M.Sc. 2nd Semester Examination, 2016

DBMS LAB.

PAPER — COS-205

Full Marks : 50

Time : 6 hours

The figures in the right hand margin indicate marks

Answer any two questions :   20 × 2

1. Consider the following details (schema) :

   SHOP (shop No., shop Name, shop Address)

   CUSTOMER (cust. Name, cust. Address)

   SUPPLIES (shop No., cust. Name, item, price)

   Write SQL query for the following :

(*i*) Create the above schema using SQL and insert some dummy data.

(*ii*) Retrieve the names of customer who leaves in Kolkata and buys a product greater than Rs. 5000.

(*iii*) Find the address of a shop which are not listed in supplies relation.

(*iv*) List the details of the shop according to highest sales.

2. Consider the following schema :

STUDENT (s Id, s Name, phone, program)

SUBJECTS (sub Id, sub Name, instructor)

MARKS (s Id, sub Id, marks)

Write SQL query for the following :

(*i*) Create the above schema and insert some dummy data.

(ii) Find the name of students who have passed more than 5 subjects. (Pass marks = 50 %)

(iii) Find the list of teachers who have taught more courses than what has been taught by instructor 'X'.

(iv) Change the data type and length of an attribute phone in STUDENT table.

3. Consider the following schema :

BRANCH (br Name, br City, br Asset)

LOAN (lo Number, br Name, amount)

BORROWER (acc Number, br Name, balance)

Write SQL query for the following :

(i) Create the above schema and insert some dummy data.

(ii) Find the names of all branch that have assets greater than at least one branch located in Howrah.

(*iii*)Find the branch that has highest average balance.

(*iv*) List the entire loan relation in descending order of amount of several loans have same amount then order them in ascending order by loan number.

4. Consider the following schema :

CUSTOMER (c Id, c Name, c Age, c Gender)

ON FLIGHT (id, f No., f Date)

FLIGHT (f No., to City, start time, duration)

Write SQL query for the following :

(*i*) Create the above schema and insert some dummy data.

(*ii*) Show the name of passengers who flew on flight "F11" at least once.

(*iii*)List the name of customers who flew on same flight as 'A. Gupta'.

(iv) Show the number of passengers on flight 'F13' on '15/06/2016'.

5. Consider the following schema :

CUSTOMER (cust Id, cust Name, phone No.)

MOVIE (movie No., title, type, rent price)

ISSUES (issue No., movie No., cust Id, issue Data, return Date)

Write SQL query for the following :

(i) Create the above schema and insert some dummy data.

(ii) List the names of all customers having 'i' in any case as the second letter in their names.

(iii) List the movies which are issued to customers for more than a week.

(iv) List the movies in sorted order of their title except drama.

(6)

6. Consider the following schema :

    EMPLOYEE (e No., eName, e Address, e City, basic Sal., job status)

    PROJECTS (p No., p Name, p Category)

    WORK IN (p No., e No., p Duration)

    Write SQL for the following :

    (*i*) Create the above schema and insert some dummy data.

    (*ii*) Find the employee number of all employees who are working on at least one project.

    (*iii*) Find the average salary of all employees working in a project "based in Kanpur".

    (*iv*) Find basic sal. of employees who are working in second longest duration project.

    [Viva — 10 Marks]

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