

Third Semester M. Sc. (Part - II) (CBCS)
Examination

MICROBIOLOGY

Paper - XI
Fermentation Technology

P. Pages : 3

Time : Three Hours]

[Max. Marks : 80

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- Note :** (1) All questions are compulsory and carry equal marks.
(2) Draw well labelled diagrams wherever necessary.

1. (a) Describe various parameters of batch fermenter. 8
- (b) Explain various types of bioreactor in detail. 8

OR

- (c) Elaborate advantages and dis-advantages of continuous fermentation. 8
- (d) Describe computer control of fermentation. 8

2. Define steroids. How are they produced ?

OR

Describe in detail microbial production of L-asparaginase. 16

3. Explain the process of production of single cell proteins.

OR

How is beer produced ? Differentiate between beer and wine. 16

4. Explain in detail production and market potential of following fermentation.

(a) Saurkraut 8

(b) Sausages 8

OR

(c) What is food poisoning ? Give responsible organisms. 8

(d) Explain in detail different parameters considered to check bacteriological quality of food. 8

5. Describe the fungal biomass production of *Paecilomyces variotii* by Pekilo process.

OR

Explain in detail desirable characteristics and health benefits of probiotics. 16

