

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. SEMESTER– V• EXAMINATION – SUMMER-2022

Subject Code:BP504TP**Date: 06/06/2022****Subject Name: Pharmaceutical Microbiology****Time: 02:30PM TO 05:30PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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| Q.1 | (a) | Give a brief account on IMViC test. | 06 |
| | (b) | Classify bacteria with respect to oxygen requirement, temperature, flagellar arrangement by stating suitable examples. | 05 |
| | (c) | Write short notes on Bacterial Growth curve. | 05 |
| Q.2 | (a) | Define; Sterilization, Disinfection, D value, Z value, Inactivation factor, Antiseptic | 06 |
| | (b) | Give a brief account on Horizontal autoclave with a neat diagram. | 05 |
| | (c) | Write short notes on Biological indicators. | 05 |
| Q.3 | (a) | Explain Phenol coefficient tests. | 06 |
| | (b) | Write short notes on Test for sterility. | 05 |
| | (c) | How will you sterilize thermolabile materials? Explain the methods. | 05 |
| Q.4 | (a) | Give a detailed account on Laminar Flow equipment. | 06 |
| | (b) | State the procedure for carrying out Microbiological assay of Antibiotics. | 05 |
| | (c) | Write short notes on Scanning Electron Microscope. | 05 |
| Q.5 | (a) | Name the factors affecting Disinfection action and explain. | 06 |
| | (b) | Explain the possible microbial contamination in cosmetics and their limit test. | 05 |
| | (c) | State various methods of carrying out animal cell culture and explain. | 05 |
| Q. 6 | (a) | How will you isolate and preserve the pure culture? | 06 |
| | (b) | Draw a neat schematic diagram of sporulation cycle of bacteria. | 05 |
| | (c) | Classify the viruses and its method of replication. | 05 |
| Q.7 | (a) | Give a brief account on application of cell cultures in Pharmaceuticals. | 06 |
| | (b) | Write short notes on microbiological assay of Vitamin B1. | 05 |
| | (c) | Explain Ethylene Oxide sterilization. | 05 |
