D–1712

Sub. Code
51711

DISTANCE EDUCATION

DIPLOMA IN COMPUTER APPLICATION EXAMINATION, DECEMBER 2023.

First Semester

PRINCIPLES OF INFORMATION TECHNOLOGY

(CBCS 2020 – 2021 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — ($10 \times 2 = 20$ marks)

Answer ALL questions.

1. Specify the four main elements of a computer.

2. What is GPS use?

3. Differentiate RAM and ROM.

4. Write short notes on cache memory.

5. What are the different types of system software?

6. Define the term Spreadsheet. Give Examples.

7. Differentiate Intranet and Extranet.

8. Why do we use Protocols in Internet?

9. Expand URI, URL, and URN.

10. What is DNS?

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions choosing either (a) or (b).

11. (a) Discuss the role of IT in Industry and Business.

Or

(b) Explain the various components of Information systems.

12. (a) Enlighten the types of computers.

Or

(b) Describe the applications of computer.

13. (a) Define software. Explain various types of software with example.

Or

(b) Elucidate the advantages of word processing.

14. (a) Discuss advantages and disadvantages of network topologies.

Or

(b) Explicate in detail about Firewall.

15. (a) Differentiate Analog and Digital Signals.

Or

(b) Describe the types of communication software.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Draw the block diagram of computer and explain all the components of computer.

17. What is the advantage of secondary storage? Explain various secondary storage devices.

18. Explain Operating System functions and services in detail.

19. Illustrate the types of Networks.

20. Discuss the role of World Wide Web. Write its advantages and disadvantages.

———————

D–1713

Sub. Code
51712/22412

DISTANCE EDUCATION

COMMON FOR DIPLOMA IN COMPUTER APPLICATION
OF CERTIFICATE PROGRAMMING IN WEB DESIGNING
EXAMINATION, DECEMBER 2023.

First Semester

OPEN SOURCE SOFTWARE

(CBCS 2020 – 2021 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

1. Why has the open source software become popular?

2. What does an Open-Source License do?

3. Mention the three classes of processes in LINUX?

4. What are the two distinct modes of operation of the CPU in Linux?

5. What is MySQL? Why do so many organisations use MySQL?

6. How to sort a MySQL Query Result?

7. How is Sequence handled in MySQL?

8. Write MySQL commands to display the table structure and empty the table.

9. How to run a PHP script?

10. Tell whether PHP variable and keywords are case sensitive?

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions choosing either (a) or (b).

11. (a) What is Open Source Software (OSS)? How it is useful to Small Businesses?

Or

(b) List the differences between User mode and Kernel mode of Linux Operating system.

12. (a) List and explain System Calls used in Process Scheduling.

Or

(b) Explain in detail about Signals used in Linux.

13. (a) Describe in detail about Meta Data in SQL.

Or

(b) List and explain Date and Time functions used in SQL.

14. (a) Write a PHP script to accept String. Font name and draw vertical string user specified font.

Or

(b) Discuss the File handling and Data storage in PHP.

15. (a) Explain the procedure to Connect MySQL Database with PHP Websites.

Or

(b) What is LDAP? Discuss the procedure for connecting to the LDAP server.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Describe the applications of Open Source.

17. Elaborate on various Linux Shells?

18. Explain in detail about OOP in PHP with examples.

19. Discuss about five string handling functions in PHP.

20. What are the components of LDAP? List out the characteristics of LDAP.

———————

D–1714

Sub. Code
51713

DISTANCE EDUCATION

DIPLOMA IN EXAMINATION
DECEMBER 2023

First Semester

Computer Applications

OFFICE AUTOMATION

(CBCS 2020 – 2021 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions

1. How to find and replace a word in document?

2. What is meant by ruler in MS Word?

3. Define cell.

4. What is wrap text?

5. What is the use of undo and redo operations in Excel.

6. What is meant by slide master?

7. How to insert a video in power point slide?

8. What is MS Access?

9. List out any two advantages of MS- Access.

10. Define database.

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b)

11. (a) Draw and explain the word document window.

