O.S.

MCA II Semester – Sub : Operating Systems Lab – Question Bank - JULY/AUGUST 2020

1.a. Create a shell program to perform arithmetic operations
   b. Write the syntax and execute the following commands
      i) WHO AM I   ii) MAN

2.a. Write a shell program to find the sum of n numbers
   b. Write the syntax and execute the following commands
      i) PWD   ii) CD

3.a. Execute the following commands in UNIX operating system
      i) fork   ii) exec
   b. Write the syntax and execute the following commands
      i) CAT   ii) MKDIR

4.a. Create a shell program to perform arithmetic operations
   b. Write the syntax and execute the following commands
      i) RMDIR   ii)CLEAR

5.a. Create a shell program to perform arithmetic operations
   b. Write the syntax and execute the following commands
      i) PWD   ii) CD

6.a. Execute the following commands in UNIX operating system
      i) opendir   ii) close
   b. Write the syntax and execute the following commands
      i) LISTING DIRECTORY   ii) COPY

7.a. Write a C program to implement the UNIX commands 'cp, ls, grep'
   b. Write the syntax and execute the following commands
      i) CAT   ii) MKDIR

8.a. Execute the following commands in UNIX operating system
      i) close   ii) stat
   b. Write the syntax and execute the following commands
      i) MAN   ii) WHO AM I

9.a. Write a shell program to find the factorial of a given number
   b. Write the syntax and execute the following commands
      i) CAT   ii) PWD

10.a. Create a shell program to perform arithmetic operations
    b. Write the syntax and execute the following commands
       i) WHO   ii) MOVE

11.a. Implement least recently used page replacement algorithm using C program
    b. Explain the following system calls in UNIX operating system
       i) fork   ii) execc.

12.a. Implement LFU page replacement algorithm using C program
    b. Write a shell program to find the given number is odd or even

13.a. Implement the paging concept using C program
    b. Execute the following commands in UNIX operating system
       i) opendir   ii) readdir

14.a. Write a C program to implement best fit memory allocation method

b. Create a shell program to perform arithmetic operations

15.a. Write a C program to implement Shortest Job First Scheduling algorithm
  b. Execute the following commands in UNIX operating system
   i) wait   ii) exit

16.a. Write a C program to implement first fit memory allocation method
  b. Write a C program to implement the UNIX commands 'cp, ls, grep'

17.a. Write a C program to implement worst fit memory allocation method
  b. Execute the following commands in UNIX operating system
   i) getpid   ii) close

18.a. Implement Least Recently Used page replacement algorithm using C program
  b. Create a shell program to find the greatest among the given three numbers

19.a. Write a C program to implement indexed file allocation strategy
  b. Execute the following commands in UNIX operating system
   i) close   ii) stat

20.a. Implement first come first serve page replacement algorithm using C program
  b. Explain the concept of looping using shell programming

21.a. Write a C program to implement first come first serve scheduling algorithm
  b. Write the syntax and execute the following commands
   i) LISTING DIRECTORY   ii)COPY

22.a. Write a C program to implement linked list file allocation Strategy
  b. Write the syntax and execute the following commands
   i) WHO AM I   ii) MAN

23.a. Implement pipe concept in inter process communication using C program
  b. Write the syntax and execute the following commands
   i) CAT   ii) MKDIR

24.a. Write a C program to implement indexed file allocation strategy
  b. Write the syntax and execute the following commands
   i) LS   ii) COPY

25.a. Write a program to implement sequential data allocation.
  b. Write the syntax and execute the following commands
   i)PWD   ii)CD

26.a. Write a C program to implement producer-consumer problem using semaphore concept
  b. Write the syntax and execute the following commands
   i) CAT   ii) MKDIR

27. a. Implement Bankers Algorithm for Deadlock Detection using C program
  b. Write the syntax and execute the following commands
   i) RMDIR   ii) CLEAR

28.a. Implement the concept of threading and synchronization using C Program
  b. Write the syntax and execute the following commands
   i) PWD   ii) CD

29.a. Write a C program to implement round robin scheduling algorithm
   b. Write the syntax and execute the following commands
      i) RMDIR   ii) CLEAR

30.a. Write a C program to implement First Fit Memory Allocation Method
   b. Write the syntax and execute the following commands
      i) MOVE   ii) WHO