

**UNIVERSITY**

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

Karunya Institute of Technology & Sciences

(Declared under section-3 of the UGC Act, 1956)

**End Semester Examination – April/May – 2017**

**Subject Code : 14CS2044 Duration : 3hrs**

**Subject Name : INTRODUCTION TO SYSTEM ADMINISTRATION Max. Marks : 100**

**ANSWER ALL THE QUESTIONS (5x20=100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub**  **Div** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Write the sequence of steps to format a partition sdb using fdisk. | CO2 | 10 |
|  | b. | Demonstrate how to schedule a user defined process using your own example. | CO2 | 10 |
|  |  | (OR) |  |  |
| 2. | a. | Describe the application of the following (i) Shared libraries (ii) Paged memory (iii) Tracking memory usage (iv) Viewing virtual memory information | CO1 | 10 |
|  | b. | Relate the use of the following commands with its options (i) wget (ii) rsync | CO2 | 10 |
| 3. | a. | Demonstrate the use of regular expressions in text processing using 10 different expressions. | CO2 | 15 |
|  | b. | Define the strengths of Linux. | CO1 | 5 |
|  |  | (OR) |  |  |
| 4. | a. | Indicate the advantage of X window system when developing your own desktop environment. | CO1 | 10 |
|  | b. | Show the advantage of data redirection using your your own examples. | CO2 | 10 |
| 5. | a. | The contents of the new\_letter file are as follows:  “John has picked 50 bushels of apples, which he hope to sell at 9.50 per bushel. That is better than last year’s price of 6.50 per bushel, but hoped for. Still, given the 9.25 per bushel that our competitors have been getting, we can’t complain.”  Write the commands to perform the tasks using the ‘sed’ filter,(i) to insert dollar sign before numbers having two decimal digits, (ii) replace bushel as BUSHEL globally (ii) Prefix “Mr.” wherever “John” appears. | CO2 | 10 |
|  | b. | Differentiate the following commands cat,tail, head, wc, tac and strings. | CO2 | 10 |
|  |  | (OR) |  |  |
| 6. | a. | Define the following (i) Process (ii) Kernel’s role in process management (iii) Multitasking (iv) fork (v) process states | CO1 | 10 |
|  | b. | Demonstrate the use of SSH and its applications. | CO3 | 10 |
| 7. | a. | Write a shell script to check the utilization of processor at specific intervals every day and store the results in a single file. | CO2 | 10 |
|  | b. | Define priority. List out ways to modify the priority of a process. | CO1 | 10 |
|  |  | (OR) |  |  |
| 8. | a. | Show how the rpm command can be used to perform the following query, search, install, uninstall, update and checking the signature of a package | CO2 | 10 |
|  | b. | Write the commands for the following operations (i) How password can be set to the newly created user account ‘demo-user1’. (ii)Under what circumstances user accounts will be disabled?(iii) What information about a user can be edited? (iv) Delete the user ‘demo-user1’ and keep his home directory (v) delete the user ‘demo-user1’ with his home directory | CO2 | 10 |
|  |  | **Compulsory:** |  |  |
| 9. | a. | Describe the linux boot process. | CO1 | 10 |
|  | b. | List out the applications of systemd daemon. | CO1 | 10 |