



**ELECTIVE - II**  
**Multimedia Communication**  
**(1121)**

**P. Pages : 2**

**Time : Three Hours**

**Max. Marks : 100**

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Assume suitable data if necessary.
5. Solve **any five** questions.

1. a) Explain Multimedia information representation in detail ? **10**  
b) Explain application and network terminology of multimedia communication. **10**
2. a) Explain role of multimedia in mobile N/W. **10**  
b) Explain role of multimedia in broadcast N/W. **10**
3. a) What are the different video coding techniques ? Explain any one ? **10**  
b) What is SMIL ? Explain it in details ? **10**
4. a) Explain MPEG 2 multimedia frame work. **10**  
b) Gives the significant features of JPEG 2000. **10**
5. a) What is the role of multimedia operating system in multimedia communication ? **10**  
b) Explain reference model for synchronization in multimedia communication. **10**

6. a) Explain application quality of services in multimedia communication. **10**
- b) A packet switched network with a worst case jitter of 10 ms is to be used for a number of applications each of which involves a constant bit rate information stream. Determine the minimum amount of memory that is required at the destination and a suitable packet size for each of the following input bit rates. It can be assumed that the mean packet transfer rate of the network exceeds the equivalent input bit rate in each case. **10**
- i) 64 kbps
  - ii) 256 kbps
  - iii) 1.5 Mbps
7. a) Explain video compression principle and differentiate between MPGE 1 and MPEG 2. **10**
- b) Explains H.261 video compression standards. **10**
8. Write note on following. **20**
- a) Process Management Techniques.
  - b) H.263

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