

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm-Semester-VI May-2012 Examination

Subject code: 260002

Subject Name: Pharmaceutical microbiology and Biotechnology -II

Time: 10:30am to 1:30pm

Date: 09-05-2012

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) Explain the structure of antibody and draw labeled diagram of the same. **06**
(b) Mention safety tests required for vaccines. **05**
(c) Describe the method of preparation of TAB vaccine. **05**
- Q.2** (a) Write in detail about chemical mutagens. **06**
(b) Explain the method of isolation of mutants using velvet replica method. **05**
(c) Write a note on applications of monoclonal antibodies. **05**
- Q.3** (a) Discuss in detail method of enzyme immobilization by adsorption and entrapment. **06**
(b) Write a note on substrates for fermentation. **05**
(c) Describe in detail aerobic fermentor. **05**
- Q.4** (a) Write in brief about different antigen antibody reactions. **06**
(b) Mention applications of biotechnology in Pharmacy. **05**
(c) Give factors affecting selection of media for fermentation. **05**
- Q.5** (a) Draw a neat flowsheet (symbolic diagram) of recovery of penicillin from fermented broth. **06**
(b) Write a note on frameshift mutation. **05**
(c) How is viral vaccine prepared. **05**
- Q. 6** (a) Describe factors affecting primary defense system in humans. **06**
(b) Explain the term attenuated vaccine. Write its method of preparation. **05**
(c) Discuss in detail about translation in DNA replication. **05**
- Q.7** (a) State differences between cellular and humoral immunity. **06**
(b) Write a note on recombinant DNA technology. **05**
(c) Describe production of streptomycin by fermentation. **05**
