



**DIT 15**

**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 :

**(2×10+5×1=25)**

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.

**P.T.O.**



## PART – B

Answer **any five** questions :

**(5×10=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 l 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 :

**(3×5=15)**

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