

# END TERM EXAMINATION

FIFTH SEMESTER [MCA] DECEMBER 2011

Paper Code: MCA 305

Subject: Multimedia Technologies

Time: 3 hours

Maximum Marks: 60

Note: Q.no.1 is compulsory. Attempt one question from each unit.

- Q1. (a) What are the various hardware platforms available for multimedia? (5)  
(b) On what criteria you would emphasis while selecting a multimedia system? (5)  
(c) Differentiate between BMP, JPG GIF and TIFF Image file formats mentioning where each is used? (6)  
(d) Explain the main aspects of MIDI specification. (4)

## UNIT – I

- Q2. (a) How CD is different from DVD. Discuss about recent development in RAM technologies? (5)  
(b) What is optical disc? How it is different from Magnetic Optic disk? (5)
- Q3. (a) Explain Card and Page based authorizing tools with examples. (5)  
(b) Differentiate between STP and UTP cables with their advantages and disadvantages. (5)

## UNIT –II

- Q4. (a) Explain Frame Replenishment and Motion Compensation for video compression. (5)  
(b) Discuss the digitization of Audio and Video objects. (5)
- Q5. (a) What determines the total number of colors that can be displayed on a monitor and how? (5)  
(b) Explain the main aspects of MIDI specification. (5)

## UNIT – III

- Q6. (a) Discuss the history of internet? (5)  
(b) Define the following: (5)  
Web servers, Web Browsers, Web Page Marker

- Q7. (a) Explain digital audio file formats? Explain. (5)  
(b) Discuss the use of text in multimedia. Explain the term hypermedia and hypertext? (5)

#### UNIT – IV

- Q8. (a) Explain the concept of digital communication and new media? (5)  
(b) Discuss the Digital Radio and Digital Broad Casting? (5)
- Q9. (a) An audio clip has duration of 8 minutes. The highest frequency of sound wave is 15 KHz. This is to be sampled using 8bits per sample and in stereo mode, calculate the file size. Mention any assumptions made. (5)  
(b) Consider a TV camera where the maximum intensity of a color signal is represented by 1 volt. An unsaturated magnet a signal is formed by mixing 70% R, 20% G and 60%B. what is the luminance output voltage for the signal? What would this value be if the magnet color is saturated. (5)

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