KALPAVRUKSHA MODEL SCHOOL

Answers of Assignments-4

Class: VIII **Sub: Physics** **Date: 12.06.2021**

Topic: STARS AND SOLAR SYSTEM

I Answer the following questions:

1. Name any inner planets.

ANS: Mercury and Venus are the two inner planets.

2. **Name the planet which lies between the Sun and the Earth.**

ANS: Venus is the planet which lies between the Sun and the Earth.

3. What is the name given to the celestial body which revolves around a planet?

ANS: A celestial body revolving around a planet is called a natural satellite.

4. What is the solar system?

ANS: Our solar system consists of our star, the Sun, and everything bound to it by gravity the planets Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune, dwarf planets such as Pluto, dozens of moons and millions of asteroids, comets and meteoroids.

5. What are planets? How many planets are there in the solar system?

ANS: A planet is a large celestial body that revolves around the sun in fixed orbits. Planets do not have any light of their own but reflect the light of the sun. Planets also do not twinkle like stars because they are much closer to us. 8 planets are there in the solar system.

6. Write any five differences between inner and outer planets.

ANS:

INNER PLANETS	OUTER PLANETS
1. closer to the Sun	1. far away from sun
2.small and rocky surface	2. Large and gaseous.
3. Get more Sunlight.	3. Get less Sunlight.
4. They are smaller in size.	4. They are large in size.
5. They are very dense	5. They are very light
6. Inner planets do not have rings.	6. Outer planets have rings.

7. **Why is it difficult to observe the planet mercury?**

ANS: Mercury is the planet nearest the Sun and is the most difficult to observe, because it is always quite close to the Sun in the sky.

7. Write a short note on the Sun.

ANS: The Sun is mostly made up of hydrogen gas (about 71%), and also helium gas (about 27%) with a tiny amount of other gases. The temperature at the Sun's surface is very high, around 5500 °C. However, that is nothing compared to deep inside the Sun. At the Sun's centre, or core, it is about 15 million °C. It is so hot at the Sun's centres that nuclear reactions can occur, which change atoms from one element to another. In the Sun's case, four hydrogen nuclei are squeezed or fused together to form a new helium nucleus. This process is called nuclear fusion.

9. **State one way in which the planets can be distinguished from the stars in the night sky.**

ANS: Planets are the members of the Solar System. They look like stars but they do not have light of their own. They reflect the sunlight that falls on them. Whereas the stars emit light of their own. The Sun is also a star.