Code: 9F00404c

MCA IV Semester Regular & Supplementary Examinations May 2018
COMPUTER GRAPHICS
(For students admitted in 2011 (LC), 2012, 2013, 2014, 2015 & 2016 only)

Time: 3 hours   Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks
*****

1 (a) Explain the application areas of computer graphics.
   (b) Explain about the different input devices.

2 (a) Explain the Bresenham's line drawing algorithm.
   (b) Explain about the boundary fill algorithms.

3 (a) Explain the basic transformations.
   (b) Explain the matrix representations and homogeneous coordinates.

4 (a) Explain window-to-viewport coordinate transformation.
   (b) Explain Cohen-Sutherland line clipping.

5 (a) Explain about Hermite curves.
   (b) Explain about Bezier surfaces and B-spline surfaces.

6 (a) Explain the following three-dimensional geometric transformations:
            (i) Reflections.
            (ii) Shears.
   (b) Explain about viewport clipping.

7 (a) Explain depth-sorting method.
   (b) Explain back-face detection.

8 (a) What are raster animations? Explain in the design of animation sequences.
   (b) Explain motion specifications.

*****