## 1. Create table EMP, fields are show below:

| Column Name | Туре           |
|-------------|----------------|
| EMPNO       | NUMBER(4)      |
| ENAME       | VARCHAR2(20)   |
| DESIGNATION | VARCHAR2(20)   |
| JOINDATE    | DATE           |
| SAL         | NUMBER(9,2)    |
|             | 110111111(7,2) |

- 2. Add a column to the existing table EMP, which will hold the grades for each employee.
- 3. Modify the sal column of the EMP table to increase its size to 10
- 4. Insert 3 rows into tables EMP using INSERT command
- 5. Insert only employee number, ename and salary using INSERT.
- 6. Insert 2 rows into table EMP using parameter substitution.
- 7. Add column commission to the existing table EMP.
- 8. List the information of all employees.
- 9. List the employee names along with their salaries
- 10. List the name and salary of the employees whose salary is more than 1000
- 11. List the names of clerks.
- 12. List the employee name and salary whose salary is between 1000 and 2000
- 13. List the names of analysts and salesman.
- 14. List the details of the employees who have joined before the end of September '81.
- 15. List the name of employees whose employee numbers are 7839,7521 using IN operator.
- 16. List the employee names, who have joined before 30th june '81 and after December '81.
- 17. List the different jobs available in the emp table using DISTINCT.
- 18. List the details of employees, whose salary is greater than 2000.
- 19. List the employees whose names start with an "S".
- 20. List the employee names ending with a 'S'.
- 21. List the names of employees whose names have exactly 5 characters.
- 22. List the employee names having 'I' as the second character.

- 23. List the number of employees working with the company.
- 24. List the number of designation available in the emp table.
- 25. List the total salaries payable to employees.
- 26. List the maximum, minimum, average and sum of salary
- 27. List the maximum salary of employee working as a salesman
- 28. List the name of employees, who are more than 2 years old in the organization
- 29. List the employee details in ascending order of salary
- 30. List the employee name and joindate in descending order of salary.
- 31. List the designation and the number of employees in each designation.
- 32. Increase everybody's salary by 10%
- 33. Change the designation of ALVIN to clerk
- 34. Delete the records of clerks from emp table
- 35. Update the commission of Albert with Rs. 500.
- 36. Update the commission with Rs. 100, if the commission is NULL.
- 37. Increment 20% in salary of employees with grade A & B.
- 38. Increment commission with Rs. 1000 of employees with grade C & D.
- 39. List the name ,salary and PF amount of all the employees(PF is calculated as 10% of salary)
- 40. List the employee name, salary, PF, HRA, DA and gross order the result in ascending order of gross. HRA is 50% of salary and DA is 30% of salary.

#### I. Create the following tables:

#### **TABLE: STUDENT**

| COLUMN NAME | DATA TYPE   | CONSTRAINTS |
|-------------|-------------|-------------|
| Roll_no     | Number(5)   | Primary Key |
| Name        | Varchar(20) | Not null    |
| Dept_id     | Number(5)   | Foreign Key |
| Gender      | Varchar(2)  |             |

| Contact_no | Number(10) |  |
|------------|------------|--|
|            |            |  |

## **TABLE: DEPARTMENT**

| COLUMN NAME | DATA TYPE   | CONSTRAINTS |
|-------------|-------------|-------------|
| Dept_id     | Number(5)   | Primary Key |
| Dept_name   | Varchar(10) | Not null    |

## Write SQL queries for the following

- 1. a. Insert 5 records in each table
  - b. Update the contact number of student with Roll\_no 005
- 2. a. Display the data of female students in alphabetical order.
  - b. Find the number of students in Electrical Department
- 3. Display the names and contact numbers of all students
- 4. Display names of Departments for which there are no students.

## II. Create the following tables:

#### **TABLE: CUSTOMER**

| Column name | Data type | Size | Constraints             |
|-------------|-----------|------|-------------------------|
| Cust_id     | Varchar   | 10   | Primary Key             |
| Fname       | Varchar   | 25   | Not Null                |
| Lname       | Varchar   | 25   |                         |
| Area        | Varchar   | 10   | Kottayam ,Kollam, Kochi |

#### **TABLE: INVOICE**

| Column Name | Data type | Size | Constraints |
|-------------|-----------|------|-------------|
| Inv_no      | Varchar   | 20   | Primary Key |
| Cust_id     | Varchar   | 10   | Foreign Key |
| Issue_date  | Date      |      |             |

