**THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

# (A Constituent College of JKUAT)
(A Centre of Excellence)

# Faculty of Engineering & Technology

**DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

DIPLOMA IN INFORMATION TECHNOLOGY
(DIT 2K 11M/DIT 11M)

**EIT 2207: MULTIMEDIA SYSTEMS & TECHNOLOGY**

END OF SEMESTER EXAMINATION
**SERIES:** DECEMBER 2012
**TIME:** 2 HOURS

**Instructions to Candidates:**
You should have the following for this examination
- *Answer Booklet*

This paper consist of **FIVE** questions
Answer 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) Define the term Multimedia. **(2 marks)**

b) Differentiate between the following types of multimedia:
   **(i)** Interactive multimedia
   **(ii)** Hyperactive multimedia
   **(iii)** Linear multimedia **(6 marks)**

c) Explain any **THREE** prerequisites that should be present if a multimedia based application is to be captured an appreciable sector of the market. **(6 marks)**

d) Explain the following terms as used in multimedia production. **(3 marks)**
   **(i)** Target audience
   **(ii)** Multimedia presentation
   **(iii)** Multimedia authoring

e) List **THREE** examples of multimedia authoring software. **(3 marks)**

## Question Two

a) Explain **FIVE** characteristics of multimedia presentation. **(10 marks)**

b) Compare and contrast MIDI audio and Digital Audio as used in multimedia technologies.
   **(10 marks)**

## Question Three

a) Multimedia production a complicated process, usually involving many people. Outline **FIVE** professionals who may be involved, for each give a brief description of their roles. **(10 marks)**

b) Explain **FIVE** design issues when working on a multimedia project. **(10 marks)**

## Question Four

a) Explain any **FOUR** video file formats. **(8 marks)**

b) Differentiate between the following terminologies as used in multimedia. Give examples.
   **(i)** Images and Graphics
   **(ii)** Static and Time Varying
   **(iii)** Motion Video and Animation **(12 marks)**

## Question Five

a) List the advantages and disadvantages of the following **TWO** types of authoring tools
   **(i)** Text Editor
   **(ii)** YSIWYG **(6 marks)**

b) Explain what a codec is, and give the functions in multimedia system. **(4 marks)**

c) Give the full names for each of the following abbreviation and briefly explain their uses.
   **(i)** NTSC
   **(ii)** PAL

**(iii)** SECAM
**(iv)** HDTV
(v)     ATSC                                                                 **(10 marks)**