

- Q.21 Enlist various methods of food preservation.
- Q.22 Which type of microbes found in food that is harmful for us?

### **SECTION-D**

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

- Q.23 Write a short note on antimicrobial agents and their mechanism of action.
- Q.24 Explain the general type of spoilage in meat.
- Q.25 Describe the historical development in food microbiology in detail.

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### **2nd Sem / Food Technology**

#### **Subject : Food Microbiology**

Time : 3 Hrs.

M.M. : 60

### **SECTION-A**

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

- Q.1 Which factor is/are responsible for food borne illness?
- a) inadequate cooling during storage
  - b) food from unsafe sources
  - c) poor hygiene
  - d) all of the above
- Q.2 Moisture content of cereal grain that prevents from spoilage is-
- a)  $\leq 12\%$
  - b)  $\geq 12\%$
  - c)  $\leq 15\%$
  - d)  $\leq 17\%$
- Q.3 Yeast is used for the production of
- a) Tetracycline
  - b) Butanol
  - c) Ethanol
  - d) Citric Acid

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Q.4 Clostridium Botulinum mainly result in spoilage of \_\_\_\_\_ foods

- a) High acid Food
- b) Acidic Food
- c) Medium acid Food
- d) Low acid Food

Q.5 What are the factors that contribute to microbial growth?

- a) pH
- b) Moisture
- c) Oxidation -Reduction Potential
- d) All of the above

Q.6 Lactic acid bacteria include

- a) Lactococcus lactis
- b) Lactococcus cremoris
- c) Bifidobacterium
- d) All above

## SECTION-B

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

Q.7 Temperature-Time combination of HTST Pasteurization is \_\_\_\_\_.

Q.8 Enlist various causes of food spoilage.

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Q.9 Temperature range for freezing is \_\_\_\_\_.

Q.10 Thermophiles grow at which temperature?

Q.11 Name any two chemical antimicrobial agents?

Q.12 Which micro-organism is responsible for discoloration of meat?

## SECTION-C

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

Q.13 Define F, Z and D value.

Q.14 What are the various sources of contamination in butter?

Q.15 What is food fermentation? Give four examples of fermented foods.

Q.16 Why antimicrobial agents are added in food?

Q.17 Write down the microbiology of milk.

Q.18 What is the difference between freezing and chilling?

Q.19 What are the factors influencing the growth the microorganism in milk?

Q.20 What are the factors affect the heat resistance of microorganisms.

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