Reg No.:_____ Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FIFTH SEMESTER REGULAR AND THIRD SEMESTER SECOND YEAR DIRECT MCA DEGREE EXAMINATION(S) MAY 2019

Course Code: RLMCA387

Course Name: COMPUTER GRAPHICS

Max. Marks: 60 Duration: 3 Hours

PART A

Answer all questions, each carries3 marks.

1	Define persistence, resolution and aspect ratio.	(3)
2	What is a raster scan system?	(3)
3	What is shearing?	(3)
4	Explain 2D viewing pipeline.	(3)
5	What is plane equation?	(3)
6	What is mean by vanishing points?	(3)
7	What is a spline?	(3)
8	What is a shadow?	(3)

PART B

Answer six questions, one full question from each module and carries 6 marks.

Module I

9	Explain Refresh Cathode Ray Tube.	(6)

OR

10	Explain in detail about Bresenham’s line generating algorithm. Give example.	(6)

Module II

11	Explain any one of the Line Clipping Algorithm with example.	(6)

OR

12	Explain any one of the Polygon Clipping Algorithm with example.	(6)

Module III

13 Explain the following.

a) Polygon surfaces (3)

b) Polygon tables (3)

OR

14 Explain the following.

a) Curved Lines and surfaces (3)

b) Quadric surfaces (3)

Module IV

15 Explain 3D viewing pipeline with suitable examples. (6)

OR

16 Explain Depth Cueing with necessary diagrams. (6)

Module V

17 Explain Bazier Curves with neat diagram. (6)

OR

18 Explain any three 3D Transformation giving the matrix/equations. (6)

Module VI

19 Explain any two shading methods. (6)

OR

20 Explain Area Subdivision method with neat diagrams. (6)

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