Diploma in Information Technology (DIT) Annual Examination, August 2009 INFORMATION TECHNOLOGY BASICS AND OS

Time: 3 Hours Max. Marks: 90

Instruction: Answer all questions in Part - A, any five in Part - B and any three in Part - C.

PART – A $(10 \times 2 + 5 \times 1 = 25)$

- 1. What is an operating system?
- 2. What is a computer?
- 3. Name any four input devices.
- 4. Write any three output devices.
- 5. Expand RAM.
- 6. What is a compiler?
- 7. Name any two differences between DOS and WINDOWS.
- 8. Name the different types of secondary storage devices.
- 9. What is a finite set?
- 10. What is Windows NT?
- 11. Expand the following:
 - 1) BIOS
 - 2) GUI
 - 3) ROM
 - 4) DOS
 - 5) CPU.

Answer any five: $(5\times10=50)$

- 1. Explain briefly operating system concepts.
- 2. Explain the features of impact and non-impact printers.
- 3. Explain the working of a computer system with a neat diagram.
- 4. Explain Windows NT features and architecture.
- 5. Bring out the features of WINDOWS operating system.
- 6. Write a brief note on secondary storage devices.
- 7. Explain any five commands of MS-DOS with example.
- 8. What is software and discuss the classification of software.

PART - C

Write short notes on any three of the following:

 $(3 \times 5 = 15)$

- 1. CPU
- 2. System Software
- 3. Data Processing Cycle
- 4. GUI (Graphical User Interface)
- 5. Computer Generations.

Diploma in Information Technology Annual (DIT) Examination, August 2009 DATABASE MANAGEMENT SYSTEM I & II

Time: 3 Hours Max. Marks: 90

Instruction: Answer **all** questions in Part - A, any five in Part - B and any three in Part - C.

PART - A

 $(10 \times 2 + 5 \times 1 = 25)$

- 1. What is a Data base?
- 2. What is a Report?
- 3. Name the main functions of a DBMS.
- 4. What are Triggers?
- 5. What is Privileges and Roles?
- 6. What is the difference between Static and Dynamic files?
- 7. What is a Form?
- 8. What are Remote Procedure calls?
- 9. What is a Program Global Area?
- 10. What is Distributed Data base?
- 11. Explain the following terms:
 - 1) DBA
 - 2) ODBC
 - 3) SADB
 - 4) DML
 - 5) DDL

PART – B

 $(5 \times 10 = 50)$

- 1. Explain the ORACLE memory structures in detail.
- 2. Explain the features of Import and Export of files in DBMS.
- 3. What is record organization? Explain the variable and fixed length record.
- 4. What is hashing? Describe different hashing with suitable examples.
- 5. Narrate the ODBC and describe how it works.
- 6. Explain the steps required to create and design queries in MS-ACCESS.
- 7. What are the methods used to grant and cancel privileges in RDBMS?
- 8. What is the difference between SQL and PL/SQL? Programmers prefer PL/SQL to SQL Give reasons.

PART - C

Write short notes on any three of the following:

 $(3 \times 5 = 15)$

- 1. Client/Server system
- 2. Two tier Data base design
- 3. Remote Procedure calls
- 4. JDBC API Components
- 5. Index Sequential File.

II Semester Diploma in Information Tech. (DIT) Examination, August 2009 DATABASE MANAGEMENT SYSTEM

Time: 3 Hours Max. Marks: 75

Instruction: Answer all questions in Part A, any five questions in Part B.

PART - A

Answer all the questions:

- 1. What is PL/SQL?
- 2. Name PL/SQL data types.
- 3. Name PL/SQL Operators.
- 4. Name PL/SQL iterative statements.
- 5. What is a Database Trigger?
- 6. What is menu? Mention the various menu styles.
- 7. Explain ODBC API.
- 8. What is a form?
- 9. What is meant by an Instance?
- 10. What is a Literal?
- 11. Expand the following terms:
 - a) SGA
 - b) PGA
 - c) DBWR
 - d) LGWR
 - e) PMON.

Answer any five: $(5\times10=50)$

- 1. What is hashing? Describe different hashing with suitable example.
- 2. Write a note on String Operators and Logical Operators with example.
- 3. Explain the different types of exceptions.
- 4. Explain the different components of ORACLE forms.
- 5. What is the difference between SQL and PL/SQL? How PL/SQL helps to programmers? Explain the block PL/SQL structure.
- 6. Narrate the ODBC and describe how it works.
- 7. Discuss briefly the significance of Remote Procedure Call.
- 8. Write short note on Client/Server system, two-tier and three-tier database design.

