M.Sc.(Microbiology) CBCS Pattern Semester-I

PSMBT-101-Paper-I : Microbial Diversity & Evolution

P. Pages : 1 **GUG/W/23/11171**

Time : Three Hours * 6 1 9 8 * Max. Marks : 80

Notes : 1. All questions are compulsory and carry equal marks.

1. Discuss evolutionary chromometers, Ribosomal RNA sequencing methods for determining relationship of the species. **16**

OR

a) Explain the characteristics of domain of life. **8**

b) Write a note on- early life forms on the earth. **8**

2. Explain the characteristics of Phylum Euryarchaeota. With example. **16**

OR

a) Explain the characteristics of sulfolobales and desulfolobales. **8**

b) Write about evolutionary significance hyperthermophiles. **8**

3. Write a note on.

a) Sulphur and iron oxidizing bacteria. **8**

b) Sulphate and Sulphur reducing bacteria. **8**

OR

Describe the evolutionary. Characters of the phylum prochlorophytes & cyanobacteria. **16**

4. Describe the characteristics of Green sulfur bacteria and green non- sulfur bacteria. **16**

OR

Write a note on.

a) Phylum:- Nitrospira. **8**

b) Purple Phototrophic bacteria. **8**

5. Write an account on.

a) Molecular coding. **4**

b) Thermoproteales. **4**

c) Planctomyces. **4**

d) Phylum: Aquifex. **4**

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