

THE UNIVERSITY OF WESTERN ONTARIO
LONDON CANADA

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ECONOMICS 1022B-003

March 17, 2012

MID-TERM TEST #2

INSTRUCTIONS

1. The test starts at 1 pm and ends at 3 pm.
2. The multiple choice questions are to be answered on the Scantron answer form.
3. The test contains 17 pages and 50 questions.
4. There are no washroom breaks allowed during the test.
5. Only non-programmable calculators are allowed.
6. Only the following items are allowed at your desk:
 - a. Pencils
 - b. Erasers
 - c. Rulers
 - d. Calculator (without the case)
 - e. Student card (without the plastic wallet)

Drinks, food, pencil cases, calculator cases, the plastic wallet holding your student card and cell phones are not allowed. The possession of a cell phone at your desk may be considered an attempt to cheat and will be dealt with accordingly.

Further instructions are on the reverse of this page.

7. Use a **BLACK PENCIL** to complete your Scantron answer form.
 - i. Print your **NAME** and complete your signature.
 - ii. Enter your **STUDENT NUMBER**
 - iii. Enter your **SECTION NUMBER** – 003
8. Ensure that the code on your answer sheet matches the test version number in the top right hand corner of this page.
9. Do not ask questions during the test. If you have a concern about a question, note it on a piece of paper along with your name and student number and hand it in at the end of the test.
10. **WHEN YOU ARE FINISHED, HAND IN YOUR SCANTRON ANSWER SHEET – YOU MAY KEEP YOUR QUESTION PAPER.**

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) The marginal propensity to consume

- A) is between zero and 1.
- B) is between 1/2 and 1.
- C) is greater than 1 if dissaving is present.
- D) is negative if dissaving is present.
- E) is greater than 1 but less than 2.

$$\frac{\Delta C}{\Delta Y_D}$$

2) If a household's disposable income increases from \$12,000 to \$22,000 and at the same time its consumption expenditure increases from \$4,000 to \$9,000, then

- A) the household is dissaving.
- B) the marginal propensity to consume over this range is negative.
- C) the slope of the consumption function is 0.5.
- D) the slope of the consumption function is 0.6.
- E) the marginal propensity to save over this range is negative.

$$\frac{\Delta C}{\Delta Y_D} = \frac{5000}{10000} = 0.5$$

Use the figure below to answer the following question.

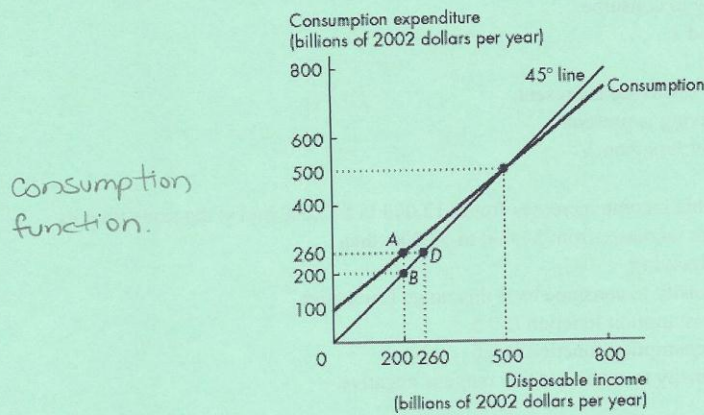


Figure 1

This figure describes the relationship between consumption expenditure and disposable income for a model economy.

- 3) Refer to Figure 1. When disposable income is \$200 billion,
- A) households are consuming less than \$200 billion.
 - B) saving is equal to line segment AD .
 - C) households are saving an amount equal to line segment AB .
 - D) households are dissaving an amount equal to line segment AB .
 - E) businesses are spending more than households because the consumption function lies above the 45° line.
- 4) Everything else remaining the same, a decrease in expected future income decreases current consumption expenditure and increases saving.
- A) does not change; does not change
 - B) decreases; decreases
 - C) increases; increases
 - D) increases; decreases
 - E) decreases; increases

- 5) If aggregate planned expenditure exceeds real GDP, then inventories
- A) increase and real GDP increases.
 - B) decrease and real GDP increases.
 - C) increase and real GDP falls.
 - D) remain constant and real GDP remains constant.
 - E) decrease and real GDP decreases.

$AE > \text{real GDP}$

Use the figure below to answer the following question.

