Code: 15R00303

R15

B.Pharm II Year I Semester (R15) Supplementary Examinations June 2017

PHARMACEUTICAL ORGANIC CHEMISTRY – III

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) Enlist any two drugs containing quinoline ring.
(b) Comment on reactivity of furan.
(c) Define racemic mixture.
(d) What is optical activity?
(e) Define disaccharides and mutarotation.
(f) Give any two examples of heteropolysaccharides.
(g) Define derived protein? Give any one example.
(h) Define acid value and peroxide value.
(i) Enlist catalyst/reagents involved in: (i) Curtius rearrangement. (ii) Birch reduction.
(j) Enlist catalyst involved in: (i) Wittig reaction. (ii) MPV reduction.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Describe structure, aromaticity and reactivity of imidazole. Give any two methods of synthesis and any two chemical reactions of imidazole.

OR

3 Describe structure, aromaticity and reactivity of pyrimidine. Give any two methods of synthesis and any two chemical reactions of pyrimidine.

UNIT – II

4 Give a brief account on Stereoselective and Stereospecific reactions.

OR

5 Discuss in detail E & Z, Cis/trans configuration with example.

UNIT – III

6 What are carbohydrates? Give its classification. Discuss in detail Osazone formation reaction.

OR

7 What are glycosides? Give its classification. Comment on structure and physiological importance of anthraquinone glycosides.

UNIT – IV

8 What are proteins? Give its classification. Explain any three color reactions of proteins.

OR

9 What are lipids? Give its classification. Explain how you will compare fat and wax, based on their properties.

UNIT – V

10 Describe Beckmann reaction in detail. Give one example of its application in drug synthesis.

OR

11 Write short notes on the following:

(a) Oppenauer oxidation.
(b) Michael addition.