## UNIX AND OPERATING SYSTEMS LAB

COURSE CODE: 20CA3113 L T P C

1 0 3 2.5

## **COURSE OUTCOMES:**

At the end of the course student will be able to

**CO1:** Create simple Shell Scripts based on Shell commands.

**CO2:** Identify the File that is executable, readable & writable using Shell Script.

**CO3:** Develop programs that display directory path, date and terminal name.

**CO4:** Create C Programs for developing FCFS and FIFO algorithms.

**CO5:** Execute Priority and Resource Request algorithms at Shell prompt.

## **EXPERIMENTS:**

- 1. Write a shell script to accept two numbers and perform all arithmetic operations on it.
- 2. Write a shell script to find largest of three numbers using conditional execution operators
- 3. Write a shell script to accept the name of the file from standard input and perform the following tests on it
  - a) File executable
  - b) File readable
  - c) File writable
  - d) Both readable & writable
- 4. Write a shell script which will display the username and terminal name who is login recently in to the Unix system.
- 5. Write a shell script to find number of files in a directory
- 6. Write a shell script to print the following format

1 12

123

1234

. . . . . . . . .

- 7. Write a shell script which will display the number of days in the given month and year
- 8. Write a shell script to check whether a given number is perfect number or not
- 9. Write a shell script for concatenation of two strings using arguments
- 10. Write a shell script to demonstrate break and continue statements
- 11. Write a shell script to satisfy the following menu options
  - a. Display current directory path
  - b. Display today's
  - c. Display users who are connected to the Unix system
  - d. Quit
- 12. Write a shell script to delete all files whose size is zero bytes from current directory
- 13. Write a shell script to display reverse numbers from given argument list
- 14. Write a shell script to display factorial value from given argument list
- 15. Write a shell script which will greet you "Good Morning", "Good Afternoon", "Good Evening" and "Good Night" according to current time
- 16. To implement the FCFS Algorithm
- 17. To implement the Shortest Job First Algorithm

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- 18. To implement Priority Algorithm
- 19. To implement the round robin Algorithm
- 20. To implement the FIFO page replacement Algorithm
- 21. To implement LRU page replacement Algorithm
- 22. To implement Resource Request Algorithm
- 23. To implement First-Fit, Best-Fitand Worst-Fit Algorithm
- 24. To implement Sequential File Organization
- 25. To implement Random File Organization.