



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: PHY 2574

Time: 3 hours

Course Title: Digital Electronics

Max. Marks: 75

- I. Answer **ANY FIVE** questions. **(5 × 15 =75)**
1. Describe the different types of logic gates with its Boolean expression, diagram and truth table.
 2. Describe Half adder and Full adder with its neat circuit diagram and truth table.
 3. Explain parity checker and parity generator with its neat diagram.
 4. Explain the operation of JK flip flop with its diagram and truth table.
 5. Explain the working of a serial in serial out shift register with necessary circuit diagram and waveforms.
 6. Describe the working of an Astable multivibrator and draw the necessary circuit diagram.
 7. Explain the operation of a Binary ladder circuit with a neat circuit diagram.
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