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]**