

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 2426 PLANT ANATOMY AND EMBRYOLOGY

Time: 3 Hrs Marks: 75

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

- 1. Elaborately write the various theories proposed and types of Meristem.
- 2. Explain the anatomical features of dicot stem with suitable diagrams.
- 3. Write a brief account on anomalous secondary growth observed in plants.
- 4. Write an essay on the morphological variations of vegetative parts observed in plants.
- 5. Bring out the anatomical features of male gametophyte in flowering plants with suitable diagrams.
- 6. What is pollination? Explain the various pollination methods observed in plants.
- 7. Write short notes on the following.
 - a. Parthenocarpy b. Male sterility c. Rf gene d. Mitochondrial genome e. Apomixis