

## IT-602

### B.E. VI Semester

Examination, June 2013

## Computer Graphics and Multimedia

*Time : Three Hours*

*Maximum Marks : 100*

*Minimum Pass Marks :35*

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- Note:** i) Attempt all questions with internal choice.  
ii) All questions carry equal marks.

### Unit - I

1. a) What are the function of interactive input devices? Give logical classification of graphical input devices?  
b) Differentiate between Raster and Random display.

**OR**

2. Explain the working of keyboard and scanner?

### Unit - II

3. a) Develop Bresenham's circle drawing algorithm for drawing circular arc of radius R centered at (0, 0) starting (R,0) and lying in forth quadrant between 0 and -45° degree?  
b) What are the drawback of DDA line drawing Algorithm?

**OR**

4. Write the properties of Bezier curve. A bezier curve is drawn using the control points  $P_1(1, 1)$ ,  $P_2(2,3)$ ,  $P_3(4,3)$  and  $P_4(3,1)$ . Find the equation of Bezier curve and draw its rough sketch?

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### Unit - III

5. a) Obtain mirror reflection of triangle with vertices A(0,0), B(0,50), C(-20,30) about the line  $Y=X+2$ .  
b) Define RGB color model.

**OR**

6. a) Explain why sutherland-Hodgman polygon clipping algorithm works for only convex clipping region.  
b) Explain phong and Ground shading.

### Unit - IV

7. a) What are the different types of Authoring tools in multimedia? Discuss each in brief.  
b) Explain SCSI?

**OR**

8. a) What are the components of multimedia system? How they are linked with each other?  
b) Explain multimedia databases?

### Unit - V

9. What do you mean by MIDI? What are the advantages of using MIDI files for generating background music for multimedia applications.

**OR**

10. Explain JPEG compression in details.

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