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P.E.S. College of Engineering, Mandya - 571 401
 (An Autonomous Institution affiliated to VTU, Belgaum)
Sixth Semester, B.E. - Information Science and Engineering
Semester End Examination; June/July - 2015
Multimedia Computing

Time: 3 hrs

Max. Marks: 100

Note: Answer any *FIVE* full questions, selecting at least *TWO* full questions from each *part*.

PART - A

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| 1. a. | With help of diagram, explain the use of full motion video in multimedia applications. | 8 |
| | b. List out the defining objects for multimedia systems and explain. | 7 |
| | c. List the data elements for multimedia system and explain any four elements. | 5 |
| 2. a. | Explain the different types of Image formats. | 10 |
| | b. Write a note on VRML with example. | 6 |
| | c. Explain the following : | |
| | i) HDTV | 4 |
| | ii) Digital Television | |
| 3. a. | Explain the lossy sequential DCT based mode of JPEG Compression technique with block diagram. | 10 |
| | b. List out basic compression techniques. Explain any two techniques. | 10 |
| 4. a. | Explain the need of four different frame types followed in MPEG. How the sequence of execution of these frames are maintained. | 6 |
| | b. Explain the basic block diagram of MPEG audio encoding. | 8 |
| | c. Write a note on Fractal compression. | 6 |

PART - B

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| 5. a. | Explain how CD – DA (compact disc digital audio) works. | 10 |
| | b. Explain CD – Bridge disc. | 4 |
| | c. Compare DVD with CD technology. | 6 |
| 6. a. | Explain the audio analysis using syntactic and different semantic audio indicators. | 10 |
| | b. Explain the analysis of individual images in content analysis. | 10 |
| 7. a. | Explain the RIFF file format. | 10 |
| | b. What are the specification objectives of TWAIN? Explain the TWAIN architecture. | 10 |
| 8. a. | Explain the components of multimedia system with the help of diagram. | 10 |
| | b. What are the different types of multimedia systems? Explain. | 10 |