

Total No. of Questions : 10]

SEAT No. :

P3324

[Total No. of Pages : 2

[5353]-199

T.E. (Information Technology)
MULTIMEDIA TECHNOLOGIES
(2012 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat diagrams must be drawn wherever necessary.*

Q1) a) Explain different Multimedia blocks. [5]

b) Explain the Huffman coding with example. [5]

OR

Q2) a) Explain vector quantization technique. [5]

b) Solve below example with the Arithmetic Encoding method. Encode the message $\alpha_1 \alpha_2 \alpha_3 \alpha_3 \alpha_4$ [5]

Source Symbol	Probability
a_1	0.2
a_2	0.2
a_3	0.4
a_4	0.2

Q3) a) Sampling at the Nyquist rate can create a good approximation of the original wave. Justify. [5]

b) Write a short note on PCM Encoder. [5]

OR

Q4) a) Draw and explain different blocks of VOC file format. [5]

b) Explain the Fractal compression algorithm. [5]

P.T.O.

- Q5) a)** What is chroma subsampling, what are its types? Draw and explain. [8]
b) Compare NTSC, PAL and SECAM techniques. [8]

OR

- Q6) a)** Explain the concept of Motion estimation and compensation with diagram. [8]
b) What is MPEG 1 video? Explain different types of frames? [8]

- Q7) a)** What are basic principles of animation? Explain any four in detail. [8]
b) What is OPEN GL? Explain OPEN GL rendering pipeline with key stages. [8]

OR

- Q8) a)** Explain stages in the Process of creating the animation. [8]
b) What is animation? How it differs from the video? What are the applications of animation? Enlist some tools used to create the animation. [8]

- Q9) a)** What is virtual reality? Explain different applications of it. [6]
b) Explain the IGMP and RSVP (Resource ReSerVation Protocol) with example. [6]
c) What is IP multicast and Mbone? [6]

OR

- Q10) a)** What are the broadcast schemes for video on demand? Explain any two. [6]
b) Draw and Explain android multimedia framework architecture? [6]
c) What is Open core and Open Max multimedia engine? [6]

