## SEMESTER EXAMINATION-2021 CLASS – MSC. MICROBIOLOGY-III SEM

## PAPER CODE: MMB-E302 (Pharmaceutical Microbiology)

Max. Marks: 70 Min. Pass: 40%

Note: Question Paper is divided into two sections: A and B. Attempt both the sections as per given instructions.

## **SECTION-A (SHORT ANSWER TYPE QUESTIONS)**

Instructions: Answer any five questions in about 150 words each. Each question carries six marks. (5 X 6 = 30 Marks)

Question-1: Write short notes on GMP.

Question-2: Differentiate between bacteriostatic and bactericidal agents.

Question-3: What is Phenol coefficient?

Question-4: What are antitubercular drugs? Give some examples.

Question-5: What is pharmacokinetics? Define bioavailability.

Question-6: Write short notes on Microbial limit test (MLT).

Question-7: What are the different biosafety levels? Give examples of each level.

**Question-8: What is Pyrogen test?** 

Question-9: Write short notes on MIC.

Question-10: Explain nutritional mutants.

## **SECTION-B (LONG ANSWER TYPE QUESTIONS)**

Instructions: Answer any FOUR questions in detail. Each question carries 10 marks. (4 X 10 = 40 Marks)

- Question-11: What are antibiotics? How antibiotics are classified?
- Question-12: What is LAL Test? How LAL test is performed?
- Question-13: What are non-medicinal antimicrobial agents? Explain it with suitable examples.
- Question-14: Write the principle of amino acid assay? How it is performed?
- Question-15: What are synthetic drugs? How Sulphonamides are synthesized?
- Question-16: What are pyrogens? How Rabbit pyrogen test is performed in pharmaceutical industry?
- Question-17: Explain drug resistance. What is the genetic basis of drug resistance?
- Question-18: What are chemical and biological indicators and how these indicators are used in pharmaceutical industries?