MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES

School of Computer Applications

COURSE NAME: DATABASE MANAGEMENT SYSTEMS (4.5CA1)

LAB ASSIGNMENT: II

Question 1:

Schema 1

Consider the following relations for a database that keeps track of students' enrolment in courses and the books adopted for each course.
STUDENT (SSN, Name, Major, Bdate)
COURSE (Course#, Quarter, Grade)
ENROLL (SSN, Course#, Quarter, Grade)
BOOK_ADOPTION (Course#, Quarter, Book_ISBN)
TEXT (Book_ISBN, Book_Title, Publisher, Author)

1) Find names of students who have registered for a DBMS Course.
2) List names of students starting with character 's'
3) List names of Course starting with word 'Data'
4) List all courses in quarter 2
5) Find titles of Books for the course DBMS.
6) Find count of students enrolled for the course DBMS.
7) Display name of all publishers for the course DBMS.
8) Find number of students enrolled for more than three courses in the first quarter.
9) Find publisher of all Data Science books
10) Find find names of students enrolled in quarter 2 and with grade I
11) List students having birthdate in month of June
12) List Courses running in quarter 2
13) Find authors of books used for courses in quarter 2
14) List SSN and name of Grade 4 students
15) List all students having age greater than 20 years

Schema 2

Product(Maker, model, type)
PC(Model, speed, ram, harddrive, screen, price)
Laptops(model, speed, ram, harddrive, screen, price)
Printer(model, color, type, price)

Write the queries for the following using SQL

1. Find the make and model of all the pcs that are less than $1000 but greater than 800 dollars?
2. What are the models of PCs that are not made by a company that also makes laptops?

3. Find those manufacturers (i.e., makers) who produce Laptops but not PC's.
4. Find the model and price of all products made by manufacturer B (i.e., maker='B')
5. List the model of all color printer

6. List the price of all the PC, laptop, and printer.

7. List PC model with RAM >4GB and Price < 50000

8. Find Minimum and Maximum Price of printers

9. Find average price of PC as well as Laptops

10. List makers, models and price of all laptops with harddrive more than 500GB.

Schema 3

Consider the following schema for employee database.

Employee (empname, street, city, date of join)
Works (empname, company-name, salary)
Company (company-name, city)
Manages (empname, manager-name)

Write SQL queries for the following statements:
i. Finds all employees who joined in the month of January
ii. Modify the database so that 'Peter' now lives in 'Banglore'.
iii. List all employees who live in the same cities as their managers.
iv. Give all employees of XYZ corporation a 15 percent raise.
v. List all managers of XYZ corporation company
vi. Find name and city of all the employees who works in "ABC Pvt Ltd."
vii. Find manager name of employee ' Suhas Patil'
viii. List all employees with salary >50000
ix. List employees whose name ends with letter 'h'
x. List companies having more than 10 employees
xi. Find average salary given by 'ABC Pvt. Ltd.'
xii. List all companies with its maximum salary
xiii. List companies present in 'Thane' city