

Roll No. ....

Total No. of Pages : 2

Total No. of Questions : 09

**B.Tech. (IT) (Sem.-7/8)**

**MULTIMEDIA AND APPLICATIONS**

**Subject Code : IT-406**

**Paper ID : [A0532]**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTION TO CANDIDATES :**

- 1. SECTION-A is COMPULSORY.**
- 2. Attempt any FOUR questions from SECTION-B.**
- 3. Attempt any TWO questions from SECTION-C.**

**SECTION-A**

**(10 × 2 = 20 Marks)**

1. Write short notes on :

- What is sampling and quantization?
- What is phoneme? Explain its uses.
- Distinguish between multimedia and hypermedia systems.
- Explain the compression technique used in multimedia.
- Suggest any five applications of multimedia other than application in the field of entertainment and education.
- Compare lossy and lossless compression.
- What do you mean by visually coupled systems?
- Explain how media streaming protocol streams audio and video over the internet.
- What do you mean by desktop virtual reality ?
- What is DVI technology ?

**SECTION-B**

**(4 × 5 = 20 Marks)**

2. What are the various limitations of workstation operating systems for multimedia applications?

3. Discuss the hardware requirements of a multimedia computer.
4. How analog sound signal is converted to digital sound signal? Explain.
5. Explain the role of multimedia in entertainment and business.
6. What are the various multimedia file system requirements?

**SECTION-C**

**(2 × 10 = 20 Marks)**

7. What do you mean by multimedia? Explain the desirable features of a multimedia system. Also explain the various components of a multimedia system.
8. Write a note on digital video compression. Also explain MPEG motion video compression. How is it different from JPEG?
9. Write a note on the following :
  - (a) Intelligent Multimedia Systems
  - (b) Virtual Reality