

Ahsanullah University of Science and Technology
Dept. of Computer Science and Engineering

Course Number: CSE 4126

Course Name: Distributed Database Systems Lab

Lab Final Examination | Fall 2021 semester

Marks: 20

Time: 1 hour

- 1. What will be the output of the following code? [3]**

```
SET SERVEROUTPUT ON;
CREATE OR REPLACE FUNCTION TotalItem(b1 in char, b2 in varchar2, tk out number)
return number
is
    m1 number := 10;
    m2 number := 15;
    total number;
    budget number := 8224.50;
BEGIN
    total := m1+m2;
    tk := budget/total;
    return total;
END TotalItem;
/
DECLARE
    grandTotal number;
    avg_item_price int;
BEGIN
    grandTotal := TotalItem('Dhanmondi','Uttara', avg_item_price);
    dbms_output.put_line('Total item of 2 branches : ' || grandTotal);
    dbms_output.put_line('Average price per item : ' || avg_item_price);
END;
/
```

- 2. What is the difference between ROW LEVEL trigger and STATEMENT LEVEL trigger? [1]**
- 3. Write a short note on DUAL in Oracle. [2]**
- 4. Suppose, your program attempts to assign values to the attributes of an uninitialized (atomically null) object. Which exception should you use to handle the error? [1]**
- 5. Write down a single line query which returns the current date and time of the server. [1]**

- 6. Rewrite the following code by correcting the errors. [5]**

Here, Student is a database table which contains 3 attributes-(id, name, DOB)

```
SET VERIFY OFF;
SET SERVEROUTPUT OFF;

BEGIN
    select DOB from Student where id = 3;
    CASE MOD(DOB, 3)
        WHEN 0 THEN
            DBMS_OUTPUT.PUT_LINE('ZERO');
        WHEN 1 THEN
            DBMS_OUTPUT.PUT_LINE('ONE');
        ELSE
            DBMS_OUTPUT.PUT_LINE('TWO');
    END CASE;
END;
/

/*DECLARE
    batch varchar(20) := 'AUST CSE 42';
    reason varchar2(30) := ' for ending the semester!';
BEGIN
    DBMS_OUTPUT.PUT_LINE('Congratulation ' || batch || reason);
END;
/*/

BEGIN
    insert into Student values (4, 'X', 1999);
END;
```

7. Write a PL/SQL code to implement the following –

[3]

- a. Prompt to user: “Enter last 3 digits of your ID = “
- b. Nested Anonymous Blocks
- c. Take Input in the outer block
- d. Check Even/Odd in the inner block
- e. Print “Even”/”Odd” in the outer block

8. Consider the following relational schemas related to Ice Cream Parlor:

[4]

Shop(s_id, s_name, s_address)

IceCream(i_id, i_name, flavor)

Record(s_id, i_id, cost)

Create a function that will calculate the total cost for a shop s_id. User will give s_id as input. Use necessary exception handling inside the function. Your function should be declared inside a package.