

AU-308

M.Sc. Part-I Semester—II (CBCS Scheme) Examination
BOTANY
(Plant Metabolism)
Paper—VIII

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory and carry equal marks.

(2) Draw well labelled diagrams wherever necessary.

1. Write on :

- | | |
|--------------------------------|---|
| (a) Regulation of glycolysis | 6 |
| (b) Sucrose Synthesis | 5 |
| (c) Pentose phosphate pathway. | 5 |

OR

- | | |
|----------------------------------|---|
| (d) Starch Biosynthesis | 6 |
| (e) Regulation of gluconogenesis | 5 |
| (f) Glycolysis. | 5 |

2. Write on :

- | | |
|-------------------------------------|---|
| (g) Oxidative deamination reactions | 6 |
| (h) Proline synthesis and stress | 5 |
| (i) Storage Proteins. | 5 |

OR

- | | |
|--|---|
| (j) Transamination | 6 |
| (k) Biosynthesis of aromatic amino acid | 5 |
| (l) Post translation modification of proteins. | 5 |

3. Give detail account of classification, structure and functions of lipids. 16

OR

Give detail account of catabolism of storage lipids. Add a note on its functions. 16

4. Write on :

(m) Nitrite reduction 6

(n) Sulphur fixation 5

(o) Synthesis of glutathione. 5

OR

(p) Ammonia uptake and reduction 6

(q) Reductive sulphate assimilation 5

(r) Functions of glutathione and its derivatives. 5

5. Give detail account of different types of glycosides. Add a note on its distribution and localization. 16

OR

Give detail account of principle of HPLC. Add a note on its application. 16