

Roll No. 

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Total No. of Questions: 09

Total No. of Pages: 02

**B. Tech. (IT) (Sem. 7, 8)**  
**MULTIMEDIA AND APPLICATIONS**  
**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. Write briefly:**

- a) List any four desirable features of multimedia systems.
- b) What is the role of multimedia servers?
- c) Where do we use pattern substitution?
- d) Name the various multimedia authoring tools.
- e) What is the role of QoS in multimedia communication?
- f) How analog signal is different from digital signal?
- g) List the features of MPEG compression.
- h) Write the full forms of: JPEG, MIDI, TIFF and SGML.
- i) How multimedia plays a positive role to promote education?
- j) Give the names of various audio compression methods.

**SECTION B**

2. Discuss the various challenges and applications of multimedia.
3. Describe the various DVD standards. Also list its applications.

4. How can an audio be delivered over a network? Explain the whole process using well labeled diagram.
5. What is the significance of MPEG video bitstream? How decoding the MPEG video in software is done?
6. Write short notes on:
  - (a) Huffman Coding
  - (b) Transform Coding

### SECTION C

7. How to insert the. Image and video in the multimedia system?
8. Explain the various source coding techniques. Also mention their application areas.
9. Give details of:
  - (a) GIF compression
  - (b) Distributed multimedia systems