

APOLLO

Test of Functional groups and organic analysis

FBISE Chemistry Class 12 (HSSC-II)

Domain G: Lab and Practical Skills

6 questions | questions

Original FBISE question crops. National Curriculum 2022-23 topic.

A student is provided with two unlabelled liquid samples: Ethanol and Ethanal.

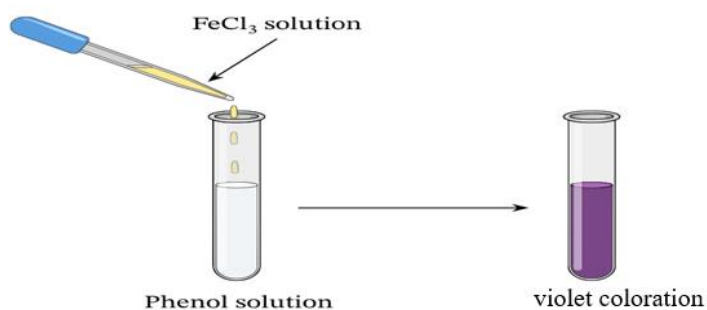
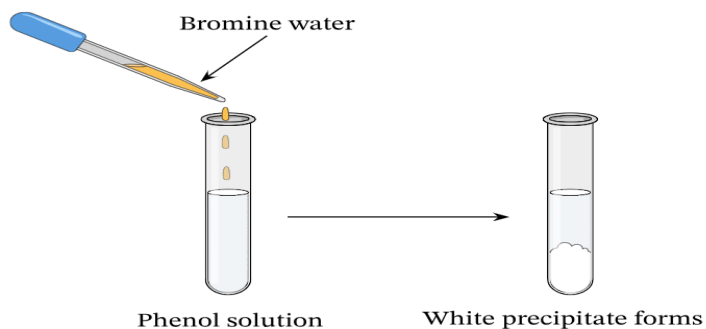
- (a)** Name a specific reagent/s that can produce a yellow precipitate when reacted with both of these compounds. [1]
- (b)** Write the chemical formula of the yellow precipitate formed. [1]
- (c)** Describe a chemical test (reagent and observation) that can be used to distinguish Ethanal from Ethanol. [2]

- (a)** A mixture contains an aldehyde and a ketone.
Name a laboratory reagent used to selectively identify the aldehyde, and state the expected observation. [1+1]

- (b)** A student performed a chemical test to confirm the presence of the phenol functional group.
(i) State the observation when aqueous bromine is added to phenol. [1]

- (b)** A student performed a chemical test to confirm the presence of the phenol functional group.
(i) State the observation when aqueous bromine is added to phenol. [1]
(ii) Write the balanced chemical equation for the reaction between phenol and aqueous bromine. [1]

- ii. Following are the two chemical tests carried out for phenol detection. Write complete reaction for observed products for identification of phenol functional group? [02]



- iv. Write the name of reagent and observation involved in the identification of carboxylic acid. Also write the chemical equation involved. [01]