Pokhara University

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| Level: Bachelor | Semester – Fall | Year : 2011 |
| Programme: BE | | Full Marks: 100 |
| Course: Multimedia Systems | | Pass Marks: 45 |
| Time : 3hrs. |

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| *Candidates are required to give their answers in their own words as far as practicable.* |
| *The figures in the margin indicate full marks.* |
| Attempt all the questions. |

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|  | 1. Explain the various image recognition steps. 2. What is a speech recognition system? Mention the features of speaker independent recognition system? 3. What is a medium? List the different types of medium. | 5  5  5 |
|  | 1. What are the various methods of controlling animation? Explain briefly. 2. Discuss about the visual aspect of a video signal. 3. What is clustered –dot ordered dithering? | 7  5  3 |
|  | 1. Describe the Huffman encoding process with an example. 2. Point out why H. 261 px64 uses limited motion search. 3. Explain the Lossy Sequential DCT-based mode of JPEG after the input image has been prepared for compression. | 5  2  8 |
|  | 1. Explain about the formats of CD-ROM Extended Architecture. Illustrate with the appropriate block layouts. 2. Explain how error handling is done in CD-DA. 3. What is the role of Video RAM in the video processor in DVI still-image processing? | 8  5  2 |
|  | 1. Define real time systems. Explain the characteristics of real time OS. 2. Discuss about the Hybrid systems for communication architecture. How does it differ from Digital systems? | 7  8 |
|  | 1. Define hypertext and hyper media with example. Differentiate between ODA and MHEG with suitable block diagram. 2. Mention and briefly describe the different layers of hypertext system architecture. 3. What is the significance of a MIDI message? List the types of MIDI messages. | 8  4  3 |
|  | Write short notes on **any two:**   1. SGML 2. Eight to fourteen modulation 3. MPEG audio encoding | 2×5 |