



Code No. : 5294/M

**FACULTY OF INFORMATICS**

**B.E. 3/4 (IT) II Semester (Main) Examination, May/June 2012**

**COMPUTER GRAPHICS (Elective – I)**

Time : 3 Hours]

[Max. Marks : 75

**Note :** Answer *all* questions from Part – A. Answer *any five* questions from Part – B.

**PART – A**

**25 Marks**

1. Define resolution. 2
2. List the different types of flat panel displays. 2
3. Write about character attributes. 2
4. Define reflection and shear transformation with their matrices. 3
5. Draw the 2-D viewing transformation pipeline. 2
6. Write any four 2-D viewing functions. 3
7. Define three types of input modes. 2
8. List the issues in structuring a user dialogue. 3
9. What is a polygon mesh ? 3
10. State the parametric continuity conditions. 3

**PART – B**

**50 Marks**

11. Write and illustrate Midpoint circle algorithm with a radius = 10.
12. How are transformations between co-ordinate systems done ?



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13. How is Weiler-Atherton polygon clipping algorithm different from Sutherland Hodgeman clipping algorithm ?
14. Discuss interactive picture construction techniques.
15. Explain perspective projection operation.
16. Explain Depth sorting method.
17. Write about **any two** of the following :
  - a) Basic video-controller refresh operations.
  - b) Computational efficiency in composite transformations.
  - c) Phong shading.