Section - 8

Question. 2. Difference between external and internal Fragmentation. Describe the typical element of the process control block.

Answer:-

Internal Fragmentation	External Fragmentation.
1. Where there is a difference between required memory space vs allocated memory space	When there are small non-contiguous memory block which can not be assigned to any process
2. Internal fragmentation occures when allocated memory blocks are of fixed size	External fragmentation occurs when allocated memory blocks are of varying size.
3. Internal fragmentation occures when a process needs more space than the size of allocated memory block or we less space.	External fragmentation occurs when a process is removed from the main memory.
4. Best fit block search is the solution for internal	External fragmentation occurs when a process is removed,
5. Best fit block search in the solution for internal fragmentation	Compaction is the solution for external fragmentation.
6. Internal fragmentation occurs when paging is employed	External fragmention occurs when segmentation is employed

Typical elements of the process control block:-
PCB is a data structure which is associated with any process and provides all the complete information about that process. The process control block is the manifestation of a process in an operating system. Process control block is important in multiprogramming environment as it captures the information pertaining to the number of process running simultaneously.