

Total No. of printed pages = 3

Co-404/EoM/4th Sem/2013/N

## ELEMENTS OF MULTIMEDIA

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions.

Attempt any *five* questions.

1. (a) Define multimedia. What are its uses in the field of Education and Business ? 6
- (b) Define the following terms : 8
  - (i) Sampling rate
  - (ii) Quantization
  - (iii) Clipping
  - (iv) Resolution.
2. (a) What is acoustics of sound ? Write a brief note on psychoacoustics. Why psychoacoustics is important in multimedia ? 8
- (b) What are the advantages and disadvantages of MIDI over digital audio files ? 6

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3. (a) What do you mean by perception of human eye? What are additive colours and subtractive colours? 6
- (b) Define vector and raster graphics. 4
- (c) What do you mean by 16 bit and 24 bit colour depth? 4
4. (a) Define Scaling, Cropping and Rotation in relation with image. 6
- (b) What do you mean by Lossy and non-lossy image compression? 4
- (c) Write brief note on JPEG image compression. 4
5. (a) Discuss briefly the different TV broadcast standards. 8
- (b) Write brief note on image manipulation – scaling, cropping and rotation. 6
6. (a) What do you mean by video compression? Why is it needed? What are the techniques available for video compression? 8
- (b) Define video formats, lines, frames and fields. 6

7. Write short notes on any *two* :

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(a) Amplifier

(b) Digital camera

(c) MIDI

(d) Component and composite Video.