Bachelor of Computer Applications
1st Semester Examination

1127

PROBLEM SOLVING THROUGH C
Paper : BCA-16-104

Time : 3 Hours]   **[Max. Marks : 65**

Note :– Attempt *one* question from each Unit and the entire Compulsory question. All questions carry equal marks.

Unit–I

1. (a) What do you mean by a Flow Chart ? How does it differ from a decision table ?

    (b) What are the data types in C language ?   7,6

2. (a) What are Operators ? What are the different categories of operators ?

(b) Why the header file stdio.h is frequently used in C language ?

(c) What are type specifications in C language ? 7,3,3

Unit–II

3. (a) Differentiate between if and if-else statements.

(b) What is the purpose of switch-case statement ? What is the role played by break statement within a Switch Statement ? 7,6

4. (a) Give built-in functions in C.

(b) How do you pass arguments to the function ? Discuss various approaches with examples. 7,6

Unit–III

5. (a) How do you declare and initialize a one dimensional array ?

(b) Write a program in C to sort an array of numbers. 7,6

6. (a) How do you declare a pointer variable ? How do you access values by using the pointers ?

(b) What do you mean by Dynamic Memory Allocation ? 7,6

Unit–IV

7. (a) What is a String Variable ? How do you declare and initialize a string variable ? Give *three* build-in string functions and their use.

(b) What are the various file opening modes ? What is the significance of each ? 7,6

8. (a) How do you define and declare a structure in a C program ? What are nested structures ?

(b) Differentiate structures and arrays. 7,6

Compulsory Question

9. (a) What is an Arithmetic Expression ? 2

(b) What is an Algorithm ? 2

(c) Give *two* features of C language.   2

(d) What are floor() and ceil() functions ?   2

(e) What is a Pointer Variable ?   2

(f) What is the significance of goto statement ?   2

(g) What is stdio.h file ?   1