

2012

MCA

3rd Semester Examination

DBMS LAB

PAPER—MCA-307 (Group - B)

(PRACTICAL)

Full Marks : 50

Time : 2 Hours

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

Answer any one question.

1×30

1. Patient (p_id, p_name, age, address)

Doctor (d_id, d_name, d_add)

attend (d_id, p_id)

admitted (p_id, date_of_admission)

Write SQL.

(a) List the name of the patients who have the age greater than 50 and date of admission is 20.11.2012.

(b) List the total no. of doctors who check the same patient more than 3 times.

(Turn Over)

- (c) List the name of the patient in descending order of age.
- (d) List the name of the patient whose first letter of name starts with "A" and age between 45 to 50.
- (e) List the name of the patients who have the same address as the doctor id "D 1001" and Doctor name "Abhinanda Bhattacharya".

2. Emp (Eid, Ename, Salary)

Works (Eid, did)

Dept (did, dname, managerid, floorname)

Write the following in SQL.

- (a) Give every employee who works in the production dept. a 20% raise in the salary.
- (b) Print the names of all employees who works on floors Sudip Basu works.
- (c) Print the names of all managers who manage three or more departments on the same floor.
- (d) Print the name of the dept. that employee Subal Bera works in.
- (e) Print the names of all employees who work on the 5th floor and earn salary greater than ₹ 70,000.

3. Sales (order_no, cust_no, order_date)

Customer (cust_no, cust_name, cust_addr)

- (a) Create the above database using SQL.
- (b) Display the names of customer who have given more than one order in a month.
- (c) Find top 3 customers name, after arranging the name in descending order.
- (d) Add a constraint to check that order_date must be greater than '25-11-2012'.

4. Working (p_name, c_name, salary)

Living (p_name, street, city)

Located (c_name, city)

- (a) Create the above database using SQL.
- (b) List the names and cities they live in the Professors who are working for the college C1.
- (c) Find name, street, and city of the Professors who are working for the college C2 and are having a salary greater than 80,000/-.
- (d) Update each Professor's salary by 5%.

5. employees (e_number, e_name, address, bas_sal, job_sta)
projects (p_name, p_number, no_of_staff)
work_in (p_number, e_name, p_job)

Write the following in SQL.

- (a) Find out the names of employee who are working in a Project Bio-informatics.
 - (b) Find the numbers and names of the employees who employee nos. are 8, 10, 13, 15.
 - (c) Find the names of employees who are not working in any project.
 - (d) Find the details of the employees whose basic salary is more than 15,000/-.
 - (e) Find Project name of where "Sudipta" works as on Team Leader (Job_Status).
6. Employee (e_no, e_name, address, basic_salary, job_status, p_name, p_job, dept_no).
- (a) Update 'basic_salary' as salary.
 - (b) Find the sum, average and maximum salaries.
 - (c) Delete the record of the employee whose e-no is 10.
 - (d) Drop the column 'p_name'.

7. Student (S_id, Programme, D_id, Year)

Teacher (D_id, S_id, Course_id, T_id)

Grade (S_id, Course_id, Grade, Year)

(a) Create the above database using SQL.

(b) List all teacher id who teaches for D_id = 10.

(c) List all the students who have registered in the year 2012 and later.

(d) Find the grade and year, where S_id, and Course_id are same.

8. Consider the following database of student enrollment in courses & books adopted for each course :

STUDENT (regno: string, name: string, major: string, bdate:date)

COURSE (course#:int, cname: string, dept:string)

ENROLL (regno:string, course#:int, sem:int, marks:int)

BOOK _ ADOPTION (course#:int, sem:int, book-ISBN:int)

TEXT (book-ISBN:int, book-title:string, publisher:string, author:string)

(i) Create the above tables by properly specifying the primary keys and the foreign keys.

(ii) Enter at least five tuples for each relation.

- (iii) Demonstrate how you add a new text book to the database and make this book be adopted by some department.
- (iv) Produce a list of text books (include Course#, Book-ISBN, Book-title) in the alphabetical order for courses offered by the 'CS' department that use more than two books.
- (v) List any department that has all its adopted books published by a specific publisher.

Viva - 15 .

Practical Note Book — 5
