

B.C.A Semester - 1 (CBCS) Examination
Jan/Feb.-2022 (NEW COURSE)
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. (all three) 03
- (1) Who invented C language?
 - (2) What is the range of unsigned char data type in C language?
 - (3) What is keyword?
- Q:1(B) Answer the following question. (any two) 06
- (1) List out all C tokens. Describe all tokens. Also give the example of it.
 - (2) Draw a flowchart to print 1 to 20.
 - (3) What is Operator? List out all operators available in C language. Explain any two of them.
 - (4) What is C character set?
- Q:1(C) Answer the following question. (any one) 05
- (1) What is Type Casting? How can it used in programming.
 - (2) Write a short note on pre-processor in C language.
- Q:2(A) Answer the following questions. (all three) 03
- (1) Write down the syntax of GOTO statement.
 - (2) _____ statement is used to terminate the loop.
 - (3) What is the output?

```
#include<conio.h>
#include<stdio.h>

Void main()
{
    int i;
    for(i=5;i<=25;i++)
    {
        i=i+8;
    }
    printf("%d", i);
}
```
- Q:2(B) Answer the following question. (any two) 06
- (1) Explain while() loop with example. Also give their advantages.
 - (2) Explain continue statement with example.
 - (3) Explain break statement with example.
 - (4) Explain nested do...while loop with example.
- Q:2(C) Answer the following question. (any one) 05
- (1) What is "if" statements. List out their types. Explain nested if with example.
 - (2) Write a program to print following output.

```
0 0 0 0 0
0 0 0 0 0
0 0 1 0 0
0 0 0 0 0
0 0 0 0 0
```

- Q:3(A) Answer the following questions. (all three) 03
- (1) What is heard file?
 - (2) Give difference between clock() and localtime()
 - (3) _____ header file must be included if we want to used line() or circle() function in program.
- Q:3(B) Answer the following question. (any two) 06
- (1) Explain call by value and call by reference with example.
 - (2) Explain : malloc (), calloc (), realloc () functions.
 - (3) Describe Recursion. Explain it with a program.
 - (4) Explain any three header files in short.
- Q:3(C) Answer the following question. (any one) 05
- (1) Write a short note on : Storage Classes available in C language.
 - (2) What is U.D.F.? List out all types of U.D.F. available in C language and explain any two with example.
- Q:4(A) Answer the following questions. (all three) 03
- (1) Array index value is always starts from 0. Is it true or false?
 - (2) Give the main difference between Array and Structure.
 - (3) Define : Union
- Q:4(B) Answer the following question. (any two) 06
- (1) What is structure? Why we used it? Explain its advantages and limitation.
 - (2) Explain : String Array. Also give proper example.
 - (3) Write a program to print all prime numbers between 1 to 1000.
(the number which is divisible by 1 and itself is known as prime number.
For example : 2,3,5,7,11...etc)
 - (4) Write a program to enter any 10 values from keyboard and print those numbers which is less than average value.
- Q:4(C) Answer the following question. (any one) 05
- (1) What is an Array? Explain all types with details.
 - (2) Explain : Array with functions using UDF.
- Q:5(A) Answer the following questions. (all three) 03
- (1) What is Pointer?
 - (2) What is the use of double pointer?
 - (3) Give Full Form : CLA
- Q:5(B) Answer the following question. (any two) 06
- (1) Describe : Command Line Arguments. Give their advantages.
 - (2) Explain pointer to structure with example.
 - (3) Explain pointer within array with example.
 - (4) Define : Use of pointers in Dynamic Programming.
- Q: 5(C) Answer the following question. (any one) 05
- (1) Describe important of File Handling in C language. Also explain I/O operation in File Handling.
 - (2) Write a program to enter any value and print that given number is Armstrong or not.
(Armstrong number means, the sum of cubes of each digits is equal to the number itself.)
