



M 27792

Reg. No. :

Name :

II Semester M.C.A. Degree (Reg./Sup./Imp.) Examination, July 2015
(2014 Admn.)

MCA 2C12 : COMPUTER GRAPHICS

Time : 3 Hours

Max. Marks : 80

SECTION - A

Answer **any ten** questions. Each question carries **three** marks.

1. Define pixel and resolution.
2. List out the three input mode interfaces to open the Graphics Library.
3. What are the various areas of applications of computer graphics ?
4. Mention the RGB color model in the computer graphics.
5. Differentiate between flood-fill and boundary fill.
6. What is point clipping ?
7. What is the need for 2D and 3D transformation ?
8. What are the merits and demerits of bitmap images and vector images ?
9. What are the limitations imposed by the use of the depth buffer ?
10. Differentiate between geometric transformations and coordinate transformation.
11. Compare and contrast quadric and super quadric surfaces.
12. What are the classification of different visible surface detection methods ?

(10×3=30)

P.T.O.



SECTION – B

Answer **all** questions. **Each** question carries **ten** marks.

13. a) With suitable diagram explain the working of random scan color monitor.

OR

b) Describe emissive and non-emissive flat panel display systems (one each).

14. a) Write the DDA line drawing algorithm and trace the same on the line with end points (2, 1) and (-5, 8).

OR

b) Discuss the event driven programming for pointing devices in open GL.

15. a) Explain the two dimensional transformation with respect to region filling algorithms.

OR

b) Explain 2D window-to-view port coordinate transformation.

16. a) Explain the depth-buffer algorithm for hidden surface removal.

OR

b) Describe the geometric data table representation for polygon surface with suitable example.

17. a) Discuss parallel projection method for projecting the 3D-objects onto the 2D view plane.

OR

b) Explain the two important basic illumination methods features briefly. (5×10=50)