Or

(b) Write the various font formatting tools available in Ms–Word.

12. (a) How to insert a row and a column to an Excel sheet?

Or

(b) List and explain the logic functions in MS Excel with suitable example.

13. (a) Discuss any six features of Electronic spreadsheet processing.

Or

(b) How do you create a hyperlink in Excel?

14. (a) How will you add an existing picture to a PowerPoint slide?

Or

(b) Explain custom animation and slide transition.

15. (a) Discuss the steps to create a Query.

Or

(b) List out the ways to create reports in MS Access. Explain them.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Elaborate the concept of Mail Merge.

17. Describe different types of charts in MS Excel.

18. Write notes on slide show menu in MS–POWERPOINT.

19. Explain the various objects in MS-ACCESS.

20. How to create a new database using database wizard in MS Access? Explain it.

———————

D–1716

Sub. Code
51722

DISTANCE EDUCATION

DIPLOMA IN COMPUTER APPLICATIONS EXAMINATION, DECEMBER 2023.

Second Semester

PROGRAMMING IN C

(CBCS 2020 – 21 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define identifier.
2. Write short notes on Associativity and Precedence.
3. What is branching?
4. How to read and write a Character in C?
5. Write the syntax of one dimensional array with examples.
6. What is String and its function in C?
7. Write the types of functions.
8. Classify #include, #define directives.
9. What are * and & operators means?
10. Write Short notes on pointer.

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions choosing either (a) or (b).

11. (a) What are basic data types available in C. Write the significance of each data type.

Or

(b) Elucidate the guidelines to use scanf() and printf() functions in C language with example.

12. (a) Clarify switch statement with syntax and example.

Or

(b) Write two way selection statements? Explain if, if-else, and cascaded if-else with examples.

13. (a) Explicate Dynamic arrays with suitable example.

Or

(b) Explain with example (i) Character string (ii) String literal (iii) Storage classes

14. (a) What is function? Write a function to find the sum of two numbers.

Or

(b) Discuss actual parameters and formal parameters? Illustrate with example.

15. (a) Compare structures and unions.

Or

(b) Enlighten the concept of functions returning pointers with example.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Illustrate the basic structure of a C program with an example.

17. Explain conditional control statements used in C.

18. Discuss with syntax and examples, the different string manipulation library functions with example.

19. Give explanation types of argument passing techniques with examples.

20. Elaborate the following file handling functions with examples.

(a) fseek( ) (b) ftell( ) (c) rewind( ) (d) feof( )

———————

D–1717	Sub. Code
	51723

DISTANCE EDUCATION

DIPLOMA IN COMPUTER APPLICATIONS EXAMINATION, DECEMBER 2023.

Second Semester

DATA STRUCTURES AND ALGORITHMS

(CBCS 2020 – 2021 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What are primitive data types?

2. Define: Space complexity.

3. Define: Array.

4. How to declare a string array to hold 15 names with maximum of 10 characters in a name?

5. State the operations of Stack and Queue.

6. Define: Linked list.

7. State any two uses of Linked list.

8. What is meant by Binary tree?

9. What is the use of Hash technique?

10. What is the time complexity of Binary Search?

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions choosing either (a) or (b).

11. (a) Write a note on the types of Data Structure.

Or

(b) How the time complexity measured? Explain.

12. (a) Write a program to add the elements of an integer array.

Or

(b) Give an example of operation on two-dimensional array.

13. (a) Discuss the applications of Stack.

Or

(b) Write a note on Circular Queue.

14. (a) Write a program to insert and display elements in Single Linked List.

Or

(b) Explain about the traversing of Linked list.

15. (a) Write a note on types of Binary tree.

Or

(b) Write a program to search the given number in an integer array.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain the operations on Multi-dimensional array with examples.

17. Write a program to illustrate PUSH and POP operations in Stack.

18. Explain the insertion and deletion operations on Double Linked List.

19. Elaborate on the Binary tree traversal operations in detail.

20. Explain any two searching techniques with example.

———————