



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY XAMINATIONS FOR THE DEGREE OF BACHELORS OF EDUCATION
WITH I.T
3RD YEAR 1ST SEMESTER, 2016/2017 ACADEMIC YEAR
KISUMU CAMPUS

COURSE CODE: SCS 310

COURSE TITL: MULTIMEDIA AND GRAPHICS

EXAM VENUE:

STREAM: EDUCATION ARTS.

DATE: APRIL 2017

TIME: 2 HOURS

Instructions

1. Answer question one (compulsory) and any other two questions
2. Candidates are advised not to write on the question paper
3. Candidates must hand in their answer booklets to the invigilator while in the examinations room

QUESTION ONE (30 MARKS)

- a) What is multimedia? (4 Marks)
- b) Explain the following Multimedia Authoring Metaphors (6 Marks)
- i. Slide show metaphor
 - ii. Hierarchical metaphor
 - iii. Iconic/flow-control metaphor
- c) State and explain the FOUR different multimedia elements. (4 Marks)
- d) Explain the following software AUTHORING tools (8 Marks)
- i. Music sequencing and notation
 - ii. Digital audio
 - iii. Graphics and image editing
 - iv. Video editing
- e) A multimedia application is developed in stages, identify and briefly discuss the **four** basic stages of multimedia project development. (8 Marks)

QUESTION TWO (20 MARKS)

- f) Discuss any three features and the functions of a Multimedia Authoring Tools (6 Marks)
- g) State and discuss the **four** animation techniques. (4 Marks)
- h) There exist several color models such as HUE, RGB, CYMK and LAB. Give in full what the four abbreviations stands for? Hence discuss in detail the "HUE" color model? (6 Marks)
- i) Briefly explain five desirable features of a multimedia system. (4 Marks)

QUESTION THREE (20 MARKS)

- a) State **any FOUR** guidelines to be used when choosing a font for multimedia presentation. (4Marks)
- b) Identify and discuss the various types of Authoring Tools used in the development of multimedia applications. (10 Marks)
- c) Explain the following two dimensional transformations citing a matrix representation example of each (6Marks)
- i. Translation

ii. Rotation

iii. Scaling

QUESTION FOUR: (20 MARKS)

a) Write following acronyms are formats of multimedia write them in full (4 Marks)

i. TIFF

ii. GIF

iii. MPEG

iv. JPEG

b) HSB Color Model is based on human perception of color. Explain the three fundamental characteristics of color. (10 Marks)

a) Multimedia may be broadly divided into linear and non-linear categories. Citing examples where necessary, differentiate these categories (6 Marks)

QUESTION FIVE (20 MARKS)

a) Identify some of the imaging and editing tools. (4 Marks)

b) Differentiate between Vector and Bitmap. (6 Marks)

c) Explain any FOUR Application of Multimedia authoring tool (4 Marks)

d) Briefly describe interactive multimedia (2 Marks)

e) Define MIDI and list the advantages and disadvantages (4 Marks)

