SURESH GYAN VIHAR UNIVERSITY Accredited by NAAC with 'A' Grade		INTERNAL ASSIGNMENT - 1
Course	**MCA**	**Operating System Concepts**
Semester	**2**	
Total Marks:	**15**	

Q.1. Write answers for any two questions from below. (5 marks each – Word limit – 500)

A. What are the advantages and disadvantages of using the same system call interface for manipulating both files and devices?

B. Mention the objectives and functions of Real-Time Embedded systems.

C. Write an overview of computer system.

Q.2. Write short notes on all of the following topics (1 mark each - Word limit - 100)

A. Explain the importance of Real-Time Embedded systems.

B. The Safe, unsafe, and deadlock state spaces.

C. The benefits of multithreaded programming

D. Different attributes of the process.

E. What are the various attributes that are associated with an opened file?

SURESH GYAN VIHAR UNIVERSITY Accredited by NAAC with 'A' Grade		INTERNAL ASSIGNMENT - 2
Course	**MCA**	**Operating System Concepts**
Semester	**2**	
Total Marks:	**15**	

Q.1. Write answers for any two questions from below. (5 marks each – Word limit – 500)

A. What is the cause of thrashing? How does the system detect thrashing? How to eliminate this problem?

B. With a neat diagram, explain the layered structure of UNIX operating system.

C. What is an Operating system? Describe the Operating-System Functions. Explain the overview of an Operating system with neat sketch.

Q.2. Write short notes on all of the following topics (1 mark each - Word limit - 100)

A. What is a deadlock?

B. What is a Virtual Memory? Discuss the benefits of virtual memory technique.

C. Define Thread. Write the differences between user-level and kernel-level threads.

D. The various security issues that arise in multiprogramming and time-shared systems.

E. Define Busy Waiting? How to overcome busy waiting using Semaphore operations.