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SEAT No. :

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TE/INSEM/APR-68

T.E. Information Technology (Semester - II)

314452 : MULTIMEDIA TECHNOLOGIES

(2012 Pattern)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicates full marks.
- 4) Assume Suitable data if necessary.

Q1) a) State and explain various components of multimedia. Also, explain the need of multimedia. [5]

b) Write and explain Huffman Coding algorithm for the input with frequencies of occurrences A(3) B(5) 8(E) H(2) I(7). Construct Huffman Tree. [5]

OR

Q2) a) Define Multimedia. Why is multimedia important? Explain any two web applications. [5]

b) Explain Arithmetic coding Algorithm. Encode the message a1a2a3a4 with initial probabilities of a1= 0.2, a2 = 0.2, a3=0.4, a4=0.2 [5]

Q3) a) Explain smoothening and sharpening filters used for image enhancement. [6]

b) Write a short note on color CMY and HSV color model. [4]

OR

Q4) a) Explain Vector Quantization lossy image compression. [5]

b) Explain JPEG image compression with neat sketch. [5]

P.T.O.

Q5) a) Write and explain MPEG Audio coding algorithm. [5]

b) What is MIDI? Explain MIDI with MIDI file structure and MIDI sound attribute. [5]

OR

Q6) a) Explain Predictive coding and delta modulation audio compression technique. [6]

b) Explain WAV, WMA, MP3 Audio file formats. [4]

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