Q: Consider the following statement regarding Bagmati River:

- 1. It rises in the Shivapuri Hills.
- 2. Major tributaries are Bishnumati, Hanumante, Dhobikhola and Tukucha.
- 3. It is a transboundary river between Bangladesh and 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: a

Explanation:

- Bagmati River is a transboundary river between Nepal and India.
- It rises in the Shivapuri Hills to the north of Kathmandu and flows southward through the city.
- It passes across the Kathmandu Valley, which is situated in Nepal.
- It gets divided from Kathmandu through Patan, passing via Province No. 2 of the Southern region of Nepal that eventually seeps into the Bihar state of India.
- This river is assumed to be sacred by a pair of religions, Hindus as well as Buddhists.
- Major tributaries Bishnumati, Hanumante, Dhobikhola and Tukucha, Origin
- The River ultimately joins the Narayani River, located in southern Nepal.
- The merged waters of the Bagmati and Narayani eventually make their way southward and into the Ganges.

Q: Consider the following statement regarding Natural Rubber:

- 1. India is the second largest producer.
- 2. It is a polymer made up of a chemical molecule called isoprene.
- 3. It grows well in equatorial climates.

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:

- Natural rubber is a polymer made up of a chemical molecule called isoprene.
- It is a native of the Amazon basin, which was introduced to countries in the tropical belts of Asia and Africa in the late nineteenth century.
- Rubber trees require moist and humid climates with heavy rainfall of more than 200 cm.
- It grows well in equatorial climates and temperatures above 25 degrees Celsius.
- Well-drained, weathered soils is required.
- India is the third largest producer, the fourth largest consumer of natural rubber and the fifth largest consumer of natural rubber and synthetic rubber together in the world.

Q: Consider the following statement regarding Spices Board of India:

- 1. It was constituted with the merger of the erstwhile Cardamom Board and Spices Export Promotion Council.
- 2. It is functioning under the Ministry of Commerce & Industry.

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:

- Spices Board of India was constituted on 26th February 1987 under the Spices Board Act 1986 with the merger of the erstwhile Cardamom Board (1968) and Spices Export Promotion Council (1960).
- It is functioning under the Ministry of Commerce & Industry.
- It is responsible for the export promotion of the 52 scheduled spices and the development of Cardamom (Small and large).
- The Board is a link between the Indian exporters and the importers abroad.

Q: Consider the following statement regarding Monoclonal antibodies:

- 1. These are proteins made in laboratories.
- 2. Antibodies are parts of our immune system.
- 3. They seek out the antigens and stick to them in order to destroy them.

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:

- Monoclonal antibodies (also called moAbs or mAbs) are proteins made in laboratories that act like proteins called antibodies in our bodies.
- Antibodies are parts of our immune system. They seek out the antigens (foreign materials) and stick to them in order to destroy them.
- The word "monoclonal" refers to the fact that the antibodies created in the laboratory are clones. They are exact copies of one antibody.

Q: Consider the following statement regarding Nipah virus:

- 1. It first appeared in domestic pigs.
- 2. It is closely related to Hendra virus.
- 3. The organism that causes Nipah Virus encephalitis is an DNA

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:

- Nipah virus infection is a zoonotic illness that is transmitted from animals to humans.
- The organism that causes Nipah Virus encephalitis is an RNA or Ribonucleic acid virus of the family Paramyxoviridae, genus Henipavirus, and is closely related to Hendra virus.
- It first broke out in Malaysia and Singapore in 1998 and 1999.
- It first appeared in domestic pigs and has been found in several species of domestic animals, including dogs, cats, goats, horses, and sheep.