



ED-644

M.Sc. 3rd Semester
Examination, March-April 2021

BIOTECHNOLOGY

Paper - XI

Bioprocess Engineering and Technology

Time : Three Hours]

[*Maximum Marks* : 80

[*Minimum Pass Marks* : 16

Note : Answer **all** questions in which question No.1 is compulsory. All questions carry equal marks.

1. (a) Give four names of Industrial important microorganisms.
(b) Write a short note on Photobioreactor.
(c) Write a short note on Crystallization.
(d) Write a short note on Canning.

Unit-I

2. Describe different techniques utilized for the sterilization of Air.

OR

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(Turn Over)

(2)

List some products obtained from bioprocessing. Explain the importance of that products.

Unit-II

3. List some advantages of continuous fermentation.

OR

List some advantages of Fluidized bed bioreactor.

Unit-III

4. Explain, how solid matters separated from medium after fermentation.

OR

List some enzymes utilizes for disruption of cells.

Unit-IV

5. Describe the production technique of amino acids.

OR

Write an essay on Local approach uses for the food preservation in Chhattisgarh.