22156

M. E. 1st Semester (Electronics & Communication Engg.) Examination – January, 2012

MULTIMEDIA SYSTEMS

Paper : MEEC-514

Time : Three hours]   *[Maximum Marks : 100*

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

Note : Attempt any *five* questions. All questions carry equal marks.

1. (a) What are Multimedia Appliances ? Explain designer's view of multimedia appliances.   **10**

   (b) What is synchronization & orchestration ? Compare them.   **10**

2. (a) Explain the architecture of an audio signal processing library by giving examples. **10**

(b) Explain the process of speech recognition and generation in detail. **10**

3. (a) Compare & contrast Interpolative techniques and Predictive techniques of video compression by giving examples. **10**

(b) Explain MPEG Video compression standard in detail. **10**

4. What are the objectives of JPEG compression standard ? Explain JPEG architecture Further, explain JPEG-DCT encoding and quantization with help of a diagram. **20**

5. (a) What are the goals and characteristics of multimedia system services. **10**

(b) What is New OS support ? Explain various categories of New OS supports for continuous Media Applications ? **10**

6. (a) Explain Architecture for network based multimedia services with help of diagram. 10

   (b) What is OMFI ? Explain the OMFI composition class hierarchy with help of a diagram. 10

7. (a) Explain various **architectures** for future multimedia telephony system. 10

   (b) Discuss various design considerations for web pages by giving examples. 10

8. Write short notes on : 20

   (a) Web Page Browsers.

   (b) Communication Protocol.

   (c) Hyper Applications.

   (d) Client Control of Continuous Media.