



TECHNICAL UNIVERISTRY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA INFORMATION COMMUNICATION TECHNOLOGY (DICT 13S)

EIT 2206: MULTIMEDIA SYSTEMS

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 **THREE** printed pages

Question One (Compulsory)

- a) State the general convention followed for validating a multimedia presentation (2 marks)
- b) List any FOUR core components of a multimedia system (4 marks)
- c) Explain any FOUR factors that affect the consumer/user acceptance of a multimedia passed application or presentation (8 marks)
- d) Multiple media in multimedia can generally be classified in two main categories. Explain these categories giving suitable examples for each. (6 marks)

Question Two

- a) Explain the following characteristics of multimedia and state how they are related:
 - (i) Non-linearity
 - (ii) Interactivity(4 marks)
- b) Navigation is a major concern when dealing with hypertext. Outline any FOUR navigation aids that can help users to locate information with ease in a multimedia application (8 marks)
- c) Discuss how sound is used in multimedia (8 marks)

Question Three

- a) Define the following types of multimedia giving a suitable example for each:
 - (i) Hyper media
 - (ii) Linear media
 - (iii) Interactive media(6 marks)
- b) Explain FIVE career opportunities that are available to you as a student of multimedia systems. (10 marks)
- c) State FOUR advantages of using Graphic design software over traditional drawing (4 marks)

Question Four

- a) Explain any THREE requisite skills for Graphic design (6 marks)
- b) Explain the following principles of graphic design:
 - (i) Unity
 - (ii) Balance
 - (iii) Scale(6 marks)
- c) Describe any FOUR audio file formats and state the suitability of each. (8 marks)

Question Five

- a) (i) Differentiate between lossy and lossless compression techniques (4 marks)
(ii) List examples of the above techniques in video (2 marks)
- b) Explain the meaning of the following terms as used in multimedia:

- (i) Resolution
- (ii) Clipping
- (iii) CODEC
- (iv) Downsampling

(8 marks)

c) (i) Differentiate between analog and digital video

(4 marks)

(ii) Describe any TWO examples of the above video

(2 marks)