



**NAY-003-003404**

Seat No. \_\_\_\_\_

**B. C. A. (Sem. IV) (CBCS) Examination**

**March / April - 2017**

**CS - 22 : Operating System Concepts  
With Unix Linux**

*(Old Course)*

**Faculty Code : 003**

**Subject Code : 003404**

**Time :  $2\frac{1}{2}$  Hours]**

**[Total Marks : 70**

**Instructions :** Write Down All Answers in Main Answer Sheet.

**1 Short questions : 20**

- (1) Give one name of Open Source Operating System.
- (2) Full form of TCP/IP is \_\_\_\_\_.
- (3) Full form of FCFS is \_\_\_\_\_.
- (4) Full form of SJF is \_\_\_\_\_.
- (5) What is the meaning of Kernel?
- (6) Which symbol is used to represent root directory in Linux operating system?
- (7) What is the full form of LILO?
- (8) What is the full form of GRUB?
- (9) "mail," is a communication command. TRUE or FALSE.
- (10) By default, which web browser is provided by Red Hat Linux.
- (11) Which player provides Linux for Entertainment?
- (12) In Linux, which window provides to open a command console in a graphical interface?

- (13) When user logged in as an administrator with root as username, which symbol will display on the screen?
- (14) In vi editor, the last command line displays which name?
- (15) What will be the output of this command? "Is s\*t"
- (16) Who is a command language interpreter?
- (17) Which command displays the calendar of March 2017?
- (18) Which command used to display list and information of the users currently logged in to the system?
- (19) Which command used to return, to the command prompt?
- (20) Which command is used to count the number of lines, words and characters in the specified file or files?

**2** (A) Answer any **THREE** from the following : **6**

- (1) Explain the meaning of Operating System?
- (2) What is process state transition diagram?
- (3) Explain Contiguous Memory Allocation.
- (4) List out types of Shell.
- (5) Explain chmod and chown command.
- (6) What will be the use of touch and tail command?

(B) Answer any **THREE** from the following : **9**

- (1) Write down and explain various functions of operating system.
- (2) Write a short note on Round Robin Method.
- (3) Give difference between Physical Memory and Virtual Memory.
- (4) Explain Unix Architecture with its features.
- (5) Write a short not on types of files in Unix.
- (6) How to change password in Unix Operating System? Explain.

(C) Answer any **TWO** from the following : **10**

- (1) Explain Time Sharing Operating System.
- (2) Give difference between Multi Processing, Multi Tasking and Multi Threading OS.
- (3) Write a detailed note on Virtual Memory using Paging.
- (4) Write a detailed note on Virtual Memory using Segmentation.
- (5) Write a note on Unix File and Directory permissions.

**3** (A) Answer any **THREE** from the following : **6**

- (1) What is vi editor?
- (2) Explain redirection.
- (3) Explain piping.
- (4) What are positional parameters?
- (5) Explain any two Logical Operators with example.
- (6) Give difference between shell keyword and shell variable.

(B) Answer any **THREE** from the following : **9**

- (1) Explain following commands. cat, cd, mv, chown, wc, touch
- (2) Explain the use of case esac in shell script with example.
- (3) Explain cursor movements.
- (4) How to mount and demount a file in Unix?
- (5) Share your knowledge about GNOME & KDE in linux.
- (6) Unix/Linux is used to develop games. Justify the statement in your own ideas.

(C) Answer any **TWO** from the following : **10**

(1) Write a shell script to display the following output.

1

2 3

4 5 6

7 8 9 10 .... Input n for number of lines.

(2) Write a shell script that display prime numbers from 1 to 100 numbers.

(3) Write a shell script that displays the use of nested if.

(4) Write a shell script to read a file.

(5) Write a shell script to display the use of parameters.

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