R09

Time: 3hours   Max.Marks:60

Answer any five questions
All questions carry equal marks
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1. Write about File and Directory maintenance system calls? (Give syntax & examples).

2. a) What are message queues ? Explain with an example?
   b) Write a program to allow cooperating processes to lock a resource
      for exclusive use using semaphores**.**

3**.** a) What are Berkely sockets ? And write a note on 'socket options'?
   b) Explain socket system calls for connectionless protocol.

4. Write a c program that demonstrates redirection of standard output to a
   file.Ex: ls > f1. ?

5. a) Write about here documents ?
   b) Write a shell script that determines the period for which a specified user is
      working on the system?

6. Write a c program that accepts two small numbers as arguments and then sums
   the two   numbers in a child process. The sum should be returned by child to the
   parent as its   exit status and the parent should print the sum?

7. Write a C program that counts the number of blanks in a text file
        a. Using standard I/O   b. Using system calls

8. Write short notes on the following?
   a) POSIX thread API's
   b) Linux API's for shared memory
   c) Process and Threads (differentiate)

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