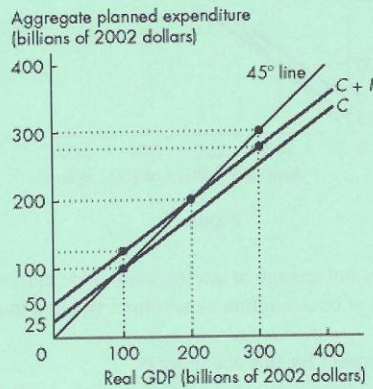


Figure 2

The economy depicted does *not* engage in international trade and has no government. Planned aggregate expenditure (AE) is equal to the sum of consumption expenditure (C) and investment (I).

- 6) Refer to Figure 2. When real GDP is \$100 billion,
- A) aggregate planned expenditure is less than real GDP, and firms increase production.
 - B) real GDP is less than aggregate planned expenditure, and firms increase production.
 - C) aggregate planned expenditure is greater than real GDP, and firms decrease production.
 - D) real GDP is greater than aggregate planned expenditure, and firms decrease production.
 - E) aggregate planned expenditure equal real GDP, and the economy is in equilibrium.
- 7) The fact that imports increase as real GDP increases implies that imports are part of
- A) autonomous expenditure.
 - B) induced expenditure.
 - C) equilibrium expenditure.
 - D) marginal expenditure.
 - E) consumption expenditure.

Use the figure below to answer the following question.

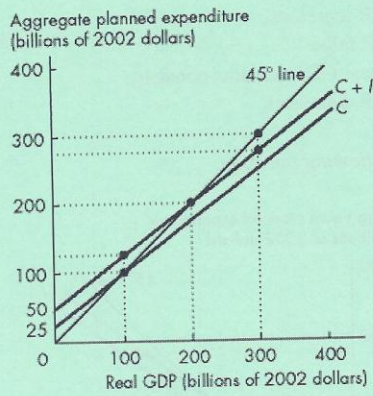


Figure 3

The economy shown in the graph does not engage in international trade and has no government. Planned aggregate expenditure equals the sum of consumption expenditure (C) and investment (I).

- 8) Refer to Figure 3. The multiplier for this economy is
 A) 2. B) 1. C) 3. D) 2.5. E) 4.

$$\frac{1}{1 - \text{slope}}$$

$$\text{slope} = \frac{200 - 50}{200}$$

$$\frac{1}{1 - 0.75} =$$

Use the table below to answer the following question.

Table 1

The following table shows the relationship between aggregate planned expenditure and GDP in the hypothetical economy of Econoworld.

Real GDP (billions of 2002 dollars)	Aggregate planned expenditure (billions of 2002 dollars)
0	100
200	260
400	420
600	580
800	740

- 106 190.
- 9) Refer to Table 1. If investment increases by \$25 billion, the real GDP becomes
- A) \$625 billion.
 - B) \$675 billion.
 - C) \$600 billion.
 - D) \$725 billion.
 - E) \$525 billion.
- 10) The aggregate expenditure curve will become steeper if spend more.
- A) people show an increased preference for foreign-made products.
 - B) people become thriftier.
 - C) income tax rates are raised.
 - D) firms expect an increase in future profit.
 - E) income tax rates are lowered.
- 11) A rise in the price level
- A) has no effect on aggregate expenditure.
 - B) decreases aggregate expenditure and produces a movement along the aggregate demand curve.
 - C) increases aggregate expenditure, but has no effect on the aggregate demand curve.
 - D) decreases aggregate expenditure and produces a leftward shift of the aggregate demand curve.
 - E) decreases aggregate expenditure and produces a rightward shift of the aggregate demand curve.

Autonomous = $I + G + X$
 Induced = $C + M$

- 12) Suppose there is an increase in exports. Assuming the price level is held constant, which one of the following best describes the sequence of changes in the economy?
- A) Autonomous expenditure increases, real GDP increases, induced expenditure increases, real GDP increases more, induced expenditure increases again, and the process continues until equilibrium expenditure is reached.
 - B) Induced expenditure increases, autonomous expenditure increases, real GDP increases, and consumption increases.
 - C) Induced expenditure increases, real GDP increases, autonomous expenditure increases, real GDP increases more, autonomous expenditure increases again, etc.
 - D) Autonomous expenditure increases, induced expenditure increases, real GDP increases, and the price level rises.
 - E) Induced expenditure increases, real GDP increases, autonomous expenditure increases, and the price level increases, lowering autonomous expenditure and real GDP increases by a smaller amount.

