

Total No. of Questions : 6]

SEAT No. :

P1973

[5145]-203

[Total No. of Pages :2

F.Y.B.Pharm.

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

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

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

SECTION - I

Q1) Explain why aldehydes are more reactive than Ketones for nucleophilic addition reaction and add a note on Cannizzaro reaction? **[10]**

OR

What are sulphonic acids? Explain any two methods of preparation and two reactions of sulphonic acid. Add a note on aromatic sulfonic acid and acidity of sulphonic acid.

Q2) Answer the following (Any 5): **[15]**

- a) Aniline is less basic than methylamine, explain.
- b) Write any three Methods of preparations of Phenol.
- c) What are enamines how are they prepared.
- d) How will you distinguish between primary, secondary and tertiary amine by simple chemical tests.
- e) Draw structures for the following IUPAC names.
3-chloropentanal, 3-pentanol and 2-methoxy propane.
- f) Explain methods of preparation of ethers.
- g) Explain acidity of phenols.

P.T.O.

- Q3)** Write short note on (Any 2): **[10]**
- a) Preparation of amines.
 - b) Oppenaur oxidation.
 - c) Reactions of Alcohols.
 - d) Haloform reactions.

SECTION - II

- Q4)** Define Substitution Nucleophilic Bimolecular reaction. Explain mechanism, kinetics and stereochemistry of S_N^2 reactions. **[10]**

OR

What are esters? Discuss Diekmann reaction and addition of Grignard reagents to esters in detail.

- Q5)** Answer the following (Any 5): **[15]**
- a) Discuss any two reactions of cyanides.
 - b) Comment on hydrolysis of carboxylic acid derivatives
 - c) Explain trans esterification reaction.
 - d) Define amides, how will you convert acids to amides.
 - e) Classify carboxylic acid derivatives with examples. Give any two methods of preparation of amides.
 - f) What are anhydrides? Draw structures of Succinic anhydride and Pthallic anhydride.
 - g) Give any two methods of preparation of alkyl halide.

- Q6)** Write short note on (Any 2): **[10]**
- a) Williamson's Synthesis.
 - b) Hofmann Degradation.
 - c) Cyanides and Isocyanides.
 - d) Preparation and use of carboxylic acids.

