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**University Examinations 2015/2016**

THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DIPLOMA IN INFORMATION TECHNOLOGY

**CIT 2329: OPERATING SYSTEM II**

**DATE: NOVEMBER 2015 TIME: 11/2 HOURS**

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

**QUESTION ONE (30 MARKS)**

1. Define the term super user and explain how a super user can login (4 Marks)
2. Differentiate between root account and normal user account (3 Marks)
3. Explain **three** functions of init program giving examples of the programs started by init(3 Marks)
4. Explain the information contained in /etc/shadow file (7 Marks)
5. Use Numeric mode to assign permissions to the following files and directories
6. d r – x r w x r - - software (1 Mark)
7. d r w - - w x - - - hardware (1 Mark)
8. - - - - r – x r w x application (1 Mark)
9. Max Computers is an IT company that has 50 users, the company has been experiencing challenges with their backup system, they have consulted you for advice concerning backup types they can adopt. Advice Max Computers any three types of backup they can adopt and why (6 Marks)
10. Assume you have been given a contract by MinTechn Company to put measures in place to ensure physical security of computers. Explain any four measures you will put in place to ensure security of information and systems in MinTech Company. (4 Marks)

**QUESTION TWO (15 MARKS)**

1. Outline the commands used to achieve the following (5 Marks)

i) Halt the system at Eight o’clock

ii)Delete directory **system** and its contents

iii)Add user Sammy to group **ICT**

iv) Reboot the system after five minutes

v)Display user information

b) Supposed you have been asked to offer advice to MicroTech Company on disaster recovery options. Using the knowledge gained in Operating system II, explain to MicroTech Company two disaster recovery options that can be adopted (5 Marks)

c) You have been assigned lab 1 to support Operating System II class. You are required to temporarily disable users from logging into the system for 2 hours. Explain how you are going to carry out the task. (5 Marks)

**QUESTION THREE (15 MARKS)**

1. List any **four** backup devices (2 Marks)
2. Explain **six** run-levels in Linux (6 Marks)
3. Differentiate between userdel – r command and userdel command (3 Marks0
4. Assume you are a super user on a Linux system, explain the process of adding users to the system (4 Marks)

**QUESTION FOUR (15 MARKS)**

1. List any **three** advantages of using Linux operating system (3 Marks)
2. Write the use of the following commands

i)Grouppad (1Mark)

ii)Chfn (1 Mark)

iii)Ipr (1 Mark)

iv)who (1Mark)

1. Explain **three** levels of RAID (3 Marks)
2. Assume you are a Linux administrator and you are required to lock users in procurement department from accessing the system and unlock users in business department to allow them access the system. Using your knowledge in Operating System II explain how you can carry out the task. (5 Marks)

**QUESTION FIVE (15 MARKS)**

1. List **three** tasks performed by a system Administrator (3 Marks)
2. List **two** types of operating system loader found in Linux (2 Marks)
3. Explain the information contained in /etc/password file (7 Marks)
4. Assume you are logged in as user Jane in a Linux system and you want to switch to user Joseph. Write step by step process of switching to user Joseph. (3 Marks)