

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER - 2024**

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. Define Software engineering.
2. Write the outcome of software requirement analysis.
3. List two complexity metrics for function oriented design.
4. Define Test Case.
5. What is a Software risk?

(5 x 2 = 10)

PART – B

Maximum marks: 30

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

1. Describe Software Process.
2. Explain the role of software architecture.
3. Explain Requirement analysis.
4. Briefly explain Code inspection.
5. Describe Refactoring.
6. Explain Project Management Framework.
7. Describe about Resource 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) Describe Feasibility study phase. (6)
- (b) Explain classical waterfall model and write its two limitations. (9)

OR

- IV.** (a) Explain the activities performed in the maintenance phase. (6)
(b) Compare Iterative, Prototyping and Spiral life cycle models. (9)

UNIT – II

- V.** (a) Summarize the desirable characteristics of an SRS. (7)
(b) Describe any two complexity metrics for object oriented design. (8)

OR

- VI.** (a) Describe two approaches of detailed design. (7)
(b) Explain the general structure of an SRS document. (8)

UNIT - III

- VII.** (a) Explain boundary value analysis with an example. (7)
(b) Explain the programming practices to make the code easier to read and minimize errors. (8)

OR

- VIII.** (a) Explain different levels of testing. (6)
(b) Describe Incremental coding process and Pair programming. (9)

UNIT – IV

- IX.** (a) Describe change management. (7)
(b) Explain the activities in software quality management. (8)

OR

- X.** (a) Describe the necessity of configuration management. (7)
(b) Write about different capability levels in CMMI. (8)
