

**TILAK MAHARASHTRA VIDYAPEETH, PUNE**  
**BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)**  
**SPECIALIZATION IN CYBER SECURITY (CS)**  
**EXAMINATION : DECEMBER - 2022**  
**SEMESTER - I**  
**Sub: C Programming (BCA –141-18/BCA-141-20/BCA-CS-141-20)**

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**Date : 28/12/2022**

**Total Marks : 60**

**Time: 10.00 am to 12.30 pm**

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**Instructions:**

1. All questions are compulsory unless and otherwise stated.
  2. Bold figures to the right of every question are the maximum marks for that question.
  3. Candidates are advised to attempt questions in order.
  4. Answers written illegibly are likely to be marked zero.
  5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
  6. Draw neat and labelled diagrams wherever necessary.
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**Q.1. Fill in the blanks. (5)**

1. How is an array initialized in C language?
  - a) `int ar = [1,2,3];`
  - b) `int ar[3] = {1,2,3};`
  - c) `int ar = 1,2,3;`
  - d) `int ar(3) = 1,2,3;`
2. Which of the following is exit controlled loop?
  - a) While
  - b) for
  - c) do while
  - d) do for
3. What is the size of the float data type (in bytes) in C?
  - a) 1
  - b) 2
  - c) 3
  - d) 4
4. Which of the following is not a header file?
  - a) `stdio.h`
  - b) `stdlib.h`
  - c) `conio.h`
  - d) None of the above
5. Which of the following function is used to open a file in C.
  - a) `fopen()`
  - b) `fstart()`
  - c) `fopenfile`
  - d) All of above

**Q.2. State True/False (5)**

1. Function can return more than one values.
2. (.) operator is used to access the elements of structure.
3. Every if must have else statement .
4. C language support object oriented concepts.
5. Do while loop always executed at least once .

**Q.3. Answer the following. (Solve any 5) (10)**

1. What is an Algorithm?
2. What is an assignment statement? Give the general form of an assignment statement?
3. What is index in an array?
4. What do you understand by data type? How much memory each data type take up.
5. What is the use gets () function?
6. What is nested loop?

**Q. 4. Answer the following in detail. (Solve any 6) (30)**

1. What is Variable? List the rules for naming a variable in C?
2. What is structure? Explain C syntax of structure declaration with example.
3. Write a C program to concatenate two strings without using built-in function.
4. What is function? Explain the difference between user defined and library functions
5. Explain gets() and puts functions with example
6. What are symbolic constants? Write down the rules for declaring symbolic constants
7. Explain goto statement with example.

**Q. 5. Answer the following in detail. (Solve any 1) (10)**

1. What is string? How string is declared and initialized? Explain any four string manipulation functions with examples
2. What is File? Explain file opening and closing functions with example?

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