

QP Code : **6214**

(3 Hours)

[Total Marks : 80

N. B. : (1) Question No. 1 is **compulsory**.
(2) Attempt any **three** questions out of remaining **five** questions.

1. (a) Explain applications of multimedia for entertainment, education and health science? 5
- (b) Compare RIFF & TIFF file formats. 5
- (c) Explain the production process of multimedia applications, with an example. 5
- (d) Explain Card and Page based Authoring tools with Examples? 5
2. (a) Discuss the use of text in multimedia. Explain the term Hypermedia and Hypertext? 10
- (b) Consider an image of dimensions 640×480 and color depth of 16 bits. If this image is to be transmitted along a 56 kbps line from a Web server, calculate how long it would take before the entire image is visible on the screen? 10
3. (a) Explain different architectures for content organization in multimedia databases 10
- (b) Explain and draw neat labelled diagram for encoder & decoder of H. 261. 10
4. (a) An MPEG-1 video has a frame sequence : IBBPBBPBBPBB. Determine the size of GOP. Derive the transmission sequence of the frames? 10
- (b) What is dictionary based compression? Show all the steps of LZW compression including dictionary formation for the text string "AB\$ABA\$ABA\$ABAAC\$AB". 10
5. (a) Explain speech coding using ADPCM. 10
- (b) Explain media abstraction and query language. 10
6. Write short notes on 20
- (a) JPEG Compression standard
- (b) Multimedia over ATM networks
- (c) IETF Multimedia Standards
- (d) Main aspects of the MIDI specifications