

Register No.: ..... Name: .....

## SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FOURTH SEMESTER INTEGRATED M.C.A DEGREE EXAMINATION (S), SEPT 2022  
(2020 SCHEME)

Course Code: 20IMCAT202

Course Name: Linux/Unix Fundamentals

Max. Marks: 60

Duration: 3 Hours

### PART A

*(Answer all questions. Each question carries 3 marks)*

1. Explain the different types of users in Linux.
2. Explain the Linux architecture with help a neat diagram.
3. Differentiate local and global shell variables.
4. How do you do the following activities using vi editor?
  - (i) Text replacement
  - (ii) Delete text
5. Write the Linux commands for the following with syntax.
  - (i) To switch a process between foreground and background.
  - (ii) To terminate an executing process
  - (iii) To connect two different processes together.
6. What are standard files?
7. Write short notes on the network commands : *ifquery, ifup, ifdown*
8. Which are the backup strategies used in Linux?
9. Explain any three modes of *RPM* command.
10. What is a daemon? Write any one example.

### PART B

*(Answer one full question from each module, each question carries 6 marks)*

#### MODULE I

11. a) What are the different types of shell available in Linux? Explain. (4)
- b) Explain any two important features of Linux. (2)

OR

12. Explain file access permissions. (6)

#### MODULE II

13. Write a shell program for a menu based calculator which performs *add, sub, mult, div* and *exit*. (6)

## OR

14. a) Explain the conditional and iterating statements used in shell script. (3)  
b) Write a shell script to print the day of the week using *case...esac* statement. (3)

## MODULE III

15. a) Write a short note on the role of filters in Linux. (2)  
b) Explain the following commands.  
(i) *sed*  
(ii) *grep* (4)  
(iii) *sort*  
(iv) *uniq*

## OR

16. Write short note on the following commands.  
(i) Pipe and redirection (4)  
(ii) Scheduling tasks. (2)

## MODULE IV

17. a) How does file transfer protocol work in Linux? (2)  
b) Write the use of the following commands  
(i) *mget*  
(ii) *get* (4)  
(iii) *put*  
(iv) *mput*

## OR

18. a) What are the different file compressing commands used in Linux? (3)  
b) Explain the various commands used in Linux for accessing e- mails. (3)

## MODULE V

19. a) Explain powers of 'root'. (3)  
b) What are the commands used to manage users and groups in Linux? (3)

## OR

20. a) How do you schedule a task using *cron* and *atd* commands? (2)  
b) What are the purposes of *Xinetd* and *Inetd* commands? (4)

\*\*\*\*\*