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Class: 8 'G'

Date _____
Page _____

Mixture

Unit-12

Classwork

Draw a well labelled figure of
simple and fractional distillation.

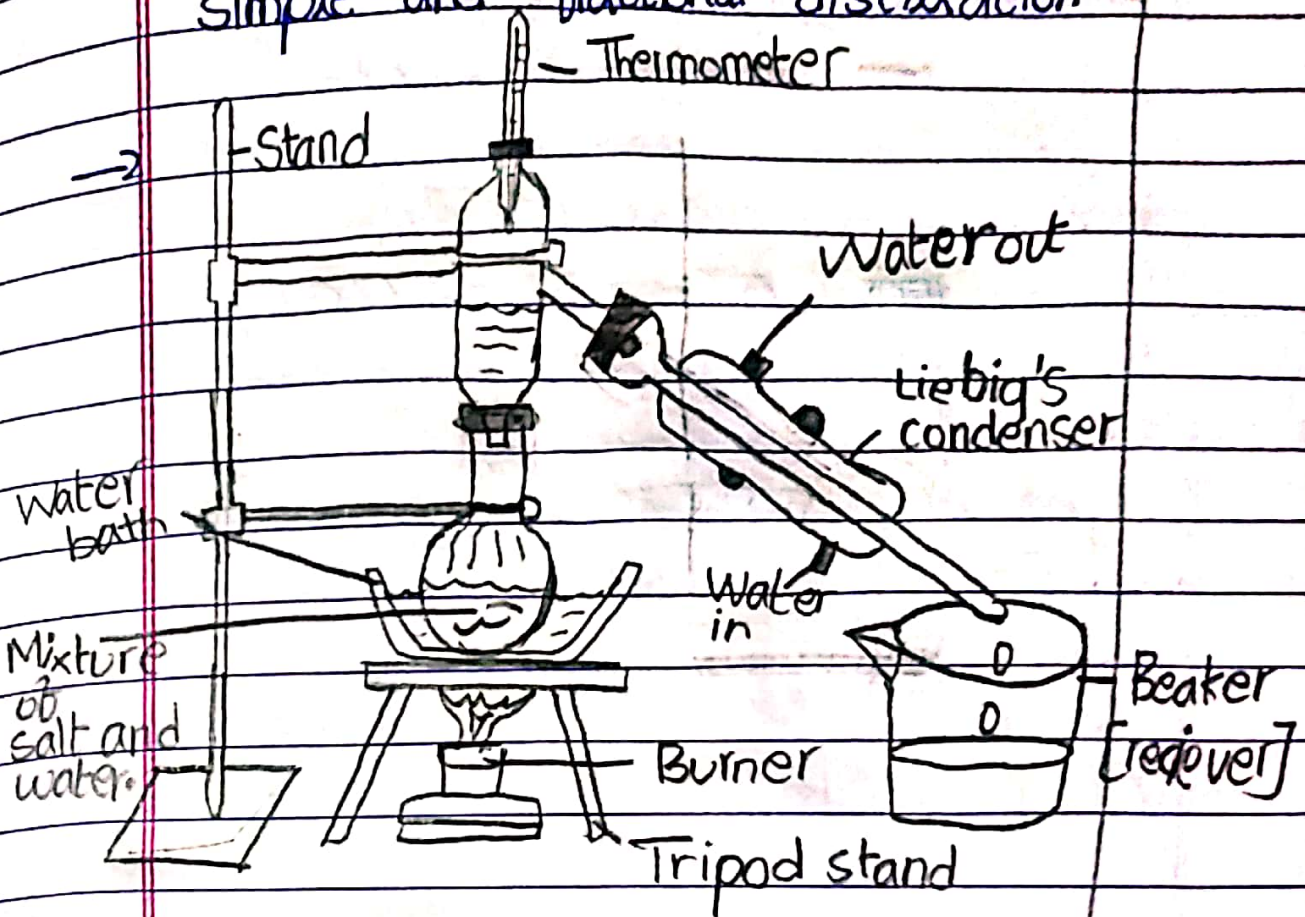
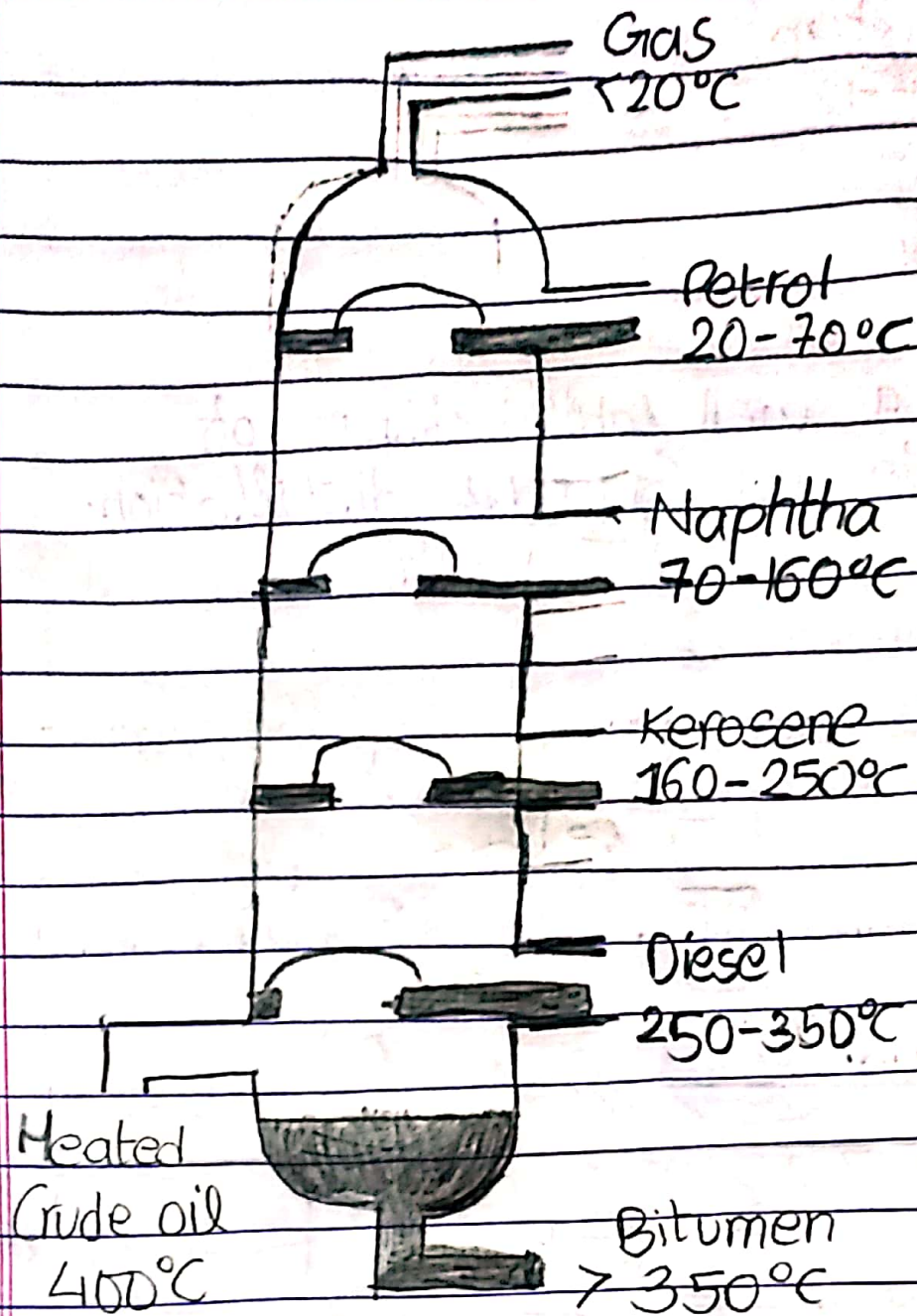


