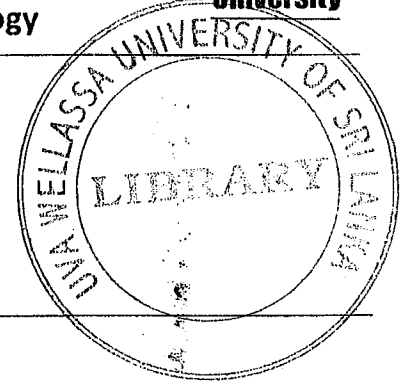


Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Computer Science and Technology
300 Level 2nd Semester Examination Dec.-2018 /Jan.-2019
CST374-2 Multimedia and Hypermedia Technology



Instructions to candidates

Number of questions: Four (04)

Mark allocation: 100

Time Duration: Two (02) hours

Answer all questions.

1.
 - a. List five (05) basic elements of multimedia and state real world applications of those elements. (10 mark)
 - b. Briefly explain the two (02) types of a multimedia presentation with examples. (04 mark)
 - c. What is meant by Multimedia Authoring? Describe in brief. (03 mark)
 - d. Briefly explain the following terms.
 - i. Multimedia Authoring Metaphors
 - ii. Automatic Authoring (08 mark)
2.
 - a. Does the "Content Design" involve as an issue in designing a multimedia application? Justify your answer with appropriate examples. (10 mark)
 - b. Describe the following techniques of representing an image
 - i. Bitmap techniques or Bitmap Graphics
 - ii. Vector techniques or Vector Graphics (10 mark)
 - iii. What is meant by Aliasing and Anti- Aliasing technique in Image processing? (05 mark)
3.
 - a. Briefly explain the key differences between lossless and lossy compression in data compression. (04 mark)
 - b. What is meant by frequency in sound? (04 mark)
 - c. List three (03) advantages and three (03) disadvantages of video compression. (06 mark)
 - d. What is Musical Instrument Digital Interface (MIDI)? (04 mark)
 - e.
 - i. What is Huffman Coding? (02 mark)
 - ii. Draw the Huffman Tree and determine the values for each symbol.

Table 1: Frequency Table

Symbol	A	B	C	D	E
Frequency	16	12	10	4	4

(05 mark)

4.

- a. What is meant by Color Harmonies? Briefly explain three color schemes. (12 mark)
- b. Briefly describe dithering image processing technique. (03 mark)
- c. Briefly explain two (02) applications of video streaming with examples. (06 mark)
- d. Briefly explain the following principles of animation with examples.
 - i. Anticipation
 - ii. Secondary action (04 mark)

