

[LD 357]

OCTOBER 2013  
M.PHARM. DEGREE EXAMS  
FIRST YEAR

Sub. Code: 2918

BRANCH VI – PHARMACEUTICAL BIOTECHNOLOGY  
PAPER III – BIOPROCESS TECHNOLOGY

*Q.P. Code : 262918*

**Time : 3 hours**

**Maximum : 100 marks**

**I. Elaborate on :**

**(2x20=40)**

- 1 Explain the various systems of cultivation and their merits and demerits.
- 2 Discuss in detail about the design of bio reactor and uses of Computers in fermentation.

**II. Write notes on :**

**(10x6=60)**

1. Cleaning & sterilization of air.
2. Extraction methods .
3. Fermentation kinetics.
4. Air lift fermentor .
5. Preservation of microbial culture.
6. Bioprocessing of alcohol .
7. Microbial transformation.
8. Enzyme assays.
9. Importance of rheology.
10. Bio mass estimation.

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