



THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

BOT 1438

Plant Biology II

Marks: 75

I. Answer any FIVE of the following questions each not exceeding 4 pages. (5X15=75)

1. Explain osmosis using water potential concept.
2. Study the mechanism of general mineral absorption and water transport.
3. Present transpiration as a process regulated through stomatal apparatus.
4. Trace flow of carbon in C3 and C4 plants.
5. Discuss symbiotic biological nitrogen fixation with examples.
6. Compare the agricultural significance of auxin, gibberellins and cytokinins.
7. What are LDP & SDP and Day neutral plants. Find a role for phytochrome in regulating the flowering process.