

**18U329**

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Name: .....

Reg. No.....

**THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2019**

(Regular/Supplementary/Improvement)

(CUCBCSS-UG)

**CC17U CSC3 C03 - PROBLEM SOLVING USING C PROGRAMMING**

(Computer Science – Complementary Course)

(2017 Admissions onwards)

Time: Three Hours

Maximum: 64 Marks

**PART A**

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

1. The file name `stdio.h` is an abbreviation for ..... file.
2. Symbolic names do not appear in declaration. (True/False)
3. Write the output of the following code segment.  

```
for (i=15; i<=10; i=i-1)
{printf(“%d”, i-1);}
```
4. .... and ..... variables are automatically initialized to zero.
5. Define array.
6. What is the significance of writing the format specifier **%8.3s** in a `printf()` statement?
7. Define function.
8. What is the key difference between a static external variable and a simple external variable?
9. If `x` is an array and `p` is a pointer to `x`, then how do you represent `x[3]` using `p`?

**(9 x 1 = 9 Marks)**

**PART B**

Answer *all* questions. Each question carries 2 marks.

10. What is a pointer?
11. Write any four conversion specifiers with meaning.
12. Write the differences between `break` and `continue`.
13. What is recursion?
14. Explain `malloc()`

**(5 x 2 = 10 Marks)**

### **PART C**

Answer any *five* questions. Each question carries 5 marks.

15. Explain tokens in C.
16. Write syntax and explain in detail a) printf() , b) scanf() c) gets()
17. Explain switch statement in C in detail.
18. Write a program to count the no. of positives, negatives and zeroes in a set of numbers.
19. Explain sorting in ascending order with the following set of numbers {55, 44, 33, 22, 11}
20. Explain string functions used in C.
21. Describe the different argument passing mechanisms in C.
22. What are the different operations on files?

**(5 x 5 = 25 Marks)**

### **PART D**

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

23. Explain the structure of a C program with an example.
24. Write the program to 'display first n natural numbers' using for, while and do. While and explain the differences.
25. Write notes on
  - a) Storage Classes
  - b) Pointer Operations

(6+4 =10)

**(2 x 10 = 20 Marks)**

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