Roll No. ..... Total Pages : 02

BT-8/M-19 38012

MULTIMEDIA COMMUNICATIONS

ECE-406E

Time : Three Hours] [Maximum Marks : 100

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit.

Unit I

1. (a) Explain Television and Data networks in detail. **10**

   (b) With the help of diagrams differentiate between MOD and N-MOD. **10**

2. What is the process of digitization ? Why is it required ? Explain the complete process of digitization with the help of waveforms and block diagram. **20**

Unit II

3. (a) Derive the static Huffman coding of the series given below :

   AABBBAAACCDDAABCD **10**

   (b) Differentiate between LZ and LZW coding in detail. **10**

4. (a) Draw and explain the basic block diagram of JPEG encoder. 10

(b) Explain with the help of example difference between lossless and lossy compression algorithms. 10

Unit III

5. Why audio compression is required ? With the help of proper block diagrams explain the difference between DPCM and A-DPCM. 20

6. (a) Explain the terms motion estimation and motion compensation. 10

(b) Explain in detail H.263 video compression standard. 10

Unit IV

7. (a) What is Internet Telephony ? Explain the various protocols used in it. 10

(b) With the help of proper diagram explain the complete electronic mail message structure. 10

8. Write short notes on the following : 20

(a) DNS (b) WWW

TOPPERWorld