

B. Pharm. - III Year (New Course)  
**35017 : Pharmaceutical Biotechnology - III.T.3**

P. Pages : 1

Time : Three Hours



AU - 0641

Max. Marks : 80

- Notes :
1. All question carry equal marks.
  2. Answer **eight** question.
  3. Illustrate your answer necessary with the help of neat sketches.
  4. Use of pen Blue/Black ink/refill only for writing the answer book.

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|-----|---|----|
| 1.  | Explain various Antigen - Antibody reactions and Active and Passive immunization. | 10 |
| 2.  | Explain the following.  | 10 |
|     | a) Conjugation  |    |
|     | b) Gene cloning & its applications  |    |
| 3.  | Discuss about production of penicillin by fermentation process.                   | 10 |
| 4.  | Discuss design of Biotransformation process.                                      | 10 |
| 5.  | Discuss about structure and functions of bacterial cell.                          | 10 |
| 6.  | a) Write note on cell culture methods.  | 5  |
|     | b) Discuss Transcription Process.   | 5  |
| 7.  | Discuss semiconservative replication of DNA in eukaryotes.                        | 10 |
| 8.  | a) Write a note on "genetic code".  | 5  |
|     | b) Development of Humatrope.  | 5  |
| 9.  | Discuss different techniques of enzyme immobilization.                            | 10 |
| 10. | Write short notes on <b>any two</b> .   | 10 |
|     | a) Amylase.   |    |
|     | b) Cellular humoral immunity.   |    |
|     | c) Gene therapy.  |    |

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