

**CLASS V  
ASSIGNMENT  
CH - 10  
AIR AND WATER**

Q1- Explain the composition of air.

A1- The different gases present in atmosphere are Nitrogen (78%), Oxygen (21%), and other gases (1%), other gases include argon, Carbon dioxide, water vapour, ozone, hydrogen and helium.

Q2- What is the use of Argon?

A2- Argon is used in making light bulb and fluorescent tubes.

Q3- Name and describe the different layers of atmosphere.

A3- The different layers of atmosphere are-

Troposphere- It contains the air that we breathe. All weather changes take place here.

Stratosphere- It contains the ozone layer that traps the harmful UV rays.

Mesosphere- Meteors and other stones from space burn up in this layer and do not reach the earth.

Thermosphere- Space shuttles orbit around the Earth in this layer.

Exosphere- It contains the least amount of air. Beyond this layer, no air exists.

Q4- How is atmosphere useful for us?

A4- Atmosphere is useful for us in the following ways-

The atmosphere maintains the right temperature for the survival of living things.

Ozone protects us from the harmful rays (ultraviolet rays) of the sun.

The atmosphere also protects us from meteoroids, which are small rocks moving about in space. Most of the meteoroids burn up in the atmosphere before they can reach the surface of the Earth.

Q5- What causes depletion in the ozone layer?

A5- The extensive use of chlorofluorocarbons in refrigeration and jet planes causes depletion in the ozone layer.

Q6- What are the different properties of air?

The different properties of air are:-

- a. Air occupies space.
- b. Air has weight.
- c. Air exerts pressure.

Q7- Why we cannot notice the weight of air?

A7- We cannot notice the weight of air because we are surrounded by it.

Q8- What would happen if there was no air pressure?

A8- If there was no air pressure; we would not be able to do certain things like drinking through a straw or filling up fountain pens, syringes and droppers.

Q9- What are impurities?

A9- Substances that make water, air and soil unfit for use are called impurities.

Q10- What is distilled water?

A10- The water collected by distillation is called distilled water. It is the purest form of water and does not contain any impurities or germs. It is used in car batteries, injections and medicines.

Q11- What is chlorination?

A11- Adding chlorine tablets in water kills germs and makes water fit for drinking. This process of purifying water is called chlorination.

Q12- Why distilled water is used in laboratories for doing experiments?

A12- Distilled water is used in laboratories or doing experiments as it is free from any impurities and germs.

Q13- Is distilled water good for drinking?

A13- Distilled water is not good for drinking as it does not contain necessary salt which is required by our body.

Q14-Why ozone layer is important for life on the planet earth?

A14-The ozone layer protects the earth from the harmful ultraviolet rays of the sun.

Q15-Who holds our atmosphere?

A15-It is the earth`s gravity that holds the layer of air around our planet.

**CLASS V**  
**ASSIGNMENT**  
**CH-11**  
**Earth, Sun and Moon**

Q1. What is a satellite?

A1. A satellite is a celestial body that orbits a planet.

Q2. Name the dwarf planet?

A2. Pluto is known as the dwarf planet.

Q3. What features make life possible on the Earth?

A3. Earth has water, air and soil which make life possible on it.

Q4. Name the different layers of the Earth.

A4. The different layers of the Earth are crust, mantle and core.

Q5. Name the star closest to the Earth.

A5. The sun is the star that is closest to the Earth.

Q6. What is corona?

A6. The sun has a thin layer of atmosphere called corona.

Q7. What is solar energy? How is it formed?

A7. Energy that we get from the sun is called solar energy. At the centre of the sun, hydrogen changes into helium. This process releases a large amount of heat and light energy.

Q8. What is the temperature of the Sun?

A8. The temperature at the centre of the Sun is about 15 billion degree Celsius and on the surface, about 6000 degree Celsius.

Q9. Name the natural satellite of the earth.

A9. The moon is the natural satellite of the earth.

Q10. Does moon have light of its own?

A10. No, the moon does not have any light of its own. The moon light we see is only reflected sunlight.

Q11. What will happen to our body weight if we land on the surface of the moon?

A11. The gravity of moon is about one-sixth the gravity of the earth. So our body weight on moon will be one-sixth the weight on the surface of the earth.

Q12. What do you mean by the phases of moon? Describe the different phases of moon with diagram?

A12. When the moon revolves around the earth, its shape appears to change day by day. The changing shape of moon are called phases of moon.

Diagram on page 133

Q13. Who was the first man to set foot on the surface of moon and when?

A13. Neil Armstrong was the first man to set foot on the surface of moon on July, 20<sup>th</sup>, 1969.

Q14. What are artificial satellites?

A14. Artificial satellites are man-made objects that orbit the earth.

Q15. What is the use of communication satellite?

A15. Communication satellites send signals for T.V., radio programmes and telephone calls.

Q16. What is the use of Navigation Satellite?

A16. Navigation Satellite helps the ships and aircrafts find their way.

Q17. What is the use of Astronomy Satellite and Weather Satellite?

A17. Astronomy Satellite carries telescopes into space and Weather satellites help in forecasting.

Q18. Name India's first space craft to be sent to the moon? Who launched it and when? What was the aim of mission?

A18. The Chandrayan-1 mission was India's first spacecraft to be sent to the moon. It was launched by India's national space agency, the Indian Space Research Organization (ISRO) on October 22, 200. The aim of mission was to map the moon's surface in high resolution and also get more details of the moon.

Q19. What is the full form of IAU?

A19. The full form of IAU is International Astronomical Union.

Q20. Differentiate between the three layers of the Earth.

A20.

CRUST	MANTLE	CORE
It is the outermost layer of the Earth.	It is the middle layer of the Earth.	It is the innermost layer forming the centre of the Earth.
It is made up of rocks.	Its upper part is made up of solid rocks, whereas the lower part consists of molten rocks.	The outer core contains iron and nickel in a molten state. Some Sulphur is also present.
It contains everything that is essential for life.	It contains a lot of iron and magnesium.	The inner core is a solid ball almost entirely made up of iron.