

Course : II-B.Tech (R22) II-SEM MID-I Branch : IT

**Subject: DBMS (SET-2) Duaration : 2 hr**

**Date : 06-03-2025 Max.Marks : 30**

**I. Answer all the below questions each question carry two marks 5\*2=10**

**CO BTL**

1. What is DBMS? Why do we need DBMS? (CO1) 1

2. Explain Views in SQL? (CO1) 2

3. Define Trigger and give an example? (CO2) 1

4. Write down the applications of DBMS. (CO2) 1

5. Write the syntax for various commands present in DML? (CO3) 1

**II. Answer any four questions from the following**  4**\*5=20**

6. Construct an entity relationship diagram to perform conceptual database design of online e-commerce application such as AMAZON.COM. (CO1) 4

7. Write short notes on Set comparison operators (ANY, ALL, IN, EXISTS, BETWEEN) (CO2) 1

8. What are the integrity constraints? And explain enforcement of integrity constraints? (CO2) 1

9. What is Relational calculus? Explain Types of relational calculus? (CO2) 1

10. Consider a following relation

Emp salary(Emp-No,Emp name,DOB, Dno,salary)

Dept(Dno,Dname,Dlocation)

Write the sql for the following:

1. Display the no of employees working in each department
2. Find the sum of salaries of employees.
3. Find the highest salary that an employee draws
4. Find the least salary that an employee draws. (CO3) 2

11.Discuss GROUP BY and HAVING clauses? Write a query to illustrate these clauses.  (CO3) 2

**SCHEME OF EVALUATION**

**Part –A**

| **SNO** | **THEORY** | **MARKS** | **TOTAL** |
| --- | --- | --- | --- |
| **1** | What is DBMS? Why do we need DBMS | **2** | **2** |
| **2** | Views in SQL | **2** | **2** |
| **3** | Define Trigger and give an example | **2** | **2** |
| **4** | Applications of DBMS | **2** | **2** |
| **5** | Write the syntax for various commands present in DML | **2** | **2** |

**Part –B**

| **SNO** | **THEORY** | **MARKS** | **TOTAL** |
| --- | --- | --- | --- |
| **6** | Conceptual database design of online e-commerce application such as AMAZON.COM | **5** | **5** |
| **7** | Set comparison operators (ANY, ALL, IN, EXISTS, BETWEEN) | **5** | **5** |
| **8** | integrity constraints, enforcement of integrity constraints | **5** | **5** |
| **9** | Relational calculus, Types of relational calculus | **5** | **5** |
| **10** | Aggregate functions | **5** | **5** |
| **11** | GROUP BY and HAVING clauses | **5** | **5** |