



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.

Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411

Fax: 064-30321

Website: www.must.ac.ke Email: info@must.ac.ke

University Examinations 2013/2014

STAGE 4, EXAMINATION FOR DIPLOMA/CERTIFICATE IN INFORMATION
TECHNOLOGY

DIT 0408: OPERATING SYSTEMS 1

DATE: APRIL 2014

TIME: 1½ HOURS

INSTRUCTIONS: Answer questions *one* and any other *two* questions

QUESTION ONE - (30 MARKS)

- a) Define an operating system. (2 marks)
- b) Differentiate between input redirection and output redirection. (4 marks)
- c) Convert the following using symbolic and Numeric mode (6 marks)
- `dr-x - - x r - - semester`
 - `dr - - r - x - - - unit`
 - `- - - - - - r - x student3`
- d) Use the directory tree diagram to answer the following questions: Let **Linda** be your working directory and write relative pathnames to the following directories. (10 marks)

- i. tmp
 - ii. pattern
 - iii. ict
 - iv. home
 - v. lib
- e) As a DIT stage 5 student you have been assigned lab2 to support Linux class. The assignment given to you is to assign permissions to users files and directories. Explain how you can execute a shell script in Linux. (4 marks)
- f) Assume you are Linux administrator and you are required to create user accounts to add all stage 5 students to the system. Using the knowledge acquired in this unit explain how you will carry out the exercise. (4 marks)

QUESTION TWO (15 MARKS)

- a) Explain the use of the following commands in Unix. (6 marks)
- i. w
 - ii. rmdir
 - iii. rm -r
 - iv. passwd
 - v. mv
 - vi. chfn
- b) Giving examples differentiate absolute pathname and relative pathname. (3 marks)
- c) Jane is a student in stage 5 she is using Linux operating system and she would like to communicate with her friend. As an Operating system 1 student explain three communication programs in Linux that Jane can use to communicate. (6 marks)

QUESTION THREE (15 MARKS)

- a) Giving examples explain four types of an operating system. (4 marks)
- b) As a student in DIT having gained knowledge in Linux Operating system give three help documentation you can use when using Linux. (6 marks)
- c) Write the commands used to perform the following tasks. (5 marks)
- i. Change file permissions
 - ii. Print a document in Unix
 - iii. Display date and time
 - iv. Change user information
 - v. Copy file1 to file2

QUESTION FOUR – (15 MARKS)

- a) Briefly explain any three types of shell in Unix. (3marks)
- b) Name and explain parts of an operating system. (4 marks)
- c) Explain the use of the following vi editor commands: (4 marks)
 - i. wq
 - ii. x
 - iii. w
 - iv. q
- d) As an OSI student write the process you use to connect to a Linux server from a Windows Operating system. (4 marks)

QUESTION FIVE (15 MARKS)

- a) Write the function of the following commands; (5 marks)
 - i. ps
 - ii. kill -9
 - iii. lp
 - iv. touch
 - v. cal -y
- b) Name and explain three divisions of file permissions. (6 marks)
- c) Giving examples explain piping in Unix. (4 marks)