

**Computer Science [Major]
[NEP-CBCS]**

B.Sc. First Semester End Examination-2023

**PAPER: COSH-MJ 01P
[PRACTICAL]**

Full Marks: 20

Time: 02 Hrs

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

Answer any one question:

1x15= 15

1. Write a C program to check whether a given entered number is an Armstrong or not?
2. Write a C++ program to overload unary “+” operator.
3. Write a C program to sort an array in ascending order.
4. Write a C++ program to multiply the two matrix.
5. Write a C program to convert Decimal number to Binary number.
6. Write a program in C to store and display the details of 3 students such as roll-no, Name, student-id using structure.
7. Write a C++ program to find the Transpose of a matrix.
8. Write a C program to print Fibonacci Series.

(2)

9. WAP to check year is Leap year or not using conditional operator.

10. WAP to solve the following Quadratic equation

$$Ax^2 + Bx + C = 0$$

$$S = 1 - 2 + 3 - 4 + 5 \dots\dots\dots$$

11. Write a function to find whether a given no. is prime or not. Use the same to generate the prime numbers less than 100.

12. Write a function that checks whether the string entered by user is palindrome or not.

13. WAP to count number of vowels, consonants, digits and blank spaces in a line of text.

14. WAP to print a triangle of stars as follows (take number of lines from user):

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

15. WAP to print the pyramid of numbers as follows (take number of lines from user):

```
      1
     121
    12321
   1234321
  123454321
```

(3)

16. Copy the contents of one text file to another file, after removing all whitespaces.

Viva – 03

PNB - 02