

FD-314

M.Sc. 1st Semester Examination, Dec.-Jan., 2021-22

BOTANY

Paper - I

Cytology

Time: Three Hours] [Maximum Marks: 80

Note: Answer all questions. All questions carry equal

marks.

Unit-I

1. Describe the structure, chemical composition and function of cell wall.

OR

Write short notes on any **two** of the following:

- (a) Various models of plasma membrane
- (b) Receptors of plasma membrane
- (c) Biochemical energetics

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(Turn Over)

Unit-II

2. Describe the ultrastructure of a chloroplast and also give an account on the function of the chloroplast.

OR

Write short notes on any **two** of the following:

- (a) Plant vacuole
- (b) Biogenesis of mitochondria
- (c) RNA editing

Unit-III

3. Describe the various check points of cell cycle. Give the role of cyclin dependent kinases.

OR

Write short notes on any **two** of the following:

- (a) Ribosomes: Structure and function
- (b) Nuclear pore: Ultrastructure
- (c) Programmed cell death

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(Continued)

(3)

Unit-IV

4. What are microbodies and microtubules? Describe their structure and function.

OR

Write short notes on any **two** of the following:

- (a) Electron microscope
- (b) Lysosomes
- (c) Immunotechniques

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