**Pune Vidyarthi Griha‟s College of Engineering and Technology & G.K. Pate (Wani) Institute of Management, Pune- 411009.**

**SCHEDULE OF LAB EXPERIMENTS**

ACADEMIC YEAR: 2020-2021

**DEPARTMENT: COMPUTER ENGINEERING Date : 27/05/2021**

**CLASS: T.E. SEMESTER: II**

**SUBJECT: System Programming &Operating System Lab**

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| **Sr. No.** | **Title** | **Performance Date** | **Submission Date** |
| **1** | Design suitable data structures and implement **pass-I of a two-pass assembler** for pseudo-machine in Java using object oriented feature. Implementation should consist of a few instructions from each category and few assembler directives. | 18/3/21 | 27/5/21 |
| **2** | Implement **Pass-II of two pass assembler** for pseudo-machine in Java using object oriented features. The output of assignment-1 (intermediate file and symbol table) should be input for this assignment. | 16/4/21 | 27/5/21 |
| **3** | Write a program to create **Dynamic Link Library** for any mathematical operation and write an application program to test it. (Java Native Interface / Use VB or VC++). . | 22/4/21 | 27/5/21 |
| **4** | Write a program using Lex specifications to implement lexical analysis phase of compiler to **generate tokens of subset of ‘Java’ program**. | 13/5/21 | 27/5/21 |
| **5** | Write a program using Lex specifications to implement lexical analysis phase of compiler to **count no. of words, lines and characters of given input file**. | 17/5/21 | 27/5/21 |
| **6** | Write a program using YACC specifications to implement syntax analysis phase of compiler **to validate type and syntax of variable declaration in Java**. | 17/5/21 | 27/5/21 |
| **7** | Write a program using YACC specifications to implement syntax analysis phase of compiler **to recognize simple and compound sentences given in input file**. | 20/5/21 | 27/5/21 |
| **8** | Write a Java program (using OOP features) to implement following scheduling algorithms: **FCFS , SJF (Preemptive), Priority (Non-Preemptive) and Round Robin (Preemptive)** | 20/5/21 | 27/5/21 |
| **9** | Write a Java program to implement Banker’s Algorithm | 24/5/21 | 27/5/21 |
| **10** | Write a Java Program (using OOP features) to implement paging simulation using 1. Least Recently Used (LRU) 2. Optimal algorithm | 24/5/21 | 27/5/21 |

**Subject Coordinator Head of the department**

**(Prof. Ashlesha Sawant) (Prof. D.D.Sapkal )**