Bachelor of Science (B.Sc.) Second Semester Old

2SMIC-T2 - Microbiology Paper-II
(Microbial Taxonomy, Ecology and Diversity)

P. Pages : 2 **GUG/W/18/1247**

Time : Three Hours * 0 9 6 0 * Max. Marks : 50

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

1. Discuss in detail genetic relatedness methods of classification. **10**

OR

Describe in detail sexual and asexual methods of fungal reproduction.

2. Define mycorrhizae and with suitable example mention the types of it. **10**

OR

Discuss in detail symbiotic nitrogen fixation with suitable examples.

3. a) Explain in brief binomial nomenclature. **2½**

b) Write characteristics of Archaebacteria? **2½**

c) Explain anaerobic methods of composting. **2½**

d) What are biopesticides? Give suitable examples. **2½**

OR

e) Describe Whittaker classification method. **2½**

f) Write note on reproduction in yeast. **2½**

g) Write applications of mycorrhizae. **2½**

h) Describe Biomagnification concept with examples. **2½**

4. a) Write note on Bergey's manual of systematic bacteriology. **2½**

b) Write general characters of protozoa. **2½**

c) Describe composition and functions of humus. **2½**

d) Describe factors affecting nitrogen fixation. **2½**

OR

e) Describe Bergey's manual of systematic bacteriology. **2½**

f) Describe cyanobacteria as photosynthetic organisms. **2½**

g) Add a note on symbiosis. **2½**

h) Describe the process of modulation in legume plants. **2½**

5. Solve **any ten** of the following.

a) Define taxonomy? **1**

b) What is three domain system. **1**

c) Define binomial system with example. **1**

d) Write two diseases caused by mycoplasma. **1**

e) What is the site of photosynthesis in blue green algae. **1**

f) Write two industrial uses of yeast. **1**

g) Define predation. **1**

h) What is antagonism? **1**

i) Define humus? **1**

j) Which organism is used in preparation of biofertilizer. **1**

k) Write one reactor for recalcitrance. **1**

l) What is superbug? **1**

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