**OM 305 S23 Test 4 (Final) Answers**

**KEY**

**(5/18/23)**

Your name**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Problem 1:** The value of the objective function =\_\_\_\_\_\_

**Problem 2:**

1. The number of apartment buildings to be purchased? :\_\_\_\_\_\_\_
2. The number of townhouses to be purchased?\_$\_\_\_\_\_\_\_\_\_\_\_\_
3. Maximized annual cashflow:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Problem 3:**

1. The value of slack/surplus of the ingredient A: = \_\_\_\_\_\_\_\_\_\_\_\_
2. The shadow price of the ingredient B:=\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Problem 4:**

1. Which investment should not be funded (Circle one):

Plant Expansion Warehouse Expansion

New Machinery New Product Research

1. Value of the objective function (NPV):$\_\_\_\_\_\_\_\_\_\_\_\_

**Problem 5:**

1. Is the solution feasible? (Circle one) : Y N
2. The number of pillows to be purchased?\_\_\_\_\_\_\_\_\_\_\_\_
3. The amount of prep time used:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_