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24-BO-24

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

BOTANY

Paper - IV

[Cell Biology]

[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 structure, functions and chemical composition of cell wall in detail. (15 Marks)

OR

Explain specialized plant cell types.

Q. 2 Explain structure, functions and different models of plasma membrane. (15 Marks)

OR

Write notes on -

- i) Structure and role of Plasmodesmata.
- ii) Vacuoles.
- iii) Ion carriers, channels and pumps.

Q. 3 Describe in detail structure of chloroplast and Nucleo Chloroplastic interaction. (15 Marks)

OR

Write about -

- i) Golgi apparatus.
- ii) Lysosomes.
- iii) Endoplasmic Reticulum

Q. 4 What are specialized types of Chromosome. Explain them in detail. (15 Marks)

P.T.O.

OR

Write notes on -

- i) Nucleus structure.
- ii) Cell cycle.
- iii) Chromosome structure

Q. 5 Explain Structural alterations of chromosome in detail.

(15 Marks)

OR

Explain Numerical alterations of chromosome in detail.

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