

### SECTION-D

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

- Q.23 Give the brief of Vinegar production with the help of process flow diagram.
- Q.24 Describe in detail the procedure for beer preparation?
- Q.25 Define fermentation and Elaborate on the advantages of fermented food products in terms of shelf life extension, enhanced nutritional value and sensory attributes provide specific examples to support your explanation

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Roll No. ....

3rd Sem.

Branch : Food Technology

Sub.: Food Fermentation Technology

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note: Multiple type Questions. All Questions are compulsory. (6x1=6)**

- Q.1 The aeration is mainly provided to organisms present in \_\_\_\_.
- a) Submerged culture      b) Solid state culture  
c) Surface culture      d) Batch culture
- Q.2 IN the anaerobic respiration of yeast and bacteria, which of the following is released?
- a) Methanol      b) CO<sub>2</sub>  
c) Butanol      d) NONE
- Q.3 Which is known as vinegar Bacteria?
- a) Lactobacillus      b) Acetobactor  
c) Clostridium      d) Bacillus
- Q.4 Which of the following sparger is made of ceramics or metals?
- a) Porous sparger      b) Nozzle sparger  
c) Orifice sparger      d) Combined sparger

Q.5 Which of the following is a traditional fermented Korean dish made from soya bean and wheat?

- a) Tofu                                      b) Kimchi
- c) Miso                                        d) Dhokla

Q.6 The crushed grapes are known as

- a) Malt                                        b) Wort
- c) Must                                        d) Sonti

#### SECTION-B

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

Q.7 Germinating barley seeds are used in preparation of \_\_\_\_\_.

Q.8 The sour taste of vinegar is due to \_\_\_\_\_.

Q.9 Sauerkraut is a fermented product made from \_\_\_\_\_.

Q.10 Bread is prepared by (Yeast/bacteria).

Q.11 Where did Tempeh originate?

Q.12 Natto is produced from fermenting \_\_\_\_\_.

#### SECTION-C

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

Q.13 Explain the importance of aseptic techniques in maintaining pure cultures for fermentation.

Q.14 Provide a detailed explanation plantation of the role of baffles in a fermenter and how they influence the fermentation process.

Q.15 Describe the production process of rum and its unique characteristics compared to other distilled beverages.

Q.16 Discuss the nutritional benefits of yogurt and its role in promoting gut health.

Q.17 Compare the advantages and disadvantages of single cell protein production with traditional protein sources.

Q.18 What is the difference between a synthetic and complex media?

Q.19 Explain any five fermented food products with their raw material and their fermenting microbe.

Q.20 What are the precursors and antifoaming agents?

Q.21 Draw neat and clean diagram of fermentor and write uses of fermentor?

Q.22 Describe the steps in wine making with the help of a process flow diagram.