



(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR FOUR SEMESTER TWO EXAMINATIONS
FOR THE DEGREE OF BACHELOR OF SCIENCE
COMPUTER SCIENCE**

**COURSE CODE : CSC 421
COURSE TITLE : MULTIMEDIA
TECHNOLOGIES**

DATE: 20/05/2019

TIME: 2:00 P.M – 4:00 P.M

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [30 MARKS]

- a) i. Differentiate between linear presentation and nonlinear multimedia presentation. [4 marks]
- ii) Identify reasons that will make your choice of using multimedia advantageous over a plain presentation. [4 marks]
- iii. Explain to your colleague doing business administration the concept of how hypertext and hypermedia can be used in business. [4 marks]
- b. Illustrate your understanding of two testing methods that can be used to test multimedia. [6 marks]
- c. i. Describe four different classification of fonts in multimedia. [4 marks]
- ii. Distinguish between bitmapped and vector fonts. [4 marks]
- d. i. What is the difference between image resolution and display resolution? [2 marks]
- ii. In what ways are the RGB and CMY color schemes not related? [2 marks]

QUESTION TWO [20 MARKS]

- a. i) Multimedia finds its application in various spheres of life. Explain how it can be of help in the fields of mathematics and medicine. [6 marks]
- ii. Discuss four characteristics of multimedia that make it most appropriate choice for a marketing company seeking to have a global market for its products. [8 marks]
- iii. Describe to your client with reasons, how you will deliver the following multimedia content to him:
- A video of 5.2 GB [2 marks]
- An advert of 450 MB [2 marks]

An educational documentary of 4.2 GB

[2 marks]

QUESTION THREE [20 MARKS]

a) Critically examine three subcategories of analog media devices that can be used in multimedia giving current examples. [6 marks]

b. i. Contrast between an authoring tool and a metaphor [2 marks]

ii. Discuss four metaphors that most authoring programs are based on. [12 marks]

QUESTION FOUR [20 MARKS]

a) Describe three steps involved in image processing [6 marks]

b. i. Sound waves are variations of pressure in a medium such as air created by the vibration of an object and interpreted by the human brain as sound. With the aid of diagrams, discuss three properties of sound. [12 marks]

ii. Give four basic sound editing operations that are performed on audio media. [2 marks]

QUESTION FIVE [20 MARKS]

a) You have been invited to your nearby High School to meet the physics club. You are to make a presentation on the different types of analog video signal. Write what you will present.

[12 marks]

b) As a senior designer in your organization describe with the aid of diagrams different navigational structures they can include in a customer's project. [8 marks]