

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM – SEMESTER – V • EXAMINATION – WINTER – 2015

Subject Code: 2250004

Date: 17/12/2015

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

Time: 10.30 AM to 1.30 PM

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What are Sympathomimetic Agents? Classify them with examples. **06**
(b) Give SAR of Muscarinic Antagonists. **05**
(c) Write synthesis of Salbutamol and Atenolol. **05**
- Q.2** Write a short note on following: **16**
(a) Bioisosterism
(b) Expectorants
(c) Radiological Contrast Media
(d) Antispasmodics
- Q.3** (a) Explain the following terms with example. **06**
(i) Laxatives
(ii) Prokinetics
(iii) Anti-emetics
(b) What are Physiological properties? Explain Partition coefficient and Protein binding in detail. **05**
(c) What are Isomers? Draw the structure of one drug each having Optical isomerism and Geometrical isomerism. **05**
- Q.4** (a) What is Asthma? Explain Anti-asthmatic drugs in detail. **06**
(b) Give SAR of H₂-Antagonists. **05**
(c) Write synthesis of Cetrizine and Ephedrine. **05**
- Q.5** (a) Explain the following term with examples. **06**
(i) Antacids
(ii) Anti-secretary agents
(iii) Redox potential
(b) Explain Irritable Bowel Syndrome. Give the details of drugs used in the treatment of it. **05**
(c) Write synthesis of Promethazine and Ranitidine. **05**
- Q. 6** Write a short note on following: **16**
(a) Eicosanoids
(b) Sympatholytic Agents
(c) H₁-Antagonists
(d) Neuromuscular Blocking Agents
- Q.7** (a) What are Parasympathomimetic Agents? Classify them with examples. **06**
(b) Explain the Proton Pump Inhibitors in detail. **05**
(c) Write synthesis of Diatrizoic acid and Omeprazole. **05**
