

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm - SEMESTER-VI- (NEW SYLLABUS) EXAMINATION – SUMMER-2015

Subject Code: 2260002

Date: 01/05/2015

Subject Name: Pharmaceutical Microbiology & Biotechnology - II

Time: 10:30 am to 1:30 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)	What is mutation? Give its importance.	06
	(b)	Differentiate transformation and transduction.	05
	(c)	What is monoclonal antibody? Give its applications.	05
Q.2	(a)	Explain microbiological assay of Vitamin B ₁₂ .	06
	(b)	How do you carried out sterility test for (any two) (i) Sulphacetamide Eye drop (ii) Benzyl Penicillin Injection (iii) Insoluble Powders	05
	(c)	Define Immunity and Classify it with examples.	05
Q.3	(a)	Discuss antigen-antibody reactions.	06
	(b)	Describe the preparation, standardization and storage of Tetanus Toxoid.	05
	(c)	Why ELISA and Widal tests are performed? Explain the Tuberculin test.	05
Q.4	(a)	Give the list of different mutagenic agents. How mutants are identify?	06
	(b)	Explain Gene cloning.	05
	(c)	Write a note on Dried Human Plasma.	05
Q.5	(a)	Discuss the isolation & recovery of Fermentation products.	06
	(b)	Differentiate the sera and vaccines with examples.	05
	(c)	Discuss the parameters of Fermentation process.	05
Q. 6	(a)	Discuss the design of Fermenter.	06
	(b)	Give the flow sheet of Penicillin production by biotechnological way.	05
	(c)	List out the requirements of Ideal plasma substitute.	05
Q.7	(a)	Write a note on Humulin or Streptokinase.	06
	(b)	Write a note on Whole Human Blood & its storage.	05
	(c)	Write a note on Interferon.	05