13) The marginal propensity to consume is 0.7, the marginal tax rate is 0.2 and the marginal propensity to import is 0.15. How much should the government decrease taxes by if they want to raise GDP by \$100 million?

- A) \$105 million
- B) \$84 million
- C) \$59 million
- D) \$41 million
- E) \$50 million

$MPC = 0.7$
 $t = 0.2$
 $MPI = 0.15$

$$\frac{-MPC}{1 - [MPC(1-t) - MPI]}$$

$$= \frac{-0.7}{1 - [0.7(0.8) - 0.15]}$$

Use the table below to answer the following questions.

$-2.41 = \text{multiplier}$

Table 2

$3.44 = \text{gov.}$

Taxes are directly proportional to GDP.)

Y	T	Y _D	C	I	G	X	M	AE
0	0		250	40	50	200	110	430
800	80	720	600	40	50	200	100	780
1,000	100	900	700	40	50	200	90	900
900	90	810	650	40	50	200		

$\frac{50}{90}$

700	550
600	500
500	500
400	450
300	400
320	350
100	300
0	250

- 14) Refer to Table 2. What is the equilibrium GDP?
- A) \$781
 - B) \$1,222
 - C) \$1,000
 - D) \$955
 - E) \$790
- 15) Refer to Table 2. What is the government expenditures multiplier?
- A) 0.56
 - B) 2.22
 - C) 1.02
 - D) 1.82
 - E) 1.24

$Y = 300 + Y + 290 - 12.5 - 0.125Y$
 $0.125Y =$
 $Y = 250 + 0.54 + 290 - 0.54 - C-6$

$$\frac{1}{1 - [MPC(1-t) - MPI]}$$

$$= \frac{1}{1 - [\frac{50}{90}(1-0.1) - 0.1]}$$

- 16) The government of Ricardia's budget lists the following projected revenues and outlays: \$25 million in personal income taxes, \$15 million in corporate income taxes, \$5 million in indirect taxes, \$2 million in investment income, \$30 million in transfer payments, \$12 million in government expenditure, and \$8 million in debt interest. Ricardia has a government budget

- A) deficit of \$3 million.
 B) deficit of \$13 million.
 C) surplus of \$3 million.
 D) surplus of \$13 million.
 E) surplus of \$57 million.

$$+25 + 15 + 5 + 2 - 30 - 12 - 8 =$$

- 17) If the economy is in an expansion, and the federal government is running a deficit, then a recession would automatically

- A) decrease the deficit.
 B) increase taxes.
 C) increase government outlays.
 D) increase the deficit.
 E) C and D.

- 18) The cyclical deficit

- A) occurs when the economy is at full employment.
 B) arises purely because real GDP does not equal potential GDP.
 C) is a persistent economic phenomenon.
 D) is an accumulation of the government debt.
 E) none of the above.

- 19) Which one of the following statements is true, using absolute values? The autonomous tax multiplier

- A) is smaller than the government expenditure multiplier.
 B) is larger than the government expenditure multiplier.
 C) has the same value as the government expenditure multiplier except during recessions.
 D) is larger than the government expenditure multiplier during expansions.
 E) always equals the government expenditure multiplier.

- 20) Due to automatic stabilizers, when income rises

- A) government outlays rise and revenues fall.
 B) the economy will automatically return to its original level of real GDP.
 C) government outlays fall and revenues rise.
 D) government outlays equal revenues.
 E) the economy will automatically move to full employment.

Use the figure below to answer the following question.

