

Total No. of Questions : 10]

SEAT No. :

P2020

[Total No. of Pages : 2

[4858] - 1108

T.E. (Information Technology) (Semester - II)

MULTIMEDIA TECHNOLOGIES (314452)

(2012 Pattern) End Semester

Time : 2.30 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Neat diagram must be drawn wherever necessary.
- 3) Figures to the right indicates full marks.
- 4) Assume suitable data, if necessary.

Q1) a) What is Multimedia authoring tools. Which authoring tools are used in Entertainment industry? [5]

b) Explain the principle of LZ compression algorithm. [5]

OR

Q2) a) What is an image? Distinguish between binary, grayscale and color images [5]

b) Explain any one image enhancement techniques using point processing. [5]

Q3) a) Draw the block diagram of JPEG encoder and explain in brief [5]

b) Discuss the fundamental characteristics of sound waves. [5]

OR

Q4) a) In relation to MIDI, distinguish between channel messages and system messages giving examples. [5]

b) Write short note on RMF and WMA file formats. [5]

P.T.O.

- Q5)** a) Why inter-frame correlation is important in video encoding? How I, P and B-frames technique help in the MPEG video compression technique? [8]
- b) Distinguish between component, composite and S-video signal formats. Explain their applications. [8]

OR

- Q6)** a) Why do we need video file formats? Explain H.261 and H.263 briefly. [8]
- b) Describe MPEG-4 decoder and encoder with the help of diagrams. [8]
- Q7)** a) Explain the terms Shape Tweening and Motion Tweening with the help of an example with respect to animation. [8]
- b) What is OPEN GL? Explain OPEN GL rendering pipeline with key stages. [8]

OR

- Q8)** a) State and explain techniques of animation. [8]
- i) Cel animation
- ii) Stop motion animation
- b) How animation differs from the video? Explain tools used to create the animation. [8]

- Q9)** a) Explain the need for synchronization in multimedia applications. State and explain types of synchronizations. [6]
- b) Explain CCD and its use in the multimedia applications. [6]
- c) Explain with diagram Android Multimedia Framework architecture. [6]

OR

- Q10)** a) What is virtual reality? Describe the input devices used in Virtual Reality [6]
- b) What is GStreamer? Explain. [6]
- c) Explain Head Mounted Displays and their use in multimedia applications. [6]

