Paper : II
Operating System Organization and UNIX
Paper : BCA-302

Note— Attempt *five* questions in all.

1. Define operating system. Name any four examples of operating system. Explain various types of operating system ? Also discuss various services provided by it to its users.   20

2. (a) Discuss' iient-Server architecture for operating system ? Explain various advantages and disadvantages of client server architecture.   10

   (b) Define process. Explain the concept of process state and process control block. Give examples of various processes in UNIX.   10

3. Discuss CPU scheduling algorithms along with suitable examples.

4. Explain various memory management technique along with suitable examples. Which techniqe is supported by UNIX operating system ?   20

5. What is Disk scheduling ? Explain various types of disk scheduling algorithms along with suitable examples.   20

6. (a) Discuss various along with suitable examples.   20

7. Define deadlock. How it differs from starvation. What are the necessary conditions fo a deadlock to occur ? Explain various deadlock prevention techniques.   20

8. (a) Define interprocess communication. How the processes communicate by means of direct and indirect communication. Give examples.   15

(b) Write short note on Direct Memory Access (DMA). 5

9. Discuss the following :

    (a) File Access Methods 15

    (b) Sequencial and concurrent process. 5

10. Write short note on the following :

    (a) System Calls and its examples

    (b) Short term vs. Long term scheduler

    (c) Unix File System

    (d) Interrupt handling.