II Semester Diploma in Information Tech. (DIT) Examination, August 2009 INFORMATION SYSTEM

Time: 3 Hours Max. Marks: 75

Instruction: Answer all questions in Part - A, any five questions in Part - B.

PART - A

Answer all the questions:

- 1. Explain Data and Information.
- 2. Explain any two properties of information.
- 3. What is Strategic Information?
- 4. Name the different types of data processing files.
- 5. What is data communication?
- 6. What is File Merging?
- 7. What is an Open System?
- 8. Mention the advantages of Decentralized data processing.
- 9. What is distributed system?
- 10. Mention the disadvantages of centralized data processing.
- 11. Mention the different components of DSS.
- 12. Expand the following:
 - a) EDP
 - b) TPS
 - c) MIS
 - d) OLTP
 - e) DSS

PART – B

Answer any five questions:

 $(5 \times 10 = 50)$

- 1. Explain Open and Closed Systems with an example.
- 2. With a neat diagram explain the Features of EDP.
- 3. Explain with a neat diagram Real Time Processing (for sales transaction processing).
- 4. Explain the architecture of DSS with a neat sketch.
- 5. Explain the importance of human resource function in an organization with a neat sketch?
- 6. Explain the properties of information.
- 7. Explain the different types of knowledge system.
- 8. Mention the various types of files used in Business Data Processing and explain each one of them.

II Semester Diploma in Information Tech. DIT Examination, August 2009 NETWORKING AND COMMUNICATIONS

Time: 3 Hours Max. Marks: 75

Instruction: Answer all questions in Part - A, any five questions in Part - B.

PART - A

1. What is a Computer Network?

- 2. Explain HTML.
- 3. Define Router.
- 4. Name different types of Network Topology.
- 5. What is WWW?
- 6. What is Protocol?
- 7. Explain LAN.
- 8. What is a WAN?
- 9. Explain Wireless Communication.
- 10. Name different layers of OSI Model.
- 11. Explain the following terms:
 - a) SMTP
 - b) TCP/IP
 - c) HTTP
 - d) MODEM
 - e) Telnet.

Answer any five questions:

 $(5 \times 10 = 50)$

- 1. Explain various types of data communication.
- 2. Explain the different types of network topologies with a neat diagram.
- 3. Explain the meaning and importance of protocol in computer networks.
- 4. Explain HTML in detail.
- 5. Explain different types of communication media.
- 6. Explain the architecture of OSI Model.
- 7. What is an Internet? Explain few applications of internet with an example.
- 8. Discuss briefly the different layers of TCP/IP Model.

Diploma in Information Technology Annual (DIT) Examination, August 2009 NETWORKING AND INTERNET

Time: 3 Hours Max. Marks: 90

Instructions: Answer all questions in Part - A, any five in Part - B and any three in Part - C.

PART - A (2×10+5×1=25)

- 1. What is Computer Network?
- 2. Explain Bandwidth.
- 3. Explain Star Topology.
- 4. What is a Point to Point Connection?
- 5. Define Router.
- 6. Explain WAN.
- 7. Name different layers of OSI Model.
- 8. Explain http.
- 9. Name different types of Network Topology.
- 10. What is Intranet?
- 11. Expand the following terms:
 - STP
 - TCP/IP
 - ISP
 - FTP
 - NIC

PART - B (5×10=50)

Answer any five questions.

- 1. Explain the features of different types of cables used in network communication.
- 2. Explain the components of HTML in details.
- 3. Discuss briefly the components of data communication.
- 4. Explain the architecture of OSI Model.
- 5. Explain different topologies in computer networks?
- 6. Briefly discuss the different layers in TCP/IP model.
- 7. What is a Web Browser? Explain Browser elements and mention some popular Web Browsers.
- 8. Compare the following:
 - DNS and URL
 - Router and Gate Way

 $PART - C (3 \times 5 = 15)$

Write short notes on any three of the following:

- 1. Modem
- 2. SMTP
- 3. HTML
- 4. Protocols
- 5. Internet.

Diploma in Information Technology Annual (DIT) Examination, August 2009 OFFICE AUTOMATION

Time: 3 Hours Max. Marks: 90

Instruction: Answer all questions in Part - A, any five in Part - B and any three in Part - C.

