## BCA / M-14 MULTIMEDIA TECHNOLOGY Paper—BCA-365

Time allowed: 3 hours] [Maximum marks: 80

Note: Student will be required to attempt five questions in all. Question number 1 is compulsory. In addition to compulsory question, student will have to attempt four more questions selecting one question from each unit. All questions carry equal marks.

- 1. Compulsory question.
  - (a) What are main applications of multimedia in business?
  - (b) What is the difference between LCD and CRT monitor?
  - (c) Write short note on video editing tools.
  - (d) Write short note on Chroma subsampling.
  - (e) Write short note on differential coding of audio.
  - (f) Write short note on MIDI.
  - (g) Explain run -length coding.
  - (h) What is the difference between H. 261 and MPEG?

 $8 \times 2 = 16$ 

## Unit—I

2. (a) What is Multimedia? Explain various components of Multimedia. How it differs from Hypermedia?

(b) What is VRML? Explain various features of VR1V.L.	10
3. (a) Define Multimedia Authoring. Explain different types of Authoring tools	. 10
(b) Explain various categories of multimedia hardware and software.	6
Unit—II	
4. (a) What is file Format? Explain any five popular file formats.	6
(b) What do you mean by graphics and image data representation? Explain	
various graphic and image data types in detail.	10
5. Explain various analog and digital video standards. 16	
<b>Unit -111</b>	
6. (a) What is digitalization? Explain various steps of digitalization of sound.	8
(b) Explain various digital audio formats.	8
7. (a) Write short note on lossless predictive coding.	6
(b) Explain DPCM. How it differs from PCM?	10
Unit—IV	
8. (a) What is Huffman coding? Explain various steps of Huffman coding	
algorithm with example.	10
(b) Explain in brief JPEG standard for image compression.	6
9. Explain various video compression techniques in detail.	16