

Total No. of Questions : 6]

SEAT No. :

P1435

[5049]-204

[Total No. of Pages : 3

F.Y.B. Pharmacy

1.1.4 : PHARMACEUTICAL ORGANIC CHEMISTRY -II
(2013 Pattern) (Semester-II)

Time : 3 Hours]

[Max. Marks : 70

Instructions to candidates:

- 1) *Answers to the two sections should be written on the separate answer books.*
- 2) *Figures to the right indicate full marks.*
- 3) *All questions are compulsory.*

SECTION - I

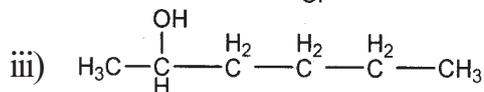
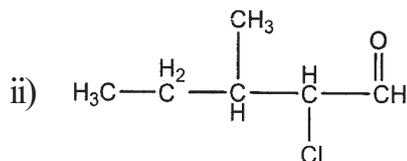
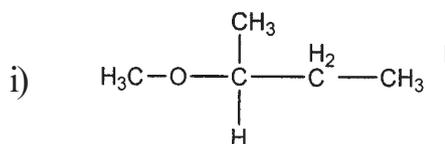
Q1) Aldehydes and Ketones are susceptible for nucleophilic addition reactions explain. Write any two methods of preparation of aldehydes and write a note on aldol condensation. [10]

OR

What are phenols, explain their acidic nature, explain any three methods and three reactions of phenols. [10]

Q2) Answer the following (Any Five) [15]

- a) Draw structures from IUPAC names of following.
 - i) 2-methoxy propane
 - ii) 4-nitrophenol
 - iii) 2-pentanol
- b) Write IUPAC names for following structures.



P.T.O.

- c) Discuss reactions of alcohols with conc. Sulphuric acid.
- At room temperature
 - At 170°C
 - Dehydration at 140°C
- d) Discuss mechanism of Claisen reaction.
- e) Explain Perkin Reaction.
- f) Explain Cannizaro reaction.
- g) How will you distinguish among primary, secondary and tertiary alcohols.

Q3) Solve any two: [10]

- Give any two methods of preparation and two reactions of Sulphonic Acids.
- Explain Reformatsky reaction.
- Write a note on Knoevenagel condensation.
- Write any two methods of preparations and two reactions of Ethers.

SECTION - II

Q4) Explain the substitution Nucleophilic unimolecular reaction, with mechanism and stereochemistry giving suitable examples. [10]

OR

Write method of preparation of following: [10]

- Acid chlorides
- Anhydrides
- Amides
- Esters

Q5) Solve any Five

[15]

- a) Describe how primary, secondary and tertiary amines can be separated from mixture.
- b) Explain acid catalyzed esterification of carboxylic acids.
- c) Give any two Chemical Reactions of Acid Chloride.
- d) Explain Ammonolysis of esters.
- e) Give any two methods of preparation of amines.
- f) Why esters are less reactive towards nucleophile than aldehydes?
- g) Compare and explain the basicities of ethanalamine and aniline.

Q6) Solve any Two

[10]

- a) Give methods of preparation of Cyanides and isocyanides.
- b) Give methods of preparations & Reactions of dicarboxylic acid.
- c) Short note on Michael addition.
- d) Explain Haloform reaction with suitable example.

