



Daily Current Affairs Prelims Quiz 05-08-2022 - (Online Prelims Test)

1) Consider the following statements regarding the Lumpy Skin Disease:

1. According to the Global Alliance for Vaccines and Immunization, it is caused by a virus called the Capripoxvirus.
2. It predominantly affects infants under five years of age and is transmitted from milk from the infected cattle species.

Which of the above statement(s) is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

Lumpy Skin Disease (LSD)

- According to a report by GAVI, the Global Alliance for Vaccines and Immunisation, the Lumpy Skin Disease (LSD) disease is caused by a virus called the Capripoxvirus and is “an emerging threat to livestock worldwide”.
- It is genetically related to the goatpox and sheeppox virus family.
- LSD infects cattle and water buffalo mainly through vectors such as blood-feeding insects.
- Signs of infection include the appearance of circular, firm nodes on the animal’s hide or skin that look similar to lumps.
- Infected animals immediately start losing weight and may have fever and lesions in the mouth, along with a reduced milk yield.
- Other symptoms include excessive nasal and salivary secretion.
- Pregnant cows and buffaloes often suffer miscarriage and in some cases, diseased animals can die due to it as well.
- According to the World Organization for Animal Health (WOAH), of which India is a member, mortality rates of 1 to 5 percent are considered usual.
- The disease is not zoonotic, meaning it does not spread from animals to humans, and humans cannot get infected with it.

2) Consider the following statements regarding the Carbon Market:

1. Carbon markets allow the trade of carbon credits with the overall objective of bringing down emissions.
2. An amendment to the Energy Conservation Act, 2001 seeks to establish a domestic carbon market.
3. Under the Kyoto Protocol, carbon markets have worked at the international level as well.

Which of the above statement(s) is/are correct?

- a. 1 and 2 only
- b. 2 and 3 only

- c. 1 and 3 only
- d. 1, 2 and 3

Answer : d

Carbon Markets

- The creation of a domestic carbon market is one of the most significant provisions of the proposed amendment to the Energy Conservation Act, of 2001.
- Carbon markets allow the trade of carbon credits with the overall objective of bringing down emissions.
- These markets create incentives to reduce emissions or improve energy efficiency.
- For example, an industrial unit that outperforms the emission standards stand to gain credits.
- Another unit that is struggling to attain the prescribed standards can buy these credits and show compliance to these standards.
- The unit that did better on the standards earns money by selling credits, while the buying unit is able to fulfill its operating obligations.

Kyoto Protocol

- Under the Kyoto Protocol, the predecessor to the Paris Agreement, carbon markets have worked at the international level as well.
- The Kyoto Protocol had prescribed emission reduction targets for a group of developed countries.
- Other countries did not have such targets, but if they did reduce their emissions, they could earn carbon credits.
- These carbon credits could then be sold off to those developed countries which had an obligation to reduce emissions but were unable to.
- This system functioned well for a few years.
- But the market collapsed because of the lack of demand for carbon credits.
- As the world negotiated a new climate treaty in place of the Kyoto Protocol, the developed countries no longer felt the need to adhere to their targets under the Kyoto Protocol.
- A similar carbon market is envisaged to work under the successor Paris Agreement, but its details are still being worked out.

3) Consider the following statements regarding the Foodborne Pathogen Survey Network (FoodNet):

1. It is a joint initiative by the Ministry of Food Processing Industries and the Ministry of Health and Family Welfare.
2. It coordinates project-based activity campaigns, estimation of illness burden, detection of specific pathogens responsible for outbreaks, etc.

Which of the above statement(s) is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : b

Foodborne Pathogen Survey Network (FoodNet)

- The Indian Council of Medical Research (ICMR) has inaugurated Foodborne Pathogen Survey Network (ICMR-FoodNet) in the northeastern States of India.
- It is the beginning of a unique public health initiative in the Northeast States.

- This latest initiative is part of the project, started by ICMR, in 2020.
- The integrated task force coordinates project-based activity campaigns, monitors foodborne enteric disease outbreaks, and conducts intensified systematic laboratory-based surveillance in four North-East Indian states, in collaboration with research and medical institutions and food sectors.
- This project also includes the estimation of illness burden, detection of specific pathogens responsible for outbreaks, documenting antimicrobial resistance patterns among enteric bacteria, while additionally acting as an external quality assurance system and maintaining a centralized databank providing reference services, noted the Council.

4) Consider the following statements regarding the redshift:

1. When two sources of light are moving with respect to each other, the wavelength of the light changes with respect to the observer and is known as the redshift.
2. If a star moves towards the observer, the wavelength gets shifted to the red side and is known as the redshift.
3. Redshifts and blue shifts of nearby objects within the Milky Way are used to determine their positions and velocities.

Which of the above statement(s) is/are correct?

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

Answer : b

Redshift

- The idea of the Doppler effect is the changes in the frequency of any kind of sound or light wave produced by a moving source with respect to an observer.
- For example, as a whistling train whizzes toward us, the frequency we hear keeps increasing as it moves toward us.
- Similarly, when two sources of light are moving with respect to each other, the wavelength of the light changes with respect to the observer, increasing and changing towards the red side as the two move apart and this is known as redshift.
- If a star is moving towards us, the wavelength gets shifted to the blue side and there is a blue shift.
- However, the redshift or blue shift in the light is not only due to the actual movement of the star with respect to us.
- There is also a change caused by the expansion of the universe which stretches the space between us and the distant galaxy or star.
- This can also contribute to the redshift.
- Measuring the shift in the light of the distant star or galaxy tells us how far it is from us.
- The further it is from us, the higher the redshift. For example, Earendel, the furthest star is at a redshift of 6.2.
- The red shift of objects closer by will be less.
- Redshifts and blue shifts of nearby objects within the Milky Way are used to determine their positions and velocities.

5) Consider the following statements regarding the Hasdeo Aranya region:

1. The region is entirely located in the state of Chhattisgarh and in the catchment area of the Hasdeo River.
2. The Hasdeo river is a tributary of the Mahanadi river which originates in Chhattisgarh and flows through Odisha into the Bay of Bengal.

3. The Hasdeo forests are also the catchment area for the Bango Dam built across the river.

Which of the above statement(s) is/are correct?

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

Answer : d

Hasdeo Aranya Region

- The Hasdeo Aranya forests are called the lungs of Chhattisgarh.
- The Hasdeo Aranya (Aranya means forest) lies in the catchment area of the Hasdeo river and is spread across 1,878 sq km in North-Central Chhattisgarh.
- The Hasdeo river is a tributary of the Mahanadi river which originates in Chhattisgarh and flows through Odisha into the Bay of Bengal.
- The Hasdeo forests are also the catchment area for the Hasdeo Bango Dam built across the Hasdeo river which irrigates six lakh acres of land, crucial to a State with paddy as its main crop.
- Besides, the forests are ecologically sensitive due to the rich biodiversity they offer and due to the presence of a large migratory corridor for elephants.
- Underneath the Hasdeo Aranya is a coalfield that comprises 22 coal blocks.
- In 2010, the Centre categorized Hasdeo Aranya to be a “no-go” zone for mining.
- It ruled out mining in any of these blocks. However, only a year later, the Ministry of Environment, Forest and Climate Change (MoEF) granted clearance for the mining of one coal block.
- At present, of the 22 blocks, seven blocks have been allotted to different companies.
- Over the past year, protests against mining in this region have erupted several times and some still continue to sit in demanding a complete stop to mining.

