

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, APRIL – 2024**

**PROJECT MANAGEMENT AND SOFTWARE ENGINEERING**

[Maximum Marks : 100]

[Time : 3 hours]

**PART – A**  
(Maximum Marks : 10)

Marks

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

1. Define Software engineering.
2. Define Software process.
3. What is a Software project?
4. Define test suite.
5. What is a Risk?

(5x2=10)

**PART – B**  
(Maximum Marks : 30)

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

1. Write short notes on phases of software development.
2. Explain Spiral life cycle model.
3. Explain Data Flow Diagrams.
4. Discuss cohesion and Coupling.
5. Explain Unit testing.
6. Explain activities of Software quality management.
7. Explain Software project management framework.

(5x6=30)

**PART – C**

(Maximum Marks : 60)

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

**UNIT – I**

**III.** Explain the phases of Classical waterfall model. (15)

**OR**

**IV.** (a) Explain emergence of software engineering. (6)

(b) Write short notes on Prototyping model. (9)

**UNIT – II**

**V.** (a) Write the characteristics of a good SRS document. (8)

(b) Explain structure of an SRS document. (7)

**OR**

**VI.** (a) Explain the role of Software Architecture. (9)

(b) Explain requirement process. (6)

**UNIT –III**

**VII.** (a) Explain Black Box testing. (10)

(b) Explain Testing activities. (5)

**OR**

**VIII.** (a) Explain Coding Standards. (9)

(b) Discuss Testing concepts. (6)

**UNIT – IV**

**IX.** (a) Explain different levels of CMMI. (9)

(b) Explain need for Software Configuration Management. (6)

**OR**

**X.** (a) Explain project estimation techniques. (9)

(b) Discuss RMMM plan. (6)

\*\*\*\*\*