UNIT–IV

S.No		Questions	BT	CO
Part–A(Short Answer Questions)				
1		Explain the difference between logical and physical addresses?	L2	CO4
2		What is paging? Discuss basic paging technique in details.	L1	CO4
3		Write short note on: a)Segmentation b)Page table c)Compaction d) Working set model e) fragmentation	L1	CO4
4		Explain difference between internal external fragmentations in detail.	L2	CO4
5		Explain following allocation algorithm. a)Firstfit b)Bestfit c)Worstfit d)Nextfit	L2	CO4
6		A1MB block of memory is allocated using the buddy system. i. Show the results of the following sequence in a figure: Request 70;Request 35; Request	L2	CO4
7		What are the memory management requirements?	L1	CO4
8		Write short note on: Relocation problem for multiprogramming with fixed partitions.	L1	CO4
9		Describe the term page fault frequency. What is thrashing? How is it controlled by OS?	L2	CO4
10		Explain hierarchical page table and inverted page table.	L2	CO4
		Part–B(Long Answer Questions)		
11	a)	Explain Segmentation in detail. OR What is segmentation? Explain the basic segmentation method.	L2	CO4
	b)	Write short on: a .multiprogramming with fixed & variable partition.		
12	a)	Consider the following page reference string. 1,2,3,4,5,3,4,1,6,7,8,7,8,9,7,8,9,5,4,5,4,2 How many page faults would occur for the following replacement algorithm, assuming four and six frames respectively? A)page replacement. b)FIFO page replacement.	L4	CO4

	b)	Write short note on: a) Not-recently used page replacement algorithm. b) Optimal page replacement algorithm. c)Swapping. d)Relocation and protection	L1	CO4
13	a)	What is demand paging? Explain it with address translation mechanism used. What are its specific advantages? How a page table is implemented?	L1	CO4
	b)	On a simple paging system with 2^24 bytes of physical memory, 256 pages of logical address, and a, page size of 2^10 bytes, how many bits are in logical address?	L4	CO4
14	a)	Free memory holes of sizes 15K, 10K, 5K, 25K, 30K, 40K are available. The processes of size 12K, 2K, 25K, 20K is to be allocated. How processes are placed in first fit, best fit, worst fit. Calculate internal as well as external fragmentation.	L4	CO4
	b)	Calculate page faults for (LRU, FIFO, OPT) for following sequences where page frame is three. 0,1,2,1,4,2,3,7,2,1,3,5,1,2,5.	L4	CO4
15	a)	What is virtual memory? How it is implemented.	L1	CO4
	b)	Write short on: a)multiprogramming with fixed &variable partition. b)Relocation problem for multiprogramming with fixed partition. c).Use of multiprogramming in memory management. d) TLB. e) Paging. f) Design issues of paging system. g)Relocation and protection . h)policy driven scheduling.	L1	CO4