

Q: Consider the following statement regarding International Tropical Timber Council:

1. It is the governing body of the International Tropical Timber Organisation.
2. It facilitates funding for forestry projects in tropical timber-producing countries.
3. India is not a member to it.

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:

- International Tropical Timber Council is the governing body of the International Tropical Timber Organisation (ITTO).
- It meets at least once a year to discuss a wide-ranging agenda aimed at promoting sustainable tropical forest management and the trade of sustainably produced tropical timber.
- It was established under the International Tropical Timber Agreement 1983 (ITTA 1983), negotiated under the auspices of the UN Conference on Trade and Development.
- It facilitates funding for forestry projects in tropical timber-producing countries.
- All projects are funded by voluntary contributions from governments.
- 75 countries (including India)
- Its members manage about 80 percent of the world's tropical forests and are responsible for 90 percent of the global tropical timber trade.
- Headquarters at Yokohama, Japan

Q: Consider the following statement regarding new species of 'music frog':

1. This species is found only in India.
2. They are known to inhabit swamps, ponds, and paddy fields.
3. The new species was named after the Noa-Dihing River.

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:

- It is a new species of 'music frog' which is named Nidirana noadihing.
- It is confirmed for the first time that the Nidirana genus has been found in India.
- The Nidirana species is known in Japan, Taiwan, China, Vietnam, Laos, and Thailand.
- Nidirana are known to inhabit swamps, ponds, and paddy fields, and they often construct nests to lay their eggs.
- The new species was named after the Noa-Dihing River, which is near where the specimens were discovered and collected.

Q: Consider the following statement regarding Rapid Innovation and Startup Expansion (RISE):

1. It is a partnership between CSIRO, Australia and Atal Innovation Mission.
2. This initiative focuses on startups and small to mid-sized enterprises (SMEs) in India and Australia.

Choose the correct option from the codes given below:

- a) 1 Only
- b) 2 Only

- c) 1 and 2
- d) None of the above

Ans: c

Explanation:

- The India Australia RISE Accelerator is delivered in partnership between CSIRO, Australia's national science agency, and Atal Innovation Mission (AIM), the Government of India's flagship initiative to promote a culture of innovation and entrepreneurship.
- This initiative focuses on startups and small to mid-sized enterprises (SMEs) in India and Australia working on circular economy technologies and solutions.

Q: Consider the following statement regarding Southern Annular Mode:

1. It is the north-south movement of Southern Westerly Winds.
2. It is also known as the Antarctic Oscillation.
3. They blow almost continuously in the mid- to high-latitudes of the southern hemisphere.

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:

- Southern Annular Mode is the north-south movement of Southern Westerly Winds over timescales of 10s to 100s of years.
- It is also known as the Antarctic Oscillation.
- They blow almost continuously in the mid- to high-latitudes of the southern hemisphere.
- It is usually defined as the difference in the zonal mean sea level pressure at 40°S (mid-latitudes) and 65°S (Antarctica).
- Positive Southern Annular Mode
- In this mode, there is lower anomalous air pressure over Antarctica and higher anomalous air pressure over the mid-latitudes.
- The belt of strong westerly winds strengthens and contracts towards Antarctica.

Q: Consider the following statement regarding Nova:

1. They are part of a binary star system.
2. The white dwarf is most likely paired with a red giant.
3. The white large is small and less dense.

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:

- Commonly, Novas start as white dwarf stars that are part of a binary star system.
- Binary stars are two stars that are close together in the distance and revolve around each other.
- The white dwarf is small and dense, and it is essentially the insides of a star that lost its outer layers. These are older stars that have lost their shine and fuel.
- The white dwarf is most likely paired with a red giant.
- The white dwarf begins to pull on its companion, the red giant, with gravitational forces.

- The white dwarf takes fuel and matter, especially hydrogen, from its companion and pulls it towards itself. The matter is quickly hurled towards the surface of the white dwarf.