**COMPUTER SCIENCE**

PRACTICAL FILE

Anuj Saharan

XII – D

The Air Force School

Index

|  |  |  |
| --- | --- | --- |
| Set | Lab Exercise | Page Number |
| Lab Exercises 1  [Recapitulation] | 1.1 Prime Numbers  1.2 Palindrome  1.3 2D Array  1.4 Structures | 1-4 |
| Lab Exercises 2  [Introduction to Object Oriented Programming] | 2.1 Flight Class  2.2 Garment Class  2.3 Distance Class | 5-9 |
| Lab Exercises 3  [Constructors and Destructors] | 3.1 Array of Objects  3.2 Constructor & Destructor | 10-13 |
| Lab Exercises 4  [Inheritance] | 4.1 Student Class  4.2 Publication Class | 14-17 |
| Lab Exercises 5  [File Handling  Text Files] | 5.1 Lines, Vowels, Words  5.2 Sum & Product of Numbers | 17-18 |
| Lab Exercises 6  [File Handling  Binary Files] | 6.1 Travel System  6.2 Admission System | 19-22 |
| Lab Exercises 7  [Pointers] | 7.1 Swapping Variables  7.2 Squaring using pointers  7.3 Palindrome  7.4 Array-Dynamic Allocation  7.5 Pointer to a structure  7.6 Pointer to a structure | 23-32 |
| Lab Exercises 8  [Sorting and Searching] | 8.1 Bubble Sort and Searching  8.2 Selection Sort  8.3 Insertion Sort | 33-39 |
| Lab Exercises 9  [Data Structures] | 9.1 Stack  9.2 Queue  9.3 Dynamic Stack  9.4 Dynamic Queue | 40-51 |
| Lab Exercises 10  [SQL] | SQL Queries | 51-81 |

**Lab Exercises 1**

Recapitulation

**Lab Exercises 2**

Introduction to Object Oriented Programming

**Lab Exercises 3**

Constructors and Destructors

**Lab Exercises 4**

Inheritance

**Lab Exercises 5**

File Handling

Text Files

**Lab Exercises 6**

File Handling

Binary Files

**Lab Exercises 7**

Pointers

**Lab Exercises 8**

Sorting and Searching

**Lab Exercises 9**

Data Structures

**Lab Exercises 10**

SQL

**SQL Database 1**

Loan Account

**SQL Database 2**

Shop