

University of North Bengal

BSc Honours 2nd Semester Examination,2020 **GE4AL-** Computer Science

Programming in Java Lab

Full marks: 20 Time allotted: 1 hr

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.

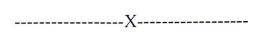
Answer any one questions from the following

- Write a Java program to accept a number from user and print the following:-1. A) number of digits
 - B) largest digit

20

Write a Java program to find the numbers greater than the average of the 2. numbers of a given array.

20



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University of North Bengal

BSc Program 2nd Semester Examination,2020

GE-2AL

CC2L-BSc(P) in

Programming Eundamentals using C 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 questions from the following

- 1. WAP to print the sum and product of digits of an integer.
- 2. WAP to reverse a number.

Bsc Hon 2nd Semeth EXAMINATION, 20 . 20.

USE A SEPARATE SCRIPT FOR EACH HALF/GROUP
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Subject Computer Science (Hom)
Paper GE-2BL (Microprocurum LAB)

Time 0 | Full Marks 20 .

Answer any owe questions

The questions are of equal value

The figures in the margin indicate full marks

81: Write a program in assembly language

for 8085 Microprocusor to first search

for 8085 Microprocusor to first search

which are stoned from memory location

200

32: Wente a program in assembly language

for fittl 8085 micro procusor to

sort a list of ten numbers in descending

order which one stored in ten consecutive

memory locations.

References

(When a passage from a book is included in the question, detail reference should be quoted here)

Signature of Moderator

Subject Con	puter	Science
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computer science



University of North Bengal

BSc Honours 2nd Semester Examination,2020 CC22L- BSc

Programming in Java 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 questions from the following

- 1. A) Write a Java program to convert a binary number to hexadecimal number.
 - B) Write a Java program to compute the sum of the first 100 prime numbers.

10 + 10

20

- 2. Write a program in Java by creating an 'Employee' class having the following methods and print the final salary.
 - A) 'getInfo()' which takes the salary, number of hours of work per day of employee as parameter
 - B) 'AddSal()' which adds \$10 to salary of the employee if it is less than \$500.
 - C) 'AddWork()' which adds \$5 to salary of employee if the number of hours of work per day is more than 6 hours.

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University of North Bengal

BSc Program 2nd Semester Examination,2020 CC2L- BSc(P)

Programming Fundamentals using C 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. WAP to print the sum of first n Fibonacci number.

2. WAP to find the sum of digits of a number.

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_USE A SEPARATE SCRIPT FOR EACH HALF/GROUP-20......

Subject Computer Science

Paper I-I TM L programmy LAB

SEC-2L

Time O | Full Marks 70

Answer any Ove questions

The questions are of equal value

The figures in the margin indicate full marks

BI. Design a home page for a college.

82. Wester HIML script to design an homepage for a Online Shopping website.

References
(When a passage from a book is included in the question, detail reference should be quoted here)

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Signature of Moderator

Signature of Paper-Setter



University of North Bengal

BSc Honours 4th Semester Examination,2020 CC43L- BSc

Database Management Systems 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

Write any two queries depending upon the following:

EMPLOYEE Schema

Field	Type	NULL	KEY	DEFAULT
Eno	Char(3)	NO.	PRI	NIL
Ename	Varchar(50)	NO		NIL
Job type	Varchar(50)	NO		NIL
Manager	Char(3)	Yes	FK	NIL
Hire date	Date	NO		NIL
Dno	Integer	YES	FK	NIL
Commission	Decimal(10.2)	YES		NIL
Salary	Decimal(7.2)	NO		NIL

DEPARTMENT Schema

Field	Туре	NULL	KEY	DEFAULT
Dno	Integer	No	PRI	NULL
Dname		Yes		NULL
Location	Varchar(50)	Yes		New Dellin

- 1. Query to display the Employee Name and Salary of all the employees earning more than \$2850.
- 2. Query to display Employee Name and Department Number for the Employee No= 7900.
- 3. Query to display Employee Name and Salary for all employees whose salary is not in the range of \$1500 and \$2850.
- 4. Query to display Employee Name and Department No. of all the employees in Dept 10 and Dept 30 in the alphabetical order by name.



University of North Bengal

BSc Honours 4th Semester Examination,2020 CC42L- Computer Science

Software Engineering

Full marks: 20 Time allotted: 1 hr 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 SRS(Software requirements specification) for Patient Appointment and 20 Prescription Management System. 2. Create SRS(Software requirements specification) for Examination and Result 20 computation system.

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University of North Bengal

BSc Honours 4th Semester Examination,2020 CC41L- BSc

Design and Analysis of Algorithms 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. Implement Insertion Sort (The program should report the number of comparisons)
- 2. Implement Merge Sort(The program should report the number of comparisons)

111/2020



University of North Bengal

BSc Program 4th Semester Examination, 2020 CC4L-BSc(P)

Data Structures 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. Write a program to search an element from a list. Give user the option to perform Linear or Binary search. Use Template functions.

2. WAP using templates to sort a list of elements. Give user the option to perform sorting using Insertion sort, Bubble sort or Selection sort.

Syllabus of B.Sc. (Program) in Computer Science under CBCS



University of North Bengal

BSc Honours 4th Semester Examination,2020

GE SE4BL-BSc

Python Programming 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. Write a menu driven program to convert the given temperature from Fahrenheit to Celsius and vice versa depending upon users choice.
- 2. WAP 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 >=80
- b. Grade B: Percentage>=70 and <80
- c. Grade C: Percentage>=60 and <70
- d. Grade D: Percentage>=40 and <60
- e. Grade E: Percentage<40

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