

Q.1) Consider the following statements with respect to 'Zika'

1. It is caused by a virus transmitted primarily by Aedes Mosquito
2. It can cause a paralyzing side effect called Guillain-Barré syndrome

Select the correct statements

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

Q.1) Solution (c)

Virus watch

- Zika is caused by a virus transmitted primarily by the Aedes mosquito, which bites during the day

- The symptoms are generally mild and typically last for 2-7 days. However, most people with Zika do not develop symptoms

- Increased risk of neurological complications is associated with Zika virus in adults and children, including the Guillain-Barré syndrome, neuropathy and myelitis

- The symptoms include fever, rash, conjunctivitis, muscle and joint pain, and malaise or headache

- Zika infection during pregnancy may lead to babies developing microcephaly and other congenital malformations, known as congenital Zika syndrome. It can also lead to other complications like preterm birth and miscarriage



Q.2) Consider the following statements about 'Mithun'

1. They are is a large domestic bovine inhabitants of hill-forests
2. It is the State animal of Arunachal Pradesh

Select the correct statements

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

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Q.2) Solution (c)

The gayal (*Bos frontalis*), also known as mithun, is a large domestic bovine distributed in Northeast India, Bangladesh, northern Myanmar and in Yunnan, China. Gayals are essentially inhabitants of hill-forests. In India, semi-domesticated gayals are kept by several ethnic groups living in the hills of Tripura, Mizoram, Assam, Arunachal Pradesh, and Nagaland. They also occur in the Chittagong Hill Tracts.

The mithun or gayal (*Bos frontalis*), considered a descendant of the Indian Gaur or bison, plays an important role in the socio-economic and cultural life of tribes such as the Nyishi, Apatani, Galo and Adi in Arunachal Pradesh. Reared under free-range conditions in hilly forests, the mithun is known as the 'cattle of the mountain'.

It is the State animal of Arunachal Pradesh.

Q.3) Consider the following statements about 'Rushikulya river'

1. It flows through three states
2. The Rushikulya river mouth beach is a major nesting site of the endangered olive ridley turtles

Select the correct statements

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

Q.3) Solution (b)

The Rushikulya River is one of the major rivers in the state of Odisha and covers entire catchment area in the districts of Kandhamal and Ganjam district of Odisha. The Rushikulya originates at an elevation of about 1000 metres from Daringbadi hills of the Eastern Ghats range. The place from where the river originates, Daringbadi is called the 'Kashmir of Odisha'. It meets the Bay of Bengal at Puruna Bandha in Ganjam. Its tributaries are the Baghua, the Dhanei, the Badanadi etc. It has no delta as such at its mouth.

In 1993, biologists from the Odisha Forest Department and the Wildlife Institute of India learned that large scale nesting of olive ridley sea turtles was taking place near the mouth of

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the Rushikulya River. This area is the location of one of the largest mass nesting (arribada) sites of olive ridley sea turtles in India.

Q.4) Consider the following statements with respect to 'Commercial Paper (CP)'

1. It is an unsecured money market instrument issued in the form of a promissory note.
2. They are short-term instruments and the maturity period does not exceed over 30 days.

Select the correct statements

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

Q.4) Solution (a)

Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note. CPs are short-term instruments and the maturity period varies from seven days to up to one year. The instrument was introduced in 1990 to enable highly rated corporate borrowers to diversify their sources of short-term borrowings, and also to provide an additional instrument to investors. CPs can be issued by corporates, primary dealers, and financial institutions. Eligible participants should have a minimum credit rating of A-2 at the time of the issuance of the CP. Banking companies, mutual funds, other corporate bodies, NRIs, individuals and foreign institutional investors (FIIs) can subscribe to CPs; they are also traded in the secondary market.

Q.5) _____ is the ability of a single cell to divide and produce all of the differentiated cells in an organism

- a) Totipotency
- b) Prepotency
- c) Unipotency
- d) None of the above

Q.5) Solution (a)

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Totipotency

- It is a characteristic feature of a plant cell which signifies that a single cell is capable of giving rise to the whole plant i.e. the cell has the inherited capacity of differentiation and dedifferentiation.
- Totipotency is the ability of a single cell to divide and produce all of the differentiated cells in an organism.
- The term was first coined by Haberlandt in 1902.

