

University of Engineering & Technology Peshawar Department of Computer Systems Engineering 3rd Semester, Fall 2020

Subject: Object Oriented Programming Lab Midterm Examination

Marks: 15

Date: 6th Feb, 2021

Q1: Explain the following topics in detail with comprehensive examples including the outputs in C++:

- a) Class
- b) Member data
- c) Member functions including different types of constructors, destructors, & other functions
- d) Objects
- e) Inheritance
- f) Polymorphism
- g) Operator overloading
- h) Abstraction i.e., the concept of class and member data
- i) Encapsulation i.e., the concept of class, member data, and member function

RULES:

- 1) Buy a dedicated notebook/copy for this task.
- 2) WRITE BY HAND.
- 3) Printed submission is unacceptable with zero marks award.
- 4) Write your name and registration number on each page on the top.
- 5) If anyone's submission will match with anyone i.e., cheating will be awarded zero marks.
- 6) Use your own examples. Do not copy the content in lab material including the examples and tasks.
- 7) Uniqueness and quality have major weightage.
- 8) Submission is carried out in two phases:
 - a. You have maximum 24 hours to complete this task. After 24 hours, upload a short video of 2-5 minutes explaining your work.
 - b. Physically submit on or before 13th Feb 2021. You can leave your work in my office or in CMS operator office during office hours.
- 9) Both video and physical submission is mandatory.
- 10) This is an individual work. Group work is unacceptable and prohibited.
- 11) Late submission has zero marks.
- 12) It is mandatory for you to submit lab report 3, lab8_task1 video, and lab9_task1 video. It is part of this lab examination.

Good Luck