

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

COURSE CODE: PHS 3594/3494 COURSE TITLE: Astronomy & Astrophysics

Time: 3 hrs Max.Mark: 75

Part - A

Answer <u>any five</u> the following questions:

5x15=75 marks

- 1. Discuss the developmental astronomy in the earlier centuries in detail.
- 2. Describe the occurrence of seasons with diagrams.
- 3. Explain in detail on the classification of stellar spectra.
- 4. Describe the different stages in death of stars in detail.
- 5. Explain the different types of galaxies with neat sketches.
- 6. State Jeans assumptions and obtain the expression for the Jeans mass.
- 7. Discuss the various theories for the evolution of universe.