1	0	7	17	17	1
C	0	1	1	1	1

(Pages: 2)

Name.....

Reg. No.....

SECOND SEMESTER (CUCBCSS-UG) DEGREE EXAMINATION, APRIL 2020

Computer Science

BCS 2B 02-PROBLEM SOLVING USING C

(2017 Admissions)

Time: Three Hours

Maximum: 80 Marks

Part A

Answer all questions.

Each question carries 1 mark.

- 1. What are C tokens?
- 2. Define Symbolic constants.
- 3. What are conditional operators?
- 4. What will be the value of 'C' for the assignment statement? $c^{+=}$ (a > 0 && a < 10)? $^{++}$ a: a/b: for values a = 1, b = 2, and c = 3?
- 5. What are formatted input and output statements?
- 6. Give the syntax of switch statement.
- 7. How one dimensional array is declared?
- 8. What are automatic variables?
- 9. Which are the elements to be included while declaring a structure variable?
- 10. Give an example to show the initialization of a pointer variable.

 $(10 \times 1 = 10 \text{ marks})$

Part B

Answer all **five** questions. Each question carries 3 marks.

- 11. What are the steps involved in executing a C program?
- 12. Which are the different types of special operators?
- Distinguish between main() and void main().
- 14. Explain the concept of modularization.
- 15. Explain the opening of a file.

 $(5 \times 3 = 15 \text{ marks})$

Part C

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

- 16. Explain the different types of constants available in C.
- 17. How do variables and symbolic names differ?
- 18. Write a program to find the average of n numbers.
- 19. Explain how operator precedence and associativity rules are applied.
- 20. Explain how goto statement is used for unconditional branching.
- 21. Write a program to find the roots of a quadratic equation.
- 22. Write a program to find the biggest of three numbers using nested if..else statement.
- 23. Explain entry controlled loop and exit controlled loop with flowchart and example.

 $(5 \times 5 = 25 \text{ marks})$

Part D

Answer any three questions. Each question carries 10 marks.

- 24. What are operators? Explain different types of operators in C.
- 25. Explain the general form of switch statement. Write a program to find the grade of student using switch statement.
- 26. Explain how string variables are declared and initialized? Write a program to find whether the inputting string is a palindrome or not.
- 27. Explain with an example how pointers are used with functions and structures?
- 28. Explain the variable storage classes most relevant to function with examples.

 $(3 \times 10 = 30 \text{ marks})$

