



**G-035042**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. V) (Microbiology) Examination**

**April / May - 2019**

**BSCSE505 - Geomicrobiology (Elective)**

Time : 3 Hours ]

[ Total Marks : 70

- 1** Write any **two** of the following : **14**
- (1) Discuss any one theory of evolution of life
  - (2) Evolutionary tree of microbes
  - (3) Explain in brief 'biodiversity'
  - (4) Importance of biodiversity for the environment
- 2** Write any **two** of the following : **14**
- (1) Discuss microscopic methods used to study microbial diversity
  - (2) Discuss the DNA hybridization importance to study microbial diversity
  - (3) Discuss sequencing of rRNA to study microbial diversity
  - (4) Discuss the importance of methods used for studying non culturable microbes
- 3** Write any **two** of the following : **14**
- (1) Metal sulphides origin in earth
  - (2) Biodegradation of minerals
  - (3) Acid mine drainage and its effect on environment
  - (4) Bioleaching of copper
- 4** Write any **two** of the following : **14**
- (1) Petrol degradation by microbes
  - (2) Geomicrobiology of methane
  - (3) Role of microbes in peat formation
  - (4) Role of microbes in coal formation

**5** Answer as directed :  
Define the following terms :

**14**

- (1) Biodiversity
  - (2) Microbial ecology
  - (3) Geomicrobiology
  - (4) Biogenesis
  - (5) Biobenifciation
  - (6) Bioaugmentation
  - (7) Biosorption
  - (8) Bioremediation
  - (9) Fish
  - (10) Immunoflorescence
  - (11) Page
  - (12) Desulfurization of coal
  - (13) Acridine orange
  - (14) Thiobacillus
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