

DBMS LAB EXAM – P Batch

Date: 12.02.2026

QUESTION 1 – Employee Bonus Management

Tables:

- Department(dept_id, dept_name)
- Employee(emp_id, emp_name, salary, dept_id)
- Project(proj_id, emp_id, project_amount)

(A) JOIN + Subquery

Write a query to display:

- Employee name
- Department name
- Total project amount handled

Only include employees whose total project amount is **greater than the average project amount of all employees**.

(B) Function

Create function fn_total_project(emp_id)

Return total project amount handled by employee.

(C) Procedure + Cursor

Create procedure proc_bonus_update():

- If total project amount > 500000 → increase salary by 10%
- Otherwise → increase salary by 5%

Use cursor.

(D) Trigger

Create trigger to:

- Prevent salary update if new salary < 10000

QUESTION 2 – Bank Account Monitoring

Tables:

- Customer(cust_id, cust_name, city)
- Account(acc_no, cust_id, balance)
- Transaction(txn_id, acc_no, txn_type, amount)

(A) JOIN + Subquery

Display customers whose balance is less than the average balance of all customers.

(B) Function

Create function fn_total_debit(acc_no) returning total debit amount.

(C) Procedure + Cursor

Create procedure:

- If total debit > 100000 → deduct ₹500 penalty from balance.

(D) Trigger

Prevent withdrawal if balance after transaction < 500.

QUESTION 3 – Online Shopping System

Tables:

- Customer(cust_id, cust_name)
- Orders(order_id, cust_id, order_date)
- Order_Details(order_id, product_id, quantity, price)

(A) JOIN + Subquery

Display customers whose total purchase amount is above average purchase amount.

(B) Function

Create function to return total spending of a customer.

(C) Procedure + Cursor

If customer spending > 75000 → insert into Premium_Customers.

(D) Trigger

Prevent deletion of order if it has entries in Order_Details.

QUESTION 4 – College Result Processing

Tables:

- Student(stud_id, stud_name, dept_id)
- Marks(stud_id, subject, marks)
- Department(dept_id, dept_name)

(A) JOIN + Subquery

Display students whose total marks are greater than average total marks of all students.

(B) Function

Create function returning total marks of student.

(C) Procedure + Cursor

If total marks > 450 → update result column to 'DISTINCTION'

Else if > 350 → 'FIRST CLASS'

Else → 'PASS'

(D) Trigger

Prevent inserting marks greater than 100.