

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV (NEW) EXAMINATION – SUMMER 2022

Subject Code:3143614**Date:04-07-2022****Subject Name:Medicinal Chemistry-I & Microbiology****Time:10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	MARKS
Q.1 (a) Define: (1). Docking (2) Lead (3) Hit	03
(b) Describe the procedure of Aseptic transfer	04
(c) Explain culture preservation in detail	07
Q.2 (a) Classify H1 antihistamine with one example in each class.	03
(b) Write a note on Antacids.	04
(c) Write the SAR of H1 antihistamines Illustrate with suitable examples	07
OR	
(c) Write synthesis and MOA of (1). Lidocaine, (2). Warfarin	07
Q.3 (a) What is “High Throughput Screening”?	03
(b) Explain the steps involved in drug discovery process with a schematic diagram.	04
(c) Define QSAR. What are the parameters used in QSAR studies.	07
OR	
Q.3 (a) Explain “Lipinski’s rule of 5”.	03
(b) What are the principle governing “Computer Aided Drug Design”? Explain in detail	04
(c) Explain the 4 phases involved in clinical trials.	07
Q.4 (a) What are local anesthetics? Write its classifications with one example in each class.	03
(b) Write a note on (1). Thrombolytics, (2). Antiplatelet drugs. Write the synthesis of any one antiplatelet drug	04
(c) Write short notes on (1). Radioimmunoassay, (2).Scanning & Transmission electron microscope	07
OR	
Q.4 (a) Write a note on Antiulcer drugs. Write a note on Proton pump inhibitor antiulcer drugs. Give suitable examples.	03
(b) Write the synthesis of (1).Chlorcyclizine, (2)Diphenhydramine HCl	04
(c) Discuss the Principle and Process of Acid Fast staining Technique	07
Q.5 (a) Explain the morphology of bacteria	03
(b) Explain the concept of allergy	04
(c) Describe Gram staining	07
OR	
Q.5 (a) Define: (1). Taxonomy, (2). Slime layer, (3). Plasmid	03
(b) Briefly explain the motility detection test.	04
(c) Describe the classification of culture media.	07
