

PD-166-S.E.-CV-19
M.Sc. BOTANY (1st Semester), REGULAR
Examination, . Dec.-2020
Paper-III
CELL AND MOLECULAR BIOLOGY OF PLANTS

Time : Three Hours]

[Maximum Marks : 80

[Minimum Pass Marks : 29

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

1. Answer the following questions:- **1x10=10**

- (a) Cell doctrine states.....
- (b) Gram positive means.....
- (c) Plasma membrane discovered by.....
- (d) Fluid mosaic model given by.....
- (e) Middle lamella made up of.....
- (f) Known as protein factories.....
- (g) Lysosome also known as.....
- (h) Known as power house of the cell.....
- (i) Lipoprotein is important part of.....
- (j) Grossing over occur in which phase.....

2. Answer the following questions in brief:- **2x5=10**

- (a) Define grana and stroma.
- (b) What is cell plate.
- (c) Difference in DNA and RNA.
- (d) Define cytokinesis.
- (e) Define replication.

Section-B

15x4=60

Attempt all question.

3. Describe structure and function of Mitochondria with suitable diagrams.

OR

Describe structure and function of endoplasmic reticulum.

4. Write an account on Ribosome.

OR

Write brief account on Nucleus.

5. Discuss structural organization of cell, cell type and chemical foundation.

OR

Explain structure and function of golgiapparatus.

6. Explain all phases of Mitosis cell division.

OR

Write notes on the following:-

- (a) Cell Motility
- (b) Vacuoles