

**Q: Consider the following the statement regarding Kedarnath Wildlife Sanctuary (KWS):**

1. It is the largest protected area in the western Himalayas.
2. It is bordered by Kedarnath, Mandani, and Chaukhamba peaks in the north.
3. It is covered with tropical rain forest.

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:

- Kedarnath Wildlife Sanctuary (KWS) famously known as the Kedarnath Musk Deer Sanctuary, is located in the Rudraprayag and Chamoli districts of the state of Uttarakhand.
- It was named after the famous Hindu temple of Kedarnath, which lies outside the northern border of the sanctuary.
- Its alternate name comes from its primary purpose of protecting the endangered Himalayan musk deer.
- It is the largest protected area in the western Himalayas.
- It is bordered by Kedarnath (6940 m), Mandani (6193 m), and Chaukhamba (7068 m) peaks in the north.
- The area falls under the West Himalayan Zone in the Palearctic realm.
- It is covered with temperate forests.
- The higher and upper regions possess the sub-alpine and alpine coniferous forests.

**Q: Consider the following statement regarding Bhima River:**

1. It is a major tributary of the Godavari River.
2. It flows southeast through the states of Maharashtra, Karnataka, and Telangana.
3. Major tributaries are the Sina and Nira rivers.

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 Bhima River (also known as the Chandrabagha River) is a major river in southwest India.
- It is a major tributary of the Krishna River.
- It originates in the Bhimashankar hills near Karjat on the western side of the Western Ghats, in the Pune District of Maharashtra.
- Bhima flows southeast through the states of Maharashtra, Karnataka, and Telangana.
- The Bhima River merges into the Krishna River at Kadlur (Raichur) in Karnataka.
- This 861 km-long river has the Western Ghats on the west, the Balaghat Range in the north, and the Mahadeo Hills in the south.
- Major tributaries are the Sina and Nira rivers.
- Pandharpur is an important pilgrimage centre located on the right bank of Bhima River.

**Q: Consider the following statement regarding Auroras:**

1. It is characterised by a display of a natural-coloured light in the sky.
2. It is a light show which is caused when electrically-charged particles from the sun interact with the Earth's magnetosphere and atmosphere.

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:

- An aurora is a natural phenomenon that is characterised by a display of a natural-coloured (green, red, yellow, or white) light in the sky.
- What causes it?
- It is a light show which is caused when electrically-charged particles from the sun interact with the Earth's magnetosphere and atmosphere.
- Solar particles interact with different types of gas molecules in the atmosphere, mostly nitrogen and oxygen, resulting in unique, colored displays of light.
- Oxygen gives off green and red light, while nitrogen glows blue and reddish-purple.

**Q: Consider the following statement regarding New crustacean parasites:**

1. This is the first discovery and description of a new crustacean family from India.
2. The discovery of the new family has also led to the creation of a new genus and species.
3. It was found to infest the deep-sea fish *Chlorophthalmus corniger*.

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:

- New crustacean parasites is also the first discovery and description of a new crustacean family from India.
- This parasitic copepod was found to depend upon the Dollfus' Stargazer (*Uranoscopus guttatus*), a fish dwelling in depths ranging from 300-550 m off the southwest Indian coast.
- The discovery of the new family has also led to the creation of a new genus and species, *Hirodai ohstukai* under it.
- These parasitic copepods are known to infest a wide range of hosts, from sponges to marine mammals.
- New isopod species which has been named *Glyptothoa sagara*; 'Glypto' as the fish parasite was found in the deep sea fish *Glyptothidium macropus*, and 'sagara' for ocean.
- Another new isopod crustacean parasite species named *Elthusa aquabio* was collected from an unknown fish.
- It was found to infest the deep-sea fish *Chlorophthalmus corniger*.

**Q: Consider the following statement regarding Central Bureau of Investigation (CBI):**

1. The establishment of the CBI was recommended by the Santhanam Committee.
2. It is also the nodal police agency in India that coordinates investigations on behalf of Interpol member countries.
3. It is a statutory body.

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:

- Central Bureau of Investigation (CBI) is the premier investigative agency in India, with a dual responsibility to investigate grievous cases and provide leadership and direction in fighting corruption to the police force across the country.
- The establishment of the CBI was recommended by the Santhanam Committee on Prevention of Corruption (1962–1964).
- It is not a statutory body, as it was set up by a resolution (1963) of the Ministry of Home Affairs.
- It derives its powers from the Delhi Special Police Establishment Act, 1946.
- It is also the nodal police agency in India that coordinates investigations on behalf of Interpol member countries.