

- Q.29 Write factors affecting growth of yeast and mould?

Q.30 Write short note on pasteurization of milk?

Q.31 Explain the pathogenic bacteria responsible for contamination of vegetables?

Q.32 Write a note on microbial spoilage of ice-cream?

Q.33 How bread is made? Explain the use of microbes in food production?

Q.34 Name any four moulds beneficial for human beings?

Q.35 Explain the factors affecting contamination of milk product: Butter?

## **SECTION-D**

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

- Q.36 Describe microbial spoilage of foods? Enumerate the role of different food borne pathogens in spoilage?

Q.37 Write short notes on microbiology of fruits and vegetable products?

Q.38 Explain determination and importance of F, Z and D values in thermal processing of foods?

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## **3rd Sem / Branch : Food Technology Subject:- Food Microbiology**

Time : 3Hrs. M.M. : 100

## **SECTION-A**

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

- Q.1 The most spoilage bacteria grows at \_\_\_\_\_  
a) Acidic pH      b) Neutral pH  
c) Alkaline pH      d) All of the above

Q.2 What are the intrinsic factors for microbial growth?  
a) pH  
b) Moisture  
c) Oxidation Reduction Potential  
d) All of the above

Q.3 Enumeration of microorganism refers to \_\_\_\_\_  
a) Non-selective plating, depending on the test.  
b) Either spiral plating, pour plate or spread plate of a food suspension on to a suitable selective agar  
c) Either A or B  
d) None of the above

Q.4 The time-temperature combination for HTST pasteurization of 71.1C for 15 sec is selected on the basis of \_\_\_\_\_  
a) E.coli      b) Coxiella Burnetii  
c) C.botulinum      d) B.subtilis

- Q.5 Water activity can act as \_\_\_\_\_  
a) An extrinsic factor  
b) A processing factor  
c) An intrinsic factor determining the likelihood of microbial proliferation  
d) All of these
- Q.6 Pasteurization is the heat treatment designed primarily to kill  
a) Vegetable forms of microorganism  
b) All form of microorganism  
c) Spore  
d) None of the above
- Q.7 The time required to kill microorganism at a given lethal temperature is known as  
a) Z value                    b) D value  
c) C value                    d) F value
- Q.8 The microorganisms multiply and die in  
a) Geometric order        b) Logarithmic order  
c) A-logarithmic order    d) None of the above
- Q.9 Two types of fermentations are carried out for the production of  
a) Pickle                    b) Yoghurt  
c) Vinegar                  d) Sausage
- Q.10 In bread manufacturing, alcoholic fermentation is carried out by  
a) Streptococcus thermophilus  
b) Saccharomyces cerevisiae  
c) S.carlsbergensis  
d) Lactobacillus bulgaricus

## SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Write name of any two bacteria which causes food poisoning?
- Q.12 Define psychrophiles?
- Q.13 Define growth rate?
- Q.14 Write full form of HTST method of pasteurization?
- Q.15 Define micro-organism?
- Q.16 Write name of any two fermented food products?
- Q.17 Define putrefaction?
- Q.18 Define anaerobic bacteria?
- Q.19 Define pure culture?
- Q.20 What are the intrinsic factors for microbial growth?

## SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Describe various chemical agents as antimicrobial agents?
- Q.22 Explain the microbiology of cereals?
- Q.23 Explain the microbial contamination in sauces and juices?
- Q.24 Briefly explain the structure of egg?
- Q.25 List any four beneficial bacteria in food microbiology?
- Q.26 Define “Thermal Death Time”?
- Q.27 Write about various sources of microorganisms in milk?
- Q.28 Explain the preservation of high moisture cereals?