TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN INFORMATION TECHNOLOGY

EIT 2206: MULTIMEDIA SYSTEMS

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2019

TIME: 2 HOURS

DATE: Pick Date Aug 2019

Instructions to Candidates
You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of **FIVE** questions. Attempt any THREE questions.
Do not write on the question paper.

Question ONE

1. **Define the following terms (6 marks)**

    i. **Saturation**

    ii. **Palettes.**

    iii. **Dithering**

2. **Differentiate between the two categories of Multimedia (4 Marks)**

3. **List the components of a multimedia system citing 2 examples for each. (10 Marks)**

Question TWO

1. List the basic features of any multimedia system (2 Marks)

2. Discuss the categories of Graphics editing programs citing examples of each. (6 Marks)

3. Explain what stop motion animation refers to. (2 Marks)

4. List and Explain the different types of stop- motion animation. (10 Marks)

Question THREE.

1. Define the term compression? Differentiate between lossy and lossless compression. (5 Marks)

2. Discuss the two categories of sound (6 Marks)

3. Define the term multimedia authoring? Discuss multimedia authoring tools. (9 Marks)

Question FOUR

1. List three (3) questions that guide the development of a multimedia project (3 marks)

2. Discuss the Phases of Multimedia Authoring (10 Marks)

3. Define the term MIDI citing its advantages and disadvantages. (7 Marks)

Question FIVE

1. State why file or data compression is necessary for Multimedia activities. (4 Marks)

2. Discuss JPEG compression format. (5 Marks)

3. Calculate the size (in bytes) of a digital recording. (6 Marks)

    i. for a 12 second recording at 20.05 kHz, 8-bit resolution, monophonic

    ii. 10 seconds of good music quality at 38.1 kHz, 16-bit resolution, stereo

4. Discuss the attributes of an image (5 Marks)