



Part B

1.
 - a. Briefly explain the main characteristics of an expert system.
 - b. What is meant by "Conversion" in system implementation stage?
 - c. Suppose you are the system analyst of a company which handles a software development project, of which the details are given below.
 - Estimated time to complete the project : 150hrs
 - Number of workers = 3
 - A worker works 2hrs per day and 5 days per week

Calculate the effort, duration and the elapsed time of the project.

- d. Differentiate verification and validation in Software Development Life Cycle.

(25 mark)

2.
 - a. Explain what is "operational feasibility."
 - b. Briefly explain the concepts of **black box testing and white box testing**.
 - c. Briefly explain the difference between traditional development and Rapid Application Development using a suitable diagram.
 - d. Draw a cause-and-effect diagram to show the causes and effects of a person getting late for work.

(25 mark)

3.
 - a. List the types of questions you should avoid in an interview during the requirement gathering stage.
 - b. What are the problems encountered when gathering requirements?
 - c. Explain the two (02) varieties of sub states in a state machine diagram.
 - d. Briefly explain the five (05) feasibility tests you would carry out before initiating a project.

(25 mark)