

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. - SEMESTER-6 • EXAMINATION – WINTER-2023

Subject code: 2260004**Date: 12/12/2023****Subject Name: Pharmaceutical Chemistry – VIII (Medicinal Chemistry – II)****Time: 02:30pm to 05:30pm****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) Enlist theories of Drug-Receptor interactions. Describe any three in details.	06
	(b) Define Xenobiotics. Give importance of CYP-450 in drug metabolism	05
	(c) Write a detailed note on factors affecting drug-receptor interaction.	05
Q.2	(a) Write a note on Phase I reactions of drug metabolism	06
	(b) Write a detailed note on factors affecting drug metabolism	05
	(c) Discuss conjugation as mechanism of metabolism	05
Q.3	(a) What is epilepsy ? Classify antiepileptics with examples. Give synthesis of Phenytoin	06
	(b) What is Parkinson's disease? Write a note on ant Parkinson's agents.	05
	(c) Write a note on Alzheimer disease and its treatment	05
Q.4	(a) Classify NSAIDs and give their mechanism of action.	06
	(b) Write a detailed note on antigout agents	05
	(c) Define and classify the DMARDs with chemical structures.	05
Q.5	(a) Write the chemistry aspects of tricyclic antidepressants	06
	(b) Give SAR of benzodiazepines	05
	(c) Give an account of general and local anesthetics with suitable examples.	05
Q.6	(a) Define and classify sedative and hypnotics with at least three drug examples and one structure of each category.	06
	(b) Give structure of: (Any five)	05
	i). Amphetamine ii). Allopurinol iii). Phenytoin iv). L-dopa v). Naproxen vi). Imipramine	
	(c) Give synthesis and use of: (Any two)	05
	i). Paracetamol ii) Lignocaine iii) Carbamazepine	
Q.7	(a) Write the SAR and few examples with structures of antipsychotic phenothiazines	06
	(b) Discuss the SAR of barbiturates.	05
	(c) Write a short note on Analeptics	05