

# COMPUTER SCIENCE

Paper : CS04 : Theory-B : C Programming

Time Allowed : 3 Hours

Maximum Marks : 30

Note : Attempt *one* questions from each Section-A, B, C and D. Question No. 9 (Section-E) is compulsory question.

## Section-A

6 each

1. What are differences between Algorithm and Flowchart? Explain with example.
2. What are various rules for constructing constants and variables in C language ?

## Section-B

6 each

3. What are the various arithmetic operators in C language? Discuss the meaning of each. Also discuss the precedence and associativity of operators.
4. How is "switch" statement different from "if" statement ? Discuss with example.

## Section-C

6 each

5. What is Recursion ? What are advantages of using recursion?
6. How are arrays passed to functions ? Write a program in C language to search an element in an array by using the concept of passing an array to a function.

## Section-D

6 each

7. What do you understand by strings ? Write a program in C language to copy one string to another without using inbuilt function.
8. What do you mean by structures in C language. Write a program in C language to create a structure of student containing name, class, age and address of student. Input the data and print the data for one

**Section– E**

$1\frac{1}{2} \times 4 = 6$

**(Compulsory Questions)**

**9: Discuss the following in short :**

- (a) What are identifiers and keywords in C language ?
- (b) Write a short note on structure of C program.
- (c) What is difference between local and global variables ?
- (d) What is difference between array and string variables ?