

B.C.A Semester - 1 (CBCS) Examination**Jan/Feb.-2022 (OLD COURSE)****PROBLEM SOLVING METHODOLOGIES AND PROGRAMMING IN C(CORE)****Time: 1:30 Hours****Marks: 42****Instructions:**

1. Figures to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any three of the following questions.

Q.1(A) Answer the following questions in one sentence. (04)

1. Give Full Form : ANSI
2. How many keywords are there in C language?
3. Give difference traditional c and modern c.
4. Define: Algorithm.

Q.1(B) Attempt following questions. (Any one) (02)

1. Give the rules for naming of variable.
2. Draw any four symbols of flow chart with their meaning.

Q.1(C) Attempt following questions. (Any one) (03)

1. Explain type casting with example.
2. Describe data type available in C language.

Q.1(D) Attempt following questions. (Any one) (05)

1. Explain pre-processor in C language.
2. What is operator? List out them and explain any two of them.

Q.2(A) Answer the following questions in one sentence. (04)

1. Which loops are known as entry control loop? Explain shortly.
2. Ternary operator is also known as _____ operator.
3. Which loop is executed at least one time in any situation?
4. What is the output?

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int k=97;
    printf("%c %d", k, k);
}
```

Q.2(B) Attempt following questions. (Any one) (02)

1. Explain: switch case statement in detail.
2. Explain: break statement with example.

Q.2(C) Attempt following questions. (Any one) (03)

1. Describe ladder if else with example.
2. Describe continue statement. Also give example.

Q.2(D) Attempt following questions. (Any one) (05)

1. What is "nesting of loops"? Explain with proper example.
2. Write a program to print following output.

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

- Q.3(A) **Answer the following questions in one sentence.** (04)
1. Explain `getc( )` function.
 2. Give difference between `printf( )` and `scanf( )`
 3. Mathematical functions are stored in _____ header file.
 4. Output of `strlen( )` function is always float value. True or False?
- Q.3(B) **Attempt following questions. (Any one)** (02)
1. What is library function? Explain it.
 2. Explain `getchar( )` and `putchar( )` functions.
- Q.3(C) **Attempt following questions. (Any one)** (03)
1. Write a program to enter any 10 values and print maximum value and minimum value.
 2. What is pointer? Explain it.
- Q.3(D) **Attempt following questions. (Any one)** (05)
1. What is storage class? Explain all types.
 2. Give difference between “call by value” and “call by function”.
- Q.4(A) **Answer the following questions in one sentence.** (04)
1. ‘\0’ is also known as _____
 2. In structure, the `.(dot)` operator is used for what?
 3. Define: Union
 4. Structure is collection of different data types. True or false?
- Q.4(B) **Attempt following questions. (Any one)** (02)
1. How can we initialize and declare structure?
 2. Describe the advantages of array.
- Q.4(C) **Attempt following questions. (Any one)** (03)
1. Short note: pointer with structure.
 2. Explain nested structures with example.
- Q.4(D) **Attempt following questions. (Any one)** (05)
1. Explain array and all its type with example.
 2. Write a program to print all prime numbers between 1 to 50.
(the number which is divisible by 1 and itself is known as prime number.
For example: 2,3,5,7,11...etc)
- Q.5(A) **Answer the following questions in one sentence.** (04)
1. Define: `fopen( )` function.
 2. Give difference between `getw( )` and `putw( )` function.
 3. Give difference between `fprintf( )` and `fscanf( )` function.
 4. Why we used `eof( )` function?
- Q.5(B) **Attempt following questions. (Any one)** (02)
1. What is text file and binary file?
 2. Explain file handling in C language.
- Q.5(C) **Attempt following questions. (Any one)** (03)
1. Explain advantages and limitations of pointer.
 2. Describe: Command Line Argument.
- Q.5(D) **Attempt following questions. (Any one)** (05)
1. What is pointer? Explain it with example.
 2. Write a program to read from “test.txt” file and print all data on screen. If that file is not available then print proper message.
