

ans- Two processes supported by oxygen present in air are:-

- i) Respiration
- ii)

Q) Give two uses of the following components present in air -

a) Oxygen - For respiration and breathing no life is possible without oxygen. Oxygen is the most vital component which is responsible for two most important processes - respiration and combustion.

b) Nitrogen - Present in air gets fixed up in the soil as nitrates used by plants for their growth and for the formation of protein an important nutrient for animals. It is used to make fertilizer and various nitrogenous products.

c) Carbon dioxide - Carbon dioxide is used by plants to prepare their food by photosynthesis. Dry ice is used as a refrigerant - Carbon dioxide is used to prepare fizzy drinks like soda water.

d) Water Vapour - Water vapour present in air provides moisture for both plants and animals. It also helps in predicting climatic conditions of a particular area as its amount varies from place to place and hence

Time -

Q3) Define :

a) Respiration - Respiration is a chemical process that takes place in all living beings. In this process, oxygen present in inhaled air reacts with the digested food materials in the body. This results in release of energy, carbon dioxide and water.



b) Photosynthesis - Process of producing food by green plants taking  $\text{CO}_2$  from air, water from soil by roots and in presence of sunlight and chlorophyll is called photosynthesis.

c) Combustion - Combustion also called burning. It is a process in which a substance reacts chemically with oxygen and gets oxidised with the release of energy in the form of heat and light. It is a fast process.

Q4) What are fuels? Give two examples of modern fuels.

Ans) The thing which produces both light and heat energy is called fuel.

Ex - CNG (Compressed natural gas)

LPG (Liquefied natural gas)

Q5) Give reasons.

a) Aquatic animals and plants are able to survive in water.

Ans) Aquatic animals and plants use oxygen dissolved in water to survive.

b) A burning candle stops burning if covered with a glass tumbler.

as Oxygen is necessary for combustion when covered with glass tumbler supply of oxygen stops.

c) Mountaineers and divers carry oxygen cylinder with them.  
as At higher altitudes the air is less dense or thin and breathing becomes difficult. Similarly air becomes less dense below the surface of the earth. That's why divers and mountaineers carry oxygen cylinder.

d) When water is heated, we see bubbles rising up.  
as These bubbles come from the air dissolved in water. The marine life uses the air dissolved in water.