#### **PSG COLLEGE OF ARTS & SCIENCE**

(AUTONOMOUS)

#### **Byoc DEGREE EXAMINATION DECEMBER 2019**

(Fifth Semester)

## **Branch - FOOD PROCESSING TECHNOLOGY**

### **FOOD FERMENTATION TECHNOLOGY**

Time: Three Hours Maximum: 75 Marks

#### **SECTION-A (20 Marks)**

Answer **ALL** questions

ALL questions carry EQUAL marks (10x2 = 20)

- 1 Define Fermentation.
- 2 List the types of fermentation with examples.
- What is single cell protein?
- 4 Difference between solid media and broth.
- 5 Why aeration is required for aerobic fermentation?
- 6 What is meant by submerged culture?
- Why curd is considered as a probiotic food?
- 8 What is Sauerkraut?
- 9 List any four cereals basedfermented foods.
- 10 Mention the ingredients in bread making.

## SECTION - B (25 Marks!

Answer ALL Questions

ALL Questions Carry EQUAL Marks  $(5 \times 5 = 25)$ 

11 a Write a short note on acetic acid fermentation with suitable example.

OR

- b Discuss the advantages of food fermentation.
- 12 a Mention the nutritional requirement of microbes during fermentation.

OR

- b Write a note on sterilization of fermenters.
- 13 a Explain about stirred tank fermenter.

OR

- b Write the various process control parameters in any fermenter.
- 14 a Draw the flowchart of cheese production.

OR

- b Write about the microorganisms involved in sauerkraut production.
- 15 a Draw the flow sheet of sausage production.

 $\bigcap R$ 

b Mention the list of quality parameters used to check bread.

# **SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks  $(3 \times 10 = 30)$ 

- Elaborate on the physico-chemical changes happening during fermentation of foods.
- 17 Describe the production of Baker's yeast.
- Explain about working of submerged culture fermenter.
- Mention the role of probiotics in human health. Explain the production of any one probiotic food product.