Q.P. Code: 00006397

[Time:2.30 Hrs] **[Marks:75]**

Please check whether you have got the right question paper.
N.B: 1. All questions are compulsory.
         2. Figures to the right indicate full marks.
         3. Students answering in the regional language should refer in case of
             doubt to the main text of the paper in English.

Q.1   Attempt **any three** of the following: 15

a. Explain the different types of programming languages.
b. Describe the structure of a C program.
c. What is the difference between compiler and interpreter?
d. Define flowchart. Draw a flowchart to find the area of a square.
e. What is variable? Explain the rules of naming a variable.
f. Explain the various datatypes of C language.

Q.2   Attempt **any three** of the following: 15

a. Describe relational operators with examples.
b. Write a program to find sum and average of three user entered numbers.
c. What are format specifier? Explain its different types with an example.
d. Write a code in C to find the simple Interest. Accept input from the user.
e. Explain the following: scanf() , printf() , sizeof() , sqrt().
f. What are comments? Explain with example.

Q.3   Attempt **any three** of the following: 15

a. Write a C program to check if a number is even or odd.
b. Write a menu driven code using switch case to design arithmetic calculator.
c. Explain the concept of for loop with syntax and example.
d. Write a program to find the reverse of a number using while loop.
e. What is the difference between call by value and call by reference?
f. Write a code in C to print factorial of a number. Accept input from the user.

Q.4   Attempt **any three** of the following: 15

a. Explain register storage class.
b. What are preprocessor directives in C?
c. Write a c program to accept an array of 5 integers and display the same.
d. Explain the following: strlwr() strlen() strcpy() strcmp() string.h
e. Write a code in C to concatenate two strings.
f. Write a short note on macros in C.

Q.5   Attempt **<u>any three</u>** of the following: 15

       a. Differentiate between structure and class.
       b. Write a short note on union with an example.
       c. Explain types of operations that can be performed on Pointers.
       d. Explain the concept of pointers with an example.
       e. What are structures? Explain with example.
       f. Write a code in C to demonstrate ++ and -- operator on pointers.