Fig: Simple distillation



Fig; Fractional distillation

Assignment

5) Identify the method of separating the components of the following mixtures.

a) Salt and water
→ Simple distillation

b) Water and Alcohol
→ Simple distillation

c) Red and Green ink
→ Paper chromatography

d) Medicines mixed in urine
→ Chromatography

6) Difference between;

a) ~~Disti~~ Distillation and Chromatography.

Distillation

- It is a method used to separate liquids from solid ~~for~~ other liquids through evaporation and condensation.

- It has 2 types; Simple and fractional distillation.

- It can separate; salt and water, iodine and alcohol, etc.

Chromatography

- It is a method used for separation of substances of a mixture based on the difference in adsorption of different constituents on the surface of a solid.

- It has 3 types; Paper, column and gas chromatography.

- It can separate mixture of ~~red~~ red and blue inks, mixture of medicine in our urine.

b) Simple distillation and Fractional distillation

→ Simple distillation Fractional distillation

- | | |
|---|--|
| - It is used to separate a mixture of two miscible liquids having different boiling points. | - It is used to separate the mixture of two or more liquids of close boiling per range. |
| - It has no fractional column. | - It has fractional column. |

c) ^{chromatography} Paper and column chromatography.

→ Paper chromatography Column chromatography

- | | |
|--|-----------------------------------|
| - It is a method of separation of mixtures | - It is a method of separation of |
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Date _____

Page _____

in which is based on the fact that porous paper absorbs different substances on different extremes.

- Mixture of various colors can be separated by it.

- mixtures which is based on the principle that an absorbent can absorb different substances to different extents.

- It can separate the mixture of various colors and dissolved solids.