



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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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, 10th Edition - 8th