

Total No. of Questions: 09

B.Tech. (IT) (2011 Onwards Elective-III) (Sem. – 7, 8)

MULTIMEDIA AND APPLICATIONS

M Code: 71991

Subject Code: BTCS-910

Paper ID: [A3059]

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION A

1. a) Define Multimedia.
b) What is the difference between Hyper text and hypermedia? Illustrate with example.
c) Write the full form of SGML and MHEG.
d) What is the advantage of Nyquist's Sampling theorem.
e) What is the storage size required to store binary image of size 1024 x 1024.
f) What is MP3?
g) What is the significance of Run Length coding?
h) Why frequency Domain coding is useful?
i) Write the difference between BMP and PDF file formats?
j) Identify the Hardware requirements for deploying any multimedia application

SECTION B

2. Explain the characteristics of a Multimedia system.
3. Define multimedia authoring tool? Explain briefly any two multimedia authoring tools.
4. Explain briefly the different components of a MIDI System.
5. Explain Huffman coding Algorithm by using suitable example.
6. Discuss about different Color Models.

SECTION C

7. Give the basic principle of video compression. Explain MPEG based video compression technique.
8. a) What is RAID and write its key benefits? Which levels of the RAID standards are used very frequently for Commercial systems and Why?
b) Discuss in detail the various CD standards used for storing multimedia data.
9. Write short note on following:
 - a) Distributed Multimedia systems
 - b) MHEG