

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER - 2022**

PROJECT MANAGEMENT AND SOFTWARE ENGINEERING

[Maximum marks: 100]

(Time: 3 Hours)

PART – A

Maximum marks : 10

I (Answer *all* the questions in one or two sentences. Each question carries 2 marks)

1. Write any two disadvantages of classical waterfall model.
2. Write any four characteristics of SRS.
3. Define test case.
4. List three types of risks associated with a project.
5. List any four quality factors of a software product. (5 x 2 = 10)

PART – B

Maximum marks : 30

II (Answer any *five* of the following questions. Each question carries 6 marks)

1. Explain agile model for software development.
2. Explain different types of maintenance.
3. List different users of SRS and mention the context in which they make use of SRS.
4. Compare object oriented design with function oriented design.
5. Explain Unit testing.
6. What are coding guidelines? Write any five representative coding guidelines.
7. Explain different activities carried out during configuration management. (5 x 6= 30)

PART – C

Maximum marks : 60

(Answer one full question from each unit. Each full question carries 15 marks)

UNIT –I

III.(a) Explain different phases of software development life cycle. (10)

(b) Draw a schematic diagram to represent the prototype model for software development (5)

OR

IV.(a) With a neat diagram explain spiral model for software development. (9)

(b) Explain the activities carried out during feasibility study phase. (6)

UNIT-II

V.(a) Write the structure of an SRS. (8)

(b) What is a DFD? What are the primitive symbols used in a DFD? Explain each. (7)

OR

VI.(a) Explain detailed design. What is the output of detailed design? (7)

(b) Explain the need for requirement analysis. (8)

UNIT-III

VII.(a) With a suitable code explain statement coverage testing and branch coverage testing. (10)

(b) Write a note on code inspection. (5)

OR

VIII.(a) With suitable examples explain the following black box testing approaches.

(i) Equivalence Class partitioning (ii) Boundary Value Analysis (10)

(b) Differentiate the following (i) Failure with Error (ii) Test case with Test suite (5)

UNIT-IV

IX. (a) Explain the process of estimating development time and effort using basic COCOMO model. (8)

(b) Explain the activities involved in risk management. (7)

OR

X. (a) Explain different levels of CMMI. (10)

(b) Explain change management procedures. (5)
