

Q: Consider the following statement:

1. Singalila National Park is in West Bengal.
2. Singalila National Park has started an ambitious programme to augment red panda.
3. India is home to Himalayan red panda only.

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:

- The Singalila National Park, the highest protected area in West Bengal, has started an ambitious programme to **augment the wild red panda population**.
- The studies have concluded that **India is home to both the (sub) species — Himalayan red panda** (*Ailurus fulgens*) and the **Chinese red panda** (*Ailurus styani*) and the Siang River in Arunachal Pradesh splits the two phylogenetic species.

Q: Consider the following statement:

1. Padmaja Naidu Himalayan Zoological Park is located in Assam.
2. Neora Valley National Parks is in West Bengal.
3. Red Pandas are characterised as an endangered species as per IUCN Red List of Threatened Species.

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:

- Padmaja Naidu Himalayan Zoological Park in West Bengal (Darjeeling) has started an ambitious programme to release 20 of these furry Pandas in about five years to the forests.
- The number of red pandas has been declining in the wild, even in the Singalila and Neora Valley National Parks, the two protected areas where the endangered mammal is found in the wild in West Bengal.
- Categorised as an endangered species as per IUCN Red List of Threatened Species, red pandas are shy, solitary and arboreal animals and considered an indicator species for ecological change.

Q: The ICMR-Vector Control Research Centre (VCRC), Puducherry, has filed patent applications for its unique products; an artificial diet and feeding device for mosquitoes. Consider the following statement regarding Artificial Mosquito diet:

1. Female mosquito requires animal or human blood diet to produce eggs.
2. The four diets prepared for female mosquitoes is like a baby formula food.

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:

- Mosquito females require animal or human blood diet to produce eggs. For this, blood has to be obtained from blood banks or live animals with proper human and animal ethical clearance.

- Regular supply of blood from blood banks is not easy. Considering these challenges and huge potential demand, they have zeroed in on four artificial diets for feeding.
- These four diets prepared for female mosquitoes is like a baby formula food and has all the essential nutrients, which are present in the blood. These diets would attract hungry female mosquitoes to accept the meal, taste it like blood, produce healthy and viable eggs which should hatch like normal eggs, form healthy useful for laboratory research and mass production whenever necessary.

Q: Recently landslides has killed at least 125 people across four north-eastern States in 2022 after the onset of rainfall in April. Consider the following statement:

1. The Railways have reportedly blamed Jhum or shifting cultivation for this tragedy.
2. Jiribam- Imphal line connect Assam with Manipur.
3. Jiribam- Imphal line is a broad-gauge project.

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:

- The Railways have reportedly blamed jhum or shifting or slash-and-burn cultivation on hill slopes for the tragedy, sparking debates on the tendency to overlook geological challenges and not factor in climate change while executing major developmental projects.
- Sanctioned in February 2005 as a national project, the 110.625 km Jiribam (Assam)-Imphal (Manipur) line is considered a vital segment of the Trans-Asian Railway envisaged as an integrated freight railway network across Europe and Asia.
- The broad-gauge project entails connecting Manipur's Jiribam, a town on the border with Assam, and State capital Imphal mostly across the fragile hills of Noney district, is expected to reduce the travel time from the existing 10-12 hours to three hours.

Q: The decadal pace at which glaciers are receding in Ladakh's Drass region, indicates a grave threat to Himalayan glaciers. Consider the following statement:

1. Black carbon concentration is one of the cause for glacier receding.
2. The glaciers at lower elevations had receded maximum glacier.

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:

- Black carbon concentration ranged from 287 to 3,726 nanograms per cubic metre, with an average of 1,518 nanograms per cubic metre, "which is markedly higher compared to the black carbon concentration reported from other high-altitude locations in the Hindu Kush Himalayas.
- From 1980 to 2020, black carbon concentration has increased significantly from 338 nanogram per cubic meter in 1984 to 634 nano gram per cubic meter in 2020.
- The glaciers at lower elevations receded by 4.10% whereas glaciers at mid- and higher elevations receded by 3.23% and 1.46% over the period observed.
- The heavy vehicular movement is the main cause for the rapid pace at which glaciers are receding in the region.

- The study points out that 17 glaciers situated close to the national highway showed higher glacier shrinkage (4.11%) and snout retreat (209 m) than the glaciers situated further away from the national highway, numbering 60, with glacier shrinkage (2.82%) and snout retreat (148 m).