UNIVERSITY OF NORTH BENGAL

B.Sc. Programme 2nd Semester Examination, 2020

DSC2-COMPUTER SCIENCE

PROGRAMMING FUNDAMENTALS USING C

Full Marks: 40

ASSIGNMENT

The figures in the margin indicate full marks.

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 print the Fibonacci series (Number of terms should be provided by user). Also give an output example. 10

2. (a) Write a program in C to find sum of first *N* numbers by using concept of recursion (value of *N* should be provided by user) and also give an example output. 10

   (b) Write a program in C to find if a given number is palindrome or not by using concept of recursion and also give an example output. 10

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 with an example output. 10

4. (a) Write a program to convert a decimal number to its equivalent binary number. Give an example output. 10

   (b) 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

5. (a) Write a program in C to swap two given numbers using pointers. 10

   (b) Give an example with program code segment of double pointer (pointer to pointer). 10

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