

- Q.20 Describe the process of producing distilled beverages like whiskey, rum, and primary spirits through fermentation.
- Q.21 Explain the key steps involved in the production of wine through fermentation.
- Q.22 Outline the brewing process of beer, highlighting the main stages and ingredients used.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)
- Q.23 In detail, explain the basic configuration of a fermentor, including its various components. Discuss the functions of each components and their roles in the fermentation process.
- Q.24 Describe the importance of maintaining pure cultures in food fermentation. Outline the procedures involved in maintaining and propagating pure cultures.
- Q.25 Describe the entire process of wine production through fermentation. Include details about grape selection, fermentation stages, and aging.

No. of Printed Pages : 4

221135

Roll No.

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 food fermentation ?
- The process of cooking food with heat
 - The process of preserving food with chemicals
 - The process of converting carbohydrates into alcohol or organic acids using microorganisms
 - The process of freezing food for long-term storage
- Q.2 What is one of the advantages of food fermentation?
- Reduced shelf life
 - Decreased flavor
 - Improved preservation
 - Lower cost
- Q.3 Which of the following is NOT a type of fermentation process?
- Alcoholic fermentation
 - Lactic acid fermentation

- c) Baking
 - d) Frying
- Q.4 In food fermentation, what are substrates?
- a) Microorganisms
 - b) Ingredients used in the fermentation process
 - c) End products
 - d) Temperature controllers
- Q.5 What is the main purpose of using pure cultures in fermentation?
- a) To add variety to the flavor
 - b) To ensure consistent product quality
 - c) To reduce fermentation time
 - d) To increase the cost of production
- Q.6 Which part of a fermentor is responsible for mixing the fermentation broth?
- a) Sparger b) Baffles
 - c) Agitator/Impellers d) Process control

SECTION-B

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

- Q.7 The main advantage of single-cell protein production is its high _____ content.
- Q.8 The production of vitamins and amino acids through fermentation is related to the concept of _____.
- Q.9 The primary microorganism used in yogurt production is _____.

(2)

221135

- Q.10 The key ingredient in the production of miso is _____.
- Q.11 Name a product which is NOT a fermented dairy product? _____.
- Q.12 Bakers yeast is used in the production of _____.

SECTION-C

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

- Q.13 Define food fermentation and explain two advantages of this process.
- Q.14 Name three different types of fermentation processes and provide an example for each.
- Q.15 Describe the role of substrates in the fermentation process and provide two examples of commonly used substrates.
- Q.16 Explain the importance of maintaining pure cultures in food fermentation and outline one procedure for maintaining pure cultures.
- Q.17 Discuss the basic configuration of a fermentor and describe the functions of agitator/impellers in this equipment.
- Q.18 What is the purpose of a sparger in a fermentor, and how does it contribute to the fermentation process?
- Q.19 List the parts of a fermentor responsible for ensuring proper mixing and aeration during fermentation.

(3)

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