

AU-396

M.Sc. (Part—II) Semester—III (CBCS) Examination
BOTANY
(Advanced Plant Physiology and Biochemistry—II)
Paper—XII (Elective)

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory and carry equal marks.
 (2) Draw neat and well labelled diagrams wherever necessary.

1. Write on :
 - (a) Structure of starch 5
 - (b) Biosynthesis of phenylalanine 5
 - (c) Protein kinases. 6

OR

 - (d) Structure of aromatic amino acids 5
 - (e) Biosynthesis of sucrose 5
 - (f) Phosphatases. 6
2. Explain role of flavonoides. Add a note on phytoalexin. 16

OR

Explain post infectional compounds of some economically important plant. 16
3. Write on :
 - (g) Role of phenylalanine ammonia lyase 5
 - (h) Isoflavonoides 5
 - (i) ROS. 6

OR

 - (j) Secondary metabolites 5
 - (k) Lignin 5
 - (l) Jasmonate 6

4. Explain in detail protein metabolism during senescence. Add a note on its significance. 16

OR

Describe impact of senescence on photosynthesis. Add a note on oxidative metabolism. 16

5. Write on :

(m) Biotic stress tolerance 5

(n) Cadmium stress 5

(o) Freezing stress. 6

OR

(p) Abiotic stress tolerance 5

(q) Hg-stress 5

(r) Heat stress. 6