2017

BCA 3rd Semester Examination

DBMS LAB.

PAPER—2196 (Set-I)

(Practical)

Full Marks : 100

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer any *two* questions (Lottery Basis). 2×25

1. Consider the following database consisting of the following tables :

Hostel (hno, hname, type [boys/girls])
Menu (hno, day, breakfast, lunch, dinner)
Warden (wname, qual, hno)
Student (sid, sname, gender, year, hno)

(a) Display the total number of girls and boys hostel in the college.

(b) Display the menu in the hostel 'x' on Tuesday.

(c) Display the number of wardens for each hostel.

(d) Find the capacity (in term of no. of students) of each hostel

(e) Find the name of hostel which has highest capacity.

2. Consider the following database consisting of the following tables :

Department (dept id, dept name)
Student (rollno, name, gender, mark1, mark2, mark3, total, average, dept id)
Staff (staff id, name, designation, qualification, dept id)
Tutor (rollno, staff id)

(a) Display the student details who come under the tutor ship of the given staff name 'X'.

(b) Display the student details who got greater than overall average marks of their department.

(c) How many students are there in CSE department ?

(d) Count the total number of staffs for each department.

(e) Find the name of the students who have maximum tutors.

3. Consider the following database consisting of the following tables :

Employee (ssn, first name, last name, gender, designation, doj, address)
Employee-salary (ssn, basic pay, DA, TA, pay)
Department (did, dname, mgrssn)
Employee-department (ssn, deptid)
Employee-dependency (ssn, depname, depgender, deprelationship)

Queries :

(a) Retrieve the names of employees who have no dependents.

(b) Retrieve all the information about employees working in 'Research' department including the department information.

(c) Display the department having employee count > 5.

(d) Find names of employees who have more than two dependents.

(e) Find second highest paid employee.

4. Consider the following database consisting of the following tables :

Department (dept id, dept name)
Student (rollno, name, gender, mark1, mark2, mark3, total, average, dept id)
Staff (staff id, name, designation, qualification, dept id)
Tutor (rollno, staff id)

(a) Display the staff details who work in CSE department.

(b) How many different designations and departments are there ?

(c) Display the student details whose name start with 'R'.

(d) Arrange names of the departments according to their average marks.

(e) Find name of the student who got overall highest marks.

5. Consider the following database consisting of the following tables :

Branch (bname, bcity, assets)
Account (ano, starting date, balance)
Customer (cusid, name, address)
Deposit (ano, cusid, bname)
Transaction (ano, amount, mode, date of trans)

(a) Find the average account balance at each branch and display only if it is greater than 10000.

(b) Display the branch details located in a city starting with the letter 'S'.

(c) Find the number of depositors in each branch.

(d) Find total of last 5 deposit amount.

(e) Find name of the customer who has highest balance out of all branches.

6. Consider the following database consisting of the following tables :

Party (pid, pname, leader)
Constituency (cid, cname)
Contestant (ctid, ctname, ctaddr)
Election (ctid, number of votes, pname, cname)

(a) Display the contestant details if they secured greater than 10,000 votes.

(b) Find the number of contestants, constituency wise.

(c) Display the winner details in each constituency.

(d) Find the name of winner who got maximum votes.

(e) Find the winner party name.

7. Consider the following database consisting of the following tables :

Employee (ssn, first name, last name, gender, designation, doj, address)
Employee-salary (ssn, basic pay, DA, TA, pay)
Department (did, dname, mgrssn)
Employee-department (ssn, deptid)
Employee-dependency (ssn, depname, depgender, deprelationship)

(a) Retrieve the doj, address of employees who work for 'Research' department.

(b) For each employee, retrieve the employee's first name and last name.

(c) Retrieve the names of each employee who has a dependency with same first name and gender of that employee.

(d) Display names of employees with total salary according to alphabetical order.

(e) Find name of the highest paid male employee.

8. Consider the following database consisting of the following tables :

Inventory (item, level, cost)
Minlevel (item, level)
Reorder (item, quantity)
Purchase (item, quantity, cost, customer name, date of purchase)

(a) Display the number of customers for the shop on a particular day.

(b) Write a query to display the item purchased by a given customer name.

(c) Display the overall income for the shop on a given date.

(d) Find highest cost item name.

(e) Find frequently selling item name.

9. Create the following tables with the mapping given below :

(a) stu_details (reg_no, stu_name, DOB, address, city)

(b) mark_details (reg_no, mark1, mark2, mark3, total)

(i) Display only those rows whose total ranges between 250 and 300.

(ii) Drop the table mark_details.

(iii) Delete the row whose reg_no = 161.

(iv) Display all details whose names begins with 'a'.

10. Create the following tables with the mapping given below :

(a) Customer (Cust_id, Cust_name, Addr, ph_no, pan_no)

(b) Loan (Loan_id, Amount, Interest, Cust_id)

(i) Display the Cust-name having both Loan and Account.

(ii) Display number of Loans, the sum of Loan Amount of a Particular Custname ("LEENA").

(iii) Display the Custname doesn't hold any Account nor taken any Loan.

(iv) Add a column nol(number of loans)

Viva — 15 Marks

P.N.B. — 05 Marks

Internal Assessment — 30 Marks

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