



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

**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**

**DEPARTMENT OF INFORMATION SYSTEMS**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION  
(ARTS AND SCIENCE GROUP)**

**3<sup>th</sup> YEAR 1<sup>ST</sup> SEMESTER 2015/2016 ACADEMIC YEAR**

**MAIN CAMPUS**

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**COURSE CODE: SCS 310:**

**COURSE TITLE: MULTI-MEDIA AND GRAPHICS**

**DATE:**

**TIME:**

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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**

- a) Explain the term multimedia? **(2 marks)**
- b) Explain the characteristics of multimedia? **(3marks)**
- c) What are some of the desired features of multimedia system? **(5 marks)**
- d) Multimedia system comes in applications; describe some of the applications in use today? **(8marks)**
- e) Write short notes about the following multimedia and graphic terms
  - a) Data compression **(4marks)**
  - b) Data conversion **(4marks)**
  - c) Digital data **(4marks)**
  - d) Virtual reality **(4marks)**

## **Question Two**

- a) Describe the differences between Bitmapped graphics and Vector graphics giving examples for each? **(5marks)**
- b) What do graphics do in the industry of design and multimedia? **(5 marks)**
- c) Discuss the factors that determine the quality of a graphic **(5 marks)**
- d) Explain the difference between the cropping and Dithering editing techniques **(5marks)**

### **Question Three**

- a) What is animation **(2marks)**
- b) Explain the common uses of animation in relation to internet transactions of companies like Google **(6 marks)**
- c) A computer can save and interpret graphic images in a variety of formats, describe them in relation to graphic file format **(10 marks)**
- d) Differentiate between an audio file and a video file **(2 marks)**

### **Question Four**

- a) State the practical steps of designing a multimedia graphic application using any multimedia editor of your choice **(5marks)**
- b) Describe the components that form up a multimedia application **(5 marks)**
- c) Differentiate between design and visualization **(4marks)**
- d) Explain the three basic audio multimedia applications **(6marks)**

### **Question Five**

- a) You have been hired to design and create the multimedia application for a TV entertain session what steps you would go through to accomplish the task **(10 marks)**
- b) What is a design strategy and explain the different design principles used in multimedia and graphics industries **(7 marks)**
- c) Describe the multimedia data components used in today's multimedia systems **(3marks)**

**All the best**