

**GLS UNIVERSITY**  
**FCAIT**  
**BCA SEM - III**  
**Subject : Fundamentals Of Operating system**  
**Subject Code : 0301304**

**Q-1 Fill in the blanks -**

1. In \_\_\_\_\_ memory allocation technique, allocation is done before the execution.
2. when the location of the process in the memory is known at compile time, the compiler generates \_\_\_\_\_ for the process.
3. At the compilation time, compiler generate some address called \_\_\_\_\_.
4. In Swapping, the action of taking out a process from memory is called \_\_\_\_\_.
5. In Swapping, the action of bringing back the swapped out processes into memory is called \_\_\_\_\_.
6. The memory, which is free to allocate is called \_\_\_\_\_.
7. All the small holes formed during partitioning and allocation, are compacted together is called \_\_\_\_\_.
8. \_\_\_\_\_ memory allocation algorithm search the list of free holes and allocates the first hole in the list that is big enough to accommodate the desired process.
9. \_\_\_\_\_ memory allocation algorithm does not take care of the memory wastage.
10. In non contiguous allocation method, memory are divided into equal partitions, which is called \_\_\_\_\_.
11. In paging, the start addresses of pages are stored in the \_\_\_\_\_ table.
12. A Situation will occur in demand paging when the page referenced is not present in the memory, it is called \_\_\_\_\_.
13. Full form of FIFO is \_\_\_\_\_.
14. Full form of LRU is \_\_\_\_\_.

**Q-2 Answer the Following Question -**

1. Explain Logical address and physical addresses.
2. Explain swapping.
3. Explain fragmentation.
4. Difference between contiguous and non contiguous memory allocation.
5. Calculate the number of page faults for following string using FIFO algorithm with frame size 3: 4 6 2 4 5 0 1 2 4 5 6.
6. Calculate the number of page faults for following string using LRU algorithm with frame size 3: 4 6 2 4 5 0 1 2 4 5 6.
7. Explain paging concept.
8. Explain segmentation.
9. Difference between paging and segmentation.
10. Difference between internal fragments and external fragments.

**Note: Q1 is compulsory for all. You have to attempt Q-2 in following sequence -**

<b>Roll No</b>	<b>Question Numbers from both section</b>
<b>A1 to A10, B1 to B10 &amp; C1 to C10</b>	1,3,10
<b>A11 to A20, B11 to B20 &amp; C11 to C20</b>	2,3,10
<b>A21 to A30, B21 to B30 &amp; C21 to C30</b>	3,2,10
<b>A31 to A40, B31 to B40 &amp; C31 to C40</b>	4,3,10
<b>A41 to A50, B41 to B50 &amp; C41 to C50</b>	5,3,10
<b>A51 to A60, B51 to B60 &amp; C51 to C60</b>	6,10,3
<b>A61 to A70, B61 to B70 &amp; C61 to C70</b>	7,10,3
<b>A71 to A80, B71 to B80 &amp; C71 to C80</b>	8,10,3
<b>A81 to A90, B81 to B90 &amp; C81 to C90</b>	9,10,3
<b>A91 Onwards , B91 Onwards &amp; C91 Onwards</b>	10,2,3