

2006 PUNE UNIVERSITY
B.E/B.TECH DEGREE EXAMINATIONS
INFORMATION TECHNOLOGY
MULTIMEDIA SYSTEM

TIME: 3 HOUR
MARK: 80

Answer Any Eighth Question
All Question Carry Equal Mark

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MARK [10*8=80]

- Q1 a)What is the need of multimedia system?
b)What is multimedia authoring?
c)Explain any one of the authoring tools in detail.
d)Explain any one optical storage device in detailed.

OR

- Q2 a)What is a magnetic storage device?Explain its usage.
b)Explain the table top scanner.
c)Explain the need of display buffer.
- Q3 a)Starting from the first principles derive the expression for the decision parameter in Bresenham's circle drawing algorithm.Assume the center at origin and radius as 'r'.
b)Consider a square with vertices as A(1,0), B(0,0), C(0,1), D(1,1). Perform the following 2 D transformations.
i)Rotate by 30 degrees about point D.
ii)Scale in y direction by factor 2.

OR

- Q4 a)Explain the steps of performing 3D rotation on a point P(x,y,z) about any axis parallel to x axis.
b)Explain the algorithm of scan line seed fill algorithm.
- Q5 a)What is aliasing in Graphics? Explain pixel phasing in details.
b)Explain Phong Shading in detail.

OR

- Q6 a)Explain Gouraud Shading in detail.
b)Explain the aspects of illumination model in detail.

Q7 a) What is audio compression? Explain PCM in detail.

b) Explain the WAV file format used for audio.

OR

Q 8a) Explain block wise the MP3 encoder in detail.

b) Explain certain commands of the MIDI file for describing an audio music.

Q9 a) What is an animation? What are the principles of animation?

b) Explain the color model used for CRT display.

OR

Q10 a) What are the types of animation? Illustrate with suitable example.

b) Explain SECAM with respect to all its features.

Q11 a) Explain the different types of loss less compression techniques in brief.

b) Explain the BMP file format in detail.

OR

Q12 a) What is MPEG compression? Explain in brief.

b) Explain the lossy part in JPEG compression.

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