

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – V • EXAMINATION – SUMMER • 2014

Subject Code: 250002

Date: 06-06-2014

Subject Name: Pharmaceutical Microbiology-I

Time: 10:30 am - 01:30 pm

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)	Define Microbiology. Give its pharmaceutical applications	06
	(b)	Give the morphological classification of bacteria with examples.	05
	(c)	Give the cultivation methods for microorganisms.	05
Q.2	(a)	Give the nutritional requirements for microorganisms	06
	(b)	Give schematic diagram of bacterial cell.	05
	(c)	Give the broad classification of microscope with its applications	05
Q.3	(a)	Give the isolation techniques for microbes.	06
	(b)	Define disinfectant. Give its classification.	05
	(c)	Give required culture media and test organism and incubation condition for sterility testing as per IP.	05
Q.4	(a)	What is abiogenesis?	06
	(b)	Give the methods for sterilization. Explain cold sterilization methods.	05
	(c)	Give the test organisms required for antibiotic assay of Ampicillin, Chloremphenicol, Doxycycline, Erythromycin, Tetracycline	05
Q.5	(a)	Give the evaluation of Disinfectant. Explain Rideal-Walkar test.	06
	(b)	Give the various methods for bacterial counts. Explain turbidometric method with its applications.	05
	(c)	Give the difference between prokaryotic cell and eukaryotic cell.	05
Q. 6	(a)	Explain the diffusion method for antibiotic assay	06
	(b)	Give the validation of sterilization processes.	05
	(c)	Give the difference between gm+ve microorganisms and gm - microorganisms	05
Q.7	(a)	What is bergey's manual?	06
	(b)	Differentiate dry heat sterilization and moist heat sterilization	05
	(c)	Explain the vitamin assay.	05
