# UNIVERSITY OF NORTH BENGAL

B.Sc. Programme 2nd Semester Examination, 2021

## 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 various kinds of iterative statements available in C. Give examples.    10

   (b) Write a C program to convert a given number (user input) from decimal to Octal.    10

2. (a) What are void and inline functions? Give their utilities in programming.    4

   (b) Discuss any 3 string handling functions with example.    6

   (c) Write a program in C language to make a function Prime(n) which determines whether a given input 'n' is prime or not.    10

3. (a) What are the rules that must be followed while naming a variable in C?    5

   (b) Discuss various data types available in C. Give example.    10

   (c) Differentiate between structure and union with example.    5

4. (a) Write a C program to find the maximum element stored in an array of size 'n' (the array stores integers).    10

   (b) Write a C program to sort 'n' integers in descending order using any algorithm of your choice.    10

——×——