

Q: Consider the following statement regarding the Panel of the Vice-Chairperson:

1. A member of the panel of vice chairpersons cannot preside over the House, when the office of the Chairman or the Deputy Chairman is vacant.
2. During such time, the Chairman's duties are to be performed by such member of the House as the Lok Sabha may appoint for the purpose.

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: a

Explanation:

- Under the Rules of Rajya Sabha, the Chairman nominates from amongst the members a panel of vice-chairpersons.
- Any one of them can preside over the House in the absence of the Chairman or the Deputy Chairman.
- He/she has the same powers as the Chairman when so presiding.
- He/she holds office until a new panel of vice-chairpersons is nominated.
- When a member of the panel of vice chairpersons is also not present, any other person as determined by the House acts as the Chairman.
- It must be emphasised here that a member of the panel of vice chairpersons cannot preside over the House, when the office of the Chairman or the Deputy Chairman is vacant.
- During such time, the Chairman's duties are to be performed by such member of the House as the president may appoint for the purpose.
- The elections are held, as soon as possible, to fill the vacant posts.

Q: Consider the following statement regarding Heat Index:

1. It provides information about the impact of greenhouse gas.
2. At present, heat index is derived using the heat index equation similar to what is used by National Oceanic and Atmospheric Administration (NOAA), USA.
3. Green, yellow, orange and red colour are used for Experimental Heat Index.

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:

- Heat Index provides information about the impact of humidity on the high temperatures and thus provides a feel like temperature for human beings which can be used as an indication for human discomfort.
- It provides guidance towards additional care to be taken by people to reduce discomfort.
- Colour codes used for Experimental Heat Index are as follows:
 - ❖ Green: Experimental heat Index less than 35° C
 - ❖ Yellow: Experimental heat Index in the range 36-45° C
 - ❖ Orange: Experimental heat Index in the range 46-55° C
 - ❖ Red: Experimental heat Index greater than 55 °C
- The Heat Index is implemented on experimental basis only across the entire country including the State of Andhra Pradesh.
- At present, heat index is derived using the heat index equation similar to what is used by National Weather Service, National Oceanic and Atmospheric Administration (NOAA), USA.

Q: Consider the following statement regarding Credit Guarantee Scheme:

1. It aims to strengthen the credit delivery system and ensure smooth access to finance for entrepreneurs engaged in the Livestock sector.
2. The scheme targets underserved sections of society.

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:

- Credit Guarantee Scheme aims to strengthen the credit delivery system and ensure smooth access to finance for entrepreneurs engaged in the Livestock sector.
- The main objective is to encourage lenders to focus on the viability of projects and provide credit facilities based on the primary security of the assets being financed.
- By providing access to financial assistance, it promotes investments in various areas of the livestock sector, such as dairy and meat processing, animal feed plants, breed improvement technology, waste management, and veterinary vaccine and drug manufacturing facilities.
- The scheme targets underserved sections of society, including first-generation entrepreneurs and underprivileged individuals, who often lack collateral security for their ventures.

Q: Consider the following statement regarding Zombie fire:

1. It is a fire from a previous growing season that can smoulder under the ground which is made up of carbon-rich peat.
2. The burning peat also removes the layer insulating permafrost.
3. Northern ecosystems store twice as much carbon in their peat and permafrost as the atmosphere.

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:

- Zombie fire is a fire from a previous growing season that can smoulder under the ground which is made up of carbon-rich peat.
- These smouldering fires also produce more smoke because of their lower temperature of combustion.
- As the Arctic warms and fires move farther northward, peat soils rich in dead plant material burn at an accelerated rate.
- The burning peat also removes the layer insulating permafrost, the region's frozen carbon-rich soil.
- Northern ecosystems store twice as much carbon in their peat and permafrost as the atmosphere, and both are increasingly vulnerable to fire.

Q: Consider the following statement regarding Bacteriophages:

1. They work by hunting down bacteria and attaching themselves to the surface of a bacterial cell.
2. Bacteriophages are harmful to human cells.

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: a

Explanation:

- Bacteriophages is also called phage or bacterial virus, any of a group of viruses that infect bacteria.
- They are harmless to human cells as they do not recognize them as their bacterial prey.
- They work by hunting down bacteria and attaching themselves to the surface of a bacterial cell, before injecting viral DNA material into the cell.
- The viral DNA then replicates inside the bacteria, once enough new viruses have been created inside the bacterial cell, the cell then bursts to release the new viral particles.
- All this takes just 30 minutes, meaning one virus can become many in a couple of hours.