

Q: Consider the following statement regarding Kambalakonda Wildlife Sanctuary:

1. It is named after the local hillock "Kambalakonda".
2. It hosts dry evergreen forests, a highly-threatened and unique forest type.
3. It is located in the state of Tamil Nadu.

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:

- Kambalakonda Wildlife Sanctuary is located in the state of Andhra Pradesh.
- It is named after the local hillock "Kambalakonda" acting as a green lung for citizens of Vizianagaram, is this large and sprawling sanctuary.
- It is considerably hilly with steep slopes.
- It hosts dry evergreen forests, a highly-threatened and unique forest type seen only in Tamil Nadu and Andhra Pradesh in India.
- It has wonderful plants like *Tectona grandis*, *Randia dumetorum*, *Grewia tiliifolia*, *Abrus precatorius*, etc.
- One of the most stunning flowers found in the region includes the Indian screw tree. Other flowers and fruits like flowers of the Bush plum tree, Jungle berry bunches can be found all across the landscape.

Q: Consider the following statement regarding Otolith rings:

1. It is a stony lump in the frog ear.
2. Different forms or isotopes of oxygen in the otolith indicate the temperature.
3. These are much like tree rings.

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 otolith is a stony lump in the fish ear.
- These are much like tree rings which reveal fish's age.
- Different forms or isotopes of oxygen in the otolith indicate the temperature the fish experienced when it was alive. Carbon isotopes reveal how quickly food was converted into energy.
- Fish carry their fitness trackers in their ears. They are commonly known as "earstones," are hard, calcium carbonate structures located directly behind the brain of bony fishes.

Q: Consider the following statement regarding Red sprite:

1. Sprite is also an acronym for Stratospheric/mesospheric Perturbations.
2. Lightning flashes normally go downward from the clouds to the ground.

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:

- A red sprite represents an extraordinary meteorological phenomenon categorized as a Transient Luminous Event (TLE).
- Sprite is also an acronym for Stratospheric/mesospheric Perturbations resulting from Intense Thunderstorm Electrification.
- Occasionally dubbed red lightning, it occurs above thunderclouds at altitudes between 40 and 80 kilometres (25 - 50 miles) above the Earth's surface.
- Lightning flashes normally go downward from the clouds to the ground.
- However, a sprite goes in the other direction, going into the atmosphere, a bit like backwards lightning.

Q: Consider the following statement regarding Indian Mouse Deer:

1. They are smallest deer in India.
2. They are highly nocturnal.
3. Sri Lanka has a separate species called the spotted chevrotain.

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 Indian Mouse Deer or Spotted Chevrotain is the smallest deer in India and is highly nocturnal.
- Scientific Name: Moschiola indica
- It is endemic to the Indian Subcontinent.
- It is mainly found in peninsular India, with some old records from Nepal.
- Sri Lanka has a separate species called the spotted chevrotain (*Moschiola meminna*).
- Within India, it is commonly encountered in a number of forest areas along the Western Ghats, in the Eastern Ghats up to Orissa, and in the forests of central India.

Q: Consider the following statement regarding Exchange-Traded Funds (ETFs):

1. It is a collection of marketable securities that tracks an index.
2. The trading value of an ETF is based on the net asset value of the underlying stocks that it represents.
3. ETF funds are different from mutual funds.

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:

- Exchange-Traded Funds (ETFs) is a collection of marketable securities that tracks an index, a commodity, bonds, or a basket of assets.
- In simple terms, ETFs are funds that track indexes such as CNX Nifty, or BSE Sensex, etc.
- An ETF can be structured to track anything from the price of an individual commodity to a large and diverse collection of securities. ETFs can even be structured to track specific investment strategies.
- ETF funds are somewhat similar to mutual funds in terms of their structure, regulation, and management. Additionally, just like mutual funds, they are a pooled investment vehicle that offers diversified investment into various asset classes like stocks, commodities, bonds, currencies, options, or a blend of these.
- Unlike mutual funds, ETFs can be purchased or sold on a stock exchange in the same way that regular stocks can.

- The traded price of an ETF changes throughout the day like any other stock, as it is bought and sold on the stock exchange.
- The trading value of an ETF is based on the net asset value of the underlying stocks that it represents.
- ETFs typically have higher daily liquidity and lower fees than mutual fund schemes, making them an attractive alternative for individual investors.