

VAID ICS LUCKNOW
DAILY CURRENT Affairs QUIZ FOR UPSC

30/12/2024

EXPLANATION

Qn. 1

Answer: C

Explanation:

Six Pillars of the Deep Ocean Mission:

- 1. Development of Technologies for Deep Sea Mining and Manned Submersible:**
 - Focuses on creating technologies for mining polymetallic nodules from the seabed and deploying a manned submersible capable of reaching depths up to 6,000 meters.
- 2. Development of Ocean Climate Change Advisory Services:**
 - Provides ocean-related data and forecasts to address climate change and its impacts.
- 3. Technological Innovations for Exploration and Conservation of Deep-sea Biodiversity:**
 - Involves studying and conserving marine biodiversity, including genetic resources.
- 4. Deep Ocean Survey and Exploration:**
 - Focuses on mapping and exploring the deep ocean, including resources like hydrocarbons and minerals.
- 5. Energy and Freshwater from the Ocean:**
 - Develops technologies for generating energy and freshwater using ocean resources, such as Ocean Thermal Energy Conversion (OTEC).
- 6. Advanced Marine Station for Ocean Biology:**
 - Establishes a research station to study marine biology and biotechnological applications.

Qn.2

Correct Answer:

b) 1 and 3 only

Explanation:

1. **Statement 1: Correct**

OTEC operates on the principle of harnessing the temperature gradient between warm surface water and cold deep-sea water to drive a heat engine for generating electricity. This gradient is more pronounced in tropical regions, making OTEC viable in such areas.

2. **Statement 2: Incorrect**

OTEC systems are most effective in tropical regions where the temperature difference between surface and deep-sea water is typically around 20°C or more. However, this does not mean they can only operate in temperate regions; rather, they are not viable in temperate regions because the required temperature gradient is usually absent.

3. **Statement 3: Correct**

OTEC systems can produce desalinated water as a byproduct, which is highly beneficial in arid and semi-arid coastal regions where freshwater is scarce.

Qn. 3

Correct Answer: B) 1 and 3 only

Explanation:

- Statement 1 is correct: Lothal, an important city of the Indus Valley Civilization, is known for its advanced dockyard and maritime trade.
- Statement 2 is incorrect: While the Lothal Maritime Heritage Complex highlights India's maritime legacy, it spans multiple historical periods, not just the Mauryan period.
- Statement 3 is correct: The project is part of the Sagarmala initiative, which aims to enhance maritime infrastructure and heritage.

Qn. 4

Correct Answer: C) Ghana

Explanation:

- **Nigeria:** Borders Cameroon to the west.
- **Chad:** Borders Cameroon to the northeast.
- **Central African Republic:** Borders Cameroon to the east.
- **Ghana:** Does not share a border with Cameroon. It is located further west in Africa, separated by other countries like Togo and Benin.

Qn. 5

Answer: (b) 1 and 3 only

Explanation:

- Statement 1 is correct. The NRAA was set up in 2006 to address the challenges of rainfed agriculture in India.
- Statement 2 is incorrect. The NRAA is not a statutory body but functions as an advisory and coordination agency under the Ministry of Agriculture and Farmers' Welfare.
- Statement 3 is correct. The authority emphasizes watershed development, sustainable farming practices, and soil and water conservation in rainfed areas.

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