Subject Code: B13205/R13

I B. Pharmacy II Semester Regular/Supply Examinations July - 2015

PHARMACEUTICAL ORGANIC CHEMISTRY-II

Time: 3 hours **Max. Marks: 70**

Question Paper Consists of **Part-A** and **Part-B**
Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**

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PART-A

1. (a) Write a note on aromaticity of Benzene.
   (b) Give any two methods of preparation of aldehydes.
   (c) Arrange the following acids in increasing order of acid strength.
   p-Nitro benzoic acid, p-Methyl benzoic acid and Benzoic acid
   (d) Explain the industrial preparation of phenol.
   (e) Write a note on basicity of amines.
   (f) Describe the mechanism of Mannich reaction.

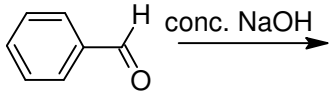
[4+4+3+3+4+4]

PART-B

2. (a) Explain the mechanism of Friedel-Craft's alkylation and its limitations.
   (b) How bromobenzene react with strong base like sodamide? Explain the mechanism.

[8+8]

3. (a) What are the products of the following reaction? Write its name and mechanism.



   (b) Give the nucleophilic addition reaction of acetophenone with Grignard reagent.
   (c) Write a note on Perkin condensation reaction of aromatic aldehyde.

[6+4+6]

4. (a) Explain the mechanism of Esterification.
   (b) Give any two methods of preparation of malonic ester from carboxylic acid.
   (c) Write any three pharmaceutical applications of acetoacetic ester.

[6+4+6]

5. (a) Write a note on:
   (i) Kolbe reaction (ii) Riemer-Tiemann reaction
   (b) Explain the effect of different substituents on acidity of phenols.

[8+8]

6. (a) How can you distinguish 1^0, 2^0 and 3^0 amines in laboratory? Explain. 6M
   (b) How will you effect following conversions? Suggest the mechanisms. 10M
   (i) Aniline ⟶ Benzonitrile (ii) Aniline ⟶ Iodobenzene

[6+10]

7. (a) Give the mechanism of Fries rearrangement.
   (b) Write a detail note on Michael addition. [8+8]

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