



# 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 : MCA 0402**

**Course : Artificial Neural Networks**

**Time : 3 Hrs**

**Max : 75 marks**

### PART – A

**Answer any FIVE of the following:**

**5 X 15 = 75 marks**

1. a) Explain the characteristics of Artificial neural networks. (10)  
b) Give notes on the applications of ANN. (5)
2. Explain in detail about single and multilayer Neural Networks with necessary theory.
3. Write and explain the complete algorithm of Back propagation technique in Artificial Neural Networks.
4. Describe the Network Structure and Normal Operation of Counter propagation networks.
5. Explain the architecture of BAM.
6. Discuss the architecture of ART with necessary theory.
7. What do you mean by Optical Neural Networks? Explain Electro Optical Matrix Multipliers.