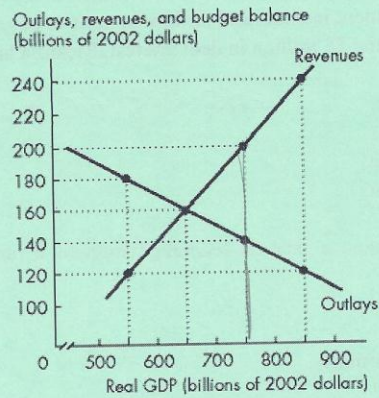


Figure 4

- 21) Refer to Figure 4, which shows the outlays and revenues for the government of Pianoland. If potential GDP is \$750 billion,
- the structural deficit is \$40 billion.
 - neither a structural surplus nor a structural deficit exists.
 - the structural surplus is \$60 billion.
 - the structural surplus is \$40 billion.
 - the structural deficit is \$60 billion.
- 22) When real GDP equals potential GDP of \$12 trillion, the budget deficit is \$1 trillion. Real GDP actually equals \$14 trillion and the budget surplus is \$3 trillion. The economy has a structural _____ and a cyclical _____.
- deficit of \$1 trillion; surplus of \$2 trillion
 - deficit of \$1 trillion; surplus of \$4 trillion
 - surplus of \$3 trillion; surplus of \$2 trillion
 - deficit of \$4 trillion; surplus of \$1 trillion
 - surplus of \$4 trillion; deficit of \$1 trillion
- real GDP = 14*
- 23) Which of the following is an example of a fiscal policy designed to counter a recessionary gap?
- increasing transfer payments
 - increasing debt interest payments
 - increasing taxes
 - decreasing government expenditures on goods and services
 - decreasing transfer payments

- 24) In the short run, an increase in autonomous taxes will
- I. shift the aggregate demand curve leftward.
 - II. decrease real GDP.
 - III. increase the government expenditure multiplier.
 - ~~IV. increase the autonomous tax multiplier.~~
- A) only I is correct.
B) I and III are correct.
C) II and IV are correct.
D) I, II, and III are correct.
E) I and II are correct.
- 25) Which one of the following is *not* a function of money?
- A) measure of liquidity
 - ~~B) unit of account~~
 - ~~C) means of payment~~
 - ~~D) medium of exchange~~
 - ~~E) store of value~~
- 26) Which one of the following is considered to be money?
- A) A credit card.
 - B) A blank cheque.
 - C) A chequable deposit.
 - D) A Canada Savings Bond.
 - E) A debit card.
- 27) The Bank of Canada does *not* do which of the following?
- A) Supervise chartered banks.
 - B) Hold government of Canada securities.
 - C) Issue bank notes.
 - D) Act as a lender of last resort to banks.
 - E) Lend money to the public.
- 28) Whenever desired reserves exceed actual reserves, the bank
- A) will call in loans.
 - ~~B) can make new loans.~~
 - ~~C) is in a profit-making position.~~
 - ~~D) will go out of business.~~
 - ~~E) has excess reserves.~~
- want more than have.

Use the information below to answer the following question.

Fact 1

The Bank of Speedy Creek has chosen the following initial balance sheet:

Assets		Liabilities	
Reserves	\$40	Deposits	\$500
Loans	\$460		
	\$500		

29) Refer to Fact 1. Based on the Bank of Speedy Creek's initial balance sheet, what is its desired reserve ratio?

- A) 40 percent
- B) 8 percent
- C) 25 percent
- D) 12.5 percent
- E) 4 percent

$$\frac{\text{desired}}{\text{deposits}} = \frac{40}{500}$$

30) The opportunity cost of holding money increases when the

- A) purchasing power of money increases.
- B) income of consumers increases.
- C) income of consumers decreases.
- D) price of goods and services decrease.
- E) interest rate rises.

Use the figure below to answer the following questions.

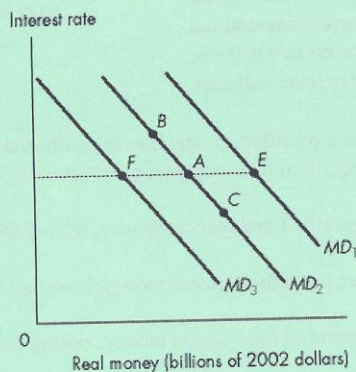


Figure 5

- 31) Refer to Figure 5. Which one of the following best describes the response to an increase in real GDP?
- A) Movement from *E* to *A*.
 - B) Movement from *A* to *F*.
 - C) Movement from *A* to *E*.
 - D) Movement from *A* to *C*.
 - E) Movement from *B* to *A*.
- 32) Refer to Figure 5. Which one of the following best describes the response to a decrease in the market price of bonds?
- A) A movement from *A* to *B*.
 - B) A movement from *A* to *F*.
 - C) A movement from *A* to *E*.
 - D) A movement from *E* to *A*.
 - E) A movement from *A* to *C*.
- 33) The amount of real money people want to hold will increase if either the amount they are spending increases or the
- A) interest rate increases.
 - B) price level decreases.
 - C) interest rate decreases.
 - D) price of bond falls.
 - E) price level increases.

34) If households and firms find they are holding less money than desired, they will

- A) sell bonds, and the interest rate will fall.
- B) buy bonds, and the interest rate will rise.
- C) buy bonds, and the interest rate will fall.
- D) sell bonds, and the interest rate will rise.
- E) buy goods, and the price level will rise.

want more
\$

35) If the interest rate is above the equilibrium rate, how is equilibrium achieved in the money market?

