Cursors: (All types: Implicit, Explicit, Cursor FOR Loop, Parameterized Cursor) Write a PL/SQL block of

code using parameterized Cursor that will merge the data availablein the newly created table N\_RollCall with

the data available in the table O\_RollCall. If the data in the first table already exist in the second table then that

data should be skipped

ANS

1

-- Table for New Roll Call (N\_RollCall)

CREATE TABLE N\_RollCall (

Roll\_No NUMBER PRIMARY KEY,

Student\_Name VARCHAR2(100),

Status VARCHAR2(10)

);

-- Table for Old Roll Call (O\_RollCall)

CREATE TABLE O\_RollCall (

Roll\_No NUMBER PRIMARY KEY,

Student\_Name VARCHAR2(100),

Status VARCHAR2(10)

);

2

DECLARE

-- Declaring a parameterized cursor to fetch data from N\_RollCall

CURSOR c\_rollcall(p\_rollno IN NUMBER) IS

SELECT Roll\_No, Student\_Name, Status

FROM N\_RollCall

WHERE Roll\_No = p\_rollno;

-- Declaring variables to hold fetched data

v\_rollno NUMBER;

v\_name VARCHAR2(100);

v\_status VARCHAR2(10);

BEGIN

-- Loop through each record in N\_RollCall

FOR rec IN (SELECT Roll\_No FROM N\_RollCall) LOOP

-- Open the cursor with the current Roll\_No

OPEN c\_rollcall(rec.Roll\_No);

-- Fetch data from the cursor

FETCH c\_rollcall INTO v\_rollno, v\_name, v\_status;

-- Check if a record was fetched

IF c\_rollcall%FOUND THEN

-- Check if the record exists in O\_RollCall (skip insertion if it does)

DECLARE

v\_exists NUMBER;

BEGIN

-- Check if the record exists in O\_RollCall

SELECT COUNT(\*) INTO v\_exists

FROM O\_RollCall

WHERE Roll\_No = v\_rollno;

-- If the record does not exist, insert it into O\_RollCall

IF v\_exists = 0 THEN

INSERT INTO O\_RollCall (Roll\_No, Student\_Name, Status)

VALUES (v\_rollno, v\_name, v\_status);

COMMIT; -- Commit the transaction for this insert

END IF;

END;

END IF;

-- Close the cursor after processing

CLOSE c\_rollcall;

END LOOP;

-- Final commit after all inserts

COMMIT;

EXCEPTION

WHEN OTHERS THEN

-- Exception handling in case of errors

ROLLBACK; -- Rollback in case of any errors

DBMS\_OUTPUT.PUT\_LINE('Error: ' || SQLERRM);

END;

3

-- Inserting sample data into N\_RollCall

INSERT INTO N\_RollCall (Roll\_No, Student\_Name, Status)

VALUES (1, 'John Doe', 'Present');

INSERT INTO N\_RollCall (Roll\_No, Student\_Name, Status)

VALUES (2, 'Jane Smith', 'Absent');

-- Execute the PL/SQL block to merge data

BEGIN

-- This block will run and merge the data from N\_RollCall to O\_RollCall,

-- skipping existing records based on Roll\_No.

END;