Practice Question Set For A-Level
Subject : Chemistry
Paper-2 Topic: Aldehydes & ketones

Merit Minds
www.merit-minds.com
Exam Preparation and Free Resources

Name of the Student:_____
Max. Marks :17 Marks **Time :17 Minutes**

Q1.

This question is about simple test-tube reactions to identify organic liquids.

(a) Silver nitrate solution can be used to distinguish between propanoyl chloride and 1-chloropropane.

Give the observations you would expect when a few drops of silver nitrate solution are added to separate samples of propanoyl chloride and 1-chloropropane.

Observation with propanoyl chloride _____

_____

Observation with 1-chloropropane _____

_____

(2)

(b) Three unlabelled bottles are known to contain either propan-1-ol, propanal, or propanone.

A sample of each liquid is warmed with a few drops of Fehling's solution.

Identify the liquid that reacts with Fehling's solution and give the expected observation.

Suggest a further simple test-tube reaction that can be used to distinguish between the remaining two liquids.

Give the expected observation with the liquid that reacts.

Liquid that reacts with Fehling's solution _____

Observation _____

_____

Further test _____

_____

Observation _____

_____

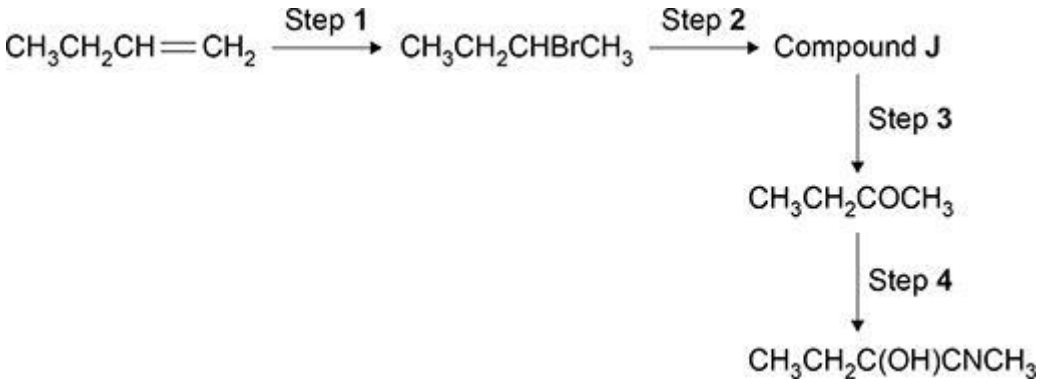
(3)

(Total 5 marks)

Downloaded from www.merit-minds.com

Q2.

This question is about an organic synthesis.



(a) Name the mechanism in Step **1**.

State the reagent(s) used for Step **1**.

Name of mechanism _____

Reagent(s) _____

(2)

(b) Identify compound **J**.

State the reagent(s) and conditions needed for Step **2**.

Compound **J** _____

Reagent(s) and conditions _____

_____

(2)

(c) State the reagent(s) used for Step **4**.

Outline the mechanism for Step **4**.

Reagent(s) _____

Mechanism

(5)

(d) Explain why Step **4** produces a racemic mixture.

_____

_____

Downloaded from www.merit-minds.com

_____

_____

_____

_____

(3)

(Total 12 marks)

Downloaded from www.merit-minds.com