

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

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?



SECTION - C

| Ш. | Ans | wer | 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 squa | 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 |

SIX