

B.E. Information Technology Eighth Semester
IT8054 - Elective-IV : Multimedia Systems and its Application

P. Pages : 1

Time : Three Hours



GUG/W/18/2059

Max. Marks : 80

- Notes :
1. Same Answer book must be used for all questions.
 2. All questions carry marks as indicated.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Illustrate your answers wherever necessary with the help of neat sketches.

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|-----------|-----|--|---|
| 1. | a) | Describe the history of Multimedia systems. | 8 |
| | b) | Explain the term "Multimedia Authoring". Explain its paradigms. | 8 |
| OR | | | |
| 2. | a) | Explain different Multimedia software tools. | 8 |
| | b) | Write short note on RAID and its levels. | 8 |
| 3. | a) | What is the significance of conversion of Analog to Digital Audio? Explain the term "digitization" of an audio signal. | 8 |
| | b) | Explain: | 8 |
| | i) | Nyquist Theorem | |
| | ii) | Sampling Theorem | |
| OR | | | |
| 4. | a) | Discuss MIDI in detail. | 8 |
| | b) | Write short note on Audio compression. | 8 |
| 5. | a) | Differentiate between Run Length and variable length encoding. | 8 |
| | b) | Explain Huffman coding along with its pros and cons. | 8 |
| OR | | | |
| 6. | a) | Explain Shannon - Fano Algorithm. | 8 |
| | b) | Explain LZW compression Algorithm. | 8 |
| 7. | a) | Explain $L^* a^* b$ colour model in detail. | 8 |
| | b) | Explain H.261 Compression. | 8 |
| OR | | | |
| 8. | a) | Enlist and explain standard system Independent formats of an Image. | 8 |
| | b) | Explain JPEG compression in detail. | 8 |
| 9. | a) | Explain OSI Network Layers in the context of multimedia networks. | 8 |
| | b) | Write short note on multiplexing technologies. | 8 |
| OR | | | |
| 10. | a) | Explain Quality of Service (QoS). | 8 |
| | b) | Explain IP-Multicast. | 8 |
