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Class - 6 sec-B

Chemistry

Ex-11

Q1. Name two important processes supported by oxygen present in air.

Ans = Two important processes supported by oxygen are respiration and combustion.

Q2. Give two uses of the following components present in air.

Ans = (i) Oxygen - Oxygen is very important for living beings because oxygen is required for respiration. Without oxygen, burning cannot take place.

(ii) Nitrogen - It dilutes the effect of oxygen present in air because it does not support burning.

• It is used to make fertilizers and various nitrogenous products.

(iii) Carbon dioxide - Carbon dioxide maintains the temperature of the earth and keeps it warm at night. Carbon dioxide being a non-supporter of burning is used as a fire-extinguisher.

(iv) Dry ice is used as a refrigerant. Water vapour - It provides moisture to both plants and animals. It also helps in predicting climatic conditions of a particular area as its amount varies from place to place and time to time.

3. Define the following.

(a) Respiration - Respiration is a chemical process in which the inhaled air reacts with the digested food material which results in the release of energy, carbon dioxide and water.

(b) Photosynthesis - It is a process in which

plants take water from the soil, carbon dioxide from air and sunlight from the sun to make food and release oxygen.

(C) Combustion - 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.

4. What are fuels? Give two examples of modern fuels?

Ans = substances which are burnt to produce large amount of energy in the form of heat and light are known as fuels.

Any two modern fuels are LPG (Liquefied petroleum gas) and CNG (compressed natural gas).

5. Give reasons

(4) Aquatic animals and plants are able to survive in water?

Ans = Aquatic plants and animals have special organs which consume the oxygen

dissolved in water as ~~water~~ air is dissolved in water.

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

Ans = Oxygen is necessary for burning but when the ~~glass tumbler~~ candle is covered with the glass tumbler it stops the oxygen to enter into the glass tumbler.

(c) Mountaineers and divers carry oxygen cylinders with them.

Ans = At higher altitudes, the air is less dense and it becomes difficult to breathe. So the mountaineers carry oxygen. Sea divers carry oxygen because there is no free oxygen present in sea water since the little dissolved oxygen ~~in~~ in water cannot be used for breathing.

(d) When water is heated, we see bubbles rising up.

Ans = Water has a lot of air dissolved in it.

This is what allows breathing to fishes and other aquatic ~~animals~~ beings. The solubility of gases decreases when the temperature is raised and that is why the dissolved air bubbles out from the water.