2020(Voc)

Time : 3 hours

Full Marks : 50

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

*Answer from **all** the Sections as directed.*

Section – A

1. Choose the correct answer from the given options : 1×5 = 5

(I) What is Sizeo f( ) in C ?

(a) datatype (b) Operator

(c) Function (d) Macro

(II) Which of the following statements should be used to obtain a remainder after dividing 3.14 by 2.1 ?

(a) Rem = 3.14 % 2.1

(b) Rem = modf(3.14, 2.1)

(c) Rem = fmod(3.14, 2.1)

(d) Rem = 3.14 / 2.1

(III) Which of the following special symbol allowed in a variable name ?

(a) * (asterisk)

(b) | (pipeline)

(c) – (hyphen)

(d) _(underscore)

(IV) Which of the following is the correct order of evaluation for the below expression ?

z = x + y * z / 4 % 2 – 1

(a) / % + – =

(b) = * / % + –

(c) /* % – + =

(d) * % / – + =

(V) Which of the following is not logical operator ?

(a) & (b) & &

(c) || (d) !

2. Fill in the blanks : 1×5 = 5

(I) If a variable is a pointer to a structure, then _____ operator is used to access data members of the structure through the pointer variable.

(II) If the two strings are identical, then strcmp( ) function returns _____.

(III) It is posible to allocated a block of memory (of arbitrary size) at run-time, using the _____ function.

(IV) A float occupies _____ bytes.

(V) _____ uses an integer value index to access a specific element.

Section – B

There are **four** questions in this Section. Answer any **two** questions : 5×2 = 10

3. What is pointer ? How is a pointer initialized ?

4. What is a structure ? How does a structure differ from an union ?

5. Distinguish between actual argument and formal argurment in a function.

6. What is an array variable ? How does it differ from an ordinary variable ?

Section – C

There are **five** questions in this Section. Answer any **three** questions : 10×3 = 30

7. Write a C program to find factorial of the given number using user defiend function.

8. Describe the various types of relational and logical operators in C with suitable examples.

9. Write a C program to find th sum of principle diagonal elements.

10. Describe the various types of loop in C language with examples.

11. A file called "STUDENTT DAT" contains information such as student roll number, name and total marks. Write a C program to create a file to store details of n students.