



FD-331

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

BIOTECHNOLOGY

Paper - I

Cell and Development Biology

Time : Three Hours] [*Maximum Marks* : 80

Note : Answer **all** questions in which Question No. 1 is compulsory. All questions carry equal marks.

1. Write short notes on the following :

- (a) Chloroplast
- (b) Endocytosis
- (c) Define Flagella.
- (d) Explain Blastocyst.

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(Turn Over)

(2)

Unit-I

2. Explain structure and function of mitochondria.

OR

Explain different cytoskeleton components and their importance in cell.

Unit-II

3. Give a detailed account on molecular events of cell cycle.

OR

Define active and passive transport of molecules across membrane.

Unit-III

4. Write a brief note on cancer, its types and properties of cancer cell.

OR

Explain GPCR mediated cyclic AMP pathway of cell signaling.

(3)

Unit-IV

5. Define events in development of embryo.

OR

Write a detailed note on Oogenesis.
