2018

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 relational database :

Student (s_id, s_name, total_marks)
Subject (sub_id, sub_name, s_id, sub_marks)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find the student name who obtained highest marks.

(c) List names of students who failed exactly two subject (less than 40% marks).

(d) Find names of students who failed in all subjects.

(e) Find the number of students who got 1st class (60% and above).

2. Consider the following relational database :

Supplier (S#, Sname, Scity, status)
Product (Pid, Pname, Pprice, Date_of_manufactured)
SP (S#, Pid, no_of_item)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find two suppliers who supply same product.

(c) Find total number of suppliers who supply "Printers".

(d) Find the name of suppliers who supply printers with lowest price.

(e) Find the name of suppliers located at Kolkata.

3. Consider the following relational database :

Employee (e_id, e_name, salary, address, hiredate)
Manager (e_id, Manager_id)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find average salary of employees.

(c) Find names of employees who are at least 3 years in company.

(d) List name and id of employees along with their name of their manager.

(e) Find names of employees who joined after their manager.

4. Database :
Employee (Eno, Ename, Joining_date, Designation, Salary, Department_name)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) List names of employees working in "Research" department.

(c) Find number of employees of Research department.

(d) Find the names of managers who are working last 2 years.

(e) Find the name of highest paid manager.

5. Consider the following relational database :

Project (p_no, p_name, manager_name)
Employee (e_no, e_name)
Assign_to (p_no, e_no)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find names of employees who are working more than one projects.

(c) Find names of projects where no employee is not still assigned.

(d) Find manager of the project located at "Kolkata".

(e) Find the project which has maximum employees.

6. Database :

Account (Ano, Atype, balance, CustId, branch)
Customer (CustomerId, AccNo, CustName, Ph_no, address)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find the total number of customers of Kolkata branch.

(c) Find total balance amount of saving accounts of Kolkata branch.

(d) List branch and number of customers according to branch's name alphabetical order.

(e) Find names of customers who have both saving and recurring accounts.

7. Database :

Bus (Bid, Agency_Name, Bfrom, Bto, Fare, No_of_days_per_week)
Ticket (Tid, Tfrom, Tto, Fare, Date)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find the names of customers who booked tickets from Midnapore to Kolkata on 21st August, 2018.

(c) Find the total number of buses which run from Kolkata to Midnapore daily.

(d) Display fares of different buses from Midnapore to Kolkata.

(e) Find the name of the bus agency who runs bus with minimum fare from Kolkata to Midnapore.

8. Database :

Student (Name, Roll, Addr, Ph_no, Email, Subject, Standard)
Teacher (Name, Id, Subject, Experience)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find the total number of students.

(c) Find names of the teachers who belong to "Computer Science".

(d) Find ratio of teacher and student.

(e) Arrange names of the teachers according to their experience in decreasing order.

9. Consider the following relational database :

Employee (e_id, e_name, salary, address, hiredate)
Manages (e_id, Manager_id)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find the difference between maximum and minimum salaries of employees.

(c) Find names of employees who are less than 5 years in company.

(d) Find names of employees who got higher salary than that of their managers.

(e) Find names of employees who joined within last one year.

10. Database :

Doctor (Did, Dname, Dept_name, Joining_date, Salary, Signation)
Patient (Pid, Did, Pname, P_addr, ph_no, admitted_dept_name)

Write SQL query for the following :

(a) Implement the above database in SQL.

(b) Find list of patients admitted under "Dr. A. Ghosal".

(c) Find total number of patients of Neurology department.

(d) List the names of doctors according to the experience in orthopedic department.

(e) List total number of doctors in pathology department.

Viva — 15

P.N.B. — 05

Internal Assessment — 30