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 arithematic encoding principle. Whether this coding is better as compared to Lempel-zir coding? Justify your answer. (20)
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)