

BACHELOR OF SCIENCE (COMPUTER SCIENCE) (CBCS - 2018 COURSE)
T.Y.B.Sc.(Computer Science) Sem-VI :SUMMER- 2022
SUBJECT : LINUX PROGRAMMING

Day : Saturday
Date : 2/7/2022

S-20127-2022

Time : 11:00 AM-02:00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate **FULL** marks.
 - 3) Draw neat and labeled diagram wherever necessary.
-

- Q.1** Attempt **ANY TWO** of the following : **(12)**
- a) Define operating system. Explain types of operating system.
 - b) Write a shell program to check given number is even or odd.
 - c) Explain built in functions in awk.
- Q.2** Attempt **ANY TWO** of the following : **(12)**
- a) What is file? Explain structure and types of files.
 - b) Describe the architecture of Linux.
 - c) Define process. Explain process environment list and environment variables.
- Q.3** Attempt **ANY TWO** of the following : **(12)**
- a) Explain different system calls to access and control files.
 - b) Write note on socket.
 - c) Illustrate while loop in shell programming with an example.
- Q.4** Attempt **ANY THREE** of the following: **(12)**
- a) Explain creation and controlling the semaphore.
 - b) Write sed command with different options.
 - c) Describe features of Linux.
 - d) Write usage of shared memory.
- Q.5** Attempt **ANY FOUR** of the following : **(12)**
- a) Write numeric and string comparison operators in shell programs.
 - b) Write a purpose and syntax of ls command.
 - c) Explain sort filtering command.
 - d) Write note on array used in awk.
 - e) Write a shell program for arithmetic operations.
 - f) Explain cat and who command with example.
