SURESH GYAN VIHAR UNIVERSITY Accredited by NAAC with 'A' Grade		INTERNAL ASSIGNMENT - 1
Course	**BCA**	**Introduction to Operating System**
Year	**2**	
Total Marks:	**100**	

Q.1. Write answers for all the questions below. (20 marks each – Word limit – 500)

A. Why page replacement algorithms are required? What happens without page replacement algorithms? Explain any one Page Replacement algorithms with a suitable example?

B. What is Deadlock in Operating System? Describe four general strategies for dealing with deadlocks.

C. Name and describe any four page replacement algorithms. Critically compare them with each other.

D. One of the job of Operating system is to allocate the resources for the effective operation of the system. How does the basic operating system allocate resources? Explain the data structure.

E. Internal and external fragmentations are common in the Operating System memory management. What are the ways to calculate the internal and external fragmentations?

SURESH GYAN VIHAR UNIVERSITY Accredited by NAAC with 'A' Grade		INTERNAL ASSIGNMENT - 2
Course	**BCA**	**Introduction to Operating System**
Semester	**2**	
Total Marks:	**100**	

Q.1. Write answers for all the questions below. (20 marks each – Word limit – 500)

A. Explain the MFT (Multiple Contiguous Fixed Partition allocation.

B. Write Bankers algorithm. Illustrate Bankers algorithm with suitable example.

C. What is Deadlock prevention? Explain any three Deadlock prevention strategies.

D. What are Semaphores? How Semaphores prevent deadlock? Explain 'Wait' Semaphore Operations with necessary coding.

E. Differentiate between Micro Kernel to Monolithic Operating system