

M.C.A. Second Semester (Second Year) (CGS)
15530 : Multimedia Technologies : 4 MCA 3

P. Pages : 2

Time : Three Hours



AU - 3166

Max. Marks : 80

- Notes :
1. Due credit will be given to neatness and adequate dimensions.
 2. Diagrams and chemical equations should be given wherever necessary.
 3. Illustrate your answer necessary with the help of neat sketches.
 4. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Explain the various steps of Multimedia Production. 5
- b) What is multimedia authoring? Explain some common authoring metaphors. 8

OR

2. a) What is Dithering? Explain ordered dithering with algorithm. 6
- b) Define multimedia. In which fields it can be used effectively? 7
3. a) Explain different types of video signals. 6
- b) What is chroma subsampling? What is purpose of chroma subsampling? 7

OR

4. a) Explain PAL video standard. 6
- b) Explain different color model in images. 7
5. a) Explain Nyquist theorem what is Nyquist frequency. 7
- b) What is MIDI? Explain classification of MIDI messages. 7

OR

6. a) Explain the following: 7
 - i) SNR
 - ii) SQNR
- b) What is sound? Explain digitization of sound. 7
7. a) Explain Dictionary based coding with example. 8
- b) Explain lossless JPEG. 6

OR

8. a) Describe Huffman coding algorithm with example. 8
- b) Explain Run length of coding with example. 6

9. a) What is sequential search method? & also compare sequential search with motion vector. 7
b) Explain H261 frame sequence and I-frame coding. 6

OR

10. a) Explain video compensation based on motion compensation. 6
b) Describe in details H.261 video Bitstream syntax. 7
11. a) What are vocoders? Explain characteristics of channel vocoders. 7
b) Explain the MPEG Audio compression algorithm. 6

OR

12. a) Explain frequency masking and Temporal masking with MPEG audio. 6
b) Explain CELP also Describe its features. 7
