

OR

- 6 a. Given memory partitions of 100K, 500K, 200K, 300K and 600K (in order) how would each of the first fit, best fit and worst fit algorithms place processes of 212K, 417K, 112K and 426K (in order) which algorithm makes the most efficient use of memory. (06 Marks)
- b. What is paging? With a neat diagram explain Paging hardware. (08 Marks)
- c. Differentiate between Segmentation and Paging. (06 Marks)

Module-4

- 7 a. What do you mean by Page Replacement? Explain the working of page replacement algorithm with a neat block diagram. (08 Marks)
- b. Consider the following page-reference string
2, 3, 2, 1, 5, 2, 4, 5, 3, 2, 5, 2
How many page faults occur in the following replacement algorithms, assuming three frames:
i) FIFO ii) LRU iii) Optimal (12 Marks)

OR

- 8 a. Describe the various file allocation methods. Also point out their advantages and disadvantages. (10 Marks)
- b. Explain the various Free Space Management techniques. (10 Marks)

Module-5

- 9 a. What is disk scheduling? Explain different types of Scheduling algorithms. (10 Marks)
- b. What is access matrix? How the access matrix is implemented, point out the advantages and disadvantages of different methods of implementation of access matrix. (10 Marks)

OR

- 10 a. Explain the different components of a Linux system. (10 Marks)
- b. Discuss the Linux file system. (10 Marks)
