

**Chapter: 10**

**Q.1 A) Choose the correct alternative and rewrite the sentence (1)**

- 1) The height of medium earth orbit above the surface of the earth is .....  
a. 1,500 km    b. 250 km    c. 45,000 km    d. 25,000 km

**B) Answer the following questions. (2)**

i) Find co-related terms

$\sqrt{\frac{GM}{R+h}}$  : critical velocity of a satellite at height h from surface of planet : : ..... : escape velocity on the surface of planet

ii) State true or false.

India is the first country to discover the existence of water on the moon.

**Q.2 A) Give scientific reason. (Any one) (2)**

- 1) Space debris is a major problem.  
2) One can jump 6 times higher on Moon than on the Earth.

**B) Answer the following questions. (Any two) (4)**

i) Distinguish between

High Earth Orbit Satellite and Low Earth Orbit Satellite

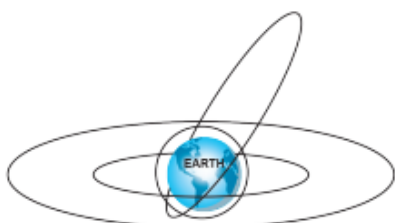
ii) Write Short Notes on

Moon Mission.

3) Artificial satellite.

**Q.3 Answer the following questions. (Any two) (6)**

1) Observe the figure and write the answers.



- a. Name the outer orbit.  
b. Which satellites revolve in low Earth orbits ?  
c. Give an example of a launch vehicle based on Newton's third law.

2) What do the space debris include? How are they generated? Its very essential to manage such debris. Explain why?

**3) Complete the paragraph.**

**(15, India, Luna 3, manned, Luna 2, Chandrayaan-1, Chandrayaan-2, unmanned, Neil Armstrong, Yuri Gagarin)**

The moon is the closest astronomical object to us, the first space missions to objects in the solar system were the missions to the moon. Such missions have so far been executed by USA, Soviet Union, European countries, China, Japan and ..... . The space crafts in the Luna series sent by Soviet Union reached near the moon. ...., launched in 1959 was first such craft. After that, till 1975, ..... space crafts made chemical analysis of the moon and also measured its gravity, density and radiations. Last four crafts even landed on the moon and brought the samples of stones on the moon for analysis in the laboratories. All these missions were ..... . America also executed moon missions from 1962 to 1972. The specialty of these missions was that some of these were manned missions. In July, 1969, ..... became the first human to step on the moon. In 2008, Indian Space Research Organization (ISRO) successfully launched ..... and placed it an into an orbit around the moon. It sent useful information to earth for about a year. The most important discovery made during the mission was the presence of water on the moon surface. India was the first country to discover this.

**Q.4 Answer the following questions. (Any one)**

**(5)**

- 1) Write contribution of following personality in space mission:



**Prism**  
Colours of your Dreams

- 2) Write Short notes on High Earth Orbits Satellite.