**SARASWATI MAHILA MAHAVIDHYALAYA, PALWAL**

**LESSON-PLAN**

**Class: BCA 2ND YEAR Semester: 3rd**

**Subject:** Introduction to Operating System( **BCA 201) Session: 2020-21**

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| **Lecture Number** | **Topic** |
| **1-2** | Introduction to Operating System, its need and operating System services |
| **3-5** | Early systems, Structures - Simple Batch, Multi programmed, timeshared, Personal Computer, Parallel |
| **6-9** | Distributed Systems, Real-Time Systems. Distributed Systems, Real-Time Systems. |
| **10-12** | Process Management: Process concept, Operation on processes, Cooperating Processes |
| **13-14** | Threads, and Inter-process Communication |
| **15-16** | CPU Scheduling: Basic concepts, Scheduling criteria, |
| **17-20** | Scheduling algorithms : FCFS, SJF |
| **21** | Round Robin & Queue Algorithms |
| **22** | Methods for handling deadlocks |
| **23** | Banker’sAlgorithm |
| **24-25** | Memory Management: Logical versus Physical address space, Swapping |
| **26** | Contiguous allocation |
| **27** | Paging |
| **28** | Segmentation. |
| **29-32** | Virtual Memory: Demand paging, Performance of demand paging |
| **33-36** | Page replacement, Page replacement algorithms, Thrashing. |
| **37-40** | File management: File system Structure, Allocation methods: Contiguous allocation |
| **41-43** | Linked allocation, Indexed allocation, Free space management |
| **44-45** | Bit vector, Linked list, Grouping, Counting |
| **45-48** | Device Management: Disk structure, Disk scheduling: FCFS, SSTF, SCAN |
| **49-50** | C-SCAN, LOOK, C-LOOK. |

**Shweta**

**(Asst Prof in CS)**