

Roll No.

Total No. of Questions : 08]

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M. Tech.

MULTIMEDIA COMMUNICATION SYSTEMS

SUBJECT CODE : EC - 513 (Elective - II)

Paper ID : [E0572]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours

Maximum Marks : 100

Instruction to Candidates:

- 1) Attempt any Five questions.
- 2) All questions carry equal marks.

Q1) (a) What are the requirements of communication system associated with multimedia applications?
(b) How is transfer of data and its rates specified in multimedia system?

Q2) (a) Discuss the working of circuit switched networks.
(b) Discuss the principle of operation of ATM switch and ATM network.

Q3) (a) Give the data stream characteristics for continuous media.
(b) Explain various information units.

Q4) (a) What is data compression? What benefits are offered by compression techniques in designing multimedia systems?
(b) Explain lossy and lossless data compression.

Q5) (a) What is K factor and what is its importance in CCITT Group-3 2D compression scheme? Discuss the advantages and disadvantages of this compression scheme.
(b) Explain how discrete cosine transform is used to achieve compression.

Q6) Describe the various multimedia file formats with their applications.

- Q7)** (a) Compare JPEG and MPEG. How would motion JPEG differ from MPEG?
- (b) Explain with the help of block diagram the principle of teleconferencing.
- Q8)** Write notes on the following :
- (a) Source and channel encoding.
- (b) High speed modems.

