KUMARAGURU
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Register Number:……………………..

MCA DEGREE EXAMINATIONS: NOV/DEC 2014

(Regulation 2009)

Fourth Semester

MASTER OF COMPUTER APPLICATIONS

MCA515: Unix and Networking Programming

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 2 = 10 Marks)

1.   What is File Descriptor?

2.   Role of Signals in UNIX OS.

3.   What are the various ways for a process to terminate?

4.   Differentiate Signals and threads.

5.   Define concurrent servers and iterative servers.

6.   Compare pipe and FIFO Techniques.

7.   State Functionality of semaphore in OS?

8.   What is the purpose of resolvers?

9.   What are the different functions done by TCP echo client server program?

10. What is the purpose of trace route program?

PART B (5 x 16 = 80 Marks)

11. a)   Compare UNIX operating system with other any operating systems. How to login with UNIX operating system? Explain the entries in etc/passwd file in UNIX.

(OR)

b)   Discuss in detail the following file I/O functions.

(i) Creat function

(ii) Open function

(iii) read/write functions

12. a) What do you mean command – Line arguments in UNIX? Discuss in detail about memory layout of a C program in UNIX?

(OR)

b) What are the various steps involved in terminal login and network login? Explain.

13. a) Write an implementation procedure for message queues in UNIX?

(OR)

b) What do you mean by Inter Process Communication (IPC)? Explain in detail about shared memory?

14. a) Draw the block of elementary TCP client/server sockets and explain each function on it.

(OR)

b) Write a program to implement the UDP socket.

15. a) Write a program to implement TCP echo client/server in UNIX.

(OR)

b) How the files can be transfered from client server? Write necessary code for the same.

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