2018

2nd Semester

COMPUTER SCIENCE

PAPER—GE2P (Set 1)

(Honours)

(Practical)

Full Marks : 20

Time : 2 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 *one* questions : 1×5

1. Consider the following relational Schema : 5×3

Employee (Emp_No, Emp_Name, designation, salary, Hiredate, Dept_No, Manager_name)

Department (D_No, Dname, Location)

(a) Create the above database using SQL.

(b) Insert at least three records in each table.

(c) Find all employees whose department is located in "Delhi".

(d) Display the details of the employee whose Salary is greater than 20,000.

(e) Show the details of all employees hired on June 4, 1998.

2. Consider the following relational Schema : 5×3

Employee (emp_name, street, city)

Works (emp_name, company_name, salary)

Company (company_name, city)

manager (emp_name, manager_name)

(a) Create the above database using SQL.

(b) Insert at least three records in each table.

(c) Find all name of all employees who lives in the same city as the company for which they work.

(d) Find the name of all employee who work for "Small bank Corporation".

(e) Show the details of all companies located in "Mumbai".

3. Consider the following relational Schema : 5×3

Employee (emp_no, Emp_name, designation, salary, Hire_date, Dept_no, Manager_name)

Department (Dnumber, Dname, Location)

(a) Create the above database using SQL.

(b) Insert at least three records in each table.

(c) Find all the employees whose name begins or end with 'M'.

(d) Find all the employees who were hired more than 2 year ago.

(e) Show the details of all employees under the Manager 'A. K. Singh'.

4. Consider the following relational Schema : 5×3

Book (Acc_No, ISBN_No, BName, Author)

User (User_id, Uname, department_Name)

Borrower (User_id, acc_no, issue_data)

(a) Create the above detabase using SQL.

(b) Insert at least three records in each table.

(c) Find the total number of books borrowed by each borrower.

(d) Find the details of the user who have borrowed the book "Database Management System".

(e) Change the length of the datatype of attribute 'UName'.

5. Consider the following relational Schema : 5×3

Owns (IPL_team, owner, team_id)

Match (team_id1, team_id2, result)

Players (team_id, P_name, Cost_value)

* "Result" attribute will store the team-id of team won.

(a) Create the above database using SQL.

(b) Insert at least three records in each table.

(c) Show the details of most expensive player.

(d) Find the cost of each team.

(e) Find the owner name whose team has won maximum matches.

[Practical Note Book : 2 Marks

Viva-Voce : 3 Marks]

———

2018

2nd Semester

COMPUTER SCIENCE

PAPER—GE2P (Set 2)

(Honours)

(Practical)

Full Marks : 20

Time : 2 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 *one* question : 1×15

1. Consider the following schemas and answer the queries:

Customer (Customer_ID, Customer_Name, Address, Contact_No, PAN)

Loan (Loan_ID, Loan_Type, Amount, Interest_Rate, Customer_ID)

(a) Identify primary and foreign keys. Create the database tables and insert at least 5 records in each databse table.

(b) Find the names of the customer who do not have any loan.

(c) Find the total amount of loans of these customers who have taken at least two types of loans.

(d) Reduce the interest rate of the customer by 20% having PAN = 'ABCDE1243F'.

(e) Add a column 'Loan-Duration' to the Loan table.

5×3

2. Create a database having two tables with the specified fields, to computerize a library system of a Delhi University College.

Library_Books (Accession_Nuber, Title, Author, Department, Purchase_Date, Price)

Issued_Books (Accession_Number, Borrower)

(a) Identify primary and foreign keys. Create the tables and insert 5 records in each table.

(b) Delete the record of book titled 'Database System Concepts'.

(c) Change the Department of book titled 'Discrete Maths' to 'CS'.

(d) List all books that belong to 'CS Department' and are written by author 'Navathe'.

(e) List all books which have a price less than 500 or purchased between 01.01.1999 and 01.01.2004.

5×3

3. Consider the following database and answer the queries :

Person (P_name, P_id, d_o_b, address)

Food (Fast_Food_Name, price)

Likes (P_id, Fast_Food_Name)

(a) Identify primary and foreign keys. Create the database tables and insert at least five records.

(b) Find the names of the person who likes 'Chicken Sandwitch' and whose age are below 40 years.

(c) Group the person names according to their fast food choice.

(d) List the fast food according to their price.

(e) Change the length of datatype of an attribute 'address'. 5×3

4. Consider the following schema and answer the queries :

Student (Name, Roll, Class, Dept_name)

Course (C_Name, Credit_hours, Dept_Name) Grade (Roll, grade)

(a) Identify primary keys and foreign keys. create the tables and insert at least 5 records in each table.

(b) Display all the details of a student having grade 'A'.

(c) Display the name, roll of the students whose Dept_name is 'Computer Science'.

(d) Add column mobile. No to student table.

(e) Display the following information of each student.

Name, Roll, Dept_name, total

Credit_hours taken by a particular student. 5×3

5. Consider the following schema :

Answer the queries :

Customer (ID, Name, City, Phone, Age)

Travel (Travel ID, ID, Place, No_of_days, cost, month_of_visit)

(a) Identify primary and foreign keys. Create the database tables and insert at least five records.

(b) Find the customer who lives in 'Midnapore' and visited 'Digha'.

(c) Find the names of customer who have visited 'Kashmir' in April.

(d) Find the names of the customer who have spent more than Rs. 80,000 for visiting any place.

(e) Find the names of customer whose age is below 45 and visited 'Kolkata'. 5×3

6. Create the following tables and answer the queries given below :

Employee (person_name, street, city)

works (Person_name, Company_Name, Salary)

Company (Company_name, city)

(a) Identify primary and foreign keys. Create the tables and insert 5 records in each table. 6

(b) Alter table employee, add a column_email of type varchar (20) 3

(c) Find the names, street, cities of residence and salary of all employees who work for – Samba Bank and earn more than $16000. 3

(d) Find the name of all employees who live in the same city as the company for which they work. 3

7. Create the following table and answer queries in SPL :

Book (Isbn, book_name, author, price)

Lib (ace_no, book_name)

(a) Identify Primary and Foreign Keys.

create the tables and insert at least 5 records in each table.

(b) Display all information about book which have aec_no equal to "500".

(c) Display author name, price where book_name is 'Let us C'

(d) Display the details of the book which have highest price.

(e) Display the book name and no. of copies present in the library.

[Practical Note Book : 2 Marks

Viva-Voce : 3 Marks]

———