

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 2445 Time: 3 hr

Course Title: Astrophysics & Relativity

Max.Mark: 75

Part - A

Answer any five of the following questions

 $5 \times 15 = 75$

- 1. Discuss the solar and lunar eclipses with suitable diagrams.
- 2. Describe the spectral classification of star in detail.
- 3. Discuss the various reflecting telescopes with diagram.
- 4. Explain the theory of IR and Xray telescopes
- 5. Describe types of Galaxies
- 6. Explain Open, Close and Steady state Universe
- 7. Derive the expressions of Lorentz Tranformation
