

## I Semester B.C.A. Degree Examination, February/March 2024 (NEP Scheme) (Freshers and Repeaters) COMPUTER APPLICATIONS Programming in C

Time: 2½ Hours

Max. Marks: 60

Instruction : Answer all the Sections.

## SECTION - A

I. Answer any six questions. Each question carries two marks.

 $(6 \times 2 = 12)$ 

- 1) Write any two merits of 'C' programming language.
- 2) Mention any five 'C' keywords.
- 3) Differentiate between getch() and getchar().
- 4) What are constants? Give example.
- 5) Write the general syntax of conditional operator.
- 6) Differentiate between Break and Continue statement.
- 7) What is the use of typedef keyword?
- 8) Mention the types of arrays.
- 9) How to access addresses and value of variable using pointers?

## SECTION - B

II. Answer **any four** questions. **Each** question carries **six** marks.

 $(4 \times 6 = 24)$ 

- 10) What are the rules to be followed while constructing a variable? Give one example for each rule.
- 11) Explain for loop with an example.
- 12) What are the advantages and disadvantages of arrays?
- 13) Explain any 4 character handling function with an example.
- 14) Differentiate between structure and union. Give an example.
- 15) What are the advantages and disadvantages of pointers?

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## SECTION - C

III. Ans	swe	r any three questions. Each question carries eight marks.	(3×8=24)
16)	a)	Explain the structure of C program with example.	6
	b)	Give the memory size (in terms of bytes) of data type in C.	2
17)	a)	Explain nested if with an example.	4
	b)	Write program to find sum of first 'N' natural number.	4
18)	a)	Explain two dimensional arrays.	3
	b)	Write a 'C' program to read, display and to find the trace of a squ	are
		matrix.	5
19)	a)	Explain the different operations on strings.	3
	b)	Write a 'C' program to find the quadratic equation.	5
20)	Dis	scuss the categories of user-defined functions.	8