



**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 2nd Semester Examination, 2021

**GE2A & GE2B-COMPUTER SCIENCE**

Full Marks: 40

**ASSIGNMENT**

*The figures in the margin indicate full marks.*

**The question paper contains GE2A and GE2B.  
The candidates are required to answer any *one* from *two* courses.  
Candidates should mention it clearly on the Answer Book.**

**GE2A**

**PROGRAMMING IN C**

**Answer any *two* questions from the following**

20×2 = 40

1. (a) Discuss different types of loops in C with proper example. 10  
(b) Write a program in C to find all Armstrong numbers from a set of input values. Also give an output example. 10
2. (a) What are different data types in C? Write program in C to identify if a given number is integer or a floating point number. 4+6  
(b) Differentiate array and string. Write a program in C to remove white spaces from a string. 3+7
3. (a) Give proper examples to describe use of functions: strcpy(), strcmp(), strrev(), gets(), strlen(). 10  
(b) Write a program in C to count number of vowels in a given string using concept of function with an example output. 10
4. (a) Describe break statement and continue statement in C with proper example. 10  
(b) Write a program to convert decimal number to its equivalent binary number. Give an example output. 10

**GE2B**

**MICROPROCESSOR**

**Attempt any *two* questions**

20×2 = 40

1. Explain the internal architecture of microprocessors with the help of a suitable block diagram. Consider any example to explain the internal architecture. 20
2. Explain the system bus architecture of microprocessors with the help of a suitable diagram. 20
3. Explain memory and I/O interfaces of microprocessors. 20
4. What are registers? Explain different types of registers used in microprocessors. 20

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