

Q: Consider the following statement regarding “Ajeya Warrior”:

1. It is a military exercise between India and United Kingdom.
2. 7th edition of joint military exercise is being conducted at Salisbury Plains, United Kingdom.
3. This is a yearly exercise.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: a

Explanation:

- The 7th edition of joint military exercise “Ajeya Warrior-23” between India and the United Kingdom is being conducted at Salisbury Plains, United Kingdom from 27 April to 11 May 2023.
- Ajeya Warrior is a biennial training event with the UK which is conducted alternatively in both countries.
- The last edition was held at Chaubatia, Uttarakhand in October 2021.

Q: Consider the following:

1. Land and Sea Breeze
2. Ocean warming
3. Changes in land water storage

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: b

Explanation:

- The report points to the following factors as being responsible for a rising Global Mean Sea-Level (GSML): ocean warming, ice loss from glaciers and ice sheets, and changes in land water storage.
- The report also quantifies the individual contribution of these factors to yield, what researchers call the “GSML budget”.

Q: Consider the following statements with respect to NET Zero Innovation Virtual Centre:

1. It is a joint initiative of India and U.K.
2. It aims to fetch both countries to work in industrial decarbonization and Green Hydrogen.

Choose the correct option from the codes given below:

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

Ans: c

Explanation:

- NET Zero Innovation Virtual Centre is the joint initiatives of India and United Kingdom.
- It will provide a platform to bring stakeholders from both countries together to work in some of the focus areas in Science & Tech.
- It includes Decarbonization of manufacturing process & transport systems and Green Hydrogen as renewable source.
- It also helps both countries to reach the Paris Agreement climate change collective targets to limit the global warming to acceptable levels.
- Energy efficiency and Renewable energy are two central pillars of science and technology in India.
- India has already taken lead by various initiatives like India Solar Alliance, Clean energy mission etc.

Q: The cryosphere includes

1. Glaciers
2. Ice sheets of Greenland
3. Seasonal snow cover

Choose the correct option from the codes given below:

- a) 1 and 2

- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: d

Explanation:

- The cryosphere includes the Arctic and Antarctic regions, glaciers, the ice sheets of Greenland and Antarctica (area of ice on land covering more than 50,000 km²), seasonal snow cover, and permafrost (mass of land that remains below 0 degree Celsius for at least two straight years).

Q: Consider the following statement:

1. Voyager-2 spacecraft is in interstellar space, the region where our sun has no influence.
2. Voyager-2 uses a Radioisotope Thermoelectric Generator (RTGs).
3. Voyager 2 is the only probe ever to study Sun.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: a

Explanation:

- Travelling at a speed of 55,345 kilometers per hour outside our Solar System, the Voyager-2 spacecraft is in interstellar space, the region where our sun has no influence.
- The world's most successful mission is set to continue doing science till 2026 as Earth beams a new plan.
- Voyager-2 uses a Radioisotope Thermoelectric Generator (RTGs), which converts heat from decaying plutonium into electricity that eventually powers the probe.
- Voyager 2 is the only probe ever to study Neptune and Uranus during planetary flybys.
- It is the second man-made object to leave our planet.