Kazakhstan

b. Canada

c. Namibia

d. India

Answer : a

Explanation

- **Option a is correct** – Kazakhstan (39% of global supply) holds the largest share of Uranium reserves in the world.
    - Canada – 24% of global supply
    - Namibia – 12% of global supply
    - Australia **–** 8% of global supply

3) Consider the following statements

1. The nuclear power generation of India completely met through domestic Thorium reserves.
2. India has largest thorium reserves in the world.

Select the correct statements using the codes below:

a. 1 only

b. 2 only

c. Both 1 and 2

d. Neither 1 nor 2

Answer : b

Explanation

- **Statement 1 incorrect –** India's nuclear power generation is not completely met through domestic Thorium reserves.
- Thorium cannot be directly used as a fissile fuel in a reactor.
- It must first be transmuted to Uranium-233 through the use of fissile driver materials (like Plutonium or Uranium-235) in Fast Breeder Reactors.
- Therefore, India still heavily relies on imported uranium to power its current reactors.
- **Statement 2 correct –** India possesses the largest reserves of Thorium in the world.
- India's deposits make up approximately 25% of the known global Thorium reserves.
- These massive reserves are primarily concentrated in the monazite sands along the coastal regions of Kerala, Tamil Nadu, Andhra Pradesh, and Odisha.

4) With reference to advanced nuclear reactor technologies and India's three-stage nuclear power programme, consider the following statements:

1. Unlike conventional nuclear reactors, Fast Breeder Reactors (FBRs) do not utilize a moderator because they rely on high-energy neutrons to convert fertile isotopes into fissile material.
2. Advanced Heavy Water Reactors (AHWRs) rely entirely on heavy water for both the moderation of neutrons and as the primary coolant to drive the electricity-generation turbine.
3. Small Modular Reactors (SMRs) offer greater deployment flexibility and enhanced safety through passive cooling mechanisms compared to large centralized conventional reactors.

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

Answer : c

Explanation

- **Statement 1 is correct** – In conventional thermal reactors, a moderator (like heavy water or light water) is needed to slow neutrons down to "thermal" speeds to sustain fission.
- FBRs (Stage II of India's programme) explicitly do not use a moderator.
- They require fast, high-energy neutrons to efficiently hit fertile isotopes (like Uranium-238 or Thorium-232) and convert ("breed") them into fissile isotopes (like Plutonium-239 or Uranium-233).
- **Statement 2 is incorrect** – According to the core mechanism of AHWRs (Stage III), heavy water is only used to *moderate* the neutrons.
- The *coolant* used to absorb the heat and directly drive the turbine is actually boiling light water (normal water), not heavy water.
- **Statement 3 is correct** – SMRs are an emerging global technology designed as factory-built modules with a smaller footprint (30–300 MWe).
- Their design emphasizes passive cooling systems (which rely on natural physics like gravity or

convection rather than active, operator-driven pumps) and flexible deployment, distinguishing them from massive, centralized conventional plants.