Subject Code : RCCSCS8

CORE COURSE –XV - OPERATING SYSTEMS

UNIT 1:

Evolution of operating systems- Functions – Different views of OS – Batch processing, Multiprocessing, Time sharing OS – I / O programming concepts – Interrupt Structure & processing

UNIT 2:

Memory Management – Single Contiguous Allocation- Partitioned Allocation – Relocatable Partitions allocations – Paged and Demand paged Memory Management – Segmented Memory Management – Segmented and Demand paged Memory Management – overlay Techniques - Swapping

UNIT 3:

Processor Management – Job Scheduling – Process Scheduling – Functions and Policies – Evolution of Round Robin Multiprogramming Performance – Process Synchronisation – Wait and Signal mechanisms – Semaphores P & V Operations – Deadlock – Banker's Algorithm.

UNIT 4:

Device Management – Techniques for Device Management – I/O Traffic Controller, I/O Scheduler, I/O Device Handlers – Spooling.

UNIT 5:

File Management: Simple File System, General Model of a File System, Physical and Logical File System. Case Studies: MSDOS, UNIX.

TEXT BOOK:

Operating Systems – E. Madnick & John J.Donavan, Tata McGraw Hill Publishing Co., Limited.

REFERENCE BOOK:

System Programming and Operating Systems – D.M. Dhamdhere, Tata McGraw Hill Publishing Co., Limited.