Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

****

**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec – 2016**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **14CS3046** | **Duration :** | **3hrs** |
| **Sub. Name :** | **SYSTEM ADMINISTRATION** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Explain the need and contents of the following directories in detail: /bin, /dev, /home, /usr, /data, /etc, /lib, /media, /opt and /sbin. What will happen if the following directories are not available? | CO1 | **20** |
| **(OR)** | | | | |
| 2. | a. | Write the commands to perform the following task:  a. Find the current working directory  b. List the files in a directory  c. change the directory to the parent directory.  d. change the passowrd of user ‘bingo’  e. create a new user tux.  f. create a new group sports.  g. create files t1, t2 ….. t10 using the touch commands.  h. view the file trumpet using the cat file.  I. create a new directory university  j. copy all files from test directory to university directory | CO1 | **10** |
| b. | What is the use of find command? Write the synatx with options showing how it can be used? | CO1 | **5** |
| c. | Write the commands and differentiate ‘whereis’ and ‘which’ commands. | CO1 | **5** |
| 3. | a. | Write about the types of shell. | CO1 | **10** |
| b. | Write the commands to perform the following task:  a. list the history  b. execute the command at line 55  c. switch to root user  d.create alias  e. list all the hidden files | CO1 | **5** |
| c. | What is the benefit of YaST ? How it benefits the user? | CO2 | **5** |
| **(OR)** | | | | |
| 4. | a. | Define ip address. How ip address is assigned if Dynamic address option is selected? What is the role of Hostname? | CO3 | **5** |
| b. | How users are created? What is the role of user? How access rights are given to a user? | CO1 | **5** |
| c. | What content is stored in /etc/passwd file as well as in /etc/shadow file? Explain each parameters. | CO1 | **10** |
| 5. | a. | Write the commands to perform the following tasks in vi editor:  a. open a new file Happy  b. insert the line “I am happy today”  e. copy and paste that line five times  f. save the file as Happy-holiday  g. delete 3 lines in the new file | CO2 | **5** |
| b. | Describe the linux load procedure with necessary diagrams. | CO1 | **15** |
| **(OR)** | | | | |
| 6. |  | Write in detail about the init process. How init determines which services to start and stop? | CO1 | **20** |
| 7. | a. | What is the use of ps, pstree, nice and top command, explain with options. | CO2 | **10** |
| b. | How can process be terminated in different ways? | CO1 | **5** |
| c. | Define daemon. How are they managed? | CO1 | **5** |
| **(OR)** | | | | |
| 8. |  | Write the steps to configure LVM and software RAID. Explain the carious RAID levels. | CO1 | **20** |
|  | | **Compulsory:** |  |  |
| 9. |  | What are the ways though which task can be automated? Write the necessary commands and explain in detail using them. | CO1 | **20** |

ALL THE BEST