

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. - SEMESTER-VI • EXAMINATION – SUMMER-2016

Subject Code:260002

Date:05/05/2016

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) Write brief note on role of pharmacist in biotechnology.	06
	(b) Explain Various types of RNA with neatly labeled diagram.	05
	(c) Define mutation and explain types of mutation.	05
Q.2	(a) Draw Double Helix DNA model and describe in detail.	06
	(b) How is Humulin prepared biotechnologically?	05
	(c) Write the application of monoclonal antibodies. Explain any one in detail.	05
Q.3	(a) Write on protoplast fusion technology.	06
	(b) Define plasmid vector. Describe in detail about pBR322.	05
	(c) Enlist antigen-antibody interactions. Explain any one in detail.	05
Q.4	(a) Classify immunity. Write overview of specific immune system.	06
	(b) Explain host pathogen interaction in production of disease.	05
	(c) Explain primary and secondary defense mechanism.	05
Q.5	(a) What is autoimmunity? Classify various autoimmune diseases.	06
	(b) Describe the method of preparation, standardization and storage of IPV.	05
	(c) Explain western blotting method.	05
Q. 6	(a) Write a note on recovery of fermentation product: streptomycin.	06
	(b) Give factors affecting selection of media for fermentation.	05
	(c) How is master culture prepared & preserved?	05
Q.7	(a) Discuss any two methods of enzymes immobilization.	06
	(b) Write a factors, properties and use of immobilized enzyme.	05
	(c) Describe in detail aerobic fermentor.	05
