

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

Course Code : PHS 2446 Course Title : Digital Electronics Time: 3 hrs Marks: 75

## Answer<u>any five</u> the following questions.

5x15=75 marks

- 1) With a help of truth table explain the logical gates in detail.
- 2) Explain the why NAND and NOR called Universal gate.
- 3) Discuss the function of 8 -1 demultiplexer with a help of diagram.
- 4) Draw the block diagram of a encoder and explain its function.
- 5) Explain in detail about serial in serial out shift register.
- 6) Explain the working of BCD Ripple Counter with the help of state diagram and logic diagram
- 7) Describe the function of Programmable Logical Array with clear diagram