

**ECO 209Y – L0101
MACROECONOMIC THEORY**

Term Test #1

LAST NAME _____

FIRST NAME _____

STUDENT NUMBER _____

INSTRUCTIONS:

1. The total time for this test is 1 hour and 50 minutes.
2. Aids allowed: a simple calculator.
3. Use pen instead of pencil.

DO NOT WRITE IN THIS SPACE

Part I _____/25

Part II _____/20

Part III 1. _____/10

2. _____/10

3. _____/10

TOTAL _____/75

PART I (25 marks)

Instructions: Enter your answer to each question in the table below. Only the answers recorded in the table will be marked. Table cells left blank will receive a zero mark for that question. Each question is worth 2.5 marks. No deductions will be made for incorrect answers.

1	2	3	4	5	6	7	8	9	10

- Canadian firm imports \$15,000 worth of Piñatas from Mexico and sells them to local customers for \$20,000. What is the effect of these transactions on Canada's GDP?
 - GDP will increase by \$15,000.
 - GDP will decrease by \$15,000.
 - GDP will increase by \$20,000.
 - GDP will increase by \$5,000.
 - There will be no effect since the Piñatas are produced in Mexico.
- Suppose that the federal government runs a budget surplus of \$20 billion. It collects \$100 billion in taxes, and it has the following expenditures: \$20 billion in Social Security benefits, \$10 billion in interest on the national debt, \$10 billion in rent, and \$40 billion in wages. The government's contribution to GDP is
 - \$80 billion.
 - \$50 billion.
 - \$70 billion.
 - \$40 billion.
 - none of the above.
- In 2013 national saving in a hypothetical country was \$90 billion, investment was \$110 billion, and private saving was \$115 billion. How much was the current account balance?
 - \$5 billion.
 - \$5 billion.
 - \$20 billion.
 - \$20 billion.
 - None of the above.

Use this space for rough work.

4. Consider a closed economy with a fixed price-level and a balanced government budget at the initial equilibrium situation. A drop in government purchases will cause
- A) the level of private saving and the level of consumption to fall, and a government budget surplus.
 - B) the level of private saving to rise and a government budget surplus, but no change in the level of consumption.
 - C) both the level of private saving and the level of consumption to fall, but no change in the government budget balance.
 - D) the level of consumption to fall, the level of private saving to rise, and a government budget surplus.
 - E) none of the above.
5. In a fixed-price model of a closed economy, an increase in government expenditure will have the largest impact on the level of output when it is financed by
- A) raising taxes to the rich.
 - B) raising taxes to the middle class.
 - C) raising user fees.
 - D) borrowing from the public.
 - E) cutting other expenditure programs.
6. Consider the fixed price-level model of a closed economy. If the government has a balanced budget and income is below its equilibrium value, then
- A) aggregate expenditure will fall.
 - B) saving will be less than planned investment.
 - C) unintended inventory accumulation will occur.
 - D) income will exceed aggregate expenditure.
 - E) saving will equal planned investment.
7. Consider the fixed price-level model of a closed economy with only autonomous taxes. If the government has a budget deficit of \$100, the function for desired consumption is $C = 200 + 0.8Y$, and desired investment is \$1000, what is the equilibrium level of income?
- A) \$5000.
 - B) \$5500.
 - C) \$6500.
 - D) \$6000.
 - E) none of the above.

Use this space for rough work.

Use the following information of a hypothetical economy to answer questions 8 to 10: National income = Net domestic income = 5200; Government budget surplus = -150; Disposable income = 4400; Net exports = -110; and Consumption = 4100.

8. In this economy, government revenues are
- A) \$200.
 - B) \$800.
 - C) \$400.
 - D) \$600.
 - E) none of the above
9. In this economy, the value of government purchases is
- A) \$500.
 - B) \$800.
 - C) \$950.
 - D) \$650.
 - E) none of the above.
10. In this economy, the value of investment is
- A) \$260.
 - B) \$270.
 - C) \$250.
 - D) \$280.
 - E) none of the above.

Use this space for rough work.

PART II (20 marks)

Consider the following model of the economy:

$$C = 340 + 0.8YD - 15i$$

$$I = 150 - 10i + 0.03Y$$

$$G = 220$$

$$TR = 75$$

$$TA = 25 + 0.1Y$$

$$Y_{fe} = 2800$$

- a) As a function of the rate of interest, what is the equation for the AE curve in this model? **(3 marks)** What is the equation for the IS curve in this model? **(2 marks)**

- b) If the rate of interest is 6 percent (i.e., $i = 6$), what is the equation for the corresponding AE curve? What is the level of equilibrium income when $i = 6$? What is the size of the aggregate expenditure multiplier? **(3 marks)**

- c) What is the level of private saving (S) when the economy is in equilibrium at $i = 6$? What is the level of government saving (or budget surplus, BS) at this equilibrium? What is the level of national saving (S_N) at this equilibrium? What is the level of private investment at this equilibrium? **(4 marks)**

- d) Given the situation of the economy and the budgetary situation of the government you have described above, what do you think the government should do to improve that situation? **(3 marks)**

- e) All else equal, what change in government purchases (G) would be necessary for the economy to reach the level of full-employment income? **(1 mark)** Given this increase in G, what would be the level of government saving (or budget surplus) at the level of full-employment income? **(1 mark)** In your view, should the government implement such an increase in G? Explain your answer. **(3 marks)**

PART III (30 marks)

Instructions: Comment on the following statements in the space provided. Each question is worth 10 marks.

1. If consumption declines as the interest rate increases, then the IS curve will be flatter the less sensitive consumption is to changes in the interest rate. (Use algebraic analysis to aid your answer and explain the economics. Consider the model of a closed economy.)

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2. Tax cuts have an expansionary effect on the economy. Therefore, tax cuts are self-financed and do not increase government deficits. (Use algebraic analysis to aid your answer and explain the economics. Consider a decrease in autonomous taxes in a closed economy.)

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3. The leader of a provincial political party claims that, if elected, his government will create one million jobs by laying off 100,000 public sector workers and eliminating the government deficit in two years. (Evaluate the rationale and economic wisdom of such proposition.)

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