20U128S	(Pages: 2)	Name:
		Reg. No
FIRST SEMESTER B.Sc./B.	.C.A. DEGREE EXAMIN	NATION, NOVEMBER 2020
	(CUCBCSS-UG)	
CC15U BCS1 B01 / CC15	SU BCA1 B01 - PROBLE	M SOLVING USING 'C'

(Core Course)

(2015, 2016 Admissions - Supplementary)

Time: Three Hours Maximum: 80 Marks

- I. Answer the following questions. Each question carries 1 mark.
  - 1. Define C Tokens.
  - 2. Name the fundamental data types in C.
  - 3. Give the syntax of Switch statement.
  - 4. What are identifiers?
  - 5. What is size of() operator in C?
  - 6. Define a character constant.
  - 7. Define pointer.
  - 8. What is register storage class?
  - 9. Explain the use of \* and & in using pointers.
  - 10. What is the use of return statement in C?

(10 x 1=10 Marks)

- II. Answer *all* questions. Each question carries 2 marks.
  - 11. Explain basic structure of c programs.
  - 12. Write a program to determine whether a number is odd or even.
  - 13. Write a note on preprocessors.
  - 14. Explain command line arguments.
  - 15. What is user defined function?

 $(5 \times 2 = 10 \text{ Marks})$ 

- III. Write any *five* questions. Each question carries 4 marks.
  - 16. Define Union.
  - 17. Explain printf and scanf functions.
  - 18. Write algorithm and flowchart to compute the sum of digits of a given integer number?
  - 19. Explain any two string handling functions with example.
  - 20. Explain symbolic constants. How it is defined?
  - 21. How does Structure differ from an array?

- 22. What is a recursive function? Write a recursive function to find the factorial of a number?
- 23. What is the difference between function pointer and pointer to a function?

 $(5 \times 4 = 20 \text{ Marks})$ 

- IV. Answer any *five* questions. Each question carries 8 marks.
  - 24. What is the difference between passing by value and passing by reference? To what type of arguments does each apply?
  - 25. Write C program using the concept of functions to multiply two given matrices, after checking whether multiplication is possible?
  - 26. Explain break, contine and goto statements with suitable examples?
  - 27. Explain decision making and branching statements?
  - 28. What do you mean by files? Explain the syntax and declaration and different modes of opening a file?
  - 29. What is meant by dynamic memory allocation? Explain various memory allocation functions?
  - 30. Explain different types of operators available in C language with suitable examples?
  - 31. Write a program using pointers to read in an array of integers and print its elements in reverse order?

 $(5 \times 8 = 40 \text{ Marks})$ 

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