

November-2018
B.Sc Sem-V Microbiology
BSCSE505 Geomicrobiology

Max. Marks:70

Time:03 Hours

Instruction:

- All questions carry equal marks.
- Draw a neat and labeled diagram when required.
- Write the questions number clearly.

- Q-1 Write any two of the following. 14
- I. Theories of evolution of life
 - II. Phylogenetic tree
 - III. Concept of species
 - IV. Importance of biodiversity
- Q-2 Write any two of the following. 14
- I. Discuss culture methods used to study microbial diversity
 - II. Discuss the T_m and $at:gc$ importance to study microbial diversity
 - III. Discuss sequencing of r RNA to study microbial diversity
 - IV. List methods to study non culturable microbes and discuss any two
- Q-3 Write any two of the following. 14
- I. Origin of metal sulphides
 - II. Biodegradation of minerals
 - III. Acid mine drainage
 - IV. Bioaugmentation
- Q-4 Write any two of the following. 14
- I. Meor
 - II. Geomicrobiology of methane
 - III. Role of microbes in peat formation
 - IV. Role of microbes in coal formation
- Q-5 Answer as directed. 14
- Define the following terms:
- I. Biodiversity
 - II. Microbial ecology
 - III. Geomicrobiology
 - IV. Biogenesis
