

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2019

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. State the phases of software development.
2. List the characteristics of an SRS.
3. What is coupling ?
4. Define fault.
5. What does CMMI provide ?

(5 × 2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain the activities in the design phase.
2. Compare iterative and prototyping life cycle model.
3. Explain the requirement gathering procedure.
4. Write about the complexity metrics for function oriented design.
5. What is test driven development ?
6. Explain the black box testing.
7. How project risks can be identified ?

(5 × 6 = 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 the classic waterfall lifecycle model. 15

OR

IV (a) Define software engineering. Explain the emergence of software engineering. 9

(b) What is a software process ? Explain the characteristics of software process. 6

UNIT — II

V (a) Explain the DFD with an example. 9

(b) What is functional cohesion and explain the different types. 6

OR

VI (a) What is software architecture ? Describe its importance. 6

(b) What is object oriented design ? Explain. 9

UNIT — III

VII (a) Explain about the coding guidelines used by the developers. 9

(b) Explain unit testing. 6

OR

VIII (a) Define testing. Explain the tasks involved in the testing process. 9

(b) Write notes on different levels of testing. 6

UNIT — IV

IX Explain the different techniques to estimate project cost. 15

OR

X Explain in detail the configuration management. 15