



HDU-BT-311

Seat No. _____

M. Sc. (Biotech.) (Sem. III) (CBCS) Examination

November / December – 2017

BT-311 : Fermentation Technology

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1 Answer the following : (Any Seven out of Ten, each of 02 marks) **14**

- (1) What is drying?
- (2) What is recombinant DNA technology? Enlist its uses.
- (3) Enlist types of aerators.
- (4) How would you differentiate "Bioassay" and "Chemical assay"?
- (5) Define the term "Starter culture" .
- (6) What is lyophilisation?
- (7) What is cooling system? Give its functions.
- (8) What is dialysis?
- (9) What is flocculation?
- (10) What are genetically modified foods? Exemplify.

2 Answer the following : (Any two out of Three, each of 07 marks) **14**

- (a) Write a note on various designs of bioreactors.
- (b) Describe fermentative production of Glutamic acid.
- (c) What are parameters of secondary screening?

3 Answer the following ((a) & (b) Both are compulsory, each of 07 marks) **14**

- (a) Describe the process of Penicillin fermentation
- (b) What is fermentation economics? Describe.

OR

- 3** Answer the following ((a) & (b) Both are compulsory, each of 07 marks) **14**
- (a) Write a note on fermentative production of Gluconic acid.
 - (b) Enlist processes for food preservation and describe any one in detail.
- 4** Answer the following : (each of 07 marks) **14**
- (a) Write a note on methods of food processing.
 - (b) What is Single Cell Protein? Explain
- 5** Answer the following : (Any Two out of Four, each of 07 marks) **14**
- (a) Write a note on starter culture, its importance and preparation.
 - (b) Enlist techniques for cell disruption and describe any one in detail.
 - (c) Enlist methods for enrichment of fermentation products and describe any one in detail.
 - (d) Write a note on designer foods.
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