

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Food Technology) (Sem.-6)

FERMENTATION TECHNOLOGY

Subject Code : BTFT-604

M.Code : 79422

Date of Examination : 02-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) What is the role of single cell protein?
- b) What is the role of media formulation in the manufacturing processes?
- c) What is the importance of filter sterilization of air during aerobic fermentation?
- d) What is the mechanism responsible for cell flocculation?
- e) What is the difference in kumis and kefir?
- f) What is liquid shear method of cell disruption?
- g) What are the carbon sources used for the media preparation?
- h) What should be the characteristics of yeast to produce alcoholic beverages?
- i) What is the need of antifoaming agents in microbiological processes?
- j) What kind of fermentation is observed in dosa?

SECTION-B

2. Compare the Batch and Continuous culture systems on the basis of metabolic productivity.
3. What are the basic functions of a fermenter?
4. What is the meaning of the following in mushroom cultivation :
 - a) Composting
 - b) Spawning
 - c) Casing and Pinning.
5. What is covalent method of enzyme immobilization?
6. Write down the factors responsible for regulation of citric acid production by fermentation.

SECTION-C

7. What is Inertial impaction mechanism of filtration? Explain the process of filter sterilization of fermentation media.
8. Explain the microorganisms and substrates used to produce industrial enzymes by solid state fermentation.
9. Explain the construction and working of the batch type filters for recovery processes in fermentation.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.