

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

CLOUD COMPUTING

[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 peer-to-peer computing.
2. List any 4 disadvantages of cloud computing.
3. What is the advantage of using centralized email communication ?
4. Give any 2 web-based databases.
5. Name any 2 blog-hosting community.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Give the 6 advantages of cloud computing.
2. Explain different types of cloud services development.
3. Explain collaboration on schedules for community using cloud computing.
4. Write briefly about any 2 scheduling application.
5. How does an on-line database works ?
6. List the tools associated with online groupware.
7. Explain a social network group ?

(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 architecture of cloud computing with diagram. 8
 (b) Define a cloud storage. Give its advantages. 7

OR

- IV (a) Explain the pros and cons of cloud service development. 7
 (b) Compare Amazon EC2 and Google App Engine. 8

UNIT — II

- V (a) Explain how schedule and contact list are collaborated. 8
 (b) How cloud computing helps to collaborate financial statements for corporation ? 7

OR

- VI (a) Explain how collaboration on group projects and events are done for community. 10
 (b) How presentations are collaborated for corporation using cloud computing ? 5

UNIT — III

- VII (a) Explain about project management application. 6
 (b) Give the benefits of cloud storage. 9

OR

- VIII (a) Explain how web-based word processing works. 10
 (b) Write about any 2 on-line file storage and sharing services. 5

UNIT — IV

- IX (a) Write about the collaboration of Wikis. 7
 (b) Explain briefly about collaborating via social networks. 8

OR

- X (a) List features of the web conferencing. 10
 (b) Explain collaboration via Blogs with an example. 5

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
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MICROPROCESSORS AND INTERFACING

[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 instruction cycle.
2. List any four data transfer instructions.
3. List any two assemblers of x86.
4. Write the order of priority of interrupts in 8086.
5. What is hyperthreading ?

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain memory segmentation in 8086.
2. List features of 8086.
3. Explain shift and rotate instructions.
4. Write software interrupts of 8086.
5. What are the two types of control words in 8259.
6. What is the importance of virtual memory concept.
7. Explain super scalar processors with suitable diagram.

(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 internal architecture of 8086 with block diagram. 15

OR

- IV (a) Explain any four addressing modes of 8086 with suitable examples. 8
 (b) Explain conditional flags in flag register of 8086. 7

UNIT — II

- V (a) What is Procedure ? What are the steps taken by processor during procedure call ? 8
 (b) Write an assembly language program to calculate square of a number. 7

OR

- VI (a) Explain any four string instructions with examples. 8
 (b) What are the pre-requisites for using string instructions ? 7

UNIT — III

- VII (a) Explain functional blocks of 8255 with internal block diagram. 8
 (b) Describe the modes of operation of 8255. 7

OR

- VIII (a) Write interrupt response of 8086. 8
 (b) Explain interrupt vector table. 7

UNIT — IV

- IX (a) Explain the concept of multicore processing. 8
 (b) Write the major issues in multicore processing. 7

OR

- X (a) Explain the stages of pipelining. 8
 (b) What are pipeline hazards ? 7

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
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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

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

OR

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

UNIT — II

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

OR

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

UNIT — III

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

OR

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

UNIT — IV

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

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| X | Explain different levels of CMMI. | 15 |
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
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WEB PROGRAMMING

[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. Distinguish container and empty tags with example.
2. Mention any two client side scripting languages.
3. Define cookie.
4. What is Web Hosting ?
5. List any two Content Management Tools.

(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 Web browsers, Web servers and Domain Names.
2. With proper examples describe different types of list tags in HTML.
3. Describe Document Object Model in JavaScript with an example.
4. Develop a simple JavaScript function to validate the mobile number field of a form is a 10 digit number or not using onclick event of a button on the form.
5. Write down any six advantages of PHP.
6. How a session is started, stored and destroyed using PHP ?
7. With syntax and example explain establishing database connection and closing a connection in PHP.

(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) Write tags to embed the following in a web page with example.
 (i) image (ii) audio (iii) video (iv) applet 8
- (b) Describe tags and attributes of frames in HTML with an example. 7

OR

- IV (a) Illustrate the following input controls in a form with syntax and example.
 (i) check box (ii) radio button (iii) select (iv) text area 8
- (b) Explain the creation of table in HTML. 7

UNIT — II

- V (a) What is an External Style Sheet ? Explain the creation of it with example. 8
- (b) Create a JavaScript function to find the product of two numbers given through two text boxes and store the results in another text box on button click event. 7

OR

- VI (a) What is a selector in CSS ? Write different types of selectors with examples. 8
- (b) Construct a dynamic JavaScript document to randomly change background colour. 7

UNIT — III

- VII (a) Explain the types of arrays used in PHP. 8
- (b) Explain steps in File handling in PHP. 7

OR

- VIII (a) Explain about functions in PHP. 8
- (b) How a form is handled using GET and POST in PHP ? 7

UNIT — IV

- IX (a) Describe the procedure in creating a database table with example in PHP. 8
- (b) What is a Content Management System ? List the advantages. 7

OR

- X (a) With an example explain how to insert data from a form to a database. 8
- (b) Explain the File uploading procedure using FTP in Web Hosting. 7