

M.Sc.(Biotechnology) (NEP Pattern) Semester-I  
**NEP-92 / 01MSCBT02 - Paper-II - Microbiology**

P. Pages : 1

Time : Three Hours



**GUG/W/23/15053**

Max. Marks : 80

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1. Explain typical structure of bacterial cell and add a note on prokaryotes and eukaryotes. **16**

**OR**

a) Write a note on Bergey's system of bacterial classification. **8**

b) Give the ultrastructure of Flagella in Gram positive and Gram negative bacteria. **8**

2. Explain the principle working and application of TEM. **16**

**OR**

Describe differential staining with reference to Gram staining. **16**

3. What is the basic nutritional requirement of micro-organism. **16**

**OR**

Explain in detail microbial control. **16**

4. Describe the general characteristics and reproduction of Fungi and its significance. **16**

**OR**

Give the general character of viruses and explain different structure of viruses. **16**

5. Write a note on

a) Nucleoid **4**

b) Resolving power. **4**

c) Antiseptics **4**

d) Viroids and prions **4**

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