D 14362 (Pages : 3) Name.....

Reg. No.....

FIRST SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2016

Software Development

SDC 1IT 01—FUNDAMENTALS OF COMPUTER AND PROGRAMMING IN C

Time : Three Hours Maximum : 80 Marks

Section A

Answer **all** *questions.*

1. A computer program that converts assembly language program to machine language program is

   (a) Compiler. (b) Interpreter.

   (c) Assembler. (d) Comparator.

2. Which of the following is not a correct variable type ?

   (a) Float. (b) Real.

   (c) Int. (d) Double.

3. What will be the output of the following program ?

```
main()
{
   intx=l;
   while (x==1)
   {
    x=x–1;
    printf("\n %d",x);
   }
}
```

   (a) 0. (b) 1.

   (c) –1. (d) None of these.

4. Which of the following is a collection of different data types ?

   (a) Structure. (b) Pointer.

   (c) Array. (d) None of these.

Turn over

5. The directives for the pre-processors begin with

   (a) &. (b) //.

   (c) #. (d) <.

6. SCSI stands for_____.

7. Write the syntax of putchar and puts in C.

8. Each element of the array can be accessed with the help of a sequence number called ———.

9. Define actual parameters associated with a function call.

10. Write the syntax to open a file.

(10 × 1 = 10 marks)

Section B

Answer any **eight** *questions, not exceeding a paragraph of* 50 *words.*

11. Define transistor hierarchy.

12. Write short notes on merits and demerits of hard disk.

13. Distinguish between system software and application software.

14. What do you mean by efficiency of an algorithm ?

15. What is the purpose of main( ) function in a C program ?

16. Write the syntax and flowchart of if.... else control statement.

17. How an array can be used to store a string ?

18. What is a nested loop ?

19. Define a user defined function.

20. Differentiate between call by value and call by reference.

21. What is a pointer variable ?

22. What are the built-in functions for file manipulation ?

(8 × 2 = 16 marks)

Section C

Answer any **six** *questions, in a page of* 50 *words.*

23. Explain about evolution of computers.

24. Explain about various output devices.

25. Write a program to find the largest of three numbers using conditional operators.

26. Explain bit-wise operators with examples.
27. Write a program to display the odd numbers from 1 to 100 using while loop.
28. Write a program to arrange a group of names ascending order.
29. Explain the concept of recursion with an example program.
30. What are enumerated data types ? Explain with examples.
31. What are the advantages of macros over functions ?

(6 × 4 = 24 marks)

Section D

Answer any **two** *questions, not exceeding* **four pages**

32. Explain about various input and output devices commonly used in a Computer System.
33. Write a program in C to perform matrix addition and multiplication using switch case statement.
34. Explain with suitable example, the operator precedence and associativity of various operators available in C.
35. What is a pointer ? How 1D array and 2D array are passed to a function using pointers ? Explain with the help of examples.

(2 × 15 = 30 marks)