

Subject: Computer Science Chapter 3

Introduction to C

Class: 10

Date: 14/07/2022

A. Fill in the blanks:

- 1. AT&T Bell
- 2. Preprocessor
- 3. Main()
- 4. Constants
- 5. Real
- 6. Keywords
- 7. Identifiers
- 8. Statement
- 9. Link Section
- 10. Token

B. State True or False:

- 1. False
- 2. False
- 3. True
- 4. False
- 5. True
- 6. False
- 7. True
- 8. True
- 9. True
- 10. True

C. Multiple Choice Questions:

- 1. (a) Dennis Ritchie
- 2. (c) Compiler
- 3. (b) String
- 4. (a) Case Sensitive
- 5. (b) Control
- 6. (a) Expression
- 7. (a) Standard Input Output header file
- 8. (a) Semicolon

D. Answer in one word or sentence:

1. C99

- 2. Keyword
- 3. Declaration Section
- 4. printf()
- 5. main()
- 6. #

E. Answer the following:

1. Why is C called a middle level language? Explain any five features of C.

C is a middle level language as it combines the capability of an assembly language with the features of high level language.

The features of C language are

- 1. C is a popular language as it is reliable, simple and powerful language.
- 2. C is a Robust language. It has a rich set of built-in functions and operators that can be used to write any complex logic program.
- 3. C is a middle level language as it combines the capability of an assembly language with the features of high level language.
- 4. Programs written in C are efficient and fast due to its variety of data types and powerful operators.
- 5. C is highly portable. This means that C programs written for one computer can be run on another with little or no modifications.

2. What is a Character set?

A character set can be an alphabet, digit or any special symbol, which is used to represent information.

3. What do you understand by the term keyword? Give any two examples of it.

Keywords are reserved words in programming, which are predefined by the software developer for some specific purpose. The keywords cannot be used as variable names or functions etc.

4. What are the various types of constants used in C? Explain.

Constants are of two types

- 1. Numeric Constants: These values can be integer numbers or real numbers. For example 123, 45.67
- 2. Character Constants: These constants can be Single character or String constants.
- a) Single Character: A single character constant contains a single character enclosed within a pair of single quotes. For example 'P', '4'
- b) String constant: It contains a sequence of characters enclosed with double quotes. For example "English".

5. What do you understand by the term identifiers?

Identifiers are the names given to C entities such as variables, functions and structures etc. These are the user defined names. For example int a; float b;

6. What are the types of instructions in C? Explain briefly.

There are four types of instructions in C.

- 1) **Type Declaration Instruction:** This instruction is used to declare the type of variables used in C. Every variable must be declared before it is used in any statement.
- 2) **Input / Output Instruction:** It is used to supply input data to a program and obtaining the output from it
- 3) Arithmetic Instruction: It is used to perform arithmetic operations between constants and variables.

4) Control Instructions: It is used to control the sequence of execution of various statements in a C program.

7. Write the structure of C program.

The basic structure of a C program is

```
Documentation Section
Preprocessor Directives or Link Section
Global declaration section.
Main()
{
Declaration Section
Executable part
}
Subprogram section
Function 1
Function 2
-
-
```

Function n

8. What do you understand by statements in C program? Explain its types.

A statement causes the computer to carry out some definite action. There are three types of statements in C

- a) **Expression Statement:** It consists of an expression followed by a semicolon.
- b) **Control Statement:** The control statement enables you to execute the particular set of statements depending on a condition and controls the flow of a program.
- c) Compound Statement: It consists of several individual statements enclosed within a pair of braces{}.