

M.Sc. (Biotechnology) (CBCS Pattern) Sem-I  
**PSBIT102 - Microbiology Paper-II**

P. Pages : 1

Time : Three Hours



**GUG/W/22/11147**

Max. Marks : 80

---

1. a) Write the contribution of following scientist in the field of Microbiology. **8**  
i) Louis Pasteur ii) Robert Koch.  
b) Write a note on Bergey's system of classification. **8**  
**OR**  
a) Explain the structure and function of capsule and flagella. **8**  
b) Explain in brief about endospore. **8**
2. Explain the principle and working mechanism of TEM. **16**  
**OR**  
a) Write a note on types of stain. **8**  
b) Explain the procedure and mechanism of endospore staining. **8**
3. Describe the physical and chemical method of sterilization. **16**  
**OR**  
a) Write a note on measurement of growth. **8**  
b) Explain in brief basic nutritional requirement of micro-organism. **8**
4. Describe the general characteristic reproduction and application of algae. **16**  
**OR**  
Write the general character of viruses and explain the different structure. **16**
5. a) Give the structure of typical bacterial cell. **4**  
b) Write a note on oil immersion objective lense and its significance. **4**  
c) Write a note on measurement of growth. **4**  
d) Write a note on Viriods and Prions. **4**

\*\*\*\*\*