

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]
(2064)

14725

B. Tech 6th Semester Examination

Multimedia System

EC-6006

Time : 3 Hours

Max. Marks : 100

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all selecting one question each from sections A, B, C and D. Section - E is compulsory.

SECTION - A

1. Explain in detail television broadcast in term of scanning sequence, color signals, chrominance components & signal bandwidth. (20)
2. Explain in detail network QoS & application QoS. Discuss various parameters of communication channel associated with the quality of measures. (20)

SECTION - B

3. What are the different types of Entropy encoding & source encoding techniques. Compare the Huffman encoding & Shannon encoding in terms of expected codeword length. (20)
4. By taking suitable example explain arithmetic encoding principle. Whether this coding is better as compared to Lempel-zir coding? Justify your answer. (20)

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SECTION - C

5. Explain video compression principle in terms of frame types, motion estimation & compensation and implementation issues. (20)
6. Give suitable schematic design for MPEG-4 coding principle & discuss the encoding standard. (20)

SECTION - D

7. Explain Token ring frame format & Frame transmission & reception. (20)
8. What are different FDDI networking components? Explain FDDI transmission using a suitable diagram. (20)

SECTION - E

9. Write short notes on:
 - (a) Difference between circuit switched & packet switched networks.
 - (b) Aspect ratio.
 - (c) NTSC transmission standard.
 - (d) Digitization format 4:2:0.
 - (e) Prefix property & coding efficiency.
 - (f) JPEG image format.
 - (g) PCM encoder.
 - (h) LPC [Linear Predictive Coding]
 - (i) Early Late Token
 - (j) CSMA/CD. (2×10=20)