Register No.

Time: 3 Hours
Maximum Marks:100

I. Fill in the blanks. Answer ALL questions.   **(10 x 1 = 10)**

1. MFD stands for _____

2. Linked file allocation method it does not support direct access, true or false _____

3. _____ is a single sequence stream with in a process.

4. Program in execution is known as _____

5. RMI stands for _____

6. Disk platters divided into concentric _____

7. _____ is the time to position heads over a cylinder.

8. Hard disk platters are coated with _____ material for recording.

9. FIFO Stands for _____

10. Banker's algorithm is used for deadlock _____

II. Explain briefly. Answer any TEN questions.   **(10 x 4 = 40)**

1. What are the advantages of multiprocessor system?

2. Write a short note on single level directory structure.

3. Write similarities of thread and process.

4. What do you mean by deadlock?

5. What is an Access Matrix?

6. What do you mean by precedence graph?

7. Write a short note on computer virus.

8. Write a short note on device controller.

9. What is meant by Resource Sharing?

10. Briefly explain the advantages of virtual memory.

11. What do you mean by swapping?

12. What are the different factors affecting disk performance?

13. Write a short note on mutual exclusion.

III.Answer any FIVE questions. Explain in detail. (5 x 10 = 50)

1. Explain the concept of process in detail.

2. Explain the following

   a) Critical section problem   b) Semaphore

3. Explain in detail about deadlock detection and recovery.

4. Explain in detail about page replacement.

5. Explain the I/O scheduling policies and virtual device

6. What do you mean by thread? Explain user level thread and kernel level thread and its

   advantages.

7. Explain in detail about operating system service.