



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

**BED ( ECE) Y1S1**

**COMPUTER ORGANIZATION AND APPLICATION EXAMINATION**

**UNIT CODE:SCS 3111**

**DATE: DECEMBER 2013**

**TIME: 2 HOURS**

**INSTRUCTIONS:**

- i. This paper contains five (5) questions.**
- ii. Question ONE is Compulsory and any other TWO questions**
- iii. Answer the questions on the booklet provided**

**Mobile Phones are not allowed in exams room**

Q1(a) Convert the following binary digits into decimal number system. (10 mks )

(i) 000010 (ii) 0101000 (iii) 010010 (iv) 0111011 (v) 10101010

(b) Convert the following decimal numbers into binary digits. (10 mks )

(i) 50 (ii) 100 (iii) 45 (iv) 20 (v) 35

(c) Assume that you are preparing a science lesson plan for class one, explain how you will utilize the paint application program toolbar and menu features in coming up with a teaching aid. ( 10mks )

Q2. Explain in detail how you can apply computer system hardware in ECDE teaching. ( 20mks )

Q3. Identify and explain any five types of the following types of software (20 mks)

- (i) Operating system
- (ii) Utility software
- (iii) Programming languages
- (iv) Application packages
- (v) In house applications

Q4. Describe the common cause of virus and suggest strategies you would put in place to manage virus attack. ( 20mks )

Q5. Assuming that you have been appointed to be in charge of laptop program in your School. Explain the preparations and implementation process activities you will undertake to ensure proper ICT integration. ( 20mks )

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## **BED ( ECE) Y1S1**

### **Course outline**

**COURSE TITLE: COMPUTER ORGANIZATION AND APPLICATION**

**Course Code: SCS 3111**

**LECTURER: Mr. Abila James**

#### **Aim**

This course unit aims at enabling students to understand the computer concepts and apply them

#### **Objectives:**

**The Course unit will enable learners to:**

- i. Understand concepts in computer system
- ii. Apply computer concepts and skills

#### **Definition of computer**

**Computer functions:** *data capture, processing, storage, retrieval, output and communication in education context.*

#### **Classification of computers**

#### **Computer systems:**

Hardware, people ware and Software

Software system: system software, application software

## **LEARNING OUTCOME**

### **Learning Outcome**

Students are expected:

- i. Understand concepts in computer systems
- ii. to be skilled and proficient in computer use and applications

## **LEARNING ACTIVITIES**

- Group Work
- Individual Presentation
- Lectures
- Excursions

## **EVALUATION**

Project Work – 50%

Examination – 50%

### **Teaching Learning Materials/Resources**

- Computers; laptop, mobile phone and internet
- Power point slides and video shows
- Whiteboard and marker

## **READING LIST**

Onunga (2005). *Introduction to computers*. Mariwa publishers. Nairobi Kenya

David D (2011). *The PC Support Handbook*. Dumbreck Publishing. ISBN: 09521484-6-3, 10<sup>th</sup> Edition - 8<sup>th</sup>