

Total number of printed pages – 4

B. Tech
BCSE 3302

Fifth Semester Examination – 2008

MULTIMEDIA TECHNOLOGIES

Full Marks – 70

Time – 3 Hours

*Answer Question No. 1 which is compulsory
and any **five** from the rest.*

*The figures in the right-hand margin
indicate marks.*

1. Answer the following questions : 2×10
- (a) What is multimedia system ? How data are transmitted in multimedia system ?
 - (b) Explain the role of pixel displaying an image on the screen.

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- (c) What are the major components of a typical Multimedia System ?
 - (d) What is color perception curve ?
 - (e) What is Motion JPEG ?
 - (f) What are the two levels of compression in DVI and compare them ?
 - (g) What is the need for compression ?
 - (h) What are two possible methods for conducting personalization in a multimedia system ?
 - (i) Does the video memory determine in any way the image that being displayed on the screen ?
 - (j) What is meant by frames and frame rate in connection with motion video ?
2. (a) What is Multimedia system architecture ? What are QOS standard for multimedia system ? 5
- (b) What is the advantages of interlaced video ? What are some of its problem ? 5

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3. (a) Explain the raster scanning process. How does it help in displaying images on a screen ? 5
- (b) What are the basic components of an audio system ? Briefly describe their function ? 5
4. (a) What is general MIDI specification and what is its utility ? 5
- (b) What is the full form of MPEG ? What kinds of files are stored using the MPEG file format ? 5
5. (a) Discuss the MPEG-1 Video standard mentioning the role of I-, P- and B- frames. 5
- (b) Discuss how the "Hypermedia & Multimedia systems and technologies are important for the effective development of quality multimedia-driven & interactive applications" ? 5
6. (a) What considerations would you have when designing an architecture for a multimedia information system ? 5

- (b) Define digital video interactions (DVI).
What are the features and power of DVI
technology? 5
7. (a) How does sound card processes WAV
files? 5
- (b) Describe the organization of a file-system
best suitable for multimedia application. 5
8. (a) What is meant by helical scan and what is
its advantage?
- (b) What are the major aspects of MIDI
specification?
- (c) What is the difference between video and
motion picture?
- (d) What do you mean by media steam
protocol?

2.5x4