**Practice Exercise -1**

**Retrieve the name and address of all employees who work for the 'Research' department.**

SELECT FNAME, LNAME, ADDRESS FROM EMPLOYEE, DEPARTMENT WHERE DNAME='Research' AND DNUMBER=DNO

**Retrieve the SSN values for all employees.**

SELECT SSN FROM EMPLOYEE

R**etrieve all the attribute values of EMPLOYEES who work in department 5.**

SELECT \* FROM EMPLOYEE WHERE DNO=5

**Retrieve all the attributes of an employee and attributes of DEPARTMENT he works in for every employee of ‘Research’ department.**

SELECT \* FROM EMPLOYEE, DEPARTMENT WHERE DNAME='Research' AND DNO=DNUMBER

**Retrieve the name and address of all employees who work for the 'Research' department.**

SELECT FNAME, LNAME, ADDRESS FROM EMPLOYEE WHERE DNO **IN** (SELECT DNUMBER FROM DEPARTMENT WHERE DNAME=‘Research’)

**For every project located in 'Stafford', list the project number, the controlling department number, and the department manager's last name, address, and birth date.**

SELECT PNUMBER, DNUM, LNAME, BDATE, ADDRESS FROM PROJECT, DEPARTMENT, EMPLOYEE WHERE DNUM=DNUMBER AND MGRSSN=SSN AND PLOCATION='Stafford'

**DBMS Exercise-1**

1. **Retrieve details of all books in the library – id, title, name of publisher, authors, number of copies in each branch, etc.**

SELECT B.BOOK\_ID, B.TITLE, B.PUBLISHER\_NAME, A.AUTHOR\_NAME, C.NO\_OF\_COPIES, L.BRANCH\_ID

FROM BOOK B, BOOK\_AUTHORS A, BOOK\_COPIES C, LIBRARY\_BRANCH L WHERE B.BOOK\_ID=A.BOOK\_ID

AND B.BOOK\_ID=C.BOOK\_ID

AND L.BRANCH\_ID=C.BRANCH\_ID;

**Get the particulars of borrowers who have borrowed more than 3 books, but from Jan 2017 to Jun 2017.**

SELECT CARD\_NO FROM BOOK\_LENDING

WHERE DATE\_OUT BETWEEN ‘01-JAN-2017‘AND ‘01-JUL-2017‘

GROUP BY CARD\_NO HAVING COUNT (\*)>3;

1. **Delete a book in BOOK table. Update the contents of other tables to reflect this data manipulation operation.**

DELETE FROM BOOK

WHERE BOOK\_ID=3;

1. **Partition the BOOK table based on year of publication. Demonstrate its working with a simple query.**

CREATE VIEW V\_PUBLICATION AS

SELECT PUB\_YEAR

FROM BOOK;

1. **Create a view of all books and its number of copies that are currently available in the Library.**

CREATE VIEW V\_BOOKS AS

SELECT B.BOOK\_ID, B.TITLE, C.NO\_OF\_COPIES

FROM BOOK B, BOOK\_COPIES C, LIBRARY\_BRANCH L

WHERE B.BOOK\_ID=C.BOOK\_ID

AND C.BRANCH\_ID=L.BRANCH\_ID