

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

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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

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