

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2017

PROJECT MANAGEMENT AND SOFTWARE ENGINEERING

[Time : 3 hours

(Maximum marks : 100)

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. What is feasibility study ?
3. List any two complexity metrics for OOD.
4. Define failure.
5. What is a software risk ?

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain the agile lifecycle model.
2. Explain the activities performed in the maintenance phase.
3. Explain the structure of an SRS document.
4. Describe the types of views in software architecture.
5. What is information hiding ?
6. What is unit testing ?
7. What is change management ?

(5×6 = 30)

PART — C

(Maximum marks : 60)

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

UNIT — I

- III (a) Explain the phases of the spiral lifecycle model. 8
 (b) Explain in detail the implementation phase activities. 7

OR

- IV (a) Compare any three life cycle models of software development. 9
 (b) What is a software product ? Explain the different types of software products. 6

UNIT — II

- V (a) Explain the different methods of requirement gathering. 7
 (b) What is functional coupling and explain the different types. 8

OR

- VI (a) What are the activities performed in the project planning. 8
 (b) What is function oriented design ? Explain. 7

UNIT — III

- VII (a) Explain about the programming practices used by the developers. 10
 (b) Briefly explain code inspection. 5

OR

- VIII Define the following terms:

- (i) Error (ii) Fault (iii) Test Case
 (iv) Test suite (v) Test Harness

15

UNIT — IV

- IX Explain the different techniques to estimate project size. 15

OR

- X Explain in detail the risk management. 15