

"Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."

“प्रश्न-पत्र पर रोल नम्बर के अतिरिक्त कुछ भी न लिखें, अन्यथा इसे अनुचित साधनों में लिप्त माना जायेगा और नियमानुसार कार्यवाही की जायेगी।”

Roll No.24BCA24028

B.C.A. (Sem.-I)

P.W."C"-P.-III

10623 NEP

**Bachelor of Computer Application
(Semester-I) Examination, 2024**

(According to National Education Policy-2020)

DCC-CSA5003T

Programming with 'C'

Time Allowed : **Three Hours**

Maximum Marks : **70**

Part-A

भाग-अ

Note : 1. The questions of Part-A are compulsory. The answers of these questions are limited upto **30** words each. Each question carries **02** marks.

10623 NEP / 3000 / 6

(1)

P.T.O.

भाग-अ के सभी प्रश्न अनिवार्य हैं। इन प्रश्नों के उत्तर अधिकतम 30 शब्दों तक सीमित हैं। प्रत्येक प्रश्न 02 अंक का है।

Part-B

भाग-ब

2. Attempt **FIVE** questions in all, selecting **ONE** question either (a) or (b) from each unit. The answer of each question shall be limited upto **500** words. Each question carries **10** marks.

प्रत्येक इकाई से (a) अथवा (b) में से एक प्रश्न का चयन करते हुए, कुल मिलाकर पाँच प्रश्नों के उत्तर दीजिये। प्रत्येक प्रश्न का उत्तर 500 शब्दों तक सीमित होगा। प्रत्येक प्रश्न 10 अंकों का है।

Part-A

भाग-अ

1. What is Pseudocode?
Pseudocode क्या है?

2. Explain any four symbols used in flowchart.
फ्लोचार्ट में उपयोग होने वाले किन्हीं चार प्रतीकों को समझाइये।

3. What is Keyword?

Keyword क्या है?

4. What is the difference between getch(), getchar() and getche()?

getch(), getchar() एवं getche() में क्या अन्तर है?

5. What is ?: operator?

?: operator क्या है?

6. What is array?

ऐरे क्या है?

7. Differentiate between Local and Global variable.

लोकल एवं ग्लोबल वेरियेबल में क्या अंतर है?

8. What do you mean by Library function?

Library function से आप क्या समझते हैं?

9. What is Pointer?

प्वाइंटर क्या है?

10. What is file?

फाइल क्या है?

Part-B

भाग-ब

Unit-I / इकाई-I

1. (a) What is Algorithm? Explain with example.
एल्गोरिथ्म क्या है? उदाहरण के साथ समझाइये।

OR / अथवा

- (b) What is an Identifier? Write the rules for naming a variable.
Identifier क्या है? वेरियेबल के नाम लिखने के नियमों को लिखिए।

Unit-II / इकाई-II

2. (a) What is Operator? Explain various operators used in C.
Operator क्या है? C में प्रयुक्त होने वाले विभिन्न operators को समझाइये।

OR / अथवा

- (b) Explain in detail :
(i) Data type
(ii) Structure of 'C' program

(iii) Switch Statement

(iv) Type Conversion

विस्तार से समझाइये :

(i) Data type

(ii) Structure of 'C' program

(iii) Switch Statement

(iv) Type Conversion

Unit-III / इकाई-III

3. (a) Explain looping statements used in C with example.
C में उपयोग होने वाले looping statements को उदाहरण सहित समझाइये।

OR / अथवा

- (b) Write a program in C to perform Matrix Multiplication.
Matrix Multiplication करने का C में प्रोग्राम लिखिए।

Unit-IV / इकाई-IV

4. (a) What is Recursion? Write a C program to calculate Factorial using recursive function.
Recursion क्या है? Factorial ज्ञात करने के लिए recursive function का उपयोग कर C में प्रोग्राम बनाइये।

OR / अथवा

- (b) Explain auto, static, extern and register storage class.
Auto, static, extern एवं register storage class को समझाइयो

Unit-V / इकाई-V

5. (a) Differentiate between the following :
- Break v/s continue statement
 - Structure v/s union

निम्न में विभेद कीजिए :

- Break v/s continue statement
- Structure v/s union

diff data
diff data
diff data
own memory
diff data

OR / अथवा

- (b) Write short notes on the following :
- Declaration and initializing pointers
 - Function of file handling in C.

निम्न पर संक्षिप्त टिप्पणी लिखिए :

- Declaration and initializing pointers
- Function of file handling in C.

--X--

Print p to file
1 to 100

TERM TEST (2023-2024)

Bachelor of Computer Application (First semester)

Code: CSA5003T

Subject: Programming With C

Time – 3 Hours, Max Marks – 70

Section A consists of 10 questions, two from each unit carrying 2 marks each. Total marks is 20.

Section B consists of total five questions (one from each unit with internal choice). Each question is of 10 marks. Total marks is 50.

Section A

Q1. int x;
 float y;
 char c;

Write a single scanf statement to read x, y and c from the keyboard.

Q2. Write the output of the following code.

```
main()
{
    int month, days;
    days = 265;
    months = days/30;
    days = days%30;
    printf("Months = %d Days = %d", months, days);
}
```

Q3. Write the high priority and low priority arithmetic operators.

Q4. Write the output of the following code

```
int a = 14;
int b = 4;
printf("%d", a/b);
```

Q5. What is declaration of variable.

What is initialization of variable.

What is the basic difference between the declaration and initialization

Q6. Name any four basic data types.

Q7. State whether the following statement is valid or not

```
for(n=1, m=50; n<=m; n++, m--)
```

Q8. Write the values of x and y after the execution of the following set of statements

```
x=10;
```

```
y= --x;
```

Q9. What is the output of the following expression?

```
int a = 10, b = 5;
printf("%d", a + b * a);
```

8 + 10
20

Q10. What is output of the following statement?

```
printf("%04d", 123);
```

Section B

Q11. (a) What are the rules for framing the name of a variable/identifier.

OR

(b) How many types of operators are there. Explain any four with example

Q12. (a) Name two Entry-controlled loops with examples.

OR

(b) Write a program in C to print the following output using for-loop

```
1
22
333
4444
55555
```

cm = 10
ind x op = m

Q13. (a) Write format of user defined function with example.

OR

(b) What is recursion. Explain with an example.

Q14. (a) What is precedence of operators? Give step-by-step execution of the following code segment to evaluate the value of x:-

```
a=9; b=12; c=3;
x = a - b/3 + c*2 - 1;
```

OR

(b) m = 1234;
n = 56;
p = 789;

Write single statement to display the values of m, n and p in different lines with left justified.

Q15. (a) Write short note on reading a text file and writing text to a file.

OR

(b) What is a pointer? Explain with example.