

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm. Winter 2019-20 Examination

Semester: 5**Subject Code: 08101301****Subject Name: Pharmaceutical Chemistry-V (Medicinal Chemistry-I)****Date: 20/11/2019****Time: 10:00 am to 01:00 pm****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 heterocyclic compounds? Explain Fisher Indole synthesis and Skraup Quinoline synthesis with reaction mechanism.
2. Define and classify cholinergic agents. Discuss SAR of Parasympathomimetics.
3. Enlist various physicochemical properties affecting biological activity. Explain Hydrogen bonding and Partition coefficient in detail.

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 Salbutamol and Atenolol.
3. Write a brief note on bioisosterism.
4. What are receptors? Explain forces involved in drug receptor interaction.
5. Define Drug Therapy. Write a note on history of medicinal chemistry.
6. Explain the Proton Pump Inhibitors in detail.
7. Explain synthesis and reaction of Imidazole.
8. Write a short note on Neuromuscular blocking agents.
9. Discuss chemical reaction of Isoquinoline.

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

1. Outline the synthesis of Omeprazole.
2. Write Electrophilic Substitution Reaction in Indole.
3. Describe any two reaction of Pyrazole.
4. Write synthesis of Dicyclomine HCl.
5. Differentiate: Enantiomers Vs Diastereomers.
6. Give any two preparation of pyrimidine.
7. Define sympatholytics with example.
8. Draw structure of Oxazole and Benzisoxazole.
9. Write Ideal properties of antacids.
10. Explain types of receptor.