

- Q.23 Describe in brief historical developments in microbiology?
- Q.24 What are favorable conditions for microbial growth?
- Q.25 Differentiate between prokaryotes and eukaryotes?
- Q.26 Write a note on mode of reproduction in mould?
- Q.27 What do you understand by lyophilization for preservation of microbial culture?
- Q.28 Write a note on growth curve of bacteria?
- Q.29 Define generation-time and its significance?
- Q.30 Write a note on protoplasm?
- Q.31 Define pasteurization and full form of LTLT, HTST and UHT?
- Q.32 Explain the importance of yeast?
- Q.33 Explain the various functions of ribosome?
- Q.34 Define cell? Enlist various cell organelles?
- Q.35 Differentiate between gram positive and gram negative bacteria?

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain in detail different modes of reproduction in bacteria?
- Q.37 Define pure culture? Explain various techniques used for isolation of pure culture?
- Q.38 Define microbial growth? Explain growth curve and its different phases in detail?

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Roll No.

2nd Sem./ Food Technology Subject:- Basic Microbiology

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 What is Microbiology?
- Study of molecules that are visible to human eyes
 - Study of animals and their family
 - Study of organisms that are not visible to naked eyes
 - Study of microscope
- Q.2 Who is known as the father of microbiology?
- Edwin John Butler
 - Ferdinand cohn
 - Robert Koch
 - Antoni van Leeuwenhoek
- Q.3 Which microorganism (s) among the following perform photosynthesis by utilizing light?
- Cyanobacteria, Fungi and Viruses
 - Viruses
 - Cyanobacteria
 - Fungi
- Q.4 What is the approximate size of the bacterial cell?
- 1 mm in diameter

- b) 0.5 to 1.0 micrometer in diameter
 - c) 2 mm in diameter
 - d) 2 micrometer in diameter
- Q.5 The respiratory chain of bacteria is associated with the _____
- a) cytoplasmic membrane
 - b) Cell wall
 - c) cytoplasm
 - d) mitochondrial membrane
- Q.6 Growth of bacteria or microorganism refer to _____
- a) changes in the total population
 - b) an increase in number of cells
 - c) an increase in the size of an individual organism
 - d) an increase in the mass of an individual organism
- Q.7 Which of the following method can be used to determine the number of bacteria quantitatively
- a) Spread-plate
 - b) Streak-plate
 - c) Pour-plate and spread plate
 - d) Pour plate
- Q.8 What are the cell wall structural components of fungi?
- a) Peptidoglycan
 - b) Cellulose
 - c) Chitin
 - d) chitin, cellulose, or hemicelluloses
- Q.9 Bacterial cells grown in a medium exposed to high osmotic pressure, changes shape from rod-shaped to _____ shaped.

- a) Elongated
 - b) Irregular
 - c) rod shaped
 - d) spherical
- Q.10 Growth of microbes in a solid media is identified by the formation of?
- a) pellicle at the top of media
 - b) colonies
 - c) sediment at the bottom
 - d) turbidity

SECTION-B

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

- Q.11 Give two examples of prokaryotes?
- Q.12 Psychrophiles would be expected to grow at _____ temperature.
- Q.13 Enlist the intrinsic factors for microbial growth ?
- Q.14 Write full form of LTLT?
- Q.15 What is lag phase?
- Q.16 Who discovered the cell?
- Q.17 Define cell?
- Q.18 Define sterilization?
- Q.19 Define pure culture?
- Q.20 Define disinfection ?

SECTION-C

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

- Q.21 Explain briefly "Pour plating technique"?
- Q.22 Distinguish between unicellular and Multicellular organism ?