HW 11/09/21

Ch - 5

Pure substances & mixtures; Separation of Mixtures

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Q1- Differentiate between pure substances and mixtures.

Ans:

Pure substances	Mixtures
- Pure substances are either elements or compounds.	- A mixture may consists of elements or compounds or both.
- They contain the same kind of atoms and molecules and have a definite set of physical and chemical properties.	- They contain some other substances which may be present in smaller or larger amounts.
- Ex - Gold is an element which contains the same kind of atoms. Sugar is a compound with same kind of molecules.	- They are also called impure substances.
	- They have no fixed composition
	- Ex - Air can be an example of mixture.

Q2- Give 3 examples each of homogeneous and heterogeneous mixtures.

Ans- Air, Steel, Saltwater, Detergent, Alloy etc. are examples of homogeneous mixtures.

- Pizza, Oil and water, Cereal in milk, orange

juice with pulp etc. are examples of heterogeneous mixtures.

Q3. Explain the principle of the process winnowing for separation of solid-solid mixture.

Ans→ The winnowing method is used to separate light solids from heavier ones.

Principle → ~~Used to separate~~ the heavier solids fall vertically down and the lighter solids are blown by wind and fall at a small distance away from the heavier solids.

Explanation: Let's take a mixture of rice and husk. When it is allowed to fall from a height, ricegrains, being heavier, fall vertically down while husk gets blown away by air and forms a heap at a small distance away from the heap of rice. This is the process by which rice is separated from husk.

Summary: ~~The~~ The process of separation of grain from husk and hay with the help of ~~hay~~ wind is called winnowing.