

Total Pages : 3

BCA/1st Sem/(w.e.f. 2023-24)(NEP)

2025

1st Semester Examination (CCFUP : NEP)

BCA

Paper : BCAHMJ-101 (Major 1-T)

(Programming in C)



Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

**Group - A**

Answer any *five* questions :  $2 \times 5 = 10$

1. What is a ternary operator?
2. Differentiate between getch() and getche().
3. What is a header file in C, and why do we use it?
4. What does the size of operator do? Provide an example.
5. Define a pointer in C. Give an example of pointer initialization.
6. What will be the output? `int x=3, z; z=x++ +10; printf("x=%d, z=%d," x, z);`

P.T.O.



( 2 )

7. What is the use of the #include directive?

8. What is the purpose of the static keyword in C?

**Group - B**

Answer any *four* questions : 5×4=20

9. What is the difference between call by value and call by reference? Explain with the help of an example.

10. Write down the difference between structure and union with examples.

11. Define Dynamic memory allocation. Describe Calloc(), and malloc(). 2+3

12. What is a storage class? Explain Auto, and Extern storage classes. 2+3

13. Write a C program to generate the Fibonacci series up to a given terms using recursion. Explain in detail.

14. E lain switch statement with suitable example.

**Group - C**

Answer any *one* question : 10×1=10

15. (a) Explain the difference between fprintf() and fscanf() in C.

(b) Write a C program to check whether a number is prime or not using break statement. 4+6

( 3 )

16. (a) Discuss the differences between arrays and pointers in C. Provide examples to illustrate.

(b) Write a C program to generate all numbers up to 100 which numbers are divisible by 3 and 7. 5+5



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