(Pages: 2)

Name:

Reg.No:

SECOND SEMESTER B.Voc. DEGREE EXAMINATION, APRIL 2022

(CBCSS - UG)

CC21U SDC2 PC04 - PROBLEM SOLVING USING C

(Information Technology - Core Course)

(2021 Admissions - Regular)

Time: 2.00 Hours

Maximum : 60 Marks

Credit : 2

Part A (Short answer questions) Answer *all* questions. Each question carries 2 marks.

- 1. Why and when do we use the #include directive?
- 2. What are the rules apply to a #define statement while defining symbolic constant?
- 3. Write any four mathematical functions available in C.
- 4. Write the general syntax and working of switch statement in C language.
- 5. Explain while statement with an example.
- 6. Compare static and automatic variables.
- 7. Describe the different ways of assigning values to structure members.
- 8. What is Union? Explain the C syntax of union declaration.
- 9. Discuss various pointer declaration styles.
- 10. Show the accessing of a variable through its pointer.
- 11. Discuss various dynamic memory allocation functions.
- 12. Explain getw and putw functions.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph) Answer *all* questions. Each question carries 5 marks.

- 13. What are trigraph characters? How are they useful?
- 14. Explain the evaluation of expressions. What are the rules for evaluation of expression?

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- 15. Explain how will you declare and initialize two dimensional arrays with example.
- 16. Define string. How string is declared and initialized? Explain string input/output functions with an example.
- 17. What do you mean by call by value and call by reference?
- 18. Explain nesting of functions. Write a program to find the factorial of a number using recursion.
- 19. What are pointers? Write a program to illustrate the use of structure pointers

(Ceiling: 30 Marks)

Part C (Essay questions) Answer any *one* question. The question carries 10 marks.

- 20. What is an operator? List and explain various types of operators.
- 21. Explain decision making and branching statements with example.

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