PART - A

 $(10 \times 2 + 5 \times 1 = 25)$

- 1. Explain Standard Tool Bar.
- 2. Explain the formatting tools; Bold facing and Italic.
- 3. What is "Work Book"?
- 4. Explain the feature "OLE" (Object Linking and Embedding).
- 5. Name different types of charts.
- 6. Write down the steps for saving a document as a web page.
- 7. Explain the AVE function in MS-EXCEL.
- 8. Explain Character Formatting.
- 9. Write down the steps to insert a table in an MS-WORD document.
- 10. What is Data Source?
- 11. Explain the following terms:
 - a) Sort
 - b) Menu Bar
 - c) Cell formatting
 - d) Syntax of a formula
 - e) Comparison Operators.

 $PART - B (5 \times 10 = 50)$

Answer any five.

- 1. Explain Paragraph and Page Formatting.
- 2. Explain the essential features of word processing software.
- 3. Explain the different types of functions supported by MS-EXCEL.
- 4. Explain Sorting and Filtering in MS-Excel.
- 5. Explain Title Bar, Menu Bar, Tool Bar, Formula Bar, Name Box, Scroll bars, worksheet Tabs and Status bar.
- 6. What is Mail Merge? Explain the steps to create an invitation and send the same to 10 people.
- 7. Explain the steps for inserting a table of 4 columns and 6 rows into a Document.
- 8. Explain how to save and close a Work Book in MS-Excel.

 $PART - C (3 \times 5 = 15)$

Write short notes on any three of the following:

- a) Paragraph Formatting
- b) Find and Replace options
- c) Arithmetic functions in MS-EXCEL
- d) Page setup
- e) Chart.

II Semester Diploma in Information Tech. DIT Examination, August 2009 PROGRAMMING IN C LANGUAGE

Time: 3 Hours Max. Marks: 75

Instruction: Answer all questions in Part - A and any five questions in Part - B.

PART - A

Answer all the questions:

- 1. What is a flow chart?
- 2. Name some Library Functions in C.
- 3. Write the general format of a switch statement.
- 4. What is a function?
- 5. What is an Algorithm?
- 6. Explain scanf() and printf().
- 7. What is recursive function?
- 8. Explain the rules for framing variables.
- 9. What is a linked list?
- 10. Write the flow chart symbol for offpage connector and decision.
- 11. Explain the following:
 - a) Arrays.
 - b) Library Functions.
 - c) Pointers.
 - d) getch().
 - e) Stdio.h.

Answer any five questions:

 $(5 \times 10 = 50)$

- 1. Explain the characteristics and structure of C programming with example.
- 2. Explain the Data types, constants and arithmetic expressions in C.
- 3. Explain Control Structures with an example.
- 4. What is an array? Mention different types of arrays and explain their use with example.
- 5. Write a C program to calculate the absolute value of an integer.
- 6. Explain Pointers and functions with an example.
- 7. Explain file handling in C. Write a C program to find the largest, sum and average of five numbers.
- 8. Write a C program to find the transpose of a matrix.

Diploma in Information Technology Annual (DIT) Examination, August 2009 PROGRAMMING IN C

Time: 3 Hours Max. Marks: 90

Instruction: Answer all questions in Part - A, any five questions in Part - B and any three questions in Part - C.

PART - A

Answer all the questions:

- 1. Explain Recursive Function.
- 2. What is ternary operator? Explain with example.
- 3. Mention the different data types in C.
- 4. What do you mean by Nested statement? Explain.
- 5. What is header file? Explain with example.
- 6. Explain "while" and "do-while" loop.
- 7. What are the advantages of C?
- 8. Explain Printf () and Scanf ().
- 9. What is a function?
- 10. Explain "For" loop.
- 11. Explain the following:
 - 1) Arrays.
 - 2) clrscr ().
 - 3) Preprocessor directives.
 - 4) Stdio.h.
 - 5) Bitwise Operators.

Answer any five questions:

 $(5 \times 10 = 50)$

- 1. Explain the characteristics and structure of C programming with example.
- 2. Explain file handling in C. Write a C program to find the sum of the first 10 natural numbers.
- 3. Explain Control Structures in C. Write a C program to find the sum and average of five numbers.
- 4. Explain the relational and logical expression in C with an example.
- 5. What is an array? Mention different types of arrays and explain their use with example.
- 6. Explain any four mathematical library functions.
- 7. Write a C program to find the area and perimeter of a rectangle having length 1 and breath b.
- 8. Write a C program to insert an element into and delete an element from linked list.

PART - C

Write short notes on any three of the following:

 $(3 \times 5 = 15)$

- 1. Pointers.
- 2. Functions.
- 3. Linked lists.
- 4. Flow charts.
- 5. Variables in C.