

NAME \_\_\_\_\_

ROLL NO \_\_\_\_\_

**2008 ANNA UNIVERSITY**  
**B.E/B.TECH DEGREE EXAMINATION**  
**GRAPHICS AND MULTIMEDIA**  
**(INFORMATION TECHNOLOGY)**

JUNE-2008

**TIME-3HOUR**  
**MARKS-100**

**ANSWER ALL QUESTIONS**

**PART - A [10X2=20]**

1. What are the common attributes of a 'line'?
2. How will you perform transformation between coordinate systems?
3. What are the advantages of parallel projection?
4. How are polygon data stored in graphics applications?
5. Write short note on 'AVI' format?
6. What are "asymmetrical applications"?
7. What is the difference between an interlaced and a non-interlaced monitor?
8. What do you know about the SCSI-2 standard?
9. Define 'Hypermedia'.
10. What are the standard types of multimedia object servers?

**PART - B [5X16=80]**

11. (a) Elaborately discuss the midpoint ellipse drawing procedure and solve the following:  
Find the points on the ellipse in the first quadrant with major axis ( $r_x$ ) = 6 units and minor axis ( $r_y$ ) = 4 units.  
Or  
(b) (i) Find the reflection of a triangle with vertices at (4,10), (6,12) and (4,12) about the line  $y=x+5$ .  
(ii) Explain the Cohen Sutherland line clipping algorithm.
12. (a) (i) What are Bezier curves? Discuss their properties.  
(ii) How do you represent 3D objects using Octrees?  
Or  
(b) (i) Write notes on HSV and HLS color models.  
(ii) How is 'morphing' animation performed? Discuss with an example.
13. (a) (i) Write about multimedia applications involving full motion digital video.  
(ii) How do you define objects for multimedia systems?  
Or  
(b) (i) Define the multimedia workstation architecture and write about the various components.  
(ii) What types of Database management Systems are preferred for Multimedia. Systems? Explain.
14. (a) (i) Discuss in brief about the CCITT Group -3, 2D compression standard for binary images. Mention its advantages and disadvantages.

(ii) Describe the MPEG encoding technique for video.

Or

(b) Discuss at length about RAID technology for mass storage for multimedia systems.

15. (a) (i) Write in brief about the types of multimedia authoring systems.

(ii) Write notes on any two popular metaphors for User Interface design with examples for each of them.

Or

(b) (i) What are the components of Hypermedia message? Explain.

(ii) Analyze the object server architecture used in a distributed multimedia system.

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