

### Unit - IV

- Q. 1. Mathematical expression of growth, growth curve. factors affecting growth.
- Q. 2. Describe the methods of control of micro-organisms. (Sterilization)
- Q. 3. Write short notes on agar diffusion and phenol coefficient test.

### Unit - V

- Q. 1. Microbial metabolism - concept of anabolism and catabolism.
- Q. 2. Write short notes on nitrogen fixation
- Q. 3. Fermentation and its microbes of industrial use.

Date

B.Sc. I year (microbiology)  
Paper - II  
Unit - I

- Q-1. Write notes on general feature and system of classification of microorganisms.
- Q-2. Microbial taxonomy (write short notes on bacterial taxonomy)
- Q-3. Describe the classification of Bacteria (Bergey's manual of systematic bacteriology)

Unit II

- Q-1. Write a notes of on structure of Virus (with diagram) types of Virus.
- Q-2. Write a ~~par~~ paragraph of on nutrients require for microbial growth
- Q-3. Morphological types of Bacteria
- Q-4. Write short notes on Archaeobacteria (Microbes on extreme environment) (Extremophiles)

Unit - III

- Q-1. Write short notes on gram staining, Simple staining, negative staining.
- Q-2. Structure and diversity of fungi.
- Q-3. Staining of capsule, and spore.