

6. Explain the following terms related to video compression principles :

- (a) Moving JPEG
- (b) Frame types
- (c) Motion Estimation. **15**

Part D

7. Discuss the current state of multimedia on the internet and tools for world wide web. **15**

8. Write short notes on any *two* of the following :

- (a) Bandwidth Bottleneck
- (b) Nibbling
- (c) JPEG Images
- (d) Search Engines. **7½, 7½**

No. of Printed Pages : 04

Roll No.

BB65

M.Tech. EXAMINATION, May 2019

(Second Semester)

(B. Scheme) (Re-appear)

(ECE)

MTEC510B

MULTIMEDIA COMMUNICATION

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Part. All questions carry equal marks.

Part A

1. (a) What is Multimedia ? What are its applications involving text, images, audio and video in interpersonal, interactive and entertainment ? 7
- (b) Explain ISDN. 8
2. (a) What are Digitization Principles ? 7
- (b) Determine rate of sampler and bandwidth of bandlimiting filter in an encoder which is to be used for digitization of analog signal which has a bandwidth from 15 Hz to 10 kHz assuming the digital signal :
 - (i) is to be stored in memory of a computer
 - (ii) is to be transmitted over a channel which has a bandwidth 200 Hz to 3.4 kHz. 8

M-BB65

2

Part B

3. Explain :
 - (a) Run length encoding
 - (b) Differential encoding
 - (c) Static Huffman coding. 15
4. Explain :
 - (a) GIF
 - (b) TIFF
 - (c) Techniques of digitized documents and pictures. 15

Part C

5. (a) What is Linear Predictive Coding ? Compare it to code excited LPC. What are the three features which determine perception of sound ? 9
- (b) What are Dolby Audio Coders ? 6

(3-29/6) M-BB65

3

P.T.O.