

(Please write your exam roll no.)

Exam Roll No. ....

# END TERM EXAMINATION

FIFTH SEMESTER [MCA] DECEMBER 2013

**Paper code: MCA 313**

**Subject: Multimedia Technology(new)  
(Batch 2010 Onwards)**

**Time: 3 Hours**

**Maximum Marks :60**

**Note: Attempt any five questions including Q. no. 1 which is compulsory. Select one question from each Unit.**

- Q1 (a) Explain the buliding block of multimedia. (5)
- (b) State the meaning of the term “bits per second” in relation to digitized audio and video.  
What is the meaning of term “Compression”? (5)
- (c) Differentiate between JPEG and BMP Formats. (5)
- (d) Explain the concept of Digital Radia. (5)

## UNIT-I

- Q2 (a) Explain the various storage devices used for multimedia projects. (5)
- (b) Illustrate the meaning of term “Multimedia Highway”. (5)
- Q3 (a) Describe the various authoring tools for developing Multimedia Product. (5)
- (b) Explain the various standards which has to be maintained while producing Multimedia. (5)

## UNIT-II

- Q4 (a) Explain the following terms relating to Compression:-  
(i) Entropy encoding (ii) Source encoding. (5)
- (b) With the aid of an example, describe the rules that are followed to construct the Huffman Code tree for a transmitted character set. (5)
- Q5 (a) Describe the five main stages associated with the baseline mode of operation of JPEG. (5)

(b) Explain the following terms related to Video Compression:-

- (i) Moving Pictures      (ii) MJPEG      (5)

### UNIT-III

Q6 (a) Using a schematic diagram explain the meaning of following terms related to internet:-

- (i) A Web Server      (ii) a browser      (iii) WWW      (5)

(b) What are the different connections devices need for setting an internet connection.

Explain it.      (5)

Q7 (a) Explain the various software tools needed for developing a dynamic web portal.      (5)

(b) Explain:-

- (i) Plug-in      (ii) Delivery Vehicle.      (5)

### UNIT-IV

Q8 (a) What are the future scope of multimedia ? Explain Digital Communication.      (5)

(b) Explain the role of Project Planning and Cost Estimation in developing multimedia projects.      (5)

Q9 (a) Device the time to transmit the following digitized images at both 64 Kbps and 1.5 Mbps:-

A 640 x 480 x 8 VGA- Compatible image.      (5)

(b) The LZ algorithm is to be used to compress a text file prior to its transmission. If the average number of characters per word is 6, and the dictionary used contains 4096 Words, derive the average compression ration that is achieved relative to using 7 bit ASCII code words.      (5)