Seat No: _____ Enrollment No: _____

PARUL UNIVERSITY

FACULTY OF PHARMACY

B.Pharm. Summer 2018-19 Examination

Semester: 5 **Date: 29/04/2019**
Subject Code: 08101301 **Time: 10:00am to 01:00pm**
Subject Name: Pharmaceutical Chemistry-V (Medicinal Chemistry-I) **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. Enumerate the various physicochemical properties affecting drug action and discuss each in detail.
2. Mention the name of any one five membered heterocyclic ring fused to one benzene ring. Discuss its methods of synthesis, nomenclature, reactions and pharmaceutical importance.
3. What are parasympathomimetics? Discuss SAR of parasympathomimetics. Write the synthesis of Dicyclomine.

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

1. Discuss the various types of forces involved in drug receptor interactions.
2. Mention the reactions and pharmaceutical importance of thiazoles.
3. Discuss the SAR of β-Phenylethanolamines.
4. Mention the synthesis, mechanism of action and uses of propranolol.
5. Write a note on neuromuscular blocking agents.
6. Mention the synthesis, mechanism of action and uses of salbutamol.
7. Explain the SAR of muscarinic antagonists.
8. Write the synthesis and uses of ranitidine.
9. Write the synthesis and mechanism of action of omeprazole.

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

1. Define enantiomers and diastereomers.
2. Mention the synthesis of oxazoles.
3. Mention the pharmaceutical importance of pyrimidine.
4. What are ganglionic blockers? Give examples.
5. Mention the synthesis of neostigmine.
6. Define sympathomimetic agents. Give examples.
7. Write the mechanism of action of antacids.
8. Write the classification of proton pump inhibitors.
9. Define antisecretary agents. Give examples.
10. Explain transduction mechanism.