

# MOUNTAINS OF THE MOON UNIVERSITY

## FACULTY OF SCIENCE, TECHNOLOGY AND INNOVATION



### SEMESTER TWO EXAMINATIONS – 2023 / 2024

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DEPARTMENT	: COMPUTER SCIENCES
COURSE CODE	: BCS3101
COURSE NAME	: SYSTEMS ADMINISTRATION
DURATION	: 3 Hour
YEAR OF STUDY	: THREE
DATE OF EXAM	: 01/06/2024
TIME OF EXAM	: 2:00pm – 5:00pm

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#### INSTRUCTION (S) :

- ◇ This is a practical exam
- ◇ **Attempt and execute all questions on the console of your Linux virtual box**

1. You are to create a directory '**Cover\_Exam**' with its sub-directory '**RTH**' in your account's home directory **(6 Marks)**
2. Add a file to '**RTH**' called '**Practical.txt**' bearing your **Name** and **Registration Number** **(4 Marks)**
3. Copy all XPM files from **/usr/share/pixmaps** to '**RTH**' directory **(4 Marks)**
4. Change permissions of '**Cover\_Exam**' directory and its sub-directories such that the **owner** can have full privileges while the **group** and **others** can only **read** privileges **(8 Marks)**
5. Change permissions of the files in '**RTH**' directory such that only the **owner** has read and write privileges **(8 Marks)**
6. Make a gzip backup copy of '**RTH**' directory in **/var/tmp** **(8 Marks)**
7. Add to your Linux Box three new users '**Medad**' '**Makula**' and '**Mercy**' **(9 Marks)**
8. Create a new group '**Final**' with users '**Makula**' and '**Mercy**' **(6 Marks)**

9. Recursively change ownership of '**Cover\_Exam**' to user '**Medad**' and group '**Final**'  
(6 Marks)
10. Using command or terminal console assign a Static IP Address 192.168.5.1 to your Linux server  
(5 Marks)
11. Find the name of the service which uses TCP port 2605, as documented in */etc/services*, and write the service name to the file '**Activity.txt**'  
(6 Marks)
12. Find all of the ports used for TCP services IMAP3 and IMAPS, again as documented in */etc/services*, and write those port numbers to the file '**Practical.txt**'  
(6 Marks)
13. Change the host name of your linux box to '**central\_server**'  
(3 Marks)
14. Use appropriate commands to find out the following
  - a. when the last login occurred  
(2 Marks)
  - b. When the system was last rebooted  
(2 Marks)
  - c. For how many hours the system has been running  
(2 Marks)
15. Schedule your server to perform the following tasks;
16. Do a restart every day at 3:00am  
(5 Marks)
17. Delete all mp4 files in the users home directory on a monthly basis  
(5 Marks)
18. Delete all files in */var/tmp* every 24 hours  
(5 Marks)

~~HAPPY HOLIDAYS~~