

COURSE CODE:

IGIT– 501-CR11

COURSE TITLE:

OPERATING SYSTEM

CREDITS

4+2=06

Unit I

Introduction, Evolution of Operating System, Operating System Structure, Types of Operating System: Batch Processing, Multiprogramming, Timesharing, Distributed System, Real Time System. Process: Concepts, Process control blocks, concurrency, mutual exclusion, semaphores, Inter-process Communication, Process Synchronization.

Unit II

Processor management techniques; Threads, Process Scheduling, Scheduling Criteria, types of scheduling, scheduling algorithms, Deadlocks, Deadlocks Prevention, Deadlocks Avoidance, Deadlocks Detection.

Unit III

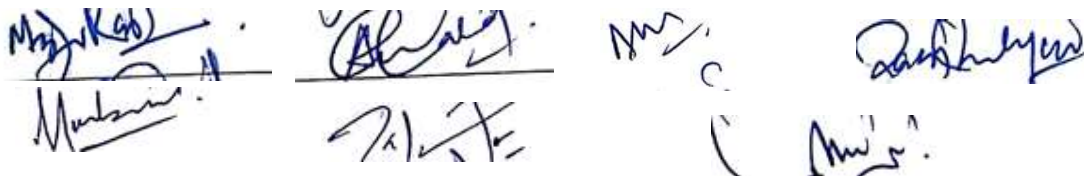
Memory Management: Real storage, Contiguous vs. Non-Contiguous storage allocation, Static and Dynamic Partitioned memory allocation; Virtual memory, management of virtual memory, Paging, Segmentations, Segmentation with Paging.

Unit IV

I/O Management: Disk Organization, disk space management, disk scheduling, Files types and operations, File access and security, File storage Management, File Organization

Recommended Books

- 1) Operating system concepts, Abraham Silberchatz, Galvin, Wiley Publications
- 2) Modern operating systems, Andrew Tannenbaum, Pearson Education
- 3) Operating system, Internals and Design principles, W Stalling, Pearson Education



The image shows four handwritten signatures or initials in blue ink, arranged horizontally. From left to right: 1. A signature that appears to be 'M. J. K. G.' with a horizontal line underneath. 2. A signature that appears to be 'A. K. G.' with a horizontal line underneath. 3. A signature that appears to be 'M. S.' with a horizontal line underneath. 4. A signature that appears to be 'R. K. G.' with a horizontal line underneath.