

Instructions to candidates

Number of questions: Four (04)

Time allocation: Two (02) hours

Mark allocation: 100

Answer all questions.

1.
 - a. What are the five (05) basic elements of multimedia? (3 mark)
 - b. Name and describe three (03) applications of multimedia except in engineering and medical fields. (6 mark)
 - c.
 - i. Define Multimedia System.
 - ii. Briefly describe the characteristics of Multimedia Systems. (4 mark)
 - d. Briefly explain the followings.
 - i. Multimedia authoring
 - ii. Card and page based tools
 - iii. Linearization versus Externalization in automatic authoring (12 mark)
2.
 - a. Compare Bitmap technique with Vector technique in image representation. (3 mark)
 - b. An image that has logical pixel dimensions of 198 pixel width and 149 pixel height to be displayed on a screen with resolution of 72 dpi (dots per inch). What will be the image size on the screen? (3 mark)
 - c.
 - i. List three (03) distinct color models used in multimedia. (3 mark)
 - ii. Briefly explain how the human visual system senses color. (5 mark)
 - d.
 - i. What is meant by Color Harmonies? (1 mark)
 - ii. Briefly explain three (03) color schemes. (6 mark)
 - iii. Define aliasing and antialiasing in computer graphics. (4 mark)
3.
 - a. Define three (03) main analogue broadcast video standards. (3 mark)
 - b. What is meant by video streaming? (4 mark)
 - c. Name and describe three (03) video transmission modes. (6 mark)
 - d. Write short notes on the followings.
 - i. Digitization
 - ii. Nyquist sampling theory
 - iii. Musical Instrument Digital Interface(MIDI) (12 mark)

