

M.Sc.(Botany) (CBCS Pattern) Sem-II
PSCBOTT07 - Paper-VII : Cell and Molecular Biology-I

P. Pages : 1

Time : Three Hours



GUG/W/22/11197

Max. Marks : 80

- Notes : 1. All questions are compulsory & carry equal marks.
2. Draw well labelled diagrams wherever necessary.

1. Describe in detail the structure function & biogenesis of cell wall. **16**

OR

Write notes on:

- a) Ion carrier membrane transport. **8**
b) Compare the movement of molecules through plasmodesmata & gap junction. **8**

2. Describe the structure of microtubules & microfilament? Explain mechanism of motor movement of microtubules during cell division. **16**

OR

Write notes on:

- a) Structure & function of golgi complex **8**
b) Structure & function of endoplasmic reticulum **8**

3. What is DNA? Explain structure of A, B, Z forms of DNA. **16**

OR

Write notes on:

- a) Ultrastructure of Nucleus & nuclear pore **8**
b) DNA damage & repair mechanism **8**

4. What is plant stress? Describe in detail the Biotic stress and Abiotic stress **16**

OR

Write notes on

- a) HR and SAR **8**
b) Active defence mechanism in plants **8**

5. Write short notes on-

- a) Aquaporins **4**
b) Lysosomes **4**
c) Nucleolus **4**
d) PR protein and R-genes **4**
