

M.Sc. (Microbiology) (CBCS Pattern) Semester - II  
**PSMBT-108R - Paper-IV : Microbiological Testing of Industrial Products**

P. Pages : 1

Time : Three Hours



**GUG/S/23/11219A**

Max. Marks : 80

---

1. Discuss in detail methods of quality assessment of mineral water? **16**

**OR**

Write a note on:

a) Discuss procedure and principle of COD and BOD in details. **8**

b) Explain in details IMViC test. **8**

2. Explain in details instrumentation, principles and mode of action of light pulse technology. **16**

**OR**

Write a note on:

a) Conventional and automated method of food analysis. **8**

b) Risk assessment in food industry. **8**

3. Discuss in details Gel dot assay and turbidimetric assay of endotoxin testing. **16**

**OR**

Write a note on:

a) Flow cytometry. **8**

b) Pyrogen test **8**

4. Discuss in details preservation of pharmaceutical products. **16**

**OR**

Write a note on:

a) Antimicrobial effectiveness testing. **8**

b) Microbial risk assessment through HACCP plan. **8**

5. Write a note on:

a) Dissolved oxygen **4**

b) Limitation of light pulse treatment **4**

c) Significance of Barcode **4**

d) Biological indicators of sterility assurance. **4**

\*\*\*\*\*