



TECHNICAL UNIVERISTRY OF MOMBASA

# Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATIONS FOR DEGREE IN:  
BACHELOR OF SCIENCE IN MATHEMATICS & COMPUTER SCIENCE  
BACHELOR OF SCIENCE IN STATISTICS & COMPUTER SCIENCE  
(BMCS/BSSC)

**EIT 4315: MULTIMEDIA SYSTEM**

END OF SEMESTER EXAMINATION

**SERIES: APRIL 2015**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions.

Attempt question **ONE (Compulsory)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

---

**Question One (Compulsory)**

- a) In designing a user interface the main design factor involve appearance and interacting. Briefly discuss how users can navigate using the 4 types of navigation maps so as to help organize the content 8 message **(8 marks)**
- b) Define multimedia and outline the TWO key areas where it can be applied in the market today. **(4 marks)**
- c) Give a definition of a multimedia autonomy system. What key features should such a system provide. **(6 marks)**
- d) Whatever project type you will be developing proper planning is a must, especially the multimedia development as it is extremely complex, costly and time consuming. 80% play 20% development must be there to avoid a disaster in the long run. The planning process is divided into three in multimedia preproduct and post product. Explain in detail the six important steps in the preproduct and planning phase. **(12 marks)**

## Question Two

- a) Explain briefly what a multimedia project **(4 marks)**
- b) What are the major factors to be taken into account when considering strange requirements for multimedia system. **(4 marks)**
- c) The main types of multimedia data are graphics, images audio and video. What technical issues are associated when these data types are integrated in multimedia system? **(8 marks)**
- d) Text and words and symbols in any form, spoken or written are the most common means of communication. Explain the importance of text in Multimedia **(4 marks)**

## Question Three

- a) Explain the term font and its importance in multimedia **(6 marks)**
- b) Explain the THREE attributes in font character **(6 marks)**
- c) Briefly describe the eight hardware and software feature that a multimedia system should possess **(8 marks)**

## Question Four

- a) Graphics are one part of the communication process that visualizes action, expression and thought. Explain FOUR ways in which graphical images are used in multimedia. **(12 marks)**
- b) Explain the difference between column depth and image size/resolution in bitmap image **(8 marks)**

## Question Five

- a) Explain the difference between the two attributes of an analog wave pattern **(6 marks)**
- b) Explain the term midi, how it is represented in multimedia and why it is device independent **(4 marks)**
- c) Sufficient memory must be allocated for strong and archiving files in multimedia  
  
Explain the FOUR different memory and storage hardware devices that can be used in multimedia **(10 marks)**