

B.Sc. Examination October - 2015

Semester - IV

Paper :Mi-401 - Nutrition & Microbial diversity

Paper Code: 3824

Time: 2:30 Hours

Total Marks: 70

Instructions: (a) Figure to the right indicates total marks of respective question.
(b) Draw neat, clean and labeled diagram wherever necessary.

- 1.(a) **Discuss: Actinomycetes.** 10
1.(b) **Write a short note on: Protozoa.** 04

OR

- 1.(a) **Discuss: Archaeobacteria.** 10
1.(b) **Explain: Major characteristics of Rickettsia.** 04

- 2.(a) **Discuss: Types of media.** 10
2.(b) **Explain: Phototrophs & chemotrophs.** 04

OR

- 2.(a) **Explain: Various techniques for preservation of pure cultures.** 10
2.(b) **Write short note on: Gene bank & its importance.** 04

- 3.(a) **Describe: Phylogenetic classification.** 10
3.(b) **Explain:Tm.** 04

OR

- 3.(a) **Discuss: Major characteristics used in taxonomy.** 10
3.(b) **Explain: Ribosomal RNA analysis as molecular tool.** 04

- 4.(a) **What are viruses?Discuss general characteristics of viruses.** 10
4.(b) **Write a short note on: Prions.** 04

OR

- 4.(a) **Explain: Various physical conditions required for cultivation of bacteria.** 10
4.(b) **Explain: Pour plate & spread plate technique for bacterial isolation.** 04

- 5.(a) **Describe: Bergey's Manual of systemic bacteriology.** 10
5.(b) **Write short note on: Phenetic classification.** 04

OR

- 5.(a) **Explain: Occurrence, characteristics & importance of algae.** 10
5.(b) **Explain: Steps involved in preparation of media.** 04