



‘সমানো মন্ত্র: সমিতি: সমানী’

UNIVERSITY OF NORTH BENGAL

BCA Honours 4th Semester Examination, 2022

CC10-BACHELOR OF COMPUTER APPLICATION (CC-43L) (PRACTICAL)

DATABASE MANAGEMENT SYSTEMS LAB

Full Marks: 20

*The questions are of equal value.
The figures in the margin indicate full marks.
All symbols are of usual significance.*

Practical:	15
Viva:	5
Total	20

Answer any *one* question of the following

15×1=15

1. The STUDENT detail databases has a table with the following attributes. The primary keys are underlined. 15

STUDENT(reg_no : int, name : string, dob : date, marks : int).

- Create the above table and insert at least five records.
- Remove attribute ‘marks’.
- Change the datatype of reg_no from integer to string.
- Add a new attribute entitled ‘Age’ of type data, derive the value of age for the respective students.

2. A Library database has a table with the following attributes. 15

LIBRARY(bookid : int, title : string, author : string, publisher : string, year : int, price : real)

- Create the above table and insert at least five records.
- Display all the different publishers from the list.
- Arrange the tuples in the alphabetical order of the book titles.
- List the details of all the books whose price ranges between Rs. 100 and Rs. 300.
- Find the average price of the books.

3. The SALARY database of an organization has a table with the following attributes. 15
 EMPSALARY(empcod : int, emp_name : string, dob : data, department : string, salary : real)
 (i) Create the above table and insert at least five records.
 (ii) Find the sum of the salaries of all employees.
 (iii) Find the average salaries of the employees of a particular department.
 (iv) Find the second highest salary that an employee draws.
4. Consider the insurance database given below 15
 PERSON(driver_id : string, name : string, address : string)
 CAR (regno : string, model : string, year : int)
 ACCIDENT(report_no : int, data : date, location : string)
 OWNS(driver_id : string, regno : string)
 PARTICIPATED(driver_id : string, regno : string, reportno : int, damage_amount : int)
 (i) Create the above tables by properly specifying the primary keys and foreign keys.
 (ii) Enter at least five tuples for each relation.
 (iii) Find the number of people who owned cars that were involved in accidents in 2002.
5. Consider the following database for BANK. 15
 BRANCH(b_name : string, b_city : string, assets: real, ifsc : string)
 ACCOUNT(accno : int, branch_name : string, balance : real)
 DEPOSITOR(c_name : string, accno : int, c_id : string)
 CUSTOMER(c_id : string, c_name : string, c_street : string, c_city : string)
 LOAN(loan_no: int, b_name : string, amount : real)
 BORROWER(c_name : string, loan_no : int, c_id : string)
 (i) Create the above tables by properly specifying the primary keys and foreign keys.
 (ii) Enter at least five tuples for each relation.
 (iii) Find all the customers who have at least two accounts at the main branch.
 (iv) Find all the customers who have an account at all the branches located in a specific city.

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