



MACHAKOS UNIVERSITY

University Examinations for 2021/2022

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

SECOND YEAR SPECIAL / SUPPLEMENTARY EXAMINATIONS FOR
BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

SIT 240: MULTIMEDIA SYSTEMS

DATE: 29/8/2022

TIME: 2.00-4.00 PM

INSTRUCTIONS:

Answer Question ONE and any other TWO Questions

QUESTION ONE (30 MARKS)

- a) Distinguish between linear and non-linear multimedia. (4 marks)
- b) Multimedia systems exhibit salient features. Discuss. (4 marks)
- c) Explain circumstances when MIDI can be considered compared to audio. (3 marks)
- d) Using texts in multimedia requires caution. Discuss. (3 marks)
- e) Outline THREE intangible needs of when you are making multimedia. (3 marks)
- f) Differentiate between cel animation and computer animation. (4 marks)
- g) Explain three analogue video standards used in the world. (3 marks)
- h) Defend reasons we need data compression in multimedia systems. (2 marks)
- i) Giving examples explain lossless and lossy compression technique. (4 marks)

QUESTION TWO (20 MARKS)

- a) Discuss three goals of multimedia security. (6 marks)
- b) Multimedia systems requires specific characteristics for one to develop a multimedia project. Explain four major characteristics. (8 marks)
- c) Discuss three methods and tools of distributing multimedia content. (6 marks)

QUESTION THREE (20 MARKS)

- a) Outline and explain five authoring paradigms used in authoring programs. (10 marks)
- b) Discuss five types of digital watermark used to protect multimedia projects. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Explain Three activities to make my audio file clean (6 marks)
- b) Outline and explain FIVE skillsets required for a multimedia project. (10 marks)
- c) Distinguish between alpha development and beta development in multimedia projects. (4 marks)

QUESTION FIVE (20 MARKS)

- a) You have been contracted to develop a multimedia project. Explain the stages you would go through to have the project ready for the user. (8 marks)
- b) Outline the process of creating a digital audio. (6 marks)
- c) Giving relevant example explain THREE areas of multimedia application. (6 marks)