



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

**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**

**DEPARTMENT OF COMPUTER SCIENCE & SOFTWARE ENGINEERING**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF S**

**1<sup>st</sup> YEAR SEMESTER 1 2018/2019 ACADEMIC YEAR**

**MAIN CAMPUS**

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**COURSE CODE: ICT 3112**

**COURSE TITLE: UNIX/LINUX SYSTEM ADMINISTRATION**

**EXAM VENUE:                      STREAM ICT**

**DATE:                                      EXAM SESSION:**

**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 30 MARKS

The following are basic Unix/Linux commands briefly describe their functions

- (a) (i) Cat (2 Marks)
- (ii) Spell (2 Marks)
- (iii) Ed (2 Marks)
- (iv) Ls -l (2 Marks)
- (v) Cal (2 Marks)
- (vi) Mount (2Marks)
- (vii) Pipe (2 Marks)
- (viii) Cp (2 Marks)
- (ix) rm (2 Marks}
- ( x) ls (2 Marks)

(b) What is the sole job of a directory in Unix/Linux operating systems? (4 Marks)

(c) Who will be recipient of the following instruction

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$mail -s "Test Message" admin@yahoo.com (2 marks)
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(d) What is syntax. (2 marks)

(e) List two shells as used in Unix operating system.(2 marks)

## QUESTION TWO 20 MARKS

- a) Briefly describe the four concepts that unite all the versions of Unix. (12 Marks)
- b) What are the two facilities offered by Unix/Linux. (4 Marks)
- c) Unix Super user (Administrator) has a number of security rules and mechanisms to enforce security in a network list four of them. (4 Marks)

### **QUESTION THREE 20 MARKS**

- (a) There are three basic types of files In Unix/Linux operating systems. Briefly describe the files. (9 Marks)
- (b) List four advantages of Unix/Linux file systems (4Marks)
- (c) \* and ? are metacharacters in Unix/Linux which have a special meaning. Explain the meanings (6 marks)
- (d) What is an invisible file in Unix/Linux? (1Mark)

### **QUESTION FOUR 20 MARKS**

- (a) A directory contains several files write a command in Unix that would select only documents files created in the month of MAY (4 marks)
- (b) How do you create a Directory in Unix/Linux operating systems (4 Marks)
- (c) Every file in Unix/Linux has attributes. Describe the three main file attributes of Unix/Linux operating system. (6 Marks)
- (d) When a Unix system is switched ON the shell goes through Initialization process name the two files it read during this process. (6 Marks }

### **QUESTION FIVE 20 MARKS**

- (a) Briefly describe the main purposes of DNS (Domain Name System). (5 Marks)
- (b) The Dynamic Host Configuration Protocol is a network management protocol briefly describe how its used in a network (10 Marks)
- (c) Explain the advantages of using SAMBA soft ware. (5 marks)