# 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]
4) Explain the Virtual reality environment
5) Discuss the animation sequences and animation functions in details
6) 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 $s x=2, s y=2$, and $t x=3$ units, $t y=4$ 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.
