

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

P. Pages : 1

Time : Three Hours



GUG/W/24/15053

Max. Marks : 80

Notes : 1. All questions are compulsory.

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| 1. | Discuss the contribution of Louis Pasteur and Robert Koch in detail. | 16 |
| OR | | |
| | a) Compare prokaryotes and Eukaryotes. | 8 |
| | b) Explain structure and function of Flagella. | 8 |
| 2. | Explain principle and application of Fluorescence microscopy. | 16 |
| OR | | |
| | a) Discuss principal and procedure of Gram-Staining. | 8 |
| | b) Discuss procedure and Mechanism of endospore staining. | 8 |
| 3. | Discuss physical and chemical methods of sterilization in detail. | 16 |
| OR | | |
| | a) Explain Basic nutritional requirement for growth of bacteria. | 8 |
| | b) Discuss bacterial growth curve. | 8 |
| 4. | Explain lytic cycle of virus in detail. | 16 |
| OR | | |
| | a) Discuss reproduction in fungi. | 8 |
| | b) Discuss general characteristics of viruses. | 8 |
| 5. | a) Discuss the structure of Endospore. | 4 |
| | b) Write a note on confocal microscopy. | 4 |
| | c) What are the types of biological complex media? | 4 |
| | d) Write a note on viroid's. | 4 |
