

Q: Consider the following statement regarding Global Hunger Index:

1. It is a tool for comprehensively measuring and tracking hunger at global, regional, and national levels.
2. It is prepared jointly by Irish aid agency Concern Worldwide and German organisation Welt Hunger Hilfe.
3. India's score in GHI is better than GHI score for the world.

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:

- Global Hunger Index is a tool for comprehensively measuring and tracking hunger at global, regional, and national levels.
- It is prepared jointly by Irish aid agency Concern Worldwide and German organisation Welt Hunger Hilfe.
- GHI scores are based on the values of four component indicators
- India's ranking is based on a Global Hunger Index score of 28.7 on a 100-point scale.
- This categorises India's severity of hunger as "serious".
- The 2023 GHI score for the world is 18.3, which is considered moderate.

Q: Consider the following statement regarding Prosopis juliflora:

1. It is native to India.
2. It is a shrub or small tree in the family Fabaceae.
3. It is one of the most invasive species in arid and semi-arid areas.

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:

- Prosopis juliflora is a shrub or small tree in the family Fabaceae, a kind of mesquite.
- It is native to Mexico, South America and the Caribbean.
- It is one of the most invasive species in arid and semi-arid areas.
- It was brought to Delhi by the British in the 1920s, when the national capital was being built.
- In India it is known locally by many names such as Bellary jaali, seemai karuvelam, seemai jaali, gando baval, vilayati kikar.

Q: Consider the following statement regarding Dampa tiger reserve:

1. It is located in the western flank (Lushai Hills) of Mizoram.
2. The vegetation of the reserve ranges from tropical evergreen to semi-evergreen forests.

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:

- Dampa tiger reserve is located in the western flank (Lushai Hills) of Mizoram.

- It was declared as a tiger reserve under the Project Tiger initiative in 1994.
- On the West, the reserve is bound by the Chittagong hill tracts (Sazek hill range) of Bangladesh.
- The terrain is hilly with elevation ranging from 49 to 1095 m. above mean sea level.
- The highest point of the reserve is the Chhawrpialtlang with an altitude of 1095m. Other peaks are Dampatlang (869 M) and Pathlawilunglentlang (780 m).
- The vegetation of the reserve ranges from tropical evergreen to semi-evergreen forests.

Q: Consider the following statement regarding Nilgiri Tahr:

1. It is an endangered mountain ungulate endemic to the southern part of the Western Ghats.
2. Locally, the animal is called 'Varayaadu'.
3. Eravikulam National Park in Kerala has the highest density and largest surviving population of Nilgiri tahr.

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:

- Nilgiri Tahr is an endangered mountain ungulate endemic to the southern part of the Western Ghats.
- Locally, the animal is called 'Varayaadu'.
- They are known for their gravity-defying skills in climbing steep cliffs, earning them the nickname Mountain Monarch.
- It is the state animal of Tamil Nadu.
- Their present distribution is limited to approximately 5% of the Western Ghats in southern India (Kerala and Tamil Nadu).
- Eravikulam National Park in Kerala has the highest density and largest surviving population of Nilgiri tahr.

Q: Consider the following statement regarding Aerosols:

1. They are tiny solid or liquid particles suspended in air or as a gas.
2. Visible forms of atmospheric aerosol plumes include smoke, smog, haze and dust.
3. Aerosol particles are not emitted directly to 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: a

Explanation:

- Aerosols are tiny solid or liquid particles suspended in air or as a gas.
- Aerosols can be natural, such as fog or gas from volcanic eruptions, or artificial, such as smoke from burning fossil fuels.
- Aerosol particles are either emitted directly to the atmosphere (primary aerosols) or produced in the atmosphere from precursor gases (secondary aerosols).
- Aerosol particles are tiny, but numerous, and often comprise of a number of inorganic and organic substances.
- True aerosol particles range in diameter from a few millimicrometres to about 1 micrometre (equal to 10⁻⁴ cm).
- Particles with a diameter of less than 0.1 micrometre are sometimes referred to as Aitken nuclei.
- Visible forms of atmospheric aerosol plumes include smoke, smog, haze and dust.

