## **SOFTWARE QUALITY AND TESTING - ASSIGNMENTS**

Instructions to complete the Assignments: (Section: 1,2 and 3)

On the First Page, Write: NAME, ID NO, SECTION, and Assignment Clearly visible on the FIRST PAGE

Assignment 1 - Write on white paper <u>ONLY USING A PEN</u> (This is not permitted in the printed format)

Assignment 2 – A Printed Document is permitted.

Write comprehensive responses to all of the Questions and submit them before May 29<sup>th</sup>, 2024

## ASSIGNMENT-1: IT IS AN INDIVIDUAL ASSIGNMENT (15 Marks)

- **1.** Discuss the relationship between the effectiveness of testing and other phases of software development. Verify?
- 2. Software Testing is a trade-off between Quality, Time, and Budget." Verify. (Ref. To increase quality, For Verification & Validation & For reliability estimation Explain clearly)
- **3.** If you are testing a program's ability to print to Printer. What generic test-to-fail test scenarios would be appropriate?
- **4.** On your Computer, Open the Windows calculator. Type 7, 00,000 2,000= (note the comma is important). Look at the result. Is this a bug? If yes, explain why; if no, explain why.
- 5. Create Test Cases Using Boundary Value Analysis for the following requirement: "In the examination grading system, if the student scores 0 to less than 40, assign E Grade, if the student scores 40 to 49, assign D Grade, if the student scores 50 to 69, assign C Grade, if the student scores 70 to 84, assign B Grade, and if the student scores 85 to 100, assign A Grade."

## ASSIGNMENT-2 (CASE STUDY): Printed Document allowed It Is a *Group* Assignment (Maximum of 5 Students in A Group) – 15 Marks

Create a Case Study utilizing Software Quality Testing Methodologies (such as Penetration Testing, Unit Testing, Integration/System Testing, Functional Testing, Regression Testing, Acceptance Testing, and so on).

Give a brief explanation of the system, what features of software quality and engineering it may be used to demonstrate, and a list of links to more detailed information about the system.