**LESSON-PLAN (Session 2021-22) Even Semester**

**Name of Professor**: Dr. Naveeta Adlakha

**Subject: Operating System**

**Class: B.Sc. II**

**Subject/Paper: paper II**

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| **Sr. No.** | **Days** | **Topics to be covered** | **Remarks if any** |
|  | **01-04-2022to 15-04-2022** | **UNIT – I**  Introduction: operating system, architecture, functions, characteristics, historical evolution, types: Serial batch, multiprogramming, time sharing, real time, distributed and parallel. OS as resource Manager. |  |
|  | **16-04-2022-30-04-2022** | Computer system structures: I/O structure, storage structure, storage hierarchy.  Operating system structure: system components, services, system calls, system programs, system structures.  **Assignment I** |  |
|  | **01-05-2022to 15-05-2022** | **UNIT – II**  Process management: process concepts, process state, process control block, operations, process scheduling, inter process communication. |  |
|  | **16-05-2022-31-05-2022** | CPU Scheduling: scheduling criteria, levels of scheduling, scheduling algorithms, multiple processor scheduling. Deadlocks: Characterization, methods of handling, deadlock detection, prevention, avoidance, recovery.  **Class Test I** |  |
|  | **01-06-2022to 15-06-2022** | **UNIT – III**  Storage Management: memory management of single-user and multiuser operating system, partitioning, swapping, paging and segmentation, virtual memory,  **Assignment II** |  |
|  | **16-06-2022-30-06-2022** | Page replacement Algorithms, Thrashing.  Process synchronization: critical section problems, semaphores. Mutual exclusion  **UNIT – IV** Device and file management: Disk scheduling, Disk structure, Disk management |  |
|  | **01-07-2022to 16-07-2022** | File Systems: Functions of the system, File access and allocation methods, Directory Systems: Structured Organizations, directory and file protection mechanisms.  **Class Test II** |  |

\*Vacation as per university calendar

\*Assignments and unit test will be taken as per schedule