

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. – SEMESTER 6 • EXAMINATION – SUMMER-2018

Subject Code:260002

Date:03/05/2018

Subject Name: Pharmaceutical Microbiology & Biotechnology II

Time: 10:30am to 01:30pm

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|-------------|--|-----------|
| Q.1 | (a) Differentiate i) Active and Passive immunity ii) Exo and Endotoxin. | 06 |
| | (b) Write short notes on Diphtheria Toxoidal preparation. | 05 |
| | (c) Define: Immunity, Vaccine, Sera, Attenuation, Virulence | 05 |
| Q.2 | (a) With a neat flow chart explain the process of Penicillin fermentation. | 06 |
| | (b) Write short notes on various carbohydrate and nitrogen sources for fermentation process. | 05 |
| | (c) Give a brief account on primary and secondary screening. | 05 |
| Q.3 | (a) Enumerate the methods of recombinant DNA technology. | 06 |
| | (b) Write the method of preparation of Activase using r-DNA technology. | 05 |
| | (c) Brief the historical development in the field of biotechnology. | 05 |
| Q.4 | (a) Explain various techniques of Enzyme immobilization. | 06 |
| | (b) Discuss types of mutations. | 05 |
| | (c) How mutants are isolated? | 05 |
| Q.5 | (a) Discuss the steps involved in Monoclonal antibody production. | 06 |
| | (b) Write short notes on DNA replication. | 05 |
| | (c) Mention the applications of Monoclonal antibodies. | 05 |
| Q. 6 | (a) How Viral Vaccines are prepared? | 06 |
| | (b) Classify immunity with suitable examples. | 05 |
| | (c) Write short notes on diagnostic preparations. | 05 |
| Q.7 | (a) Draw a neat labeled diagram of fermentor and functions of the different parts in detail. | 06 |
| | (b) Write short notes on vitamin B ₂ fermentative production. | 05 |
| | (c) Explain antigen antibody reactions. | 05 |
