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## GF—09—2023

### FACULTY OF SCIENCE AND TECHNOLOGY

### B.Sc. (First Semester) EXAMINATION

### APRIL/MAY, 2023

### (CBCS/Revised Course)

COMPUTER SCIENCE

(Introduction to Programming Language Using C : Part I)

**(Friday, 21-4-2023)**      **Time : 10.00 a.m. to 1.00 p.m.**

*Time—Three Hours*      *Maximum Marks*—75

N.B. :— (i) *All* questions are compulsory.

    (ii) Figures to the right indicate full marks.

    (iii) Assume suitable data, if required.

    (iv) Use of any electronic media such as mobile phone, digital diary and electronic calculator is not permitted.

1. Attempt any *five* of the following (**3** marks each) :      15

(a) What is the difference between high level language and assembly language ?

(b) Explain what is compiler.

(c) Explain primary data types in C.

(d) What are reserved keywords ? Write any *five* keywords.

P.T.O.

(e) Draw a flowchart for addition of 2 integers.

(f) Explain nested if else syntax.

(g) What are the applications of C Language ?

2. Attempt any *three* of the following (**5** marks each) : 15

(a) Explain operators and types of operators in C.

(b) What is formatted I/O statement ?

(c) Write a program to find first 10 prime numbers.

(d) Write a program to print first 10 numbers of Fibonacci series.

(e) Explain the flow of nested for loop using any example.

3. Attempt any *three* of the following (**5** marks each) : 15

(a) Explain the switch case/statement in C.

(b) Write a program to find greatest of 3 numbers, take 3 numbers from user.

(c) Explain the syntax of if-else ladder.

(d) Write a program to check whether given integer number is palindrome or not.

(e) Explain do-while loop syntax.

4. Attempt any *three* of the following (**5** marks each) : 15

(a) Explain break statement with an example.

(b) Explain goto statement with an example.

(*c*)      Explain continue statement with example.

(*d*)      Explain what is array.

(*e*)      What are header files ? Give at least **3** examples of header files.

5.      Write short notes on any *three* of the following (**5** marks each) :      15

(*a*)      Bitwise operator

(*b*)      Two-dimensional array

(*c*)      Stdio.h header file and conio.h header file

(*d*)      While loop

(*e*)      History of C language.