



# THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

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

## Backlog Arrear Examination, March 2021

**BOT 350/BOT 2335**

**Genetics and Plant Breeding**

**Marks: 75**

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

1. Explain the segregation of chromosomes in monohybrid and dihybrid cross and comment on linkage.
2. Present the different centres of origin of popular plantation crops and comment on plant introduction in India.
3. Differentiate hybridization techniques from pure line selection
4. Classify the different types of physical, chemical mutagens and find a role in plant improvement.
5. Assess the merits and demerits of green revolution.
6. Explain the types, causes and significance of heterosis.
7. Enumerate the steps in seed production leading to the release of new variety