

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – VI • EXAMINATION – WINTER 2013

Subject Code: 260002

Date: 29-11-2013

Subject Name: Pharmaceutical Microbiology & Biotechnology II

Time: 02.30 pm To 05.30 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 Fermentation. Classify it with suitable examples & organisms involved.	06
	(b)	Name one β lactam antibiotic & explain its fermentation.	05
	(c)	Write short notes on fermentation media and pretreatments.	05
Q.2	(a)	Explain vaccines from endotoxin producing organisms.	06
	(b)	Differentiate Humoral and Cellular immunity, Active and Passive immunity.	05
	(c)	Give a brief account on method of preparing OPV.	05
Q.3	(a)	Define Immobilization and explain different techniques adopted.	06
	(b)	Write short notes on applications of Immobilized enzymes.	05
	(c)	What are the demerits of immobilization?	05
Q.4	(a)	Differentiate Point & Frame shift mutations, Generalized & Specialized transduction.	06
	(b)	Explain velvet replica method of isolating mutants.	05
	(c)	Write short notes on bacterial variation.	05
Q.5	(a)	Explain MoAb production and biochemical principle involved in hybrid selection.	06
	(b)	Give short notes on Immunoglobulins.	05
	(c)	State the importance of cloning vectors and restriction endonucleases.	05
Q. 6	(a)	Mention various techniques of rDNA technology and explain any one in detail.	06
	(b)	Define: Exons, Introns, Transcription, Translation, Gene expression.	05
	(c)	Write short notes on Enzymes of DNA metabolism.	05
Q.7	(a)	State different sources of preparing viral vaccines with suitable examples and explain any one method of preparing Small pox vaccine.	06
	(b)	Write short notes on abnormal toxicity test of vaccines.	05
	(c)	Draw a neat labeled diagram of fermenter.	05
