BCA-362: Operating System II

(April 2022 to July 2022)

Mrs. Shailja Kumari
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Deptt. Of Computer Science

1st april to 9th April

Process Synchronization: The Critical Section Problem - Single Process/Two Process Solutions

11th April to 16th April-

Semaphores - Types. Implementation Deadlocks, Classical Problems

18 April to 23 April

Synchronization - The Bounded Buffer Problem, The Readers and Writers Problem

25 April to 30 April

The Dining Philosophers Problem, Critical Regions, Monitors

1st sessional

Directory Structure: Single Level, Two Level, Tree Structures, Acyclic Graph, General Graph; Directory Implementation, Recovery .**1st Assignment with its Analysis.**

2nd May to 7th May

Disk Structure. Disk Scheduling: FCFS, SSTF, SCAN, C-SCAN, LOOK.Data Migration, Computation Migration, Process migration ,2nd Assignment with its Analysis.

9th May to 14th May

Selection of Disk Scheduling Algorithm; Disk Management; Swap Space Management ,Network Operating Systems: Remote Login, Remote File Transfer; Distributed Operating System,

2nd sessional

16th May to 21 may

Linux: Introduction, Features, Architecture Distributions Accessing Linux System, Login/Logout/Shutting Down, Comparison of Linux with other Operating Systems

23 May to 28th May

Commands in Linux: General-Purpose Commands, File Oriented Commands, Directory Or**iented Commands,** Communication Oriented Commands, Process Oriented Commands, Redirection of Input and Output, Pipes

30th May to 4th June

Linux File System: Types of Files in Linux, File Attributes, Structure of File System, inode, File Permission,

3rd Sessional

File System Components, Disk Related Commands Processes in Linux.

6th June to 11th June

The vi editor: Introduction, Modes , Command . Shell Programming: Introduction, Variables, Keywords, Operators, Assigning Values to the Variables, I/O in Shell, Control Structures, commands Creating & Executing Shell Programs in Linux.

13th June to 18th June

Doubt Session with Quiz competition , Revision from Unit 1st with presentation

20th June to 25th June

Revision from Unit 2nd ,3rd ,4th Unit with presentation

Class- PGDCA (2021-22)

Subject-Problem Solving Using C

Teacher's Name-Ms. Shailja kumari

September :

Programming Fundamentals: Introduction to Compiler, Assembler and Interpreter, Problem definition, Program design, Debugging, algorithms, Structured programming concepts, Programming methodologies - top-down and bottom-up programming.

October:

Importance of C, Structure of a C Program.Elements of C: C character set, identifiers and keywords, Data types, Constants and Variables.

November:

Operators:Arithmetic, relational, logical, bitwise, unary, assignment and conditional operators and their hierarchy & associativity.

December:

Control statements: Sequencing, Selection: if and switch statement; Repetition: for, while, and do-while loop; break, continue, goto.

January :

Storage classes in C: auto, extern, register and static storage class, their scope, storage, & lifetime. Strings: String handling, reading and writing strings, string functions, dynamic strings.

February:

Arrays: Definition, types, initialization, processing an array, passing arrays to functions, dynamic arrays.

March:

Functions: Definition, prototype, passing parameters, function calls, library functions, recursion. Declaration, operations on pointers, pointers and arrays,

April

dynamic memory allocation, pointers and functions, pointers and strings. Structure & Union: Definition, processing, Structure and pointers, passing structures to functions, Union.

May

Input/output: Unformatted & formatted I/O function in C. Revision Work- Solve Previous year paper. Analyze And Discussion of Assignment.

June

Doubt Session with Quiz competition , Revision from Unit 1st with presentation.
Revision from Unit 2nd ,3rd ,4th Unit with presentation