BCA/IS/CPL/1196/19(Pr.)
(Set-1)

BCA 1st Semester Examination, 2019

C PROGRAMMING LAB

(Practical)

PAPER — 1196(Set-1)

Full Marks : 100

Time : 3 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

SET — 1

Answer any **two** questions (on **lottery** basis) :

30 × 2

1. Write a program in C to find the prime factors of a given number.

2. Write a program in C to swap two given numbers using a function.

3. Write a program in C to get the substring of a string using a function.

4. Write a program in C to search a number from a sorted array using binary search.

5. Write a program in C to convert a given decimal number to its binary equivalent.

6. Write a program in C to sort a given set of numbers using insertion sort.

7. Write a program in C to concatenate two given string without using any built in string function.

8. Write a program in C to find the largest word in a given line.

9. Write a program in C to multiply two matrices taken as an input from the user.

10. Write a program in C to calculate the sum of the following series :

$$1^2 + 3^2 + 5^2 + 7^2 \ldots + (2n-1)^2$$

11. Write a program in C to print the following triangle :

```
1
2   3
4   5   6
```
_____

12. Write a program in C to check whether a given number is a palindrome or not.

13. Write a program in C to print the leap years between the years 1000 and 2019.

14. Write a program in C to display the reverse of a given number and the difference between them.

15. Write a program in C to print the factorial of a given number using recursion.

   Viva — 05

   PNB — 05

   [*Internal Assessment* : 30 Marks]

BCA 1st Semester Examination, 2019

C PROGRAMMING LAB

(Practical)

PAPER —1196(Set-2)

Full Marks : 100

Time : 3 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

SET — 2

Answer any **two** questions (on **lottery** basis) :

30 × 2

1. Write a C program to check whether a given number is a number in Fibonacci sequence.

2. Write a C program to calculate GCD of two given numbers using recursion.

3. Write a C program to sort a set of numbers using bubble sort.

4. Write a C program to solve a quadratic equation taken as an input.

5. Write a C program to sort a given set of numbers using selection sort.

6. Write a C program to reverse a string without using any built-in string function.

7. Write a C program to implement a doubly linked list.

8. Write a C program to transpose a matrix taken from the user.

9. Write a C program to read some student records using a structure array and then display the records.

(Continued)

10. Write a C program to calculate the sum of the following series :

$1 + (1/3^2) + (1/5^2) + (1/7^2) +$ till n terms

11. Write a C program to print the following :

```
1
1   2
1   2   3
1   2   3   4
```
_____

12. Write a C program to display the consonants and vowels in a given string.

13. Write a C program to calculate LCM of two given numbers.

14. Write a C program to print the following triangle :

```
                *
            *       *
        *       *       *
    *       *       *       *
```

15. Write a C program to count the number of consonants and vowels in a given string.

   Viva   — 05

   PNB   — 05

[*Internal Assessment* : 30 Marks]

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