

Q.39) With respect to the Blockchain technology, consider the following statements:

1. It is a peer-based ledger which is shared amongst users.
2. Permission from all the nodes in a network is required to authorise any transaction on the blockchain.
3. The authority is transferred to next node with every transaction in blockchain.
4. It can have its application in the real estate sector.

Which of the statements given above is/ are correct?

- a) 1, 2 and 3 only
- b) 2, 3, and 4 only
- c) 1, 2 and 4 only
- d) 1, 2, 3 and 4

Q.40) With reference to Edge Computing, consider the following statements:

1. All the operations take place near the location of device generating the data.
2. It reduces the need for large amounts of data to travel among servers.
3. Due to proximity to data storage location it experiences very high latency.

Which of the statements given above is/ are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Q.41) With reference to Reverse Osmosis (RO) filters, consider the following statements:

1. It filters out calcium, zinc, magnesium, which are essential salts needed by the body.
2. RO system uses “activated carbon” components such as charcoal and carbon black to filter the water.
3. Government has banned the installation of RO filters in areas where total dissolved solid (TDS) in water is below 5000 milligrams per litre.
4. RO filters are not very useful in filtering out organic material like bacteria.

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 1, 2 and 4 only
- c) 1, 3 and 4 only
- d) 2, 3 and 4 only

Q.42) Consider the following pairs:

Assisted Reproductive Technology	Description
----------------------------------	-------------

- | | |
|-------------|----------------------|
| 1. In vitro | Retrieving eggs from |
|-------------|----------------------|

fertilization

the woman and then fertilize them with sperm in a lab

2. Intrauterine insemination

Fertilizing the egg inside the woman's uterus

3. Intracytoplasmic sperm injection

Removing one or more eggs from the woman's body and transferring back with mature egg with healthy sperm

Which of the pairs given above is/are correct?

- a) 1 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Q.43) Which of the following is the correct objective of Project NETRA:

- a) to keep a lookout for high energy objects in the universe.
- b) to safeguard India's satellites in low-earth orbits by detecting space debris.
- c) to provide timely information about tropical cyclones in the coastal areas.
- d) to explore information about potentially habitable exoplanets.

Q.44) With reference to the impact of micro plastics in human body, consider the following statements:

1. They permanently reside in the body.
2. They can limit transport of oxygen in body tissues.
3. They might affect the normal functioning of hormones in a body.

Which of the statements given above is/are correct?

- a) 1 and 3 only
- b) 2 only
- c) 2 and 3 only
- d) 1, 2 and 3

Q.45) Consider the following statements with respect to the Corbevax Vaccine:

1. It is an indigenously developed protein subunit vaccine.
2. Unlike inactivated vaccines, it targets the entire structure of the virus to be recognised by the body.
3. Corbevax vaccine will be administered to the children of age group 12-14 years.

Which of the statements given above is/are correct?

- a) 1 only
- b) 1 and 3 only
- c) 3 only
- d) 2 and 3 only