- A) People buy goods to get rid of their excess money, lowering the price of goods and lowering the interest rate.
- B) People buy bonds to get rid of their excess money, raising the price of bonds and lowering the interest rate.
- C) People sell bonds to get rid of their excess money, lowering the price of bonds and lowering the interest rate.
- D) People sell bonds to get rid of their excess money, raising the price of bonds and lowering the interest rate.
- E) People sell goods to get rid of their excess money, lowering the price of goods and lowering the interest rate.

36) Real GDP is \$2,560 billion, the price level is 125, and the velocity of circulation is 5. The quantity of money is

- A) \$640 billion.
- B) \$2,048 billion.
- C) \$625 billion.
- D) \$400 billion.
- E) \$20.48 billion.

$$MV = PY$$

$$M = \frac{125 \cdot 2560}{5}$$

37) According to the quantity theory of money, an increase in the quantity of money will increase the price level

- A) and increase real GDP but decrease the velocity of circulation.
- B) and decrease real GDP and increase the velocity of circulation.
- C) but have no effect on real GDP or the velocity of circulation.
- D) and increase real GDP and the velocity of circulation.
- E) and will have no change in real GDP and a decrease in the velocity of circulation.

38) Suppose that the banking system has excess reserves of \$10 million, the desired reserve ratio is 10 percent and the currency drain ratio is 40 percent. By how much will the quantity of money increase?

- A) \$12.5 million.
- B) \$22 million.
- C) \$40 million.
- D) \$50 million.
- E) \$28 million.

$$\text{excess} = 10$$

$$\frac{1.4}{0.5} = 2.8$$

39) Suppose that people decide to hold more money as cash. Which statement best illustrates the impact of this action on the money multiplier? The money multiplier

- A) increases because of the decrease in the currency drain ratio.
- B) decreases because of the decrease in the currency drain ratio.
- C) increases because of a decrease in deposits.
- D) decreases because of the increase in the currency drain ratio.
- E) increases because of the increase in the currency drain ratio.

$$\frac{1}{1 - MPC}$$

$$\frac{1}{1 - \left(\frac{\Delta C}{\Delta Y_b}\right)}$$

40) The operating band is

- A) the target inflation rate plus or minus a quarter of a percentage point.
- ~~B) a half percentage point range in the target inflation rate.~~
- ~~C) the interest rate that is established through an open market operation.~~
- ~~D) the range between the lending rate and the borrowing rate.~~
- E) the target overnight interest rate plus or minus 25 basis points.

↑
M ↑

41) The purchase of government bonds by the Bank of Canada

- A) decreases the price of bonds.
- B) increases bank loans.
- C) fights inflation.
- D) tightens credit conditions.
- E) decreases bank reserves.

currency ↑
dep. ↓
 $\frac{2}{1} \rightarrow \frac{4}{1}$

42) In an open market operation aimed at increasing expenditure, the Bank of Canada

- A) sells government bonds, decreasing bank reserves, decreasing lending, decreasing the overnight rate.
- B) buys government bonds, increasing bank reserves, increasing lending, decreasing the overnight rate.
- C) sells government bonds, decreasing bank reserves, decreasing lending, increasing the overnight rate.
- D) sells government bonds, decreasing bank reserves, increasing lending, increasing the overnight rate.
- E) buys government bonds, increasing bank reserves, increasing lending, increasing the overnight rate.

- 43) The current overnight loans rate is 3 percent, with the Bank of Canada's operating band set at 2.75 to 3.25 percent. If the Bank of Canada lowers their operating band to 2.25 to 2.75 percent, which of the following is one of the reasons the overnight rate will fall to within this new range?
- A) Since the banking system can now borrow from the Bank of Canada at 2.75 percent, no bank would borrow on the overnight loan market at 3 percent.
 - B) Since the banking system can now borrow from the Bank of Canada at 2.25 percent, no bank would borrow on the overnight loan market at 3 percent.
 - C) Since the banking system can now earn 2.25 percent from the Bank of Canada, no bank would lend on the overnight loan market at 3 percent.
 - D) Since the banking system can now earn 2.75 percent from the Bank of Canada, no bank would lend on the overnight loan market at 3 percent.
 - E) There is a legal requirement that the overnight rate must be within the Bank of Canada's operating band.

borrow @ 2.75

Use the figure below to answer the following question.

