



'समानो मन्त्रः समितिः समानी'

**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 4th Semester Examination, 2022

**GE2-P2-COMPUTER SCIENCE (GE-4AL & GE-4BL) (PRACTICAL)**

Time Allotted: 2 Hours

Full Marks: 20

*The questions are of equal value.  
The figures in the margin indicate full marks.  
All symbols are of usual significance.*

**The question paper contains GE-4AL and GE-4BL.  
The candidates are required to answer any *one* from *two* courses.  
Candidates should mention it clearly on the Answer Book.**

**GE-4AL**

**PROGRAMMING IN JAVA PRACTICAL**

**Program: 15**

**Viva: 5**

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**Total 20**

**Answer any *one* question**

1. Write a java program to swap two numbers.
2. Write a program in java to count number of vowels and consonants in a given string.
3. Write a java program to check if a given year is leap year or not.
4. Write a java program to find roots of a quadratic equation.
5. Write a program in java to find factorial of a given number.
6. Write a java program to find GCD and LCM of two numbers.
7. Write a java program to print all prime numbers from 1 to 100.
8. Write a java program to find sum of  $n$  natural numbers using recursion.
9. Write a java program to find transpose of a matrix.

10. Write a java program to concatenate two arrays.
11. Write a java program to display Armstrong numbers between intervals using function.

**GE-4BL**

**PYTHON PROGRAMMING PRACTICAL**

**Answer any *one* question**

1. Write a python program to find GCD of two numbers. 20
2. Write a python program to check if a string is palindrome or not. 20
3. Write a python program to check whether a given number is Armstrong or not. 20
4. Write a python program to get the largest number from a list. 20
5. Write a python program to convert month name to a number of days. 20  
Input: March                      Output: 31 days
6. Write a python program that accepts a word from the user and reverse it. 20
7. Write a program in python to perform matrix multiplication. 20
8. Write a python program to count the frequency of a letter in a file. 20
9. Write a program to find count of even and odd numbers from a list of numbers. 20
10. Write a program in python to print first  $n$  prime numbers. 20

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