

M.Sc. Botany (Life Science)

Semester – III - Theory Examination, OCT-NOV-2017

Paper – 10: Plant Physiology and Metabolism

Time: 2.30 Hrs

Subject code: 3687

Total Marks: 70

INSTRUCTIONS: (1) Draw a labeled diagram where ever it is necessary.
(2) Figure on right side indicates marks of question.

- Q.1 (a) Explain the phenomenon of Plasmolysis in Plant cell. (7)
(b) Explain about Chlorosis, Necrosis and Splitting of fruit. (7)

OR

- Q.1 Describe the role of essential elements. (14)

- Q.2 (a) Write a note on factor affecting on photosynthesis (7)
(b) Describe: Calvin Cycle. (7)

OR

- Q.2 Write a note on light reaction of photosynthesis. (14)

- Q.3 (a) Write a note on TCA Cycle. (7)
(b) Describe: Glycolysis. (7)

OR

- Q.3 Describe: Classification of Lipid. (14)

- Q.4 (a) Explain importance of sulfate assimilation in plants. (7)
(b) Explain non-biological nitrogen fixation. (7)

OR

- Q.4 Describe: Symbiotic nitrogen fixation. (14)

- Q.5 (a) Describe: Photoperiodism in plant. (7)
(b) Write a note on vernalization in plant. (7)

OR

- Q.5 Write a note on abiotic stress. (14)