

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm., Winter 2017-18 Examination

Semester: 5

Subject Code: 08101301

Subject Name: Pharmaceutical Chemistry-V (Medicinal Chemistry-I)

Date: 11/12/2017

Time: 10:00am to 1:00pm

Total Marks: 75

Instructions:

1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay type Questions. (Any 2 out of 3) (10 marks each) (20)

1. What are Sympathomimetic Agents? Classify them with examples. Write SAR of Beta-Phenylethanolamine class.
2. Enumerate the physicochemical properties affecting biological activity. Explain Hydrogen bonding and Bioisosterism properties in detail.
3. What are heterocyclic compounds? Explain preparation and reaction of Quinoline.

Q.2 Short Essay type Questions. (Any 7 out of 9) (5 marks each) (35)

1. Give SAR of Muscarinic Antagonists.
2. Write synthesis of Propranolol and Atenolol.
3. Write a short note on Neuromuscular blocking agents
4. Explain the Proton Pump Inhibitors in detail.
5. Write reaction mechanism of Fisher Indole synthesis.
6. Discuss types of forces involved in drug receptor interaction.
7. Explain synthesis and reaction of Pyrimidine.
8. Write a detail note on Antacids.
9. Write an informative note on Partition coefficient.

Q.3 Answer in short. (2 marks each) (20)

1. Why imidazole is less basic than pyrazole? Explain
2. Draw structure of Oxazole and Benzisoxazole.
3. Write synthesis of Dicyclomine HCl.
4. Describe any two reaction of Thiazole.
5. Explain geometrical isomerism with example.
6. Give any two name and structure of drug used as Ganglionic blockers.
7. Define Parasympathomimetics with example.
8. Outline the synthesis of Ranitidine.
9. Give any two preparation of Isoquinoline.
10. Explain transduction mechanism.