## (SOLUTION) TEST – 32 (Textbook) (INSTA Prelims Test Series 2022)



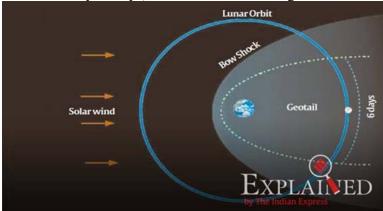
**Q Source:**https://www.wwfindia.org/about wwf/priority species/threatened species/brow antlered deer/

## 35. Correct Answer : D Answer Justification :

**Justification:** A region in space that allows the best observations. The region exists as a result of the interactions between the Sun and Earth.

How is it formed?

- 1. The Sun emits the solar wind, which is a continuous stream of charged particles.
- 2. These particles are embedded in the extended magnetic field of the Sun. Since the Earth has a magnetic field, it obstructs the solar wind plasma.
- 3. This interaction results in the formation of a magnetic envelope around Earth.
- 4. On the Earth side facing the Sun, the envelope is compressed into a region that is approximately three to four times the Earth radius.
- 5. On the opposite side, the envelope is stretched into a long tail, which extends beyond the orbit of the Moon.
- 6. It is this tail that is called the **geotail**.
- 7. Once every 29 days, the Moon traverses the geotail for about six days.



**Q Source:** Based on UPSC papers

## 36. Correct Answer : C Answer Justification :

Justification: EI-Nino is merely an extension of the warm equatorial current which gets replaced temporarily by cold Peruvian current or Humbolt current

- The system involves oceanic and atmospheric phenomena with the appearance of warm currents off the coast of Peru in the Eastern Pacific and affects weather in many places including India.
- This current increases the temperature of water on the Peruvian coast by 10°C. This affects the local temperature, and thus ocean currents, wind pattern leading to rainfall changes. El-Nino can thus cause distortion of the equatorial atmospheric circulation and irregularities in the evaporation of sea water.