

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 6 EXAMINATION – SUMMER -2020

Subject Code: 2260002**Date: 27-10-2020****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) Define and classify fermentation with suitable examples. Enumerate various methods of fermentation. **06**
(b) Write short notes on fermentative production of Streptomycin. **05**
(c) Give a brief account on recovery methods of product from the fermented broth. **05**
- Q.2** (a) Explain the microbiological assay of Streptomycin. **06**
(b) Write short notes on Test for sterility. **05**
(c) Give a brief account on Oral Polio vaccine. **05**
- Q.3** (a) i) Define: Immunity, Virulence, Attenuation, Toxoid, Exotoxin, Endotoxin **06**
ii) State the Enzymes associated with Virulence.
(b) Write short notes on Schick Test. **05**
(c) How to carry out the Microbiological assay of Vitamin B1. **05**
- Q.4** (a) Enumerate the various steps involved in Monoclonal Antibody Production. **06**
(b) Give a brief account on rDNA technology. **05**
(c) Define: Transformation, Conjugation, Transduction, Protoplast fusion, Electrophoration. **05**
- Q.5** (a) Explain the vaccine prepared by rDNA technology. **06**
(b) Define Mutation. What are the types and consequences of mutation? **05**
(c) List out the tests for identifying the mutants and explain any one. **05**
- Q.6** (a) Describe the method of preparing DPT vaccine. **06**
(b) Explain the I.P. standards to be followed for BCG vaccine preparation. **05**
(c) Write short notes on anticoagulants used in blood products with their merits and demerits. **05**
- Q.7** (a) Explain the method of preparation of Dried Human Plasma. **06**
(b) Enumerate Dextran as Plasma substitute. **05**
(c) Write short notes on Human Plasma Protein fraction. **05**
