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P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Sixth Semester, B.E. - Information Science and Engineering

Semester End Examination; May/June - 2019

Multimedia Computing

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

- 1 a. Explain the data elements for multimedia systems. 10
- b. With neat diagram(s), explain the multimedia architecture. 10
- 2 a. Illustrate the concept of 3D sound projection with a neat diagram. 10
- b. Why do we need data compression? Discuss the different types of compression standards. 10

UNIT - II

- 3 a. Explain the step involved in image recognition with necessary diagram. 10
- b. Write a note on VRML. 10
- 4 a. Mention the different image segmentation methods. Explain any two methods in detail. 10
- b. List the typical characteristics of a digital television. Mention its advantages. 10

UNIT - III

- 5 a. Explain the coding requirements for data compression. 10
- b. Discuss the important components of MPEG-4 terminals. 10
- 6 a. Compare MPEG-2 and MPEG-4 extensions standards. 10
- b. Briefly discuss the concepts of lossy sequential DCT based mode. 10

UNIT - IV

- 7 a. Explain any two CD-ROM based developments. 10
- b. List the DVD standards. Also compare CD and DVD based on various parameters. 10
- 8 a. Explain how audio and video data stored on CD? 10
- b. List the advantages and disadvantages of CDROM and DVD technologies. 10

UNIT - V

- 9 a. Discuss the key format information with respect to Rich Text Format. 10
- b. Outline the analysis of image sequences. 10
- 10 a. Explain analysis of audio in detail. 10
- b. Describe the MIDI file formats. 10

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