

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**PHARM.D YEAR-3 EXAMINATION – WINTER - 2025**

**Subject Code: 838801****Date: 20-11-2025****Subject Name: Pharmacology-II****Time: 10 : 30 AM TO 01 : 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) Write mechanism of action, adverse effects and uses of Amphotericin B	<b>06</b>
	(b) Discuss Principle and applications of Recombinant DNA technology	<b>04</b>
	(c) Write mechanism of action & adverse effects of Alkylating agents	<b>04</b>
<b>Q.2</b>	(a) Define Drug Resistance. Discuss mechanism of development of Drug resistance with its prevention.	<b>06</b>
	(b) Classify Semisynthetic Penicillin. State Difference between Ampicillin & Piperacillin	<b>04</b>
	(c) Write detailed note on Immunosuppressants	<b>04</b>
<b>Q.3</b>	(a) Write mechanism of action, therapeutic uses and adverse effects of Spironolactone	<b>06</b>
	(b) Explain the merits of Co-trimoxazole over Sulfonamide alone	<b>04</b>
	(c) What is Acute Toxicity Study? Explain its importance in drug development process.	<b>04</b>
<b>Q.4</b>	(a) Describe factors regulating transcription in Prokaryotic Cell	<b>06</b>
	(b) Classify Anticoagulants. Write therapeutic uses of Warfarin	<b>04</b>
	(c) Discuss common properties of Aminoglycoside antimicrobial agents.	<b>04</b>
<b>Q.5</b>	(a) Explain mRNA processing in detail	<b>06</b>
	(b) Explain Eukaryotic DNA Replication process	<b>04</b>
	(c) Discuss Pharmacological actions & therapeutic uses of ADH	<b>04</b>
<b>Q. 6</b>	(a) Write mechanism of actions of following Drugs	<b>06</b>
	1. Acyclovir                      2. Metronidazole                      3. Isoniazid	
	(b) Write a note on Plasms Volume Expanders	<b>04</b>
	(c) Explain PI3 kinase Signal transduction Pathway.	<b>04</b>
<b>Q.7</b>	(a) Discuss Pharmacology of Ciprofloxacin in detail.	<b>06</b>
	(b) Describe the properties of Genetic Code	<b>04</b>
	(c) Differentiate between Prokaryotic & Eukaryotic Chromosome	<b>04</b>

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