

Code: 9R01302

R09

B.Pharm II Year I Semester (R09) Supplementary Examinations November 2016

**PHARMACEUTICAL ORGANIC CHEMISTRY – II**

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Write the reactions for thiophene and add a note on acidity.  
(b) Explain any three reactions for isoquinoline and write any two examples of drugs containing isoquinoline nucleus.
- 2 Write the nomenclature and any two characteristic reactions for the following heterocyclic compounds:
  - (a) Imidazole.
  - (b) Phenothiazine.
  - (c) Thiazole.
- 3 (a) Define optical rotation and explain about optical activity.  
(b) Write a note on elements of symmetry.
- 4 (a) Explain the structural components of starch.  
(b) Write a note on oxidation-reduction reactions.
- 5 (a) Explain any three important methods of preparation of amino acids.  
(b) Write a note on C-terminal and N-terminal concept.
- 6 (a) Write a note on  $\alpha$ ,  $\beta$ -glycosidic linkages.  
(b) Define saponification value and iodine value with examples.
- 7 (a) Write the chemical structures of methylated xanthines with significance.  
(b) Write a brief account on structure of DNA.
- 8 Write the mechanism and applications of the following reactions:
  - (a) Mannich reaction.
  - (b) Michael addition reaction.
  - (c) Schmidt reaction.

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