



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE  
IN INFORMATION COMMUNICATION TECHNOLOGY**

**1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER 2018/2019 ACADEMIC YEAR**

**MAIN CAMPUS**

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**COURSE CODE: ICT 3215**

**COURSE TITLE: MULTIMEDIA TECHNOLOGY**

**EXAM VENUE:**

**STREAM: ICT**

**DATE:**

**EXAM SESSION:**

**TIME: 2.00 HOURS**

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**INSTRUCTIONS:**

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

### **QUESTION ONE 30 MARKS**

- (a) Define the following terms
- i. Hypermedia **(3 Marks)**
  - ii. Multimedia **(3 Marks)**
  - iii. Hyperlink **(3 Marks)**
  - iv. Hypertext **(3 Marks)**
- (b) Outline the areas of hypermedia applications **(4 Marks)**
- (c) Using appropriate examples, explain Multimedia Authoring Tools. **(6Marks)**
- (d) Define Data Stream and explain some of the most common transmission modes **(4 Marks)**

### **QUESTION TWO 20 MARKS**

- (a) Why is file or data compression necessary for multimedia activities **(3 Marks)**
- (b) Using examples, discuss the components (Hardware and software) required for a multimedia system **(8 Marks)**
- (c) Identify and explain the current big application areas in Multimedia **(6 Marks)**
- (d) Discuss the challenges for multimedia systems **(3 Marks)**

### **QUESTION THREE 20 MARKS**

- (a) Give a brief definition of the term MIDI. **(4 Marks)**
- (b) State the areas of multimedia applications in Society. **(5 Marks)**
- (c) Discuss the five multimedia and data formats used **(5 Marks)**
- (d) Differentiate between Vector versus Bitmap **(6 Marks)**

### **QUESTION FOUR 20 MARKS**

- (a) Identify some of the imaging and editing tools **(6 Marks)**
- (b) Discuss the various animation tools and their functions **(6 Marks)**
- (c) The HSB color model is based on the human perception of color. Explain the three fundamental characteristics of color **(8 Marks)**

### **QUESTION FIVE 20 MARKS**

- (a) There are many fonts available, describe the five attributes often used for specifying font **(10 Marks)**
- (b) Explain the different ways to classify typefaces **(10 marks)**