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24-BO-44-A

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

BOTANY

Paper - IV [Industrial 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 Describe different types of staining techniques.

(15 Marks)

OR

Write short notes on the following -

(71/2 Marks each)

- i) Eukaryotic Micro organisms.
- ii) Acellular Micro organisms.
- Q. 2 Describe different methods of food preservation.

(15 Marks)

OR

Write short notes on the following -

(71/2 Marks each)

- i) Indian fermented foods.
- ii) Vinegar.
- Q. 3 Write short notes on the following -

(71/2 Marks each)

- i) Production of Organic Acids (any one).
- ii) Production of Enzyme (any one).

OR

Describe the production of antibiotics by microbes giving suitable (15 Marks) example.

Q. 4 Describe methods of physical and chemical control of microbes.

(15 Marks)

OR

Write short notes on the following -

(7½ Marks each)

- i) Bio-deterioration.
- ii) Mushroom culture.

Q. 5 Describe different steps in sewage treatment.

(15 Marks)

OR

Write short notes on the following -

(7½ Marks each)

- i) Importance of BOD.
- ii) Biodegradation of Wastes.

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