

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Pharm D – 3<sup>rd</sup> Year • EXAMINATION – SUMMER-2023**

**Subject Code: 838805****Date: 01\07\2023****Subject Name: Medicinal Chemistry****Time: 02:30 PM TO 05:30 PM****Total Marks: 70****Instructions:**

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

<b>Q.1</b>	(a) Define QSAR. Give brief account on Hansch QSAR model	<b>06</b>
	(b) Explain the terms: (i) CADD (ii) Antisense molecules	<b>04</b>
	(c) Give structure and mechanism of any two drugs from each (i) Antiscabies (ii) Antitubercular agents	<b>04</b>
<b>Q.2</b>	(a) Describe the SAR amino quinolines used as antimalarial	<b>06</b>
	(b) Write a brief note on anti- HIV agents	<b>04</b>
	(c) What is crystalluria? Give synthesis of any one sulphonamide	<b>04</b>
<b>Q.3</b>	(a) Describe the SAR of tetracyclines	<b>06</b>
	(b) Give synthesis of (i) Atenolol (ii) Warfarin	<b>04</b>
	(c) Give brief account on Angiotensin II receptor antagonists	<b>04</b>
<b>Q.4</b>	(a) Classify oral hypoglycemic agents	<b>06</b>
	(b) Give structures and mechanism of Statins	<b>04</b>
	(c) Give brief account on thyroid and antithyroid agents	<b>04</b>
<b>Q.5</b>	(a) Classify antianginal drugs. Give synthesis of nitroglycerine	<b>06</b>
	(b) Write a short note on antimetabolites as anticancer agents	<b>04</b>
	(c) Thiazides are weak diuretics- Justify the sentence. Give structure of any one loop diuretic	<b>04</b>
<b>Q. 6</b>	(a) Classify female sex hormones. Enumerate various steroidal oral contraceptives	<b>06</b>
	(b) Explain the degradation of penicillin. Draw the structure of any two oral penicillins	<b>04</b>
	(c) Write a note about diagnostic agents and their applications	<b>04</b>
<b>Q.7</b>	(a) Give SAR of glucocorticoids	<b>06</b>
	(b) Give synthesis of (i) Cyclophosphamide (ii) Metformin	<b>04</b>
	(c) Give adverse effects and synthesis of chloramphenicol	<b>04</b>

\*\*\*\*\*