

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER – 5- EXAMINATION –WINTER - 2018

Subject Code:2250004

Date: 29/11/2018

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

Time:10:30 AM TO 01:30 PM

Total Marks: 80

Instructions:

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

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|-------------|------------|--|-----------|
| Q.1 | (a) | Enlist various physicochemical parameters that affect biological activity of drugs. Explain the effect of protein binding and hydrogen bonding on action of drugs. | 06 |
| | (b) | Write short notes on history and development of medicinal chemistry. | 05 |
| | (c) | Classify and explain bio isosterism with suitable examples. | 05 |
| Q.2 | (a) | What is asthma? Classify antiasthmatics with suitable examples and structure. | 06 |
| | (b) | Write a short note on Mucolytics & Decongestants. | 05 |
| | (c) | Explain development of H ₂ - antagonists in detail. | 05 |
| Q.3 | (a) | Give any three structure of Proton pump inhibitors & explain mode of action of omeprazole in detail. | 06 |
| | (b) | Write a short note on Pro kinetic agents & anti secretory agents. | 05 |
| | (c) | Classify & explain anti emetic agents in detail. | 05 |
| Q.4 | (a) | Explain chemistry, biosynthesis, storage & release of Histamine. | 06 |
| | (b) | Classify anti histaminic agents with suitable examples & structures. | 05 |
| | (c) | Write a chemical name & synthesis of diphenhydramine & chlorpheniramine. | 05 |
| Q.5 | (a) | What is eicosanoids? Explain biosynthesis & drug action mediated by eicosanoids. | 06 |
| | (b) | Write a short note on diagnostic agents. | 05 |
| | (c) | Write a chemical name & synthesis of diphenoxylate & ranitidine. | 05 |
| Q. 6 | (a) | Classify acetylcholine mimetics with structures & explain mechanism of acetyl choline esterase hydrolysis. | 06 |
| | (b) | Explain SAR activities of parasympathomimetic agents. | 05 |
| | (c) | Write a chemical name & synthesis of dicyclomine & propranolol. | 05 |
| Q.7 | (a) | Classify sympatholytic agents with structure & explain non selective β blockers. | 06 |
| | (b) | Explain biosynthesis, storage & release of norepinephrin, epinephrine& dopamine. | 05 |
| | (c) | Explain SAR activities of Phenylethanolamine adrenergic agonists. | 05 |
