

Code: 9A23304

R09

B.Tech II Year I Semester (R09) Supplementary Examinations December 2015

MICROBIOLOGY

(Biotechnology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Write a note on numerical taxonomy.
(b) Define fungi and protozoa.
(c) Explain how algae are classified. Give examples.
- 2 (a) Discuss the major characteristics used in taxonomy.
(b) Write a note on five kingdom classification.
- 3 (a) What types of nutrients will be used for the growth of anaerobic bacteria? Why?
(b) Explain the various methods available for cultivation of anaerobes.
- 4 (a) How will you classify microbes based on p^H , temperature, oxygen, osmotic pressure and radiation?
(b) Give examples for each of them.
- 5 How does RNA viruses replicate inside the host? Explain in detail.
- 6 (a) Discuss lytic and lysogenic cycle of bacteriophages.
(b) Explain the principle and methodology of IMVIC and sugar fermentation tests.
- 7 (a) Define infection and disease.
(b) Explain the virulence factors and pathogenicity of influenza.
- 8 (a) Discuss the applications of virology in biotech industry.
(b) Write in detail the classification viruses.
