

Model Question Paper
Hydroxy Derivatives - Part III

12th Standard

Chemistry

Reg.No. :

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I. Answer all the questions.

II. Use blue pen only.

Time : 01:30:00 Hrs

Total Marks : 75

5 x 1 = 5

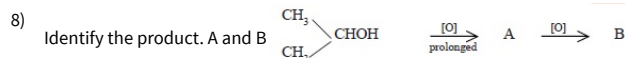
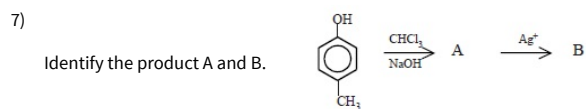
Part-A

- 1) General formula of saturated mono hydric alcohol is
(a) $C_nH_{2n}O$ (b) $C_nH_{2n+2}O$ (c) $C_nH_{2n-2}OH$ (d) $C_nH_{2n}OH$
- 2) Saturated monohydric alcohols are isomeric with
(a) ethers (b) aldehydes (c) ketones (d) esters
- 3) Ethanal and methoxymethane are
(a) chain isomers (b) position isomers (c) functional isomers (d) metamers
- 4) Which one of the following is optically active?
(a) n-butyl alcohol (b) iso butyl alcohol (c) 2-butanol (d) tertiary butyl alcohol
- 5) 1-Butanol is a
(a) primary alcohol (b) secondary alcohol (c) tertiary alcohol (d) aromatic alcohol

Part-B

5 x 3 = 15

- 6) Explain Dow's process.



- 9) What are monohydric alcohols? How are they classified? Give any three methods of preparing ethyl alcohol.
10) How will you distinguish the primary, secondary and tertiary alcohols by Victor Meyer's method?

Part-C

6 x 5 = 30

- 11) How does glycerol react with oxalic acid at (i) 383 K (ii) 533 K
- 12) What are monohydric alcohols? How are they classified? Give examples.
- 13) Give the four methods of preparation of benzyl alcohol.
- 14) Write a note on acidic nature of phenol.
- 15) How will you convert acetic acid to tertiary butyl alcohol?
- 16) An organic compound has the formula $C_4H_{10}O$. It liberates hydrogen with metallic sodium. (i) Write three isomers of $C_4H_{10}O$ which react with sodium (ii) Give the action of any one of the isomers with acetic acid.

Part-D

2X10=20

- 17) a) How will you convert ethyl alcohol to isopropyl alcohol?
b) How will you convert
(i) Glycol to formic acid
(ii) Glycerol to TNG (Trinitro glycerine)
(iii) Glycerol to Glycerol trisacetate
- 18) a) What happens when Phenol
(i) is heated with CCl_4 , NaOH (Reimer - Tiemann reaction)
(ii) is treated with benzoyl chloride, NaOH (Schotten - Baumann reaction)
(iii) is treated with conc. H_2SO_4 (Sulphonation)
b) How are phenols classified? Give their structures and names.
