# York University

## Atkinson Faculty of Liberal and professional Studies Department of Economics ECON1010C – Term Test 2 July 20, 2005

**Instructor:** Sharif F. Khan

Time Limit: 1 hour 20 Minutes

### **Instructions:**

Important! Read the instructions carefully before you start your exam.

Mark your selections for **PART A** on the multiple choice answer card in PENCIL. If you make changes, be sure to erase completely. Please record your name and student number on the multiple choice answer card. Hand in the card inside your answer booklet.

Write your answers for **Part B** and **Part C** in the booklet provided. Record your student number and name on the booklet. Hand in the card for Part A inside the answer booklet.

### **Marking Scheme:**

Part A [30 marks] TWENTY multiple-choice questions - 1.5 marks each

Part B [10 marks] TWO of Three True/ False/Uncertain questions- 5 marks each

Part C [10 marks] ONE of Two problem solving questions

#### **Calculators:**

Non-programmable calculators are permitted.

#### Notes:

- Proctors are unable to respond to queries about the interpretation of exam questions. Do your best to answer exam questions as written.
- You are NOT ALLOWED to use any textbooks, notes or other study materials. Academic dishonesty is a serious academic offence. A finding of academic dishonesty carries penalties that may include expulsion from the University.

### Part AMultiple-Choice Questions[30 marks]

Each question is worth 1.5 marks. There is no negative marking for wrong answers.

Answer all questions on the multiple choice answer card in PENCIL. If you make changes, be sure to erase completely. Please record your name and student number on the multiple choice answer card. Hand in the card inside your answer booklet.

To answer each question correctly, you have to choose the best answer from the given four choices.

Use the following table to answer question 1:

Income	Expenditures
\$ 0	\$ 500
1,000	1,167
1,500	1,500
2,000	1,833
2,500	2,167
1,500	1,500 1,833

1. The expenditures function that reflects the table above is:

A) AE = 0.667Y.

B) AE = 500 + 0.667Y.

C) Y = 500 + 0.667AE

D) AE = 1500.

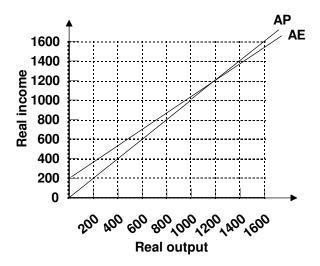
2. As the *mpc* rises, the slope of the AE curve:

A) also rises.

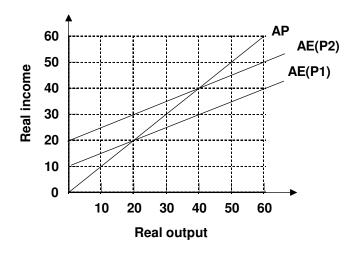
B) declines.

C) does not change.

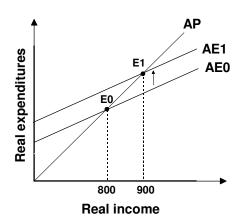
D) may rise or fall.



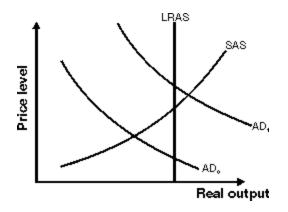
- 3. Refer to the graph above. If autonomous expenditures rose by 50 equilibrium income would be:
- A) 250
- B) 400
- C) 1200
- D) 1500
- 4. Which of the following will not shift the AE curve?
- A) a change in the exchange rate.
- B) an increase in inventories.
- C) a change in taxes.
- D) a change in consumer confidence.



- 5. In the above graph, you can derive
- A) two points on two AD curves: P1, 20 and P2, 40.
- B) two points on two AD curves: P1, 10 and P2, 20.
- C) two points on one AD curve: P1, 20 and P2, 40.
- D) two points on one AD curve: P1, 10 and P2, 20.
- 6. If an economy is in a recession, one fiscal policy that might help it recover is:
- A) a cut in social security payments.
- B) a cut in the income tax rate.
- C) a cut in education spending.
- D) an increase in property taxes.
- 7. Say the U.S. cancels China's most favoured nation status and as a result China's exports decline by 400. If the *mpc* in China is 0.6, total income in China would likely:
- A) decline by 666.67.
- B) decline by 1000.
- C) increase by 666.67.
- D) increase by 1000.



- 8. Refer to the graph above. If the mpc is 0.9, the shift from AE0 to AE1 could be explained by a:
- A) \$10 increase in government spending.
- B) \$90 increase in government spending.
- C) \$100 increase in government spending.
- D) \$10 decrease in government spending.
- 9. Which of the following is an example of countercyclical fiscal policy?
- A) A reduction in taxes when the economy is booming.
- B) An increase in government spending when the economy is booming.
- C) An increase in taxes when the economy is in a recession.
- D) An increase in government spending when the economy is in a recession.
- Suppose equilibrium income is \$100 billion lower than potential income. If the mpc is 0.8, potential income can be attained by \_\_\_\_\_ government spending by \_\_\_\_\_ billion.
- A) increasing; \$100.
- B) increasing; \$ 20.
- C) decreasing; \$100.
- D) decreasing; \$ 20.



