

M.Sc.(Biotechnology) (CBCS Pattern) Semester - I
PSBIT102 - Paper-II : Microbiology

P. Pages : 1

Time : Three Hours



GUG/S/23/11147

Max. Marks : 80

1. Give detail account on the contribution of various scientists in the development of microbiology. **16**

OR

a) Discuss about the process of endospore formation. **8**

b) Give the information about structure and function of flagella in detail. **8**

2. Discuss principles and applications of SEM. **16**

OR

a) Give detail account on differential staining. **8**

b) Discuss about various types of stains. **8**

3. Discuss various physical methods of sterilization in detail. **16**

OR

a) Discuss about the various types of biological complex media. **8**

b) Give the information about bacterial growth curve. **8**

4. Describe general characteristics, reproduction and applications of Algae in biotechnology. **16**

OR

a) Discuss about lysogenic life cycle of virus multiplication. **8**

b) Discuss about general characters and structures of viruses. **8**

5. Solve the following.

a) Give the comparison between prokaryotes and eukaryote cell. **4**

b) Discuss about the endospore staining. **4**

c) Describe any two methods of chemical sterilization in brief. **4**

d) write a note on viroids. **4**
