

Q: ISRO is working on developing indigenous capabilities towards space tourism. Consider the following statement:

1. SpaceX
2. Blue Origin
3. Artemis

Which among the following is related with space tourism?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: a

Explanation:

- The space tourism market has catapulted in the last couple of years with private aerospace companies dominating the field as government space agencies playing catch up.
- Elon Musk founded SpaceX is leading the space tourism market with its Dragon spacecraft taking people on tourism flights in zero gravity.
- Meanwhile, **Jeff Bezos-led Blue Origin** is another big player with its New Shepard spacecraft launching from West Texas with passengers in brief joyrides to space. The flights last nearly 10 minutes, giving the passengers a view of the Earth from outside it.
- The Artemis program is a human spaceflight program led by NASA to explore the Moon.

Q: A new study indicates that sunlight triggers a unique appetite-boosting hormone in men. Consider the following:

1. Prolactin
2. Ghrelin
3. Leptin

Which among the above is the appetite-boosting hormone in men?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: b

Explanation:

- Researchers maintained that appetite regulation is a complex process that directly influences health and involves **ghrelin and leptin hormones**. Ghrelin levels are at their lowest after a meal and are increased thereafter.
- While the environmental factors that control ghrelin release are music, light, and odour, the underlying mechanisms are yet to be revealed.
- These results identify the skin as a major mediator of energy homeostasis and may lead to therapeutic opportunities for sex-based treatments of endocrine-related diseases.

Q: Consider the following statement:

1. Recently IUCN had added Monarch butterfly in the Red List.
2. The population of monarch butterflies in North America is declining.

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:

- Recently, the International Union for the Conservation of Nature added the migrating monarch butterfly for the first time to its 'red list' of threatened species and categorized it as 'endangered'.
- The group estimates that the population of monarch butterflies in North America has declined between 22 per cent and 72 per cent over 10 years.

Q: Consider the following statement:

1. According to IUCN, global Tiger population is decreasing at a rate of 20 percent every year.
2. Tiger populations have decreased in Nepal, northern China and India.

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: d

Explanation:

- The international union also announced new estimates for the global population of tigers, which are 40% higher than the most recent estimates from 2015.
- The new figures, of between 3,726 and 5,578 wild tigers worldwide, reflect better methods for counting tigers and, potentially, an increase in their overall numbers.
- In the past decade, tiger populations have increased in Nepal, northern China and perhaps in India, while tigers have disappeared entirely from Cambodia, Laos and Vietnam, said Miquelle. They remain designated as endangered.

Q: Which among the following app launched by GoI to raise awareness on electric mobility?

- a) E-AMRIT
- b) E- UMANG
- c) M-Parivahan
- d) None of the above

Ans: a

Explanation:

- E-AMRIT (Accelerated e-Mobility Revolution for India's Transportation) mobile application to raise awareness on electric mobility and the Report on Advanced Chemistry Cell Battery Reuse and Recycling Market in India.