



KALPAVRUKSHA MODEL SCHOOL

Answers of Assignments-7

Class: VIII

Sub: Physics

Date: 26.06.2021

Topic: STARS AND SOLAR SYSTEM

I. Answers:

- 1. Name the planet having a well-developed system of rings around it.**

ANS: Saturn planet having a well-developed system of rings around it.

- 2. Name two planets which have been discovered with the help of a telescope.**

ANS: Uranus and Neptune, two planets which have been discovered with the help of telescopes.

- 3. What are asteroids? Where are they located?**

ANS: Asteroids are small celestial objects which revolve around the sun between orbits of Mars and Jupiter.

- 4. What is a comet? Name the comet which was last seen in 1986 after a period of 76 years.**

ANS: **Comet:** Comets are very small celestial objects made of gas and dust around the sun in highly elliptical orbits and become visible only when they come close to the sun. Halley's Comet is the comet which was last seen in 1986 after a period of 76 years.

- 5. What is the difference between a star and a shooting star?**

ANS: **Star** emits its own light.

After entering the Earth's atmosphere, it becomes hot and then produces light.

- 6. Write a short note on comets.**

ANS: A comet is a celestial body which revolves around the sun in a highly elliptical path. These are small chunks of ice and dust that revolve around the sun. They have oval orbits and spend most of their time far away from the sun. Comets are characterized by a small solid part (head) surrounded by a cloud of glowing gases (coma). As the comet approaches the sun, the coma stretches out into a long tail of over 1 million kilometers. Comets can be seen

from the earth when they come close to the sun. Since comets have very long orbits, they take a very long time to return, from a few decades to a few thousand years. One of the best-known comets is the Halley's Comet. It is named after Edmund Halley, who calculated its orbit. Halley's Comet appears after every 76 years. It appeared last time in 1986 and is expected to appear again in 2062.

7. Write a note on Pluto (a dwarf planet).

ANS: Pluto is so far away that it is very difficult to see it from the earth. It was discovered in 1930 by American Clyde Tombaugh. Pluto has an oval-shaped orbit, which takes it 249 years to go once around the sun. For about 20 years of its orbit, it is closer to the sun than the planet Neptune. Pluto is very, very cold. It is much colder than Antarctica. It is so cold that Earth's air would freeze into a kind of snow there.

8. What is a meteorite?

ANS: Sometimes, an object can be too big to be completely destroyed by burning. Such objects reach the surface of the earth and are called meteorites.

9. Differentiate between meteors, meteoroids and meteorites.

ANS: Meteoroids are smaller than comets. They are mainly chunks of rock. They may be fragments of comets or shattered asteroids. When the Earth's orbit crosses the path of a meteoroid, it falls through the Earth's atmosphere. When a small object from space reaches the atmosphere of the earth; it enters at a very high speed. The high speed creates so much friction that the object burns off before reaching the earth. Such objects are called meteors. They are visible as shooting stars in the night sky. Sometimes, an object can be too big to be completely destroyed by burning. Such objects reach the surface of the earth and are called meteorites. A meteorite can cause huge damage to the earth; like destroying a huge population of living beings.

