

B.Pharm IV Year I Semester (R13) Regular &amp; Supplementary Examinations November 2017

**MEDICINAL 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)
- Write SAR of H<sub>2</sub> receptor antagonist.
  - Write synthesis of Diphenhydramine.
  - Classify beta lactamase inhibitors.
  - Give SAR of H<sub>2</sub> Antagonists.
  - Give MOA of non-nucleoside reverse transcriptase.
  - Write a short note on ligand based drug design.
  - Write a short note on QSAR.
  - Write a short note on anticancer antibiotics.
  - Outline synthesis of promethazine.
  - Write a short note on quinolone antibiotics.

**PART – B**

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

**UNIT – I**

- 2 Give the chemical structures of Phenindamine, Tripeleminamine, Fexofenadine, Cyclizine and Esmoprazole.

**OR**

- 3 Describe the chemistry, pharmacological actions, SAR and metabolism of Meclizine.

**UNIT – II**

- 4 Outline the synthesis of Ofloxacin, Nitrofurantoin, Sulfisoxazole and Griseofulvin.

**OR**

- 5 Classify urinary antiseptics on basis of chemical structures. Give MOA, QSAR of antifungal agents with suitable examples.

**UNIT – III**

- 6 Give the chemical structures of Primaquine, Proguanil, Mebendazole, Dapsone and Niclosamide.

**OR**

- 7 Describe the chemistry, pharmacological actions, SAR and metabolism of Isoniazid.

**UNIT – IV**

- 8 Outline synthesis of Acyclovir, Zidovudine, Amantadine and Chlorambucil.

**OR**

- 9 Classify antineoplastic agents on the basis of chemical structures. Give SAR for alkylating agents with suitable examples.

**UNIT – V**

- 10 Write a note on combinatorial chemistry and explain pharmacophore modeling studies.

**OR**

- 11 Write a note on structure based drug design. Explain stereochemistry in drug design with suitable examples.

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