

Q: Consider the following statement regarding Jaderi namakatti:

1. These are clay sticks that are white in colour.
2. Namakatti is made up of the rich deposit of hydrous silicate minerals.
3. The production of namakatti does not depends upon sunlight.

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:

- Jaderi namakatti are clay sticks that are white in colour, usually available in finger-like shape with a smooth texture.
- Jaderi is a small village in Tiruvannamalai district of Tamil Nadu.
- There are around 120 families in Cheyyar taluk whose primary occupation has been the making of namakatti for more than hundreds of years now.
- Namakatti is made up of the rich deposit of hydrous silicate minerals that form fine grain particles of clay.
- The clay is processed and shaped in a finger like structure.
- The production of namakatti depends on the climatic condition as it needs a lot of sunlight to dry.
- It is used to adorn the foreheads of idols, men, and temple elephants as well as traditionally to treat stretch marks caused by by childbirth.

Q: Consider the following statement regarding Kaziranga National Park:

1. Alpine forest is the important features.
2. It is part of the Eastern Himalayan biodiversity hotspots.
3. It is home to the One-horned rhinoceros.

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:

- Kaziranga National Park is located in the state of Assam.
- It is part of the Eastern Himalayan biodiversity hotspots.
- It is also a UNESCO World Heritage Site and houses two-thirds of the total world population of greater one-horned rhinoceros.
- It is a mix of eastern wet alluvial grasslands, semi-evergreen forests and tropical moist deciduous forests.
- It is primarily famous for its dense and tall elephant grasses intermixed with small swamplands.

Q: Consider the following statement regarding Tilapia parvovirus:

1. It is a single-stranded DNA virus.
2. This virus was localized in the gills, heart, brain, liver and muscles of tilapia.

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:

- Tilapia parvovirus (TiPV) is a small, nonenveloped, single-stranded DNA (ssDNA) virus.
- It was first reported in China in 2019 and Thailand in 2021. India is the third country to report the occurrence of TiPV.
- This virus was localized in the gills, heart, brain, liver, pancreas, spleen, intestine, kidney, eyes, and muscles of tilapia.

Q: Consider the following statement regarding Pallikaranai marshland:

1. It is a freshwater marsh and partly saline wetland.
2. The site is threatened by invasive and non-native species.
3. It is one of the Ramsar sites from India.

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:

- Pallikaranai marshland is a freshwater marsh and partly saline wetland situated about 20 kilometres south of the city of Chennai, Tamil Nadu.
- On its eastern periphery, the Marsh is flanked by the Buckingham Canal.
- The diverse ecosystem of the marshland supports some 115 bird species, ten mammals, 21 reptiles, ten amphibians, 46 fish, nine molluscs, five crustaceans, and seven butterfly species.
- These include notable species such as Russell's viper (*Daboia siamensis*) and birds such as the glossy ibis (*Plegadis falcinellus*), grey-headed lapwings (*Vanellus cinereus*) and Pheasant-tailed jacana (*Hydrophasianus chirurgus*).
- Apart from its biodiversity value, the wetland also plays a vital role in the prevention of flooding for the city of Chennai, soaking up water during wet periods and releasing it during dry spells.
- The site is threatened by invasive and non-native species, household sewage, urban wastewater and droughts.
- It is one of the Ramsar sites from India.

Q: Consider the following statement regarding Hailstorm:

1. Hail is a type of solid rain made up of balls or lumps of ice.
2. They are most common in the midlatitudes.
3. Highly developed Cirrus clouds need to be present.

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:

- Hail is a type of solid rain made up of balls or lumps of ice.
- Storms that produce hail that reaches the ground are known as hailstorms.
- They typically last for no more than 15 minutes but can cause injuries to people and damage buildings, vehicles, and
- They are most common in the midlatitudes.
- Hailstorms can sometimes be accompanied by other severe weather events, such as cyclones and tornadoes.
- Size: The size of hailstones can vary widely, from small pellets less than 1/4 inch in diameter to larger stones measuring several inches in size.

- Highly developed Cumulonimbus clouds need to be present. These are the massive anvil or mushroom-shaped clouds that are seen during thunderstorms, which can reach heights of up to 65,000 feet.