

M.Sc. (Microbiology) (NEP Pattern) Semester-I  
**NEP-71 / 01MSCMB01 - Microbial diversity and Evolution**

P. Pages : 1

Time : Three Hours



**GUG/S/25/15125**

Max. Marks : 80

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**1.** Describe the Primitive life form formed in earth in detail. **16**

**OR**

a) Describe the Endosymbiosis. **8**

b) Write a note on phylogenetic probe. **8**

**2.** Describe the phylum Euryarchaeota in detail. **16**

**OR**

a) Write a note on heat stable biomolecules & extremophiles. **8**

b) Describe the energy metabolism of phylum Crenarchaeota. **8**

**3.** Describe the Characteristics of Phylum Proteobacteria. **16**

**OR**

a) Write a note on sulphate and sulphur reducing bacteria. **8**

b) Write a note on Microbial diversity of bacteria. **8**

**4.** Describe about the phylum: Nitrospira and deferribacter. **16**

**OR**

a) Describe the branching hyperthermophiles. **8**

b) Describe about green non sulphur bacteria. **8**

**5.** Write a note on:

a) Bacterial speciation. **4**

b) Evolutionary significance of hyperthermophiles. **4**

c) Phylum: Prochlorophytes. **4**

d) Phylum: Deinococci. **4**

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