

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**

PART-A

- (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.

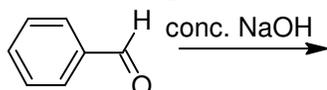
[4+4+3+3+4+4]

PART-B

- (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]

- (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]

- (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]

- (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]

- (a) How can you distinguish 1^o, 2^o and 3^o amines in laboratory? Explain. 6M
- (b) How will you effect following conversions? Suggest the mechanisms. 10M



[6+10]

- (a) Give the mechanism of Fries rearrangement.
- (b) Write a detail note on Michael addition.

[8+8]

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**I B.Pharmacy II Semester Supplementary Examinations, July. 2015
ANATOMY, PHYSIOLOGY & HEALTH EDUCATION-II**

Time: 3 hours

Max Marks: 75

**Answer any FIVE Questions
All Questions carry equal marks**

1. Define ESR? Mention their normal values .What are the factors effecting ESR.what are the methods to determine ESR? What is the significance of ESR? [15]
2. What is blood coagulation? List out the clotting factors. Explain in detail about sequence of clotting with chart. [15]
3. Explain in detail
 - (a) Hepatic circulation
 - (b) Coronary circulation
 - (c) Pulmonary circulation [5+5+5]
4. What is hypertension? Describe in detail about types, symptoms, Pathophysiology, causes and treatment of hypertension. [15]
5. (a) Describe the structure & functions of large intestine, the rectum & anal canal
(b) Explain the chemical digestion takes place in small intestine [9+6]
6. (a) Explain the structure of oral cavity
(b) How saliva secretion is regulated? [8+7]
7. (a) What is parathyroid gland? Explain the physiology and functions?
(b) Write briefly about vasopressin [10+5]
8. Write the following
 - (a) Melatonin
 - (b) Prostaglandins
 - (c) Calcitonin
 - (d) Oxytocin [4+4+3+4]