#### Write SQL queries for the following:

- 1. a. Insert 5 records in each table
  - b. Change the issue date to 24/7/08 of cust id '101'
- 2. a. Find the issue date for the customer 'JOHNS'.
  - b. List the customer name and invoice number of all customers
- 3. Find the lnames of all customers that begin with 'P' or 'B'.
- 4. List the customer details in the alphabetical order of their name

## III.Create tables **Department**(Dno ,Dname) and **Employee**(Eno,Ename, Salary,Dno)

- 1. Find the no. of employees working in each department.
- 2. Find the employee names whose salary is greater than Rs 50,000 /- and having exactly five characters in their name.
- 3. List the employee names whose salary is highest.
- 4. To find the total salary of each department.
- 5. List the average salary and number of employees working in the "HR" department.

- 6. List the department name and the total salary payable in each department.
- 7. List the department names of the employee who earn lowest salary.

**IV**.Create tables **Customer** (Cno (PK), Cname, Ccity), **Item** (Icode (PK), Iname, Irate) and **Purchase**(Cno (FK), Icode (FK), Qty, TotalRate, Pdate)

- 1. List all the customers who have purchased above RS 5000/- and lives in the 'Ernakulam'city
- 2. List the details of the customers purchased on a particular date.
- 3. List the details of the customers who have purchased more than 3 items.
- 4. List the details of the customers who have purchased more than 5 numbers of a particular item.

# **DBMS BCA18 Cycle 3**

# I. Create the following tables

#### 1. BRANCH

| Column Name | Туре        | Constraints |
|-------------|-------------|-------------|
| Bcode       | Number(2)   | Primary key |
| Bname       | Varchar(32) | Not NULL    |
| City        | Varchar(20) |             |

#### 2. EMPLOYEE

| Column Name | Туре        | Constraints |
|-------------|-------------|-------------|
| Ecode       | Number(3)   | Primary key |
| Ename       | Varchar(20) | Not NULL    |

| Bcode       | Number(2)   | Foreign key |
|-------------|-------------|-------------|
| Designation | Varchar(20) |             |
| Salary      | Number(3)   |             |
| Doj         | Date        |             |

- 1. Display all the branches which have no peons.
- 2. Display all employee details who is working in Finson's branch.
- 3. To display branch name and no: of employees.
- 4. Display all employee details whose salary in minimum corresponding designation.
- 5. To display designation with highest salary
- 6. To display total no: of designation in each branch before 2012
- 7. Create view on EMPLOYEE table.
- 8. Create view on BRANCH table.
- 9. Create view to display employee name with his/her branch details.
- 10. Create a view to display employee details who had more than 8 years experience.
- 11. Create procedure to display the employee details with Ecode=10.
- 12. Create procedure to display all employee details.
- 13. Create procedure to display employee name with his/her branch details.
- 14. Create procedure to do the following:
  - a) Display the employee details in ascending order of their salary.
  - b) Display the details of employee who had a branch city at 'ernakulam'
- 15. Create a procedure to do the following:
  - a) Display the employee names along with their salaries.
  - b) Display the details of employees, whose salary is greater than 500.
- 16. Create a procedure to do the following:
  - a) Display employee name and designation who joined before 12th Dec 2010.
  - b) Display employee name and his/her branch name.
- 17. Create a procedure to do the following:
  - a) Display the details of employees who draws salary between 200 and 400.
  - b) Display the details of employees working in 'Angamaly' branch.

## II. Create the following tables

## 1. CAR

| Column Name | Туре        | Constraints |
|-------------|-------------|-------------|
| Carid       | Number(3)   | Primary key |
| Cmpname     | Varchar(30) |             |
| Carname     | Varchar(30) |             |
| Color       | Varchar(20) |             |

## 2. DRIVER

| Column Name | Туре        | Constraints |
|-------------|-------------|-------------|
| drid        | Number(2)   | Primary key |
| Drname      | Varchar(20) |             |
| Age         | Number(2)   |             |

### 3. RESERVES

| Column Name | Туре      | Constraints |
|-------------|-----------|-------------|
| drid        | Number(2) | Foreign key |
| Carid       | Number(3) | Foreign key |
| Dat         | Date      |             |

- 1. Find the color of cars reserved by peter
- 2. Find the name of drivers who have reserved 'white' and 'red' car.
- 3. Find the name of drivers with age over 35 who have not reserved a 'black' car.

To display Driver Name and no. of cars of each driver.