EXAM 1: Corrections

# MODIFIED TRUE/FALSE

F 3. A (n) programming language is a general framework or design that describes how the various components of the application will be addressed.

The answer on page 4

ANSWER:

The answer is **False**. An **application model** is a general framework or design that describes the structure of an application’s components in terms of where the supporting software is located. An application model has three main components

* *User interface* – The windows displayed to users to enter information or take actions, such as clicking a button
* *Program* *logic* – the programming code that provides the logic of what the application does.
* *Database* – The database management system providing the physical storage structure for data and mechanisms to retrieve, add, change, and remove data.

Why I missed it: I had said flowchart, which came from my Python programming class. I was trying to depict the answer as some sort of model.

F 10. PL/SQL blocks use assignment variables to assign values to variables.

The answer is on page 38.

ANSWER:

The answer is **False**. The BEGIN section, the heart of the PL/SQL block, contains all the processing action or programming logic. SQL is used for database queries and data manipulation. Conditional logic, such as IF statements is used to make decisions on what action to take. Loops are used to repeat code, and **assignment statements** are used to put or change values in variables. In the shipping cost example, you can use IF statements to check the quantity of items and apply the correct shipping cost.

Why I missed it:

I was close. I said operators such as := but should have said assignment operators such as := or assignment statement.

# MULTIPLE CHOICE

12. Which of the following is true.

a. The WHEN clause of a CASE statement ends with a semicolon.

b. The WHEN clause of a CASE statement ends with “END CASE;”

**c. The WHEN clause of a CASE expression does not end with a semicolon.**

d. The WHEN clause of a CASE statement ends with “ENDCASE”.

The answer is on page 67

ANSWER

The CASE keyword can also be used as an expression rather than a statement. A CASE expression evaluates conditions and returns a value in an assignment statement. For example, in the tax calculation, the end result has been putting a value for the calculated tax amount in a variable. You can also use a CASE expression for this task, as shown in Figure 2-25.

DECLARE

lv\_state\_txt CHAR(1) := ‘ME’;

lv\_sub\_num NUMBER(5,2) := 100;

lv\_tax\_num NUMBER(4,2) := 0;

BEGIN

Lv\_tax\_num := CASE lv\_state\_txt

WHEN ‘VA’ THEN lv\_sub\_num \* 0.06

WHEN ‘ME’ THEN lv\_sub\_num \* 0.05

WHEN ‘NY’ THEN lv\_sub\_num \* 0.07

ELSE lv\_sub\_num \* 0.04

END;

Figure 2-25 using a CASE expression to determine the application tax rate

Why I missed it: I wasn’t used to syntax of CASE/WHEN statements yet.

# COMPLETION

1. It can be more efficient to process SQL statements stored within the database versus those stored in application code.

The answer is on page 4.

ANSWER: One key advantage is that program units can be stored in the Oracle database and called from your development tool. Processing **SQL statements** stored in the database can be more efficient that processing those stored in the application code. Statements stored in application code must be transmitted to the database server to be processed. PL/SQL program modules stored in the database are referred to as stored program units.

Why I missed it. My answer was PL/SQL code which you can store as functions or procedures. So I was close.

1. A(n) function typically returns only one value.

The answer is on page 4;

ANSWER:

**Function** – Performs a task and typically returns only one value. Within certain parameters, it can be used in SQL statements.

Why I missed it. I hadn’t worked with functions yet.