**Section I**

Write queries for the following **(1 X 10=10 Marks)**

1. Display the names of all employees with the initial letter displayed in capital(Example : Allen)
2. Display the first 3 characters of the names of all employees
3. Display the names of all the employees replacing any ‘A’ in the name with ‘a’
4. Display the salaries of all employees rounding it to the nearest 1000’s place
5. Display the number of CLERKs joined after ’01-Jan-81’
6. Display all the employee names and their corresponding department names, and for those employees who currently do not belong to any department the value ‘UNDER TRAINING’ should be displayed as department name
7. Display the department-name wise count of employees
8. Display the department number wise average salary such considering only those employees whose salary is greater than 1000
9. Perform a RIGHT OUTER JOIN between DEPT table and EMP table, where DEPT table is on the Right-Hand-Side of the join, projecting the columns ENAME, DNAME, LOC, SALARY only
10. Perform a NATURAL JOIN between DEPT table and EMP table

**Section II (15 Marks)**

1. Write a stored procedure by the name CIRCLE which accepts R as the radius of a circle and throws out A and C as the Area and Circumference of the circle respectively. Write a calling anonymous block which calls the procedure CIRCLE and passes the radius value to the procedure and also prints the Area and Circumference of the circle. (7 marks)
2. Write a stored function INTEREST which accepts the P,R,N as the principal amount, rate of interest and number of years respectively and returns the final amount using the formula :

Final amount= p+(p\*n\*r/100). Demonstrate the invocation of this function appropriately.

(8 marks)

**Section III**

Create the following table : **(15 marks)**

EMPSALCOMMTRACK

(empno, who, when, old\_sal, new\_sal, old\_comm, new\_comm) with appropriate datatypes

Write a trigger UPSALCOM on the table EMP such that it fires only when the SAL or COMM or both these columns from the EMP table are updated and then the trigger implements the following logic : The EMPNO whose SAL or COMM or both are updated should be recorded as a record into the EMPSALCOMMTRACK table, and also the USER and the DATE when the update happened should be recorded. The SAL and COMM values before and after the update should also be recorded. However, if the updated SAL is same as the old SAL, then the appropriate columns old\_sal, new\_sal, of the EMPSALCOMMTRACK should be left null, though the empno, who and when columns are recorded. Similarly, if the updated COMM is same as the old COMM, then the appropriate columns old\_comm, new\_comm, of the EMPSALCOMMTRACK should be left null, though the empno, who and when columns are recorded. The DMLS within the trigger body should be committed, regardless of whether or not the update that invoked the trigger is committed or rolled back.

ALL THE BEST