

## DEPARTMENT OF COMPUTER SYSTEM ENGINEERING

## UNIVERSITY OF ENGINEERING & TECHNOLOGY PESHAWAR

3<sup>rd</sup> Semester FALL 2022

Assignment # 4

Max Marks: 30 Marks

Due Date: Within Class on Thursday 19st January 2023

## **Plagiarism Policy:**

Plagiarism is strictly not allowed. Any case of plagiarism will get zero marks.

Q. 1: (CLO3)

Create a class called **employee**. This class maintains information about name (**char**\*), department (**char**\*), salary (**double**), and period of service in years (**double**).

- 1. Provide a no-argument constructor to initialize the data members to some fixed values.
- 2. Provide a **4-argument constructor** to initialize the members to values sent from calling function.

(You have to make dynamic allocation for both name and department data members in constructor.)

- 3. Provide a **copy-constructor** that performs the deep copy of the data members.
- 4. Provide separate getter and setter functions for each attribute.
- 5. Provide an **input** function that takes all the values from user during run-time.
- 6. Provide a **display** function that displays all the information about a specific student to user.
- 7. Provide a **destructor** to free the memory allocated to name and department in constructor.

Write a driver program to test the functionality of the above-mentioned class.

Note: All your answers to the questions posed in the assignment should be organized as a word document that you would submit along with the C++ code. The document should also discuss your implementation strategy