

B.Sc (Computer Science) 4<sup>th</sup> Semester Examination 2021

(Honours)

Paper CC 41 L

Design and Analysis of Algorithms Lab

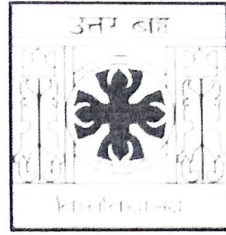
FM 20

(Attempt any one Practical)

1. Implement Insertion Sort (The program should report the number of comparisons)
2. Implement Merge Sort (The program should report the number of comparisons)

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20



## University of North Bengal

BSc Honours 4<sup>th</sup> Semester Examination, 2021

### CC42L- Software Engineering LAB

~~Time allotted: 1 hr~~

Full marks: 20

*All figures in the margin indicate full marks.*

*Candidates should answer in their own words and adhere to the word limit as practicable.*

*All symbols are of usual significance.*

### Answer any one question from the following

1. Create a Data Flow Diagram for Patient Appointment and Prescription Management System. 20
2. Create SRS for Online Hotel Reservation Service System. 20

4<sup>th</sup> Semester (CBCS) Examination-2021

Paper Code: CC 43L (Hons.)

Paper Name: Database Management System LAB

Full Mark: 20

.....  
Answer any one question from the following 20 X 1

1. Consider the relational table STUDENT(id,name,city,admission\_date,subject) and do following operations on it using SQL query:
  - (i) Create table using appropriate SQL commands. Define all integrity constraints and enter sufficient data
  - (ii) Create another column named MARKS and insert sufficient data into it.
  - (iii) Show student detail according to their admission date in ascending order.
  - (iv) Count number of students subject wise.
  - (v) Find student information who got second highest marks.
  
2. Consider the relational tables LOAN(branch\_name,loan\_no,cust\_name,amount) and DEPOSIT (branch\_name,account\_no,cust\_name,balance).Do the following operations using SQL query: 20
  - (i) Create tables using appropriate SQL commands. Define all integrity constraints and enter sufficient data.
  - (ii) Find all customers who have loan or an account or both at branch SILIGURI.
  - (iii) Delete customer detail from LOAN whose balance in DEPOSIT is zero.
  - (iv) Decrease loan amount by 5% for customers whose branch name is SEVOKE.

20

BSc ~~U.G.~~ 4th Semester (~~Honours / Progrsw~~) Examinations, 2021.

Computer Science GE-4AL

[JAVA LAB]

Fulfill any one assignments

FM-20

Assignment 1. Write a JAVA program to convert a decimal number to its binary equivalent.

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Assignment - 2. Write a JAVA program to check if a number is prime or not, by taking the number as input from the keyboard.

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Bsc 4<sup>th</sup> sem Exam 2021

~~U. G. 4th Semester (Honours / Progrsw) Examinations, 2021.~~

Computer Science GE-4BL

[PYTHON LAB]

Fulfill any one assignments

FM-20

Assignment - 1. WAP in PYTHON to calculate total marks, percentage and grade of a student. Marks obtained in each of the three subjects are to be input by the user. Assign grades according to the following criteria :

- a. Grade A: Percentage  $\geq 80$
- b. Grade B: Percentage  $\geq 70$  and  $< 80$
- c. Grade C: Percentage  $\geq 60$  and  $< 70$
- d. Grade D: Percentage  $\geq 40$  and  $< 60$
- e. Grade E: Percentage  $< 40$

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Assignment - 2. WAP in PYTHON to calculate the sum and product of two compatible matrices.

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Subject: B.Sc Computer Science (Program )

*DSC:CC-4L*

Paper: ~~COMSDSC4L~~ [Data Structures LAB]

Semester: 4<sup>th</sup>

Full Marks: 20 (Twenty)

**SET 1**

*Answer any ONE question.*

1. Write a Program using C to Perform stack operations using Linked list. 20
2. Write a Program using C to insert an element in an array at the beginning, at the middle and at any position. 20



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B.Sc (Computer Science) 4<sup>th</sup> Semester Examination 2021

Program

Paper SEC 2 L

HTML Programming Lab

FM : 20

Attempt any one practical

1. Create the website of a School. Write down the steps and code.
2. Create the website of a stationary shop. Write down the steps and code.