MCA 3rd Semester Examination, 2018

MCA

(DBMS Lab)

PAPER – MCA-308

Subject Code–32

(Practical)

Full Marks : 100

Time : 3 hours

Answer any **one** question (**Lottery** Basis)

The questions are of equal value

1. Relation schema :

Employee (<u>Employee_no</u>, Employee_name, designation, Salary, Hiredate

Department_no, Manager_name)

Department (<u>Dnumber</u>, Dname, Location)

(*a*) Create the above database using SQL.

(*b*) Find average salary of employees.

(*c*) Find names of employees whose manager joined after their joining.

(*d*) Find number of employees who joined last 2 years.

(*e*) List names of employees with their managers for department no 20.

2. Consider the following tables given below :

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

Loan (Loan_id, Amount, Interest, Cust_id)

(a) Create the above database using SQL.

(b) Find the name of customer who has drawn the highest loan amount.

(c) Find the total amount of loan drawn by customers.

(d) Find names of customers who have no loan.

(e) Add a column Email_ID to customer table.

3. 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) Create the above database using SQL.

(b) List names of girls' hostels.

(c) Find the name of the warden for hostel no 1097.

(d) Find the total number of student for hostel no 1097.

(e) List the whole day menu (breakfast, lunch, dinner) for Sunday hostel wise.

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

   Employee (ssn, first name, last name, gender, designation, date_of_joining, 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) Create the above database using SQL.

   (b) Find number of employees who have no dependant.

   (c) Find details of employees of the "Production" department joined last one year.

   (d) Find the second highest paid employee.

   (e) Display names of departments having employee greater than five.

5. Relation schema :

   Patient (p_id, p_name, p_age, p_address)

   Doctor (d_id, d_name, d_add)

   Attend (d_id, p_id)

   Admitted (p_id, p_date_of_admission)

   (a) Create the above database using SQL.

   (b) List names of the patients aged less than 50.

   (c) Find the total number of patients and doctors.

   (d) Find the names of doctors who have attended more than three patients.

   (e) List names of the patients who admitted last two days.

(*Turn Over*)

6. Create the tables described below with the constraints/ attributes specified :

Table Name : BOOK_XX (XX=> Last two digits of your class roll number)

Description : Used to store book information

Column Name	Data Type	Size	Constraints/Attributes
Book_no	Number	4	Primary key, values between 1000 and 9999
Bname	Varchar2	50	Not null, Name must be in Upper case
Authors	Varchar2	50	Not null, First Letter of each word of names must be in Upper case
Year	Date		Not null
Semester	Number	1	Default 1

(a) Find names of books published last year.

(b) Find the total number of book for 4th semester.

(c) Find name of the semester which has maximum number of books.

(d) Find authors who have "Dr." designation.

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

Branch (bname, bcity, assets)

Account (ano, strating date, balance)

Customer (cusid, name, address)

Deposit (ano, cusid, bname)

Transaction (ano, amount, mode, date of trans)

(*a*) Create the above database using SQL.

(*b*) Find the total transaction in last one day.

(*c*) Display the total number of customer branch wise.

(*d*) Find names of the branch in the city "Kolkata".

(*e*) Find the average balance of accounts for each branch.

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

   Employee (ssn, first name, last name, gender, designation, date_of_joining, address)

   Employee-salary (ssn, basic pay, DA, TA, pay)

   Department (did, dname, mgrssn)

   Employee-department (ssn, deptid)

   Employee-dependency (ssn, depname, depgender, deprelationship)

   (a) Create the above database using SQL.

   (b) List names of the employees according to alphabetical order of their names.

   (c) List names of the employees with their manager names.

   (d) Find the average salaries department wise.

   (e) Find the names of the employees having no dependants.

9. Write a PL/SQL program to find smallest and highest of three input numbers.

10. Write a PL/SQL program to find maximum salary from EMP table and save the value into a variable 'sal' and display the value of 'sal'.

Viva – 20

P.N.B. – 10

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