

Oct-2014



कानन - 017

CHEMISTRY PAPER - II : CH - 122
Organic & Inorganic Chemistry
(12136)

P. Pages : 4

Time : Two Hours

Max. Marks : 40

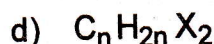
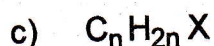
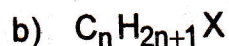
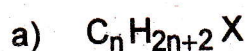
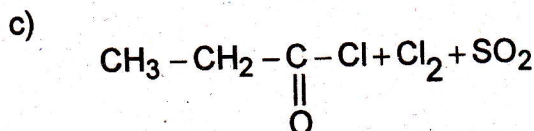
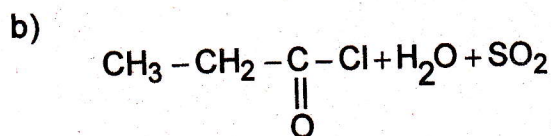
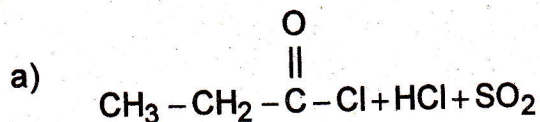
Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All questions are compulsory.
5. Figures to the right indicate full marks.
6. Use of logarithmic table and non-programmable calculator is allowed.

1. Attempt any eight of the following.

8

i) Molecular formula of alkyl halide is _____.

ii) What is the effect of $SOCl_2$ on CH_3-CH_2-COOH gives

d) None of these

- iii) 2-Butanol is an example of ____.
- a) Primary alcohol b) Secondary alcohol
c) Tertiary alcohol d) Aromatic alcohol
- iv) In Friedel craft acylation reaction hydrogen atom of benzene ring is replaced by ____.
- a) Alkyl group b) Acyl group
c) Acyl or alkyl group d) Sulphonic acid group
- v) Propanol on reduction with H_2 / Ni gives ____.
- a) 1-Propanol b) 2-Propanol
c) Propanoic acid d) None of these
- vi) n-Propyl bromide on treatment with aq. KOH produce.
- a) n-Propyl alcohol b) Propene
c) Propyne d) Propane
- vii) Acetyl chloride on reduction with Ammonia produces ____.
- a) Acetic acid b) Acetamide
c) Acetic anhydride d) Ammonium acetate
- viii) Standard solution is a solution of ____.
- a) Accurately known concentration.
b) Definite quantity of substance in definite volume.
c) Secondary standard.
d) Both a & b.
- ix) Correct statement is ____.
- a) formula weight of NaOH is 40.
b) Equivalent weight of NaOH is 40.
c) Equivalent weight of NaOH is same as its formula weight.
d) All of the above.

x) One millimole is equal to _____ moles.

a) $\frac{1}{1000}$

b) $\frac{1}{100}$

c) 1000

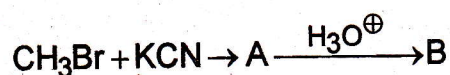
d) 100

2. Answer any four of the following.

8

i) Give classification of monohydric alcohols with one example each.

ii) Identify the products A and B of the following reaction.



iii) Draw the structure of the following compounds – any two.

a) Benzene

b) Pyridine

c) Anthracene

iv) What is the effect of following on CH_3CHO

a) NH_2OH

b) $\text{Ph}-\text{NH}-\text{NH}_2$

v) Give any two examples of primary standard.

vi) Define the term 'Molarity' with one example.

3. Answer any two of the following.

8

i) Explain Huckel rule of aromaticity with suitable example.

ii) Write a note on the following.

a) Aldol condensation

b) Cannizzaro reaction

iii) Define the terms – Titrant, Analyte, Equivalence point and End point.

4. a) What are standard solutions & primary standard substances. 6
Give requirements and examples of primary standard.

OR

- a) What is SN^2 reaction? Explain its mechanism with energy profile diagram. 6
b) Write short note on Hell-Volhard Zelinsky reaction. 2

5. Answer any two of the following. 8

- i) What is Grignard reagent? Explain how benzoic acid is prepared from Grignard reagent.
ii) Write the reaction of Friedel-Craft's alkylation and Friedel-Craft's acylation.
iii) How many ml of 12N HCl is required to prepare 250ml $N/10$ HCl solution.
