

M.Sc. (Botany) (CBCS Pattern) Sem-II
PSCBOTT05 - Paper-V : Plant Physiology and Biochemistry

P. Pages : 1

Time : Three Hours



GUG/W/22/11195

Max. Marks : 80

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Solve your answer with suitable diagram and write chemical reaction wherever necessary.

1. Give an account on the Evolution of photosynthetic apparatus and light harvesting complex. **16**

OR

Write on:

- a) CAM pathway. **8**
b) Photorespiration. **8**

2. Explain how R.Q. is measured? Add a note on factors affecting rate of respiration. **16**

OR

Write on:

- a) Oxidative and Non-oxidative Enzymes. **8**
b) Cyanide resistant chain. **8**

3. Write the classification and properties of Amino acids. Add a note on amino acid biosynthesis in plant. **16**

OR

Write on:

- a) Catabolism of starch and sucrose. **8**
b) Nitrogen cycle. **8**

4. Write in detail water transport through xylem. **16**

OR

Write on:

- a) Nomenclature and classification of enzymes. **8**
b) Activators and Inhibitors. **8**

5. Write short notes on:

- a) CO₂ fixation. **4**
b) Respiratory ratio. **4**
c) Symbiotic Bacteria. **4**
d) Colligative properties of enzymes. **4**
