

Unit4 PYQ

- 6marks

State the benefits of Virtual Memory System? (CO4)

What is paging? Explain the paging hardware. (CO4)

What is fragmentation? Explain its types and their advantages & disadvantages. (CO4)

Explain how paging supports virtual memory. With a neat diagram explain how logical address is translated into physical address.(CO4)

- 10marks

7-a. Discuss the advantages and disadvantages of paging and segmentation. (CO4) 10

7-b. When do page faults occur? Consider the reference string: 1, 2, 3, 4, 2, 1, 5, 6, 2, 1, 2, 3, 7, 6, 3, 2, 1, 2, 3, 6. How many page faults and page fault rate occur for the FIFO, LRU and optimal replacement algorithms, assuming three, four page frames? (CO4) 10

7-a. Describe the LRU page replacement algorithm, assuming there are 4 frames and the page reference string is 7, 0, 1, 2, 0, 3, 0, 4, 2, 3, 0, 3, 2, 1, 2, 0, 1, 7, 0, 1. Find the number of page faults by using LRU and Optimal Page Replacement Algorithm. (CO4)

7-b. Let us Consider the following reference string 1,3,2,4,0,1,7,4,0,2,3,5,1,0,7,1,0,2. How many page faults will occur for: i. FIFO Page Replacement ii. LRU Page Replacement iii. Optimal Page Replacement Assuming three and four frames (initially empty). (CO4)

7-a. Discuss the following page replacement algorithm with an example - (CO4)
i. Optimal
ii. LRU

7-b. Explain with the help of supporting diagram how TLB improves the performance of a demand paging system. (CO4)

7-a. What is dynamic storage allocation problem? Mention the names of different methods used to solve the above problem (CO4)

7-b. Explain about advantages and disadvantages of paging? And Explain difference between paging and segmentation? (CO4)