SET1

(I) Consider the following tables :

FACULTY(FNO, NAME, GENDER, AGE,SALARY,DNUM)
DEPARTMENT(DNO, DNAME, DPHONE)
COURSE(CNO, CNAME, CREDITS, ODNO)
TEACHING(FNO, CNO, SEMESTER)

DNUM is a foreign key that identifies the department to which a faculty belongs. ODNO is a foreign key identifying the department that offers a course.FNO and CNO in TEACHING table refers FACULTY and COURSE

Write the SQL Queries for the following;

1) Find the details of faculties with highest salary
2) Find the names of faculties teaching in 5^{th} semester
3) Course numbers and names of 3-credit courses offered by 'CS' department.
4) Names of faculty members teaching *maximum*3 courses
5) Names of departments along with number of courses offered by each of them, in the increasing order of number of courses

(II) Implement a PL/SQL program that uses a cursor to retrieve and display the details of faculties who earn more than the average salary.

SET II

I.Consider the tables given below
STUDENT (ROLLNO, NAME, AGE, GENDER, ADDRESS, ADVISOR)
COURSE (COURSEID, CNAME, TAUGHTBY, CREDITS)
PROFESSOR (PROFID, PNAME, PHONE)
ENROLLMENT (ROLLNO, COURSEID, GRADE)

Primary keys are underlined. ADVISOR& TAUGHTBY are foreign key referring to PROFESSOR table. ROLLNO and COURSEID in ENROLLMENT are also foreign keys referring to the primary keys of STUDENT and COURSE.

Write SQL queries for the following;

1. List the no of courses enrolled by each student.
2. List the name of students whose advisor is professor Raju
3. List the name of courses in which more than 5 students enrolled
4. List the name of professors who are not advisors
5. Retrieve the roll no of students in the course 'DBMS' in the descending order of grade.

II. Write an SQL **trigger** to carry out the following actions.
On Withdrawal of an amount from the account, Whenever the account balance goes below 1000 , the account has to be removed from bank table and add to table low_bal with attributes account_no and balance.