

Total No. of printed pages = 3

Co-404/EoM/4th Sem/Comp/2017/M

## ELEMENTS OF MULTIMEDIA

Full Marks – 70

Pass Marks – 28

Time – Three hours

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

Attempt question No.1 and any *five* from the rest.

1. Define the following terms (any *five*):

2×5=10

- (i) Multimedia
- (ii) Digital Audio
- (iii) Colour Depth
- (iv) Sampling
- (v) Aspect Ratio
- (vi) Colour palette
- (vii) Quantization.

[Turn over

2. (a) Discuss briefly the uses of Multimedia. 8  
(b) Write a brief note on psycho acoustics. 4
3. (a) Discuss briefly the functions of ADC/DAC for conversion of analog sound to digital and vice versa. 8  
(b) Write brief note on digital audio format.
4. (a) What do you mean by additive colour and subtractive colour ? 4  
(b) Write brief note on colour model and colour characteristics. 8
5. Why Image compression is necessary ? Write a brief notes on any two image compression techniques. 2+5+5=12
6. (a) Write a brief note on Digital Still Camera. 6  
(b) Write brief note on TV broadcast standards PAL and NTSC. 6

7. (a) What is Nyquist Theorem ? Discuss briefly about component and composite video.

2+6=8

(b) Discuss briefly the lossless and lossy video compression techniques. 4

8. Write short notes on (any *three*) : 3×4=12

(i) Microphone

(ii) Perception of human eye

(iii) Scanner

(iv) Video formats lines, frames and fields.