

**PRESTORMINGTM 2021**  
**TEST-26 - SCIENCE & TECHNOLOGY**

**1. Consider the following passage:**

**The goal of the mission is to make global measurements of the causes and consequences of land surface changes using advanced radar imaging. The mission would provide a means of disentangling highly spatial and temporally complex processes ranging from ecosystem disturbances to ice sheet collapses and natural hazards including earthquakes, tsunamis, volcanoes and, landslides.**

Which of the following statements given below is correct about the above described mission jointly developed by NASA and ISRO?

- (a) It is the first satellite mission to use two different radar frequencies
- (b) NASA is providing the mission's S-band, the launch vehicle
- (c) It has the capacity to image the entire Earth in 2 days
- (d) ISRO is providing the mission's L-band radar

**2. Which of the following will be the benefit of the Skylark constellation that was recently in news?**

- (a) Provide space tourism to people in the near future
- (b) Monitors the changes in the ecosystem with high resolution upto 1cm
- (c) Help to combat the threat of collisions in space
- (d) Regulates the development of space force without harming the existing systems

**3. Consider the following statements about Unexploded Ordnance Handling Robot (UXOR):**

- 1. It can handle, and defuse unexploded bombs, motors, and missiles up to 1,000 kg
- 2. It has the capability to operate remotely from 1km Line Of Sight
- 3. It is designed and developed by the Defence Research and Development Organisation

Which of the statements given above are correct?

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

**4. Consider the following statements about Defence Space Agency:**

- 1. It is involved in strengthening India's counter space capabilities
- 2. It is a separate arm under the Department of Space and is independent of ISRO
- 3. It is a tri-service agency consisting of members from the Army, Navy and Airforce

Which of the statements given above are correct?

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

**5. Which of the following is related to „Apothis. which is frequently seen in the news?**

- (a) It is a recently discovered exoplanet
- (b) Astronomical body that aids in the study of redshift theory
- (c) Potentially hazardous near-Earth Asteroid
- (d) Newly discovered object in the kuiper belt

**6. Consider the following statements about Space Military Exercise:**

- 1. AsterX is the space military exercise conducted by France
- 2. India has conducted its simulated space warfare exercise IndSpaceEx
- 3. Mission Shakti strengthens India's Space defence capabilities

Which of the following statements given above are correct?

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

**7. Consider the following statements about submarines in India:**

- 1. At present India has only one SSNs or nuclear-powered attack submarines that are leased from Russia
- 2. Nuclear submarines can operate at high speeds for long distances and can remain submerged for months
- 3. Diesel-electric submarines have to surface the water every few days to get oxygen to recharge their batteries

Which of the statements given above are correct?

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

**8. Consider the following statements:**

- 1. A freely suspended magnet always aligns in the North-South direction.
  - 2. The Work done by a magnetic force due to the effect of magnetic field on a moving charge is always zero.
  - 3. The magnetic force is always parallel to the direction of the moving charge in a magnetic field.
- Which of the above-given statements is/are correct?

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

**9. “As light waves enter a glass prism their energies are absorbed by the glass. As the energy moves through the glass it moves at different speeds. Because of the angle of resulting refraction, the different color light waves separate or disperse.”**

The above phenomenon can be best explained by which of the following?

- (a) Polarisation of wave
- (b) Diffraction
- (c) Dispersion
- (d) Total Internal Reflection