Roll No. 24-BT-44

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

BIOTECHNOLOGY

Paper - IV

[Genomics Proteomics and IPR and Biosafety]

[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 methods of DNA sequencing.

(15 Marks)

OR

Write note on the following -

(15 Marks)

- i) Chemical synthesis of Oligonucleotides.
- ii) Recognition of coding and non coding sequences.
- Q. 2 Write an essay on gene silencing techniques.

(15 Marks)

OR

Write notes on the following -

(15 Marks)

- i) PCR
- ii) DNA fingerprinting.
- Q. 3 Give an illustrative account of micro array along with its types and applications. (15 Marks)

OR

Write note on -

(15 Marks)

- i) Isoelectric focusing.
- ii) Peptide finger printing.
- iii) LC-MS.
- Q. 4 What do you understand by Patent? Describe different types of patent (15 Marks) in detail.

P.T.O.

Comments upon -

(15 Marks)

- i) Copyright.
- ii) Protection of GMOs.
- iii) Intellectual property in Biotech and R & D.
- Q. 5 Explain different biosafety levels in detail with reference to specific (15 Marks) micro organisms.

OR

Write notes on - (15 Marks)

- i) Roles of Institutional Biosafety Committee.
- ii) GMO's.

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2

24-BT-44