## THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University) Re-accredited ( $2^{nd}$  Cycle) by NAAC with Grade "A", CGPA - 3.46 on a 4-point scale

## Backlog Arrear Examination, March 2021

Course Code: PHS 3559 Time: 3 hr

Course Title: Medical Physics Max.Mark: 75

## Part-A

## **Answer any FIVE QUESTIONS**

(5x15=75)

- 1. Draw the block diagram of a biomedical instrumentation system and briefly explain its components.
- 2. With neat block diagram explain the working of an ECG.
- 3. Draw the mechanical chopper amplifier and explain its working.
- 4. Explain in detail the heart- lung machine with a neat diagram.
- 5. Describe the various applications of laser in medicine.
- 6. Brief on electrodes. Discuss the types of surface and needle electrodes.
- 7. Explain the working of X-ray with neat diagram.

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