Course Name: Software Testing and Quality Assurance
Course code: E2UC502T

Assignment 2(Fall-2023-2024)
Submission Date: 16th Jan, 2024 before 5PM
Handwritten Assignment on A4 sheet

Note: Assignment should be submitted on my Desk in hardcopy.

Problem 1

JUnit is a unit testing framework for the Java programming language. JUnit has been important in the development of test-driven development, and is one of a family of unit testing frameworks which is collectively known as xUnit that originated with SUnit.[CO5][K4][8 marks]
a) Shed light on the reason that why JUnit only reports the first failure in a single attempt?
b) Discuss the role of @Before and @After annotation does in JUnit 4?
c) How do you ignore certain test methods in the JUnit Test class?
D) Give a brief account of the Test Suite with respect to JUnit?

Problem 2

Selenium is one of the most widely used open source Web UI (User Interface) automation testing suite.Our Selenium tutorial includes all topics of Selenium such as Features, Selenium vs QTP, Selenium Tool Suits, Selenium IDE, Selenium IDE Locating Strategies, Selenium WebDriver, WebDriver Features, WebDriver vs RC, WebDriver Installation, etc.[CO5][K5][6 marks]
a) write down the step by step follows for Selenium Automation Testing?
b) List out the limitations of Selenium testing?
c) Identify the different types of annotations which are used in Selenium?

Problem 3

Explain in detail about mcCabe's basis path method using graph theory? Show one example how to find mcCabe's path for a graph[CO4][K3][3 Marks]

Problem 4

A software project was estimated at 352 Function Points (FP). A four person team will be assigned to this project consisting of an architect, two programmers, and a tester. The salary of the architect is Rs.80,000 per month, the programmer Rs.60,000 per month and the tester Rs.50,000 per month. The average productivity for the team is 8 FP per person month. Calculate the projected cost of the project?[CO4][K5][3 marks]

Problem 5

a) Briefly explain the ISO 9001:2000 (Requirements) document for quality assurance.
b) Briefly explain the common features of key practices in the CMM model.[CO4][K4][5 Marks]