

## Assessment Action Plan Form

**Degree Program:** Undergraduate Business Economics

**Reviewer(s):** McKinley Blackburn, Chair, Department of Economics

**Learning Goal 3:** Our graduates will be able to solve basic equations to find equilibrium outcomes, and use graphs to understand and interpret economic relationships.

**Date:**

**Assessment Activity/Course:** Exam Questions, ECON 321, Fall 2017 and Spring 2018  
Exam Questions, ECON 322, Fall 2018

**Current Success Criteria:** With respect to quantitative proficiency, seventy percent of students are expected to achieve an acceptable pass rate (75%) for all of the questions related to (a) Solving basic equations to find equilibrium outcomes; and (b) Using graphs to understand and interpret economic relationships.

### Questions

What do the assessment results mean for the program?

*I think, in total, students are meeting this learning goal, with particularly good performance in solving for equilibria in microeconomics.*

As a result of this assessment, what actions will be taken to improve the curriculum, delivery, or other components of this program?

*The question with the worst performance is the first questions administered to the 322 students. This is a complicated model to solve, so instructors in this class may want to spend more time insuring that students are able to work with this kind of algebraic model.*

What could make the assessment of this learning goal more effective?

*I think the set of questions is appropriate for this goal.*

General Comments:

**\* Please attach responses.**

## Results Summary, LG3, ECON 321 (Miao)

Question Number	Learning Goal	Percent Correct	Percent of Students Scoring $\geq 75\%$ for All Questions Related to Learning Goal	Term
1, 2, 3, 4, 9	3) Our graduates will be able to solve basic equations to find equilibrium outcomes and use graphs to understand and interpret economic relationships.	77.3	77.3	Fall 2017
1, 2, 3, 4, 9	3) Our graduates will be able to solve basic equations to find equilibrium outcomes and use graphs to understand and interpret economic relationships.	76.2	77.1	Spring 2018

## Results Summary, LG3, ECON 322 (Hess)

	Question #5: Aggregate Demand	Question #6: AS-AD	Overall
Number correct	80	112	192
Number of students taking the exam	137	129	266
Percent correct	<b>58.39%</b>	<b>86.82%</b>	<b>72.18%</b>

## Exam Questions, LG3, ECON 321 (Miao)

1. Suppose the price of good  $x$  is \$5 and the price of good  $y$  is \$7. Also, suppose  $MU_x = y$  and  $MU_y = x$ . Which of the following baskets could be an interior optimum?
  - A)  $x = 5, y = 7$
  - B)  $x = 4, y = 6$
  - C)  $x = 7, y = 5$
  - D)  $x = 6, y = 4$
  
2. Suppose the price of  $A$  is \$20, the price of  $B$  is \$10, and that the consumer is currently spending all available income. At the consumer's current consumption basket the marginal utility of  $A$  is 8 and the marginal utility of  $B$  is 2.
  - A) The consumer is currently maximizing utility.
  - B) The consumer could increase utility by consuming more of good  $A$  and less of good  $B$ .
  - C) The consumer could increase utility by consuming more of good  $B$  and less of good  $A$ .
  - D) Nothing can be said about the consumer's utility because we do not know the consumer's income or utility function.
  
3. For a particular perfectly competitive firm  $STC = 100 + 20q + q^2$  and  $SMC = 20 + 2q$ , where  $q$  is output. If the market price is equal to 40, at what level of output should the firm operate to maximize profit in the short run?
  - A) 10
  - B) 20
  - C) 30
  - D) 40
  
4. A monopolist faces an inverse demand curve  $P = 300 - 6Q$  and has a constant marginal cost of 20. The monopolist's profit-maximizing output is
  - A) 46.67
  - B) 23.33
  - C) 20
  - D) 35

9. Suppose that the supply of apples can be represented by the following equation:  $Q^s = 2P + 500$ . Further suppose that the demand for apples can be represented by the following equation:  $Q^d = 900 - 3P$ . Which of the following is the equilibrium price in the market for apples?
- A) 10
  - B) 50
  - C) 80
  - D) 100

### Exam Questions, LG3, ECON 322 (Hess)

- 5) Suppose an economy has the following structure

$$C = C_a + 0.85(Y - T) \quad C_a = 220 - 10r \quad T = 200 + .2Y$$

$$I_p = 1680 - 30r \quad G = 1800 \quad NX = 490 - 0.08Y$$

$$M^s/P = 2050 \quad M^D/P = 0.25Y - 35r$$

Where  $r$  is the interest rate (already in percentage form).

What is the equilibrium output ( $Y^*$ ) and interest rate ( $r$ )?

- A.  $Y^* = 10,824$ ;  $r = 6.501\%$
- B.  $Y^* = 9,279$ ;  $r = 7.708\%$
- C.  $Y^* = 8,732$ ;  $r = 9.376\%$
- D.  $Y^* = 12,730$ ;  $r = 4.203\%$

Correct answer is **B**

- 6) Look at the Figure: Aggregate Supply and Demand in the US. The economy is initially at point A. Then a(n) \_\_\_\_\_ shock moves the economy to \_\_\_\_\_ and the real wage \_\_\_\_\_. In response, workers ask for \_\_\_\_\_ pay causing a \_\_\_\_\_ shift in \_\_\_\_\_ and the economy moves to \_\_\_\_\_.

- A. positive supply; D; increases; less; right; aggregate demand; B
- B. adverse supply; B; decreases; less; left; aggregate demand; C
- C. positive demand; B; decreases; more; left; aggregate supply; C
- D. adverse demand; D; increases; more; right; aggregate demand B

Correct answer is **C**

Figure: Aggregate Supply and Aggregate Demand in the US

