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

MCA 5407/ 5627	<b>Computer Graphics</b>	Total Marks: 75
Answer any five questions:		5 X 15 = 75

- 1) With neat sketch discuss in detail the parts of a Cathode Ray Tube and its working principle.
- 2) (a) Discuss in detail any eight applications of Computer Graphics. 8 marks
  (b) Write a C program to implement DDA algorithm. 7 marks
- 3) (a) Elaborate on 2d and 3d transformations. 5 marks
  (b) Derive the formula for any four 2D transformations. Give examples. 10 marks
- 4) With a suitable example explain the Cohen Sutherland Line clipping algorithm using region codes
- 5) Explain Parallel and Perspective projection, its sub categories in detail.
- 6) Explain Back face removal algorithm in detail.
- 7) Differentiate Raster Scan display from Random Scan display with suitable diagrams.