

322633(33)

B. E. (Sixth Semester) Examination, 2020

(Old Scheme)

(CSE Engg. Branch)

MULTIMEDIA & VIRTUAL REALITY

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

***Note : Part (a) of each question is compulsory.
Attempt any two parts from (b), (c) and (d)
of each question. The figures in the right-
hand margin indicate marks.***

Unit-I

1. (a) Define Multimedia.
- (b) What do you mean by data stream? Explain the data stream characteristics of continuous media.

- (c) What are the components of multimedia system? In what format are these data stored in a computer? 7
- (d) How are they linked with each other? Explain the evolution of multimedia products in detail. 7

Unit-II

2. (a) Explain MIDI. 2
- (b) Write short notes on : 7
- (i) Speech Recognition System
- (ii) Authoring Tools
- (c) In what ways are video conferencing standards different from audio conferencing standards? 7
- (d) What is an image? Explain the concept of image processing. 7

Unit-III

3. (a) Define hybrid coding. 2
- (b) Explain Static and Dynamic Huffman coding techniques with the help of suitable example. 7
- (c) Explain the steps involved in JPEG compression with diagram. 7
- (d) Explain different types of video compression. 7

Unit-IV

4. (a) Explain optical media. Give examples for optical media. 2
- (b) What do you understand by Compact Disk Digital Audio. What are the advantages of Compact Disk Digital Audio? 7
- (c) How does magneto-optical technology differ from WORM technology? Explain in detail the working of WORM. 7
- (d) How are the errors handled in CD-DA system? Explain 7

Unit-V

5. (a) What is the use of virtual reality? 2
- (b) Write note on : 7
- (i) Augmented Reality System
- (ii) Applications of VR
- (c) Discuss about the following statement :
"Virtual Reality environments are made up of graphics, video, sound and a variety of other physical simulation." 7
- (d) Explain some of the domain dependent applications in visualization. 7