**Assignment Questions**

Day1:

Assignment 1: explain network terminology.

Assignment 2: Draw your Home Network Topology and explain how you are accessing the RPS Lab environment.

Day2:

Assignment 1: SDLC Overview - Create a one-page infographic that outlines the SDLC phases (Requirements, Design, Implementation, Testing, Deployment), highlighting the importance of each phase and how they interconnect.

Assignment 2: Develop a case study analysing the implementation of SDLC phases in a real-world engineering project. Evaluate how Requirement Gathering, Design, Implementation, Testing, Deployment, and Maintenance contribute to project outcomes.

Assignment 3: Research and compare SDLC models suitable for engineering projects. Present findings on Waterfall, Agile, Spiral, and V-Model approaches, emphasizing their advantages, disadvantages, and applicability in different engineering contexts.

Day3:

Assignment 1: Create an infographic illustrating the Test-Driven Development (TDD) process. Highlight steps like writing tests before code, benefits such as bug reduction, and how it fosters software reliability.

Assignment 2: Produce a comparative infographic of TDD, BDD, and FDD methodologies. Illustrate their unique approaches, benefits, and suitability for different software development contexts. Use visuals to enhance understanding.

Day4:

Assignment 1: difference between scrum vs Kanban

Assignment 2: write 3 user stories with acceptance criteria.

Assignment 3: write product backlog and backlog for your project.

Assignment 4: set a Kanban board for your project.

Day5:

Assignment 1: Write 2 script for stand-up meetings

Assignment 2: Write 2 script for stand meetings

Assignment 3: Write 30 Linux commands with example.

Assignment 4: Basic task

Assignment 5: Explain absolute path and relative path.

Day6:

Assignment1: Explain the Architecture of Git.

Assignment2: Explain all the git commands.

Assignment3: Write a step to create a new branch and merge with master branch.

Assignment4: Explain fork and git clone with example.