

- Q.27 Explain the mechanism of action of sulphur dioxide and sulphites.
- Q.28 Enlist the various methods of food preservation.
- Q.29 How are eggs spoiled? Explain.
- Q.30 Define food spoilage. What are factors that affect the food spoilage.
- Q.31 Explain the sources of contamination of meat.
- Q.32 Describe the factors affecting storage requirements of cereals.
- Q.33 Briefly explain the microbiology of jelly.
- Q.34 Briefly explain the common types of spoilage that occurred in fruits and vegetables.
- Q.35 Briefly explain about the role of various ingredients used in ice-cream.

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain the factors that affect the heat resistance of microorganisms.
- Q.37 Describe the historical developments in food microbiology in detail.
- Q.38 Describe the following food borne diseases by mentioning their causative agents, food involved, symptoms and preventive measures.
- Botulism
  - Salmonellosis

No. of Printed Pages : 4

181131/121131/031131

Roll No. ....

### Food Technology Subject:- Food Microbiology

Time : 3Hrs.

M.M. : 100

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Black rot in egg is due to
- Pseudomonas fluorescens*
  - Thamnidium*
  - Proteus* spp
  - Mucor* spp
- Q.2 Which of the following preservation method is used from ancient times?
- freeze drying
  - sun drying
  - osmotic drying
  - spray drying
- Q.3 Softness of pickles is due to
- Penicillium*
  - Bacillus*
  - Lactobacillus*
  - Pseudomonas*
- Q.4 Which of the following is natural preservative used in preservation of fish?
- Salt
  - sugar
  - vinegar
  - sodium benzoate
- Q.5 Which microorganism is used as indicator in water analysis?
- S. typhi*
  - E. coli*
  - K. pneumoniae*
  - P. aeruginosa*

- Q.6 Which of the following is highly perishable food?  
 a) sugar                              b) milk  
 c) bread                                d) tomatoes
- Q.7 Natural flora of milk includes  
 a) Streptococci  
 b) Staphylococci and micrococci  
 c) Corynebacterium  
 d) all of the above
- Q.8 The process of making an object free from living organism including bacterial and fungal spores and viruses is known as  
 a) Pasteurization                      b) Antiseptics  
 c) Disinfection                        d) Sterilization
- Q.9 Laminar air flow bench contain  
 a) Cellulose filter                      b) Nitrocellulose filter  
 c) MEGA filter                         d) HEPA filter
- Q.10 The microorganism responsible for botulism in food intoxication is  
 a) Streptococcus botulinum  
 b) Salmonella botulinum  
 c) Clostridium botulinum  
 d) All of these

#### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Rhizopus stolonifer is also known as \_\_\_\_\_  
 (Bread mold / Meat mold).
- Q.12 Number of degree required to pass through one log cycle is called as \_\_\_\_\_.

- Q.13 Study of organisms that are not visible to naked eyes is called \_\_\_\_\_.
- Q.14 Lipolysis leads to decomposition of \_\_\_\_\_.
- Q.15 The moist or neutral food such as milk, meat, fish and egg ordinarily are spoiled by \_\_\_\_\_ (Mould/ bacteria)
- Q.16 MBRT stands for \_\_\_\_\_.
- Q.17 Most spoilage bacteria grow at \_\_\_\_\_ (acidic / alkaline / neutral) pH.
- Q.18 UHT sterilization involves high temperature exposure of objects for \_\_\_\_\_ (1-3 seconds/ 1-3 minutes).
- Q.19 \_\_\_\_\_ is the bacteria that converts that converts milk into curd.
- Q.20 TDT stands for \_\_\_\_\_.

#### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain the factors that affect growth of microorganism in milk.
- Q.22 Describe the concept of F value and highlight its importance.
- Q.23 Explain the terms "intoxication" and "infection".
- Q.24 Explain the undesirable role of microorganisms in food.
- Q.25 Explain the factors affecting contamination of Butter.
- Q.26 Distinguish between aerobic and anerobic microorganism with examples.