

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]
(2064)

14730

B. Tech 6th Semester Examination

Multimedia Technology

IT(ID)-6004

Time : 3 Hours

Max. Marks : 100

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all, selecting one question from each of the sections A, B, C and D and all the subparts of the question in Section E.

SECTION - A

1. Explain the frequency domain compression of analog sound signal. Why it is necessary? Also explain the digitization of audio signal in detail. (20)
2. (a) Write short notes on the following :
(a) Multimedia (b) Metaphors (c) Masking (15)
(b) Explain the architecture of sound card. (5)

SECTION - B

3. How many HDTV systems have and are being developed worldwide? Explain it in detail and also give the working principle of HDTV. (20)
4. (a) Explain the principles of following phenomenon:
(a) Image scanning.
(b) Frame Grabber
(c) Raster graphics. (15)

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- (b) Give a list of various file formats for graphics supported by multimedia. (5)

SECTION - C

5. What is the difference between lossy and lossless compression? Explain different coding techniques for compression. (20)
6. Explain Quick Time movie file format. Also give the comparison between Quick Time and AVI file format. (20)

SECTION - D

7. Discuss the significance of synchronization in multimedia. Also distinguish between Inter-object and Intra-object synchronization. (20)
8. Explain the life cycle models used in development of multimedia applications. (20)

SECTION - E

9. (a) Differentiate Hypertext and hypermedia.
(b) How are DVIs different from CDIs?
(c) Give the working principle of CCD camera.
(d) List various applications of multimedia technology.
(e) Compare and contrast between pitch and voice.
(f) What could be the maximum dot pitch for 800×600 resolution?
(g) Give steps in configuring a sound card.
(h) What is content analysis?
(i) What are the different components of multimedia?
(j) Explain the concept of morphing. (2×10=20)