- 11. Refer to the graph above. If wage and price controls had not been introduced during the Second World War, the massive increase in military spending would have eventually:
- A) shifted the SAS curve to the right.
- B) shifted the AD curve to the left.
- C) shifted the SAS curve to the left.
- D) had no effect on AD and SAS.
- 12. When the government runs a deficit, it must:
- A) buy bonds to finance the deficit.
- B) sell bonds to finance the deficit.
- C) reduce the money supply to finance the deficit.
- D) raise taxes immediately.
- 13. An increase in the budget deficit will have a:
- A) more negative effect on income the weaker is crowding out.
- B) more positive effect on income the greater is crowding out.
- C) less negative effect on income the weaker is crowding out.
- D) less positive effect on income the greater is crowding out.
- 14. Holding the nominal deficit and total debt constant, an increase in the inflation rate will:
- A) not affect the real deficit.
- B) raise the real deficit.
- C) lower the real deficit.
- D) either raise or lower the real deficit depending on the real interest rate.

15. Use the following table to determine which statement is *true*.

		Government
Year	Revenues	Expenditures
1946	39.3	55.2
1947	38.5	54.5
1948	41.6	29.8
1949	39.4	38.8
1950	39.4	42.6

- A) In 1946 and 1950, the budget was in deficit while in 1948-1949, the budget was in surplus.
- B) In 1946 and 1950, the budget was in surplus while in 1948-1949, the budget was in deficit.
- C) The debt rose each year from 1946 to 1950.
- D) The debt fell from 1945 to 1950.
- 16. The real deficit is \$100 billion; inflation is 4 percent; total debt is \$2 trillion. The nominal deficit is
- A) zero.
- B) \$120 billion.
- C) \$180 billion.
- D) \$200 billion.
- 17. Suppose that the economy has a structural surplus of \$100 billion and is operating above potential output. From this we can infer that the budget as a whole:
- A) is in deficit.
- B) is balanced.
- C) is in surplus.
- D) could be in deficit or surplus depending on the size of the passive deficit.
- 18. M1 includes which of the following?
- A) Non-personal notice deposits.
- B) Chequing account deposits.
- C) Gold certificates.
- D) Money market mutual funds.

- 19. If the ratio of currency to deposits is 20 percent and the reserve ratio is 10 percent, then a \$100 addition to deposits will result in a:
- A) \$333 addition to the money supply.
- B) \$400 addition to the money supply.
- C) \$500 addition to the money supply.
- D) \$1000 addition to the money supply.
- 20. The narrowest measure of the money stock is:
- A) M1.
- B) M2.
- C) M1+.
- D) M2+.

### Part B True/ False/ Uncertain Questions [10 marks]

Each question is worth 5 marks.

#### Answer two of the following three questions in the answer booklet.

Explain why the following statement is True, False, or Uncertain according to economic principles. Use diagrams and/or numerical examples where appropriate. Unsupported answers will receive no marks. It is the explanation that is important.

- **B1.** A tax cut would lead to a decrease in equilibrium real output of an economy which is currently operating below potential income.
- **B2.** The net export effect weakens the effects of a contractionary fiscal policy.
- **B3.** A rise in real interest rate of a country increases the debt to Nominal GDP ratio.

## Part C Problem Solving Question [10 marks]

Answer one of the following two questions in the answer booklet.

C-1

Consider the following simple, fixed price, open economy model of Canadian economy with excess capacity:

 $C = 55 + .75Y_d$  T = 36 + 0.30Y R = 16 I = 64 G = 62 X = 54IM = 20 + 0.191Y

where, *C* is consumption,  $Y_d$  is disposable income, *T* is taxes, *R* is government transfers, *Y* is real GDP, *I* is investment, *G* is government expenditures on goods and services, *X* is exports and *IM* is imports. Note that  $Y_d = Y - T + R$ .

- (a) Solve for aggregate expenditures (*AE*) as a function of *Y*, and calculate the equilibrium level of real GDP. Illustrate your equilibrium in a diagram with *AE* on the vertical and *Y* on the horizontal axis. What is the value of the multiplier? [2+2+2=6 Marks]
- (b) What will happen to the equilibrium *Y* in part (a), if investment declines to 44 because of the stock market crash? Find the new equilibrium *Y* and show it in the diagram. [2+2= 4 Marks]

### C-2

Assume that the aggregate expenditure function of a hypothetical economy is given by the following equation.

AE = 250 + 0.5Y

Assume also that the following equations describe the current fiscal policy:

T = 30 + 0.20Y

R=40

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G = 100
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where, T is tax revenue, R is government transfers, Y is real GDP and G is government expenditures on goods and services.

In addition, assume that the potential income of this economy is 400.

- (a) Calculate the equilibrium level of real GDP, actual budget deficit, structural budget deficit and passive or cyclical budget deficit. [Hint: Budget Deficit = G+R-T]. [1+1+1+1=4 Marks]
- (b) How should the government adjust its spending (G) to completely remove any existing recessionary or inflationary gap? Assume that government successfully changed its spending (G) to remove the gap. Find the new actual budget deficit, structural budget deficit and passive or cyclical budget deficit at the new equilibrium. [1+1+1=4 marks]
- (c) Solve for the initial budget surplus function (BS = T-G-R) and plot it in a diagram. Show the actual budget deficit and structural budget deficit you found in part (a). Show how the initial budget surplus function would response to the change you prescribed in part (b). Show the new actual budget deficit and structural budget deficit you found in part (c). [1 + 1= 2 marks]