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24-MB-43

**M.Sc. IV SEMESTER [MAIN/ATKT] EXAMINATION
JUNE - JULY 2024**

MICROBIOLOGY
Paper - III
[Pharmaceutical Microbiology]

*[Max. Marks : 75]**[Time : 3:00 Hrs.]**[Min. Marks : 26]*

Note : Candidate should write his/her Roll Number at the prescribed space on the question paper.
Student should not write anything on question paper.
Attempt five questions. Each question carries an internal choice.
Each question carries **15 marks**.

Q. 1 Discuss the role of a microbiologist in different aspects of Pharma Industry. (15 Marks)

OR

Write short notes on the following -

- i) Safety in Micro biology laboratory. (7½ Marks)
- ii) Good manufacturing practices (GMP). (7½ Marks)

Q. 2 Describe standard operative procedure for water analysis. (15 Marks)

OR

Write short notes on the following -

- i) Pyrogen Test (BET). (7½ Marks)
- ii) ISO certification. (7½ Marks)

Q. 3 Describe Beta lactam and non beta lactam antibiotics. (15 Marks)

OR

Write short note on the following -

- i) Antifungal drugs. (7½ Marks)
- ii) Tetra Cyclins. (7½ Marks)

Q. 4 Discuss the origin and clinical implications of bacterial resistance to antibiotics. (15 Marks)

P.T.O.

OR

Write short notes on the following -

i) Micro encapsulation.

(7½ Marks)

ii) Antibodies for drug delivery.

(7½ Marks)

Q. 5 Describe the hybridoma technology for production of antibodies.

(15 Marks)

OR

Write short notes on the following -

i) Interferons and Humulin.

(7½ Marks)

ii) Vaccine Clinical Trials.

(7½ Marks)

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