

**EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION  
MAY 2011**

EC 04 804 (F)—MULTIMEDIA COMMUNICATION SYSTEMS

Time : Three Hours

Maximum : 100 Marks

*Answer all questions.*

1. (a) Draw and explain the multimedia communicational model. Also explain the elements of it.  
(b) Briefly explain about Lip Tracking.  
(c) Discuss in detail about critical band frequency analysis.  
(d) Explain in detail about speech coder attributes.  
(e) What are the still image compression standards.  
(f) Illustrate with an example the MPEG7 compression.  
(g) Discuss in detail about multimedia operating VOD.  
(h) Write short note on Internet Access networks.

(8 × 5 = 40 marks)

2. (a) Explain in detail about the following :

- (i) User and Network requirements.
- (ii) Multimedia Terminals.

*Or*

- (b) Discuss in detail about Joint Audio-video coding.

(15 marks)

3. (a) Write a short note on the following :

- (i) Texture based methods. (5 marks)
- (ii) Perceptual coding of Digital Audio signals. (5 marks)
- (iii) Spread of masking. (5 marks)

*Or*

- (b) List out the CD Audio coding for multimedia Application. Explain in detail about each applications with suitable diagrams and examples.

(15 marks)

4. (a) Write a short note on :

- (i) Speech coding standards.
- (ii) Multimedia conferencing standards.

*Or*

- (b) Explain in detail about MPEG 1 and 2. Compression with suitable diagrams and examples.

(15 marks)

**Turn over**

5. (a) (i) Discuss in detail about main features of Distributed Multimedia Systems (DMS). (7 marks)
- (ii) Write a brief note on basic features of a Hypermedia system. (8 marks)

*Or*

- (b) Write a detailed note of the following :
- (i) Parallel Transmission Frequency–Division Multiplexing.
- (ii) Multimedia transport across ATM networks.

(15 marks)

[4 × 15 = 60 marks]