QUESTION BANK
OPERATING SYSTEMS (CSE210)
MODULE 4

TEXT BOOK
"Abraham Silberschatz, Peter Baer Galvin and Greg Gagne, "Operating System Concepts", 9th Edition, John Wiley and Sons Inc., 2012".

S. No	Questions	Text Book Page No.	Bloom's Level
1	**Describe** various contiguous memory allocation schemes with examples.	360	Knowledge
2	Memory partitions of 100kb, 500 kb, 200 kb, 300kb, 600 kb are available how would best, worst, first fit algorithm to place processes 212,417,112,426 in order. **Show** which is the best algorithm?	363	Application
3	**Distinguish** between internal and external fragmentation.	364	Comprehension
4	**Explain** compaction with respect to memory management	360	Comprehension
5	**List** differences between logical and physical addresses.	355	Knowledge
6	What is paging? **Explain** the paging hardware?	367	Comprehension
7	**Explain** paging in detail. Describe how logical address is converted into physical address?	367, 369	Comprehension
8	**Discuss** various techniques for structuring the page tables along with example.	378	Comprehension
9	Why are segmentation and paging sometimes combined into one scheme? **Defend**	364	Comprehension
10	With a diagram **discuss** the steps involved in handling a page fault?	403	Comprehension
11	**Explain** in detail about the various page replacement strategies.	409	Comprehension
12	Consider the following page reference string: 1, 2, 3, 4, 2, 1, 5, 6, 2, 1, 2, 3, 7, 6, 3, 2, 1, 2, 3, 6. **Compute** how many page faults would occur for the following replacement algorithms, assuming three frames? Remember all frames are initially empty, so your first unique pages will all cost one fault each. LRU replacement FIFO replacement Optimal replacement	409	Application
13	A process references 5 pages A, B , C, D, E in the	409	Application

	following order A, B, C, D, A, E, B, C, E, D Assuming that the replacement algorithm is LRU and FIFO, **compute** how many number of page faults during the sequence of references, starting with an empty main memory with 3 frames.		
14	**Explain** about disk scheduling algorithms with suitable example.	472	Comprehension
15	Suppose that the head of moving head disk with 200 tracks numbered 0 to 199 is currently serving the request at track 143 and has just finished a request at track 125. If the queue request is kept in FIFO order, 86, 147, 91, 177, 94, 150, 102, 175, and 130. **Discover** what is the total head movement to satisfy these requests for I) FCFS II) SSTF III) LOOK disk scheduling algorithm.	472	Application