

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER –4 EXAMINATION – SUMMER-2024

Subject Code: BP402TP**Date: 10/06/2024****Subject Name: Medicinal Chemistry I****Time: 10.30 a.m. to 1.30 p.m.****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) Write SAR of β -blockers. Give synthesis of Propranolol	06
	(b) Write a brief note on Bioisosterism	05
	(c) Classify general anesthetic agents	05
Q.2	(a) Explain (i) Metabolism of paracetamol (ii) Glucuronide conjugation	06
	(b) Write a short note on cholinesterase inhibitors	05
	(c) (i) Explain with example- Narcotic antagonists (ii) Give synthesis of Tolazoline	05
Q.3	(a) Give SAR of Benzodiazepines	06
	(b) Give structure and use of (i) Alprazolam (ii) Valproic acid (iii) Clonazepam (iv) Pentazocine (v) Diclofenac	05
	(c) Give a brief account on α -adrenergic blockers	05
Q.4	(a) Give synthesis (i) Phenytoin (ii) Carbamazepine	06
	(b) Explain with example (i) Dissociative anesthetic (ii) Cholinesterase reactivators	05
	(c) Give structure and use of (i) Clonidine (ii) Labetalol	05
Q.5	(a) Describe SAR of parasympathomimetic agents	06
	(b) Enumerate factors affecting drug metabolism. Explain stereo-chemical aspects	05
	(c) Write in brief about synthetic cholinergic blockers	05
Q. 6	(a) Give synthesis of (i) Halothane (ii) Ibuprofen	06
	(b) Outline the biosynthesis of catecholamines. Give synthesis of Phenylephrine	05
	(c) Write a brief note on Partition Coefficient and Hydrogen bonding,	05
Q.7	(a) Classify sedative and hypnotics	06
	(b) Give synthesis (i) Neostigmine (ii) Dicyclomine	05
	(c) Classify Anti-inflammatory agents	05
