

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

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. What is the importance of Maintenance phase ?
2. Define functional requirements of an SRS.
3. Define Test Case and Test Suite.
4. List two advantages of Information hiding.
5. Define Risk.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Write short notes on the Phases of software development.
2. Write short notes on Design phase.
3. Draw and explain the major symbols used in Data Flow Diagrams.
4. Explain Effort Estimation.
5. Explain Structured Programming.
6. Explain two approaches for unit testing.
7. Explain Project Quality Assurance Plan.

(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 Agile model.   |  | 9 |
|     | (b) Explain testing phase. |  | 6 |

OR

- |    |                                                                     |  |   |
|----|---------------------------------------------------------------------|--|---|
| IV | (a) How Iterative model overcomes the drawbacks of Waterfall model. |  | 9 |
|    | (b) Explain the importance of software engineering.                 |  | 6 |

UNIT — II

- |   |                                                                |  |   |
|---|----------------------------------------------------------------|--|---|
| V | (a) Explain Object Oriented Design and its Complexity Metrics. |  | 9 |
|   | (b) Explain the characteristics of an SRS.                     |  | 6 |

OR

- |    |                                                              |  |   |
|----|--------------------------------------------------------------|--|---|
| VI | (a) Explain the need of Software Requirement Analysis.       |  | 7 |
|    | (b) Explain Cohesion and Coupling in Object Oriented Design. |  | 8 |

UNIT — III

- |     |                               |  |   |
|-----|-------------------------------|--|---|
| VII | (a) Explain Testing Process.  |  | 9 |
|     | (b) Explain Coding Standards. |  | 6 |

OR

- |      |                                                             |  |   |
|------|-------------------------------------------------------------|--|---|
| VIII | (a) Explain different phases of Code Inspection.            |  | 9 |
|      | (b) Explain Test Case Design with Test Case Specifications. |  | 6 |

UNIT — IV

- |    |                                        |  |    |
|----|----------------------------------------|--|----|
| IX | Explain Project Schedule and Staffing. |  | 15 |
|----|----------------------------------------|--|----|

OR

- |   |                                   |  |    |
|---|-----------------------------------|--|----|
| X | Explain different levels of CMMI. |  | 15 |
|---|-----------------------------------|--|----|