**NEW**

**2015**

**BCA**

**3rd Semester Examination**

**DBMS LAB**

**PAPER—2196 (SET-2)**

**(PRACTICAL)**

*Full Marks :* 100

*Time :* 3 Hours

*The figures in the 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)* : 25×2

**1.** Consider the following relational schema :

CUSTOMER (cId, cName, cAge, cGender)

ONFLINGHT (oId, fNo, fData)

FLIGHTINFO (fNo, fromCity, toCity, startTime, duration)

Write SQL statements to execute the following :

(a) Create the above Schema.

(b) Show name of customers who never flew or any flight.

(c) List the name of customers who flew with Mr.Gaurav.

(d) Find the total number of flights originality from Kolkata.

(e) Add one attribute of your choice to FLIGHTINFO table.

5×5

**2.** Consider the following relational schema :

STUDENT (sId, sName, sPhone, Dob)

COURSE (cId, cName, credit)

RUSULT (sRd, cId, marks)

Write SQL statements to execute the following :

(a) Create the above schema.

(b) Find the name of the student whose results are not declared in any course.

(c) Give a grace mark of 1 to all the student in each course.

(d) List the name of the student who has obtained highest mark in a course.

(e) Find the name of course under which maximum students enrolled.

5×5

**3.** Consider the following relational schema :

PERSON (SSN, Name, Address)

CAR (company, Year, Model)

OWNS (SSN, Car No, Model)

Write SQL statements to execute the following :

(a) Create the above schema.

(b) List the no. of car sold for each year.

(c) Find the same of the persons who have bought the car that was manufactured in the year 2012.

(d) Find the cartesian product of all the above three table.

(e) Add a unique constraint against car No.

5×5

**4.** Consider the following database :

S (S #, Sname, Status, City)

P (P #, Pname, Colour, Weight, City)

J (J #, Jname, City)

SPJ (S #, P #, J #, Qty_Supplied)

Write SQL statements to execute the following :

(a) Create the above Schema using SQL.

(b) Get Jname values for projects supplied by supplier "Si".

(c) Get P# values for parts supplied to any project by a supplier in the same city.

(d) Get Sname values for suppliers who supply project "ji" with part "Pl".

(e) Get the Pname, Color and Weight for all those parts supplied by Sname "xyz".

5×5

**5.** Consider the following database :

EMP (eno, ename, dname, salary)

Project (pno, pname)

Work (eno, pno)

Write SQL statements to execute the following :

(a) Create the above Schema using SQL.

(b) Display the name of the employee who are working on a project named "Banking System".

(c) Increase salary by 10% who get lowest salary.

(d) Find the employees information and pno who are working on some project where pno $\geq 3$.

(e) Display the name of the employees who are not working in any project.

5×5

**6.** Consider the following database :

Employee (ename, street, city)
Works (ename, cname, salary)
Company (cname, city)
Managers (ename, mname)

(a) Create the above schema using SQL.

(b) Find the names of all employee who work for "IBM".

(c) Find all employees who earn more than every employee of "TCS".

(d) Find the company that has the most employees.

(e) Find the company that has the highest payroll.

5×5

**7.** Consider the following database :

Employee (SSN, name, age, dno)
Salary (SSN, salary)
Work-on (Project #, SSN)
Project (Project #, project_name location)

Write SQL statements to execute, the following :

(a) Create the above schema using SQL.

(b) Display the names of projects at "Delhi".

(c) Retrive the name and SSN of employees working on project # 100.

(d) Increase salary by 20% of every employee.

(e) Find the project-name of employee whose salary is greater than 10,000. 5×5

**8.** Consider the following relational schema :

HOTEL (hNo, hName, hAddress)

ROOM (rNo, hNo, type, charge)

BOOKING (hNo, rNo, gName, date From, date To)

Write SQL statements to execute, the following :

(a) Create the above scheme.

(b) List the names of all guest who stayed in single beded room for three days.

(c) Find the name of the hotel which offers a room at the cheapest.

(d) List room no and type in a chronological order of room type.

(e) Remove a record from booking table which has been booked on month earlier. 5×5

**9.** Consider the following relational schema :

STUDENT (sId, sName, sPhone, sProgramme)

SUBJECT (subId, subName, Instructor)

MARKS (sId, subId, markNo)

Write SQL statements to execute, the following :

(a) Create the above schema.

(b) List subject name and its instructor in the chronological order of instructor.

(c) Find the name of all students whose name starts with AB and ends with K.

(d) Add a constraint PRIMARY key to subId.

(e) Find the names of student who have passed in more than two subjects. (*Pass marks : 40%*)

5×5

**10.** Consider the following relational schema :

SUPPLIER (sId, sName, sAddr)

PARTS (pId, pName, Color)

CATALOG (sId, pId, cost)

Write SQL statements to execute, the following :

(a) Create the above schema.

(b) Find the name of the suppliers who supply both blue and green parts.

(c) Find the name of the parts that has lowest cost.

(d) List the same of the suppliers who supply all parts.

(e) Change a color of any two parts in PARTS table.

5×5

***Viva* — 15**

***Practical Note Book* — 05**

***[Internal Assessment* — 30]**