

(FOR THE CANDIDATES ADMITTED

23UDA101

DURING THE ACADEMIC YEAR 2023 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : NOVEMBER-2023

BSC COMP.SCIENCE WITH DA(SF)

MAXIMUM MARKS: 75

SEMESTER I

TIME : 3 HOURS

**PART - III**

**23UDA101- PROGRAMMING IN C**

**SECTION – A**

**(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**

**(Objective Questions with four Multiple Choices)**

**(K1)**

1. The C Language has been developed by -----

- a) Patrick Naughton                      b) Dennis Ritchie  
c) Ken Thompson                         d) Martin Richards

2. A single character input from the keyboard can be obtained by using the ----- function.

- a) printf ()   b) getchar()   c) putchar()   d) scanf()

3. An Array is -----

- a) Which contains one single element  
b) Which contains more than one element  
c) Elements of same data type stored in continuous memory locations.  
d) A group of elements of different data type.

4. The function which is used to join two words is -----

- a) strcpy()   b) strcat()   c) strncon()   d) memcon()

5. The function of the mode ' w+' in files -----

- a) create text file for writing, discard previous contents if any  
b) create text file for update, discard previous contents if any  
c) create text file for writing, do not discard previous contents if any  
d) create text file for update, do not discard previous contents if any

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES**

**(K2)**

6. How many keywords are there in C language?

7. List any two logical operators in C

8. What is the purpose of using functions in C?

9. Define Union

10. Why do files are used?

(CONT...2)

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) Give the basic structure of C program  
(OR)  
b) Explain importance of C programming
12. a) Illustrate scanf and printf functions with suitable example.  
(OR)  
b) Explain precedence of arithmetic operators
13. a) Explain the ?: Operator with an example  
(OR)  
b) Design a C program to find whether the given number is odd or even
14. a) State how declaring and initializing of string variables is taking place in C Programming  
(OR)  
b) Explain the concept of structures with syntax
15. a) Describe the steps in accessing the address of a variable  
(OR)  
b) How to define and open a file? Explain.

**SECTION – C**

**(5 X 8 = 40 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

**(K4 (Or) K5)**

16. a) Explain the various data types in C  
(OR)  
b) Summarize C Tokens, Constants, variables and keywords.
17. a) Enumerate arithmetic & relational operators with examples  
(OR)  
b) Analyze how evaluation of expression is taken place in C programming? Give suitable examples.
18. a) State looping statements in C and explain each with an example program  
(OR)  
b) Design a C program to add two matrices
19. a) Describe Recursion with example program  
(OR)  
b) Discuss Unions and its usages.
20. a) Explain array of pointers with an example program  
(OR)  
b) List and explain Input/output operations on files