

- Q.21 Discuss the production of buttermilk and lassi through fermentation emphasizing their significance in different cultures.
- Q.22 Describe the fermentation process used in sausage production and its role in preserving the meat.

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Explain the concept of food fermentation and elaborate on its advantages. Provide examples to support your explanation.
- Q.24 Discuss the significance of substrates in the fermentation process. Provide detailed examples of different substrates used in various fermentation applications.
- Q.25 Elaborate on the role of agitator / impellers in a fermentor. How do they contribute to the success of the fermentation process? Provide examples.

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### 3rd Sem. / Food Technology

### Subject : Food Fermentation Technology

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 What is the primary function of a sparger in a fermentor?
- To mix the contents
  - To control the temperature
  - To introduce air or other gases
  - To measure pH level
- Q.2 Which fermented product is commonly made through the fermentation of milk?
- Vinegar
  - Beer
  - Curd
  - Bread
- Q.3 Which of the following is a traditional Indian fermented food product?
- Sushi
  - Kimchi
  - Idli
  - Tofu

- Q.4 What microorganism is primarily responsible for fermenting soybeans to produce tempeh?
- Yeast
  - Lactic acid bacteria
  - Molds
  - Saccharomyces cerevisiae*
- Q.5 Sauerkraut is made by fermenting which vegetable?
- Cabbage
  - Carrots
  - Tomatoes
  - Peppers
- Q.6 What is the primary source of single-cell protein?
- Plants
  - Animals
  - Microorganisms
  - Minerals

### SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Fermentation is the process of converting carbohydrates into \_\_\_\_\_ using microorganisms.
- Q.8 One of the advantages of food fermentation is improved \_\_\_\_\_.
- Q.9 \_\_\_\_\_ is NOT a type of fermentation process.
- Q.10 Substrates in food fermentation refer to the \_\_\_\_\_ used in the fermentation process.
- Q.11 The main purpose of using pure culture in fermentation is to ensure consistent \_\_\_\_\_.

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- Q.12 The agitator/impellers in a fermentor are responsible for \_\_\_\_\_ the fermentation broth.

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Describe the fermentation process used in the production of vinegar.
- Q.14 Discuss the role of bakers yeast in baking and provide an example of a baked product where it is commonly used.
- Q.15 Explain the production technology of curd, including the microorganisms involved and the fermentation conditions.
- Q.16 Describe the fermentation process used in making yogurt and discuss its nutritional benefits.
- Q.17 Explain the traditional fermentation techniques involved in making Indian dishes like idli and dosa.
- Q.18 Discuss the production technology of tempeh and its nutritional advantages.
- Q.19 Describe the fermentation process for producing miso, a traditional Japanese condiment.
- Q.20 Explain how sauerkraut is produced through fermentation, including its key ingredients and fermentation time.

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