

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

# SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS 1<sup>ST</sup>YEAR 1<sup>ST</sup> SEMESTER2016/2017 ACADEMIC YEAR KISII CAMPUS-FULL TIME

**UNIT CODE: SCS 101** 

**UNIT TITLE: INTRODUCTION TO COMPUTERS** 

**EXAM VENUE:** 

DATE: APRIL 2017 EXAM SESSION:

TIME: 2 HOURS

### **Instructions:**

- 1. Answer Question ONE (COMPULSORY) and ANY other 2 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

## **QUESTION ONE (30 marks)**

a) Explain three applications of computers [3 marks]

b) Define the following terms as used in computing

i. Databases [2marks]
ii. Accuracy [2marks]
iii. Computer networks [2marks]
iv. Addressing mode [2marks]

c) Explain the following keyboard shortcuts

[4 marks]

- i. Ctrl-X
- ii. Ctrl-Z
- iii. Ctrl-Y
- iv. **Ctrl-H**
- d) Explain why modern computers contain both Dynamic RAM (DRAM) and Static RAM (SRAM [2 marks]
- e) Explain differences between the following

i. Work station and a notebook
ii. Application program and system program
iii. Bit and byte
[2mark]
[2mark]

f) Define a compiler and explain two disadvantages of using it [3 marks]

g) Convert the following to binary

[4 marks]

30010 15610

h) Explain features of a computer operating systems

# **QUESTION TWO (20 marks)**

a)	Briefly explain the history of computing	[5marks]
b)	Using a diagram explain the components of a database system	[5mark]
c)	State and explain five applications of computers	[5marks]
d)	Discuss five importance of computer networking	[5marks]

# **QUESTION THREE (20 marks)**

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b) Explain the three types of databases

[6marks]

c) Discuss two advantages and two disadvantages of automatic memory management

[4mark]

d) Discuss three advantages and three disadvantages of databases

[6marks]

### **QUESTION FOUR (20marks)**

a)	State and explain five services provided by operating systems	[5mark]
b)	Define hyperlink and explain what it does and its importance	[5mark]

c) Explain the steps of mail merging in word processing [6marks]

[6marks] d) Discuss any four components of a computer

#### **QUESTION FIVE (20marks)**

- a) Define a web browser and discuss five features of a web browser [6mark]
- b) Briefly explain four characteristics of RISC as used in computer architecture

[4marks]

- [4marks] c) Differentiate between top-down and bottom –up approaches
- d) Define a computer programming language and explain the steps of developing a [6 marks] program