|  |  |
| --- | --- |
|  | **BAHRIA UNIVERSITY**  **(Karachi Campus)**  *Department of Software Engineering*  **CEP – Spring 2023**  **COMPLEX ENGINEERING PROBLEM** |

COURSE TITLE: **Object Oriented Programming Lab** COURSE CODE: **Csl-210**

Class: **BSE – 2(A,B,C)** Shift: **Morning**

Course Instructor: **Engr. MAHAWISH** Date: **1 APRIL’23**

Lab Instructor: **ENGR.SANIYA SARIM**

Due Date: **25 JUNE’23** Max. Marks: **30.0 Marks**

**Instructions:**

1. **This is a Complex Engineering Problem.**
2. **Demonstration of Project will be on 25 JUNE, 2023.**
3. **Group Members Should be 3 -4**
4. **Presentation must be of 10 min for project demonstration.**

**Lab Project Task:** **[CLO#05, 15.0marks]**

The Student should fulfill following requirements in their lab project.

1. Create an application that uses Object Oriented Concepts.
2. You can use VSCode,Jupiter Notebook ,Netbeans, Eclipse software for developing software based project with GUI in Java or Python
3. You can also develop any gaming application.
4. It’s essential to use some features, we learnt in our lab such as Classes, Objects,sAccess Modifiers, Constructors, Inheritance, Composition, Aggregation, Polymorphism, Static Members, Abstraction and so on.
5. You can also add essential features like Exception Handling, Interfaces etc.

**Lab Project Proposal: [CLO#05, 5.0 marks]**

**Lab Project VIVA: [CLO#06, 5.0 marks]**

**Lab Project REPORT: [CLO#05, 5.0 marks]**