Name...

Reg. No...

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2018

(CUCBCSS—UG)

BCS 2C 02—PROGRAMMING IN C

(2014 Admissions)

Time : Three Hours

Maximum : 64 Marks

Part A

*Answer **all** questions.*
Each question carries 1 mark.

1. The smallest individual unit in C program are known as ——————.

2. What is the output of the following code ?

```
# include<stdio.h>

int main()

{

int i=1;

printf("%d %d %d", ++i, i++, ++i);

return (0);

}
```

   (a) 224.
        (b) 234.

   (c) 334.
        (d) 422.

3. In C all functions except main() can be called recursively (True/False).

4. Which of the following cannot be checked in a switch case statement ?

   (a) Character.
        (b) Integer.

   (c) Float.
        (d) Enum.

5. The variable used as a subscript in an array is popularly known as —————— variable.

6. Which type of file cannot be opened using fopen() ?

   (a) .txt.
        (b) .bin.

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

Turn over

7. int a [5] = {1,2,3} what is the value of a[4] ?

   (a) 3.   (b) 1.

   (c) garbage value.   (d) 0.

8. The control automatically passes to the first statement after the loop in :

   (a) Continue statement.   (b) Break statement.

   (c) Switch statement.   (d) If statement.

9. If the two strings are identical, then strcmp() function returns :

   (a) -1.   (b) 1.

   (c) 0.   (d) yes.

(9 × 1 = 9 marks)

Part B

Answer all questions.

Each question carries 2 marks.

10. Explain the basic data types in C.

11. Write a program in C to find the greatest of three numbers.

12. Explain about various storage classes available in C.

13. How does structure differ from an array ?

14. With the help of examples, explain the difference between break and continue statements in C.

(5 × 2 = 10 marks)

Part C

*Answer any **five** questions.*

Each question carries 5 marks.

15. Explain about various operators available in C.

16. Write the syntax and the use of the following functions in C :

   (a) getchar().

   (b) putchar().

   (c) getch().

   (d) gets().

17. Summarize the syntactic rules associated with *while* statement. Compare with *do-while* statement.

18. Write a program to display all the even numbers from 1 to 100 using for loop.

19. Define a structure data type named *Student* containing four data members *Name*, *Age*, *Sex* and *Marks* with appropriate data types. Write a program to read values to these data members and display the values.

20. Write a program to arrange a group of names in ascending order.

21. What is a Union ? How does a union differ from a structure ? For what kinds of applications are union useful ?

22. Write the syntax and use of any five file handling functions available in C.

(5 × 5 = 25 marks)

Part D

Answer any **two** *questions.*
Each question carries 10 *marks.*

23. How can a list of strings be stored in a two dimensional array ? Explain with syntax and example various string handling functions available in C.

24. (a) Write a program to find the biggest element in an array of elements using function.

    (b) Briefly describe various storage classes available in C.

25. Write a complete C program for reading student details (name, class and register number) from keyboard and writing it into a file.

(2 × 10 = 20 marks)