

2018

BCA 1st Semester Examination

C PROGRAMMING LAB.

PAPER—1196 (Set-II)

(Practical)

Full Marks : 100

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

Answer any two questions through lottery basis.

2×25

1. Write a c program to check whether a given number is a prime or not using recursion.
2. Write a C program to sort a set of numbers using bubble sort.
3. Write a C program to solve a quadratic equation taken as an input.
4. Write a C program to implement a doubly linked list.
5. Write a C program to transpose a matrix taken from the user.
6. Write a C program to calculate the sum of the following series :
 $1 + (3^2 / 3^3) + (5^2 / 5^3) + (7^2 / 7^3) +$ till n terms.
7. Write a C program to display the consonants and vowels in a given string.
8. Write a C program to print the following triangle :

(Turn Over)

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      *
     * * *
    * * * * *
   * * * * * *
  * * * * * * *

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

10. Write a program to compute sum of the following series upto desired accuracy :

$$\cos x = 1 - \frac{x^2}{2} + \frac{x^4}{4} - \frac{x^6}{6} + \dots \infty.$$

11. Write a C program to calculate the sum of ASCII values of each element of a given string.

12. Write a C program to check a string is palindrome or not.

13. Write a C program to read a set of numbers and store them in a file.

14. Write a C program to compute

$$1 + \frac{2^2}{2} + \frac{3^3}{3} + \frac{4^4}{4} + \dots + \frac{n^n}{n}.$$

15. Write a program to abbreviation of a name.

Input : Amal Kumar Pal

Output : A. K. Pal

16. Write a program to check whether a matrix is symmetric or not.

Viva — 15

PNB — 05

Internal Assessment — 30