Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

Sub Sub Tim Inst	ject Co ject Nate: 10:: ruction 1. Att 2. Ma	rm - SEMESTER-VI- (NEW SYLLABUS) EXAMINATIO ode: 2260002 ame: Pharmaceutical Microbiology & Biotechnology - II 30 am to 1:30 pm ns: tempt any five questions. ake suitable assumptions wherever necessary. gures to the right indicate full marks.	N – SUMMER-2015 Date: 01/05/2015 Total Marks: 80	
Q.1	(a) (b) (c)	What is mutation? Give its importance. Differentiate transformation and transduction. What is monoclonal antibody? Give its applications.		06 05 05
Q.2	(a) (b) (c)	Explain microbiological assay of Vitamin B ₁₂ . How do you carried out sterility test for (any two) (i) Sulphacetamide Eye drop (ii) Benzyl Penicillin Injection Powders Define Immunity and Classify it with examples.	(iii) Insoluble	06 05 05
Q.3	(a) (b) (c)	Discuss antigen-antibody reactions. Describe the preparation, standardization and storage of Tetar Why ELISA and Widal tests are performed? Explain the Tubo		06 05 05
Q.4	(a) (b) (c)	Give the list of different mutagenic agents. How mutants are Explain Gene cloning. Write a note on Dried Human Plasma.	identify?	06 05 05
Q.5	(a) (b) (c)	Discuss the isolation & recovery of Fermentation products. Differentiate the sera and vaccines with examples. Discuss the parameters of Fermentation process.		06 05 05
Q. 6	(a) (b) (c)	Discuss the design of Fermenter. Give the flow sheet of Penicillin production by biotechnologic List out the requirements of Ideal plasma substitute.	cal way.	06 05 05
Q.7	(a) (b) (c)	Write a note on Humulin or Streptokinase. Write a note on Whole Human Blood & its storage. Write a note on Interferon.		06 05 05
