

### SECTION-C

**Note:** Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Discuss in detail about whittakers five kingdom concept.
- Q.4 Explain the various functions of mitochondria.
- Q.5 Explain the mode of reproduction in bacteria.
- Q.6 Write a short notes on various factors effecting microbial growth.
- Q.7 Write short noted on:
- a) slant method
  - b) Gram positive and negative bacteria.

No. of Printed Pages : 4

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**2nd Sem. / Food Tech.**

**Subject : Basic Microbiology**

Time : 3 Hrs.

M.M. : 100

### SECTION-A

**Note:** Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1
- a) Define microbiology.
  - b) Define unicellular microorganism.
  - c) What is vacuole?
  - d) What is streak plating
  - e) Define cell organelles.
  - f) What is growth curve?
  - g) What do you mean by generation time?
  - h) Draw a levelled diagram of bacteria.
  - i) Define staining

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- j) What is culture.
- k) What do you mean by Eukaryotes?
- l) What is serial dilution technique.
- m) What do you mean by differential staining?
- n) What is capsule staining?
- o) What is spore staining?
- p) Explain about size of bacteria.
- q) Define cell.
- r) What is living system.

### SECTION-B

**Note:** Short answer type questions. Attempt any ten parts 10x4=40

- Q.2
- i) Describe historical development in microbiology.
  - ii) What is pour plating? Explain.

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- iii) What are the different phases of growth curve?
- iv) What are prokaryotes and Eukaryotes.
- v) Differentiate between unicellular and multicellular organisms.
- vi) Classify unicellular organisms.
- vii) Explain the process of spread plating.
- viii) Explain the mode of reproduction in yeast.
- ix) Explain the shape and size of bacteria.
- x) What are the various function of ribosomes?
- xi) What is synchronous growth of micro organisms.
- xii) What are the various importance of yeast.
- xiii) Describe the function of Endoplasmic Reticulum.
- xiv) What is lyophilization? Explain.
- xv) What are the disadvantages of bacteria?

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