MULTIMEDIA TECHNOLOGY

Time : Three Hours   Maximum Marks : 90

Compulsory Question

1. Answer all the following :
   (a) Name any *two* Audi file formats.
   (b) What is the full form of NTSC and PAL ?
   (c) What is JPEG ?
   (d) What is the use of ADPCM ?

(e) Define Hypermedia.

(f) What do you mean by Animation ?

(g) What is the use of Multimedia in entertainment ?

(h) Name any *two* Animation file formats.

(i) What is Computer audio ?   9×2=18

SECTION-I

2. (a) What is Multimedia computer system ? What are its typical charactreistics ? Explain different applications of Multimedia.   9

   (b) What are the different hardware and software requirements for text, graphics and video components of Multimedia ?   9

3. Explain the following :

   (a) Card and Page based authoring tools.

   (b) Object-oriented authoring tools.   18

SECTION-II

4. (a) Explain different Colour models in images with the help of suitable diagrams.   9

   (b) Explain various Graphics file formats in detail.   9

5. What are the advantages of Digital representation of video ? Explain Chroma subsampling and CCIR standars with the help of suitable diagram.   18

SECTION-IIII

6. (a) Explain the hardware aspects of MIDI with the help of suitable diagram. Also explain the structure of MIDI messages.   9

   (b) Explain Differential coding of audio in detail.   9

7. Explain the following with the help of suitable diagrams:

   (a) Pulse code modulation.

   (b) Lossless predictive coding   18

SECTION-IV

8. What is General data compression scheme ? Explain Variable length coding and Transform coding in detail.   18

9. What do you mean by Video compression ? Explain MPEG and H.261 video compression techniques in detail.   18