

2015

MCA

3rd SEMESTER EXAMINATION

DBMS LAB

(PRACTICAL)

PAPER—MCA-308

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 (on Lottery basis)

1. Emp (Empno, Ename, Job, Sal, Deptno)
Department (Dnumber, Dname, Loc) :
 - (a) Create the above database using SQL.
 - (b) List all employees who have a salary between 1000 and 2000.
 - (c) List the details of the employees in departments 10 and 20 in alphabetical order of name.
 - (d) Display all employees' names which have 'TH' in them.
Select ename from emp where ename like '%T
ename like '%LL%'.

(Two)

- (e) To show all employees hired on February 22, 1981 (non-default format).
- (f) Write a query which will return the DAY of the week for any date entered in the format DD.MM.YYYY
- (g) To display the average monthly salary bill for each job type within department.

2. Emp (Empno, Ename, Job, Sal, Deptno)
Department (Dnumber, Dname, Loc)

- (a) Create the above database using SQL.
- (b) Find all departments which have more than 4 employees.
- (c) Find minimum salary for each department.
- (d) Display each employees name & hire date for department 20 as below :

<i>ENAME</i>	<i>DATE_HIRED</i>
.....
SMITH	June, Thirteenth 1983
JONES	October, Thirty-first 1983
.....	
FORD	December, Fifth 1983

- (e) List the employee name and salary increased by 12% and expressed as a whole number.
- (f) Count the number of employees in department 30.

3. 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)

5. Sales (order_no, cust_no, order_date)
Customer (cust_no, cust_name, cust_addr)
- Create the above database using SQL.
 - Display the name of the customers who had order last month.
 - Arrange names of the customers according to alphabetical order of their names.
 - Add a constraint to check that the first letter of customer name must be capital.
 - List names of the customers with the placed order and arrange them according to order date.
6. Create the tables described below with the constraints and attributes specified :

Table Name : **EMP1_XX** (XX => Last two digits of employee roll number)

Description: Used to store employee information

Column Name	Data Type	Size	Constraints / Attributes
Empno	Number	4	Primary key, values 7000 and 7999
Ename	Varchar2	20	Not null, Name must be Upper case
Deptno	Number	2	
Job	Varchar2	15	Not null
Mgr	Number	4	Foreign key reference of EMP1_XX, Values 7000 and 7999
Hire Date	Date		Not null
Salary	Number	5	Default 0

- Display all the different job types.
- Display all employees who were hired during the year 1981.
- List names, employee number & salary of employees in department 10 (give the department number at run time).

P.N.B. — 10 and Viva — 20

- (a) Create the above database using SQL.
 - (b) List the names of patients with their doctor.
 - (c) Find the names of the doctors who attend more than three patients.
 - (d) Find name of the patient who lives at the same place as his/her doctor.
 - (e) Find name of the patient who are admitted before other.
 - (f) Count total number of patients and total number of doctors.
4. Suppose you are asked to design a club database system based on the following information. Each student has a unique student id, a name, and an email; each club has a unique club id, a name, a contact telephone number, and has exactly one student as its president. Each student can serve as a president in at most one of the clubs, although he/she can be the members of several clubs. Clubs organize activities and students can participate in any of them. Each activity is described by a unique activity id, a place, a date, a time and those clubs that organize it. If an activity is organized by more than one club, different clubs might contribute different activity fees.
- Draw an E-R diagram for the system, in particular, use arrows or thick lines to represent constraints appropriately. Write down your assumptions if necessary.
 - Translate the above E-R diagram to a relational model; in particular, specify your primary key and foreign key constraints clearly.