

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

P. Pages : 1

Time : Three Hours



**GUG/S/25/11197**

Max. Marks : 80

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

**1. Write an essay on Plasmodesmata. 16**

**OR**

Write on:

- a) Properties of Plasma Membrane **8**  
b) Structure of Secondary cell wall. **8**

**2. What do you mean by Cytoskeleton? Enlist various components of Cytoskeleton. 16**

**OR**

Write on:

- a) Structure of endoplasmic reticulum. **8**  
b) Structure and function of Mitochondria. **8**

**3. Describe in detail the experimental evidence in support of semi conservative mode of DNA replication. 16**

**OR**

Write on:

- a) Mechanisms of DNA repair. **8**  
b) Comparison of A, B and Z forms of DNA **8**

**4. Write an essay on phenylpropanoid metabolism. 16**

**OR**

Write on:

- a) Chemicals involved in conferring passive resistance. **8**  
b) Hypersensitive Response (HR). **8**

**5. Write short notes on:**

- a) Channels **4**  
b) Flagellar movements. **4**  
c) Nucleotide **4**  
d) ROS **4**

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