Government College of Engineering, Aurangabad

(An Autonomous Institute of Government of Mahrashtra)

FYMCA Examination

End Semester Examination May 2012-06-23

MCA111:Computer Graphics

Time: Three hours   Max Marks: 60

"Verify the course code & check whether you have got the correct question paper"

N.B.:-

1. All questions are compulsory

2. Figures to the right indicate full marks

3. Assume suitable data if necessary and state it clearly

4. Use of non-programmable calculator is allowed

Q.1] Attempt any Two   **[Marks 12]**

1) Explain Any two Input Devices working in details

2) List and explain various application of computer graphics

3) With a neat labeled diagram explain the mechanism and working of Cathode-Ray-Tube

Q.2] Attempt any Two   **[Marks 12]**

1) Explain the different any two character generation methods in details

2) Write down algorithm and explain the ellipse generation algorithm

3) Explain in detail Splines curves

Q.3] Attempt any Two   **[Marks 12]**

1) With suitable example explain the basic idea of rotation about arbitrary point transformation

2) Explain the Mid Point Sub Division line clipping algorithm

3) Write a short note on all types of reflection in 2D transformation

Q.4] Attempt any Two **[Marks 12]**

1) Explain the Virtual reality environment

2) Discuss the animation sequences and animation functions in details

3) Translate and scale the translated polygon which has the coordinates A(2,5), B(7,10), C(10,2) initially. The transformation and scaling factors are given as follows sx=2, sy=2, and tx=3 units, ty=4 units

Q.5] Attempt any Two **[Marks 12]**

1) Differentiate between Parallel Projection and Perspective projection

2) Write a short note on classification of fractals

3) List the properties of Beizer curves.