

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 5 EXAMINATION – SUMMER -2019

Subject Code: 2250004

Date: 03-06-2019

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

Time: 02:30 PM TO 05:30 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) Discuss the following physicochemical parameters in relation to biological activity
(i) Protein binding (ii) Solubility | 06 |
| | (b) Write briefly about Bioisosterism. | 05 |
| | (c) Explain how optical isomerism affects drug action. | 05 |
| Q.2 | (a) Define expectorants, Antitussives and respiratory stimulants with examples. | 06 |
| | (b) Explain antiasthmatics in detail. | 05 |
| | (c) Write short notes on Prokinetics. | 05 |
| Q.3 | (a) Discuss Antisecretory agents and proton pump inhibitors. | 06 |
| | (b) Give IUPAC name and synthesis of the following drugs :
(i) Ranitidine (ii) Omeprazole | 05 |
| | (c) Explain the followings with examples ;
(i) Antispasmodics (ii) Drugs for IBS | 05 |
| Q.4 | (a) Write IUPAC name and synthetic routes of the following drugs :
(i) Chorcyclizine (ii) Promethazine
(iii) Cyproheptadine | 06 |
| | (b) What are H ₁ receptor antagonists. Classify them with examples. | 05 |
| | (c) What are eicosanoids ? Write briefly about biosynthesis of Prostaglandins. | 05 |
| Q.5 | (a) Write short notes on Radiopharmaceuticals as diagnostic agents. | 06 |
| | (b) Write ideal properties of Antacids. | 05 |
| | (c) Write in detail about Antidiarrheal agents. | 05 |
| Q. 6 | (a) Write SAR of muscarinic antagonists. | 06 |
| | (b) Explain Neuromuscular blocking agents. | 05 |
| | (c) Write short notes on
(i) β - blockers (ii) Hydrogen bonding and drug action | 05 |
| Q.7 | (a) Write IUPAC name and synthesis of
(i) Propranolol (ii) Adrenaline
(ii) Diatrizoic acid | 06 |
| | (b) Give SAR of Parasympathomimetics. | 05 |
| | (c) Write short notes on antiemetics. | 05 |
