



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

(An Autonomous Institution affiliated to VTU, Belgaum)

Seventh Semester, B.E. - Electronics and Communication Engineering

Semester End Examination; Dec. - 2014

Multimedia Communication

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 the help of a neat diagram, explain Broad cast television networks. | 8 |
| | b. | Explain various network types associated with communication modes. | 6 |
| | c. | Explain different QOS parameters associated with circuit switched network. | 6 |
| 2 | a. | Explain in brief about the types of text. Used for document. | 6 |
| | b. | Explain the Principle applied for digitization of document with the help of neat diagram. | 8 |
| | c. | With the help of neat diagram, Describe color derivation principles. | 6 |
| 3 | a. | Differentiate between luminance and chrominance components. | 4 |
| | b. | Explain with a suitable diagram the baseband spectrum of color TV signaled in PAL system. | 4 |
| | c. | Explain the following file formats : i) SIF ii) CIF iii) QCIF | 12 |
| 4 | a. | Explain the principle of operation of LZW compression algorithm and how this is different from LZ algorithm. | 12 |
| | b. | Explain the various stages of JPEG decoder with the aid of neat schematic diagram. | 8 |

PART - B

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|---|----|--|----|
| 5 | a. | With the aid of schematic diagram explain the operation of basic ADPCM signal encoder and decoder. | 10 |
| | b. | With an implementation schematic, explain the basic principle of MPEG - 4 video encoder. | 10 |
| 6 | a. | With aid of diagram, describe the role of each of five layers of TCP /IP reference model. | 8 |
| | b. | Explain two party call setup procedure using H. 323 gate keeper. | 6 |
| | c. | Explain the process of interworking unit using H. 323 gateway. | 6 |
| 7 | a. | Explain the role of security gateway and proxy server with the help of neat schematic diagram. | 8 |
| | b. | With the help of neat diagram, explain telephone company architecture and cable TV company architectures of Movie / Video on demand. | 12 |
| 8 | a. | Explain the following terms related to web; | 8 |
| | | i) HTML ii) HTTP iii) Hyper text iv) Hyper Link. | |
| | b. | Give an example of URL that uses file method and explain one of its uses. | 6 |
| | c. | Explain the various principles of HTTP standard application protocol with the aid of a neat diagram. | 6 |