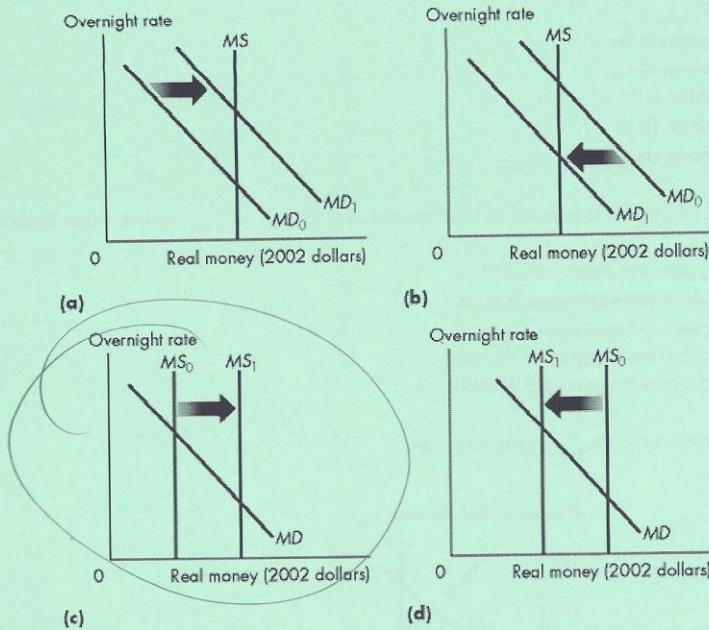


Figure 6

44) Refer to Figure 6. Everything else remaining the same, which graph best illustrates the effect of a Bank of Canada open market purchase of government securities?

- A) (a)
- B) (b)
- C) (c)
- D) (d)
- E) none of the above

interest ↓
money sup ↑

45) If the Bank of Canada lowers the overnight loans rate,

- A) other short-term interest rates fall.
- ~~B) other short-term interest rates rise.~~
- ~~C) the exchange rate falls.~~
- D) the long-term interest rate falls.
- E) A, C and D are correct.

46) The Bank of Canada raises the overnight loans rate. In the foreign exchange market people _____ dollars and the price of the dollar _____ because the Canadian interest rate differential _____.

- A) buy; rises; falls
- B) buy; rises; rises
- C) sell; falls; falls
- D) sell; rises; falls
- E) buy; falls; rises

47) If the Bank of Canada is concerned with recession it will _____ the overnight loans rate to _____.

- A) lower; increase potential GDP
- B) raise; decrease aggregate demand
- C) raise; increase aggregate demand
- D) lower; decrease aggregate demand
- E) lower; increase aggregate demand

Use the figure below to answer the following question.

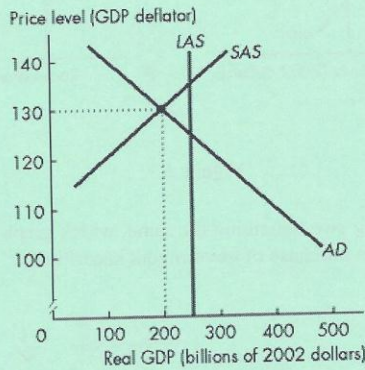


Figure 7

48) Refer to Figure 7. The figure shows the economy of Freezone. Potential GDP is \$250 billion. To return the economy to full employment, the central bank can _____ the overnight rate and _____ securities.

- A) lower; buy
- B) raise; buy
- C) lower; sell
- D) lower; not change its holdings of
- E) raise; sell

- 49) In response to an inflationary gap, the Bank of Canada
- A) raises the overnight loans rate by selling securities.
 - B) raises the overnight loans rate by buying securities.
 - C) waits until the price level falls before acting.
 - D) lowers the overnight loans rate by buying securities.
 - E) lowers the overnight loans rate by selling securities.
- 50) When the Bank of Canada raises the overnight loans rate, other short-term interest rates
- A) rise, consumption expenditure, investment and net exports decrease, and the aggregate demand curve shifts leftward.
 - ~~B) fall, consumption expenditure, investment and net exports increase, and the aggregate demand curve shifts rightward.~~
 - C) rise, consumption expenditure, investment and net exports increase, and the aggregate demand curve shifts rightward.
 - ~~D) fall, consumption expenditure, investment and net exports decrease, and the aggregate demand curve shifts leftward.~~
 - E) none of the above.