QUEEN'S UNIVERSITY AT KINGSTON

FACULTY OF ARTS AND SCIENCE

Department of Economics

ECONOMICS 112

Final Examination

Fall 2018

Course Sections and Instructors:

Econ 112 – Meng Li

Time Limit: 3 Hours

Permitted Calculator:

Pre-Approved: Casio 991

Instructions:

Part A: Mark your selections in PENCIL on the Scantron Answer Sheet. Fill in the appropriate rectangle completely but stay within its limits.

There is only one correct answer for each question; multiple answers will be marked as incorrect. If you make changes, be sure to erase completely.

Please record your ***Student Number***, ***Name***, and ***Test Form A*** in the appropriate sections of the Answer Sheet. For detailed instructions on filling in this information see the next page.

Parts B and C: Use answer booklet provided to answer parts B and C.

Marking Scheme:

Part A	[60 marks]	FORTY Multiple-Choice Questions - 1.5 marks each
Part B	[20 marks]	FOUR of SIX True/False/Uncertain Questions - 5 marks each
Part C	[20 marks]	ONE of TWO Problems - 20 marks

Notes:

- Proctors are unable to respond to queries about the interpretation of exam questions. Do your best to answer exam questions as written.
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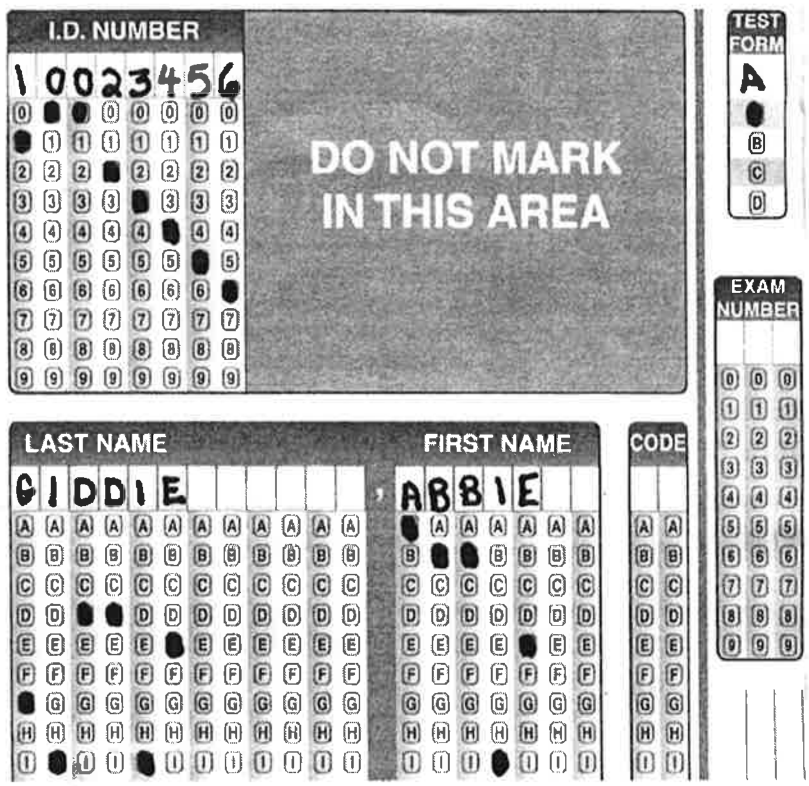
Before You Begin the Exam:

1. Write your Student # under "**I.D. Number**" on the Answer Sheet and fill in the appropriate rectangle below each number. **See example below.**

2. Print your **Last Name** followed by first name in the appropriate space, and fill in the appropriate rectangle under each letter. (If your name is too long to fit in the spaces provided, please enter as many letters as you can.) **See example below.**

3. Under "**Test Form**", fill in "A". **See example below.**



PART A: Multiple Choice Questions

Choose the one alternative that best completes the statement or answers the question. There are fourty questions in the section and you must answer ALL of them.

1) Consider a production possibilities boundary showing the quantity of military goods and the quantity of civilian goods on the two axes. A movement along the production possibilities boundary could be caused by
   A) the reallocation of resources between military and civilian goods.
   B) the employment of previously idle resources.
   C) an increase in the labour supply.
   D) the growth of productive capacity.
   E) technological progress.

2) Which of the following best describes the relationship between positive and normative statements in economics?
   A) Positive and normative statements are alternate ways of describing the desirability of certain economic policies.
   B) Neither positive nor normative statements are concerned with the desirability of certain economic changes.
   C) Normative statements are those with which all economists agree; positive statements may give rise to some disagreement.
   D) Normative statements evaluate the desirability of certain economic changes; positive statements do not.
   E) Economists generally agree with each other regardless of whether a question is positive or normative.

The table below shows the approximate value of Canada's crude oil and natural gas exports over a 5-year period. The amounts shown are billions of dollars.

	Crude Oil	Natural Gas
2009	42.5	18.0
2010	49.9	17.6
2011	68.3	15.6
2012	73.0	10.7
2013	81.0	12.7

TABLE 2-7

3) Refer to Table 2-7. Assume that 2009 is the base year, with an index number = 100. What is the index number for the value of crude oil exports in2013?
   A) 90.6 B) 190.6 C) 38.5 D) 52.5% E) 52.5

4) Refer to Table 2-7. Assume that 2009 is the base year, with an index number = 100. What is the index number for the value of natural gas exports in2013?
   A) 70.6 B) 1.42 C) 14.2 D) 142 E) 142%

5) Consider the global market for some mineral, X. In January 2014, the equilibrium price and quantity were P = $27 per unit and Q = 140 million units. In January 2016, the equilibrium price and quantity were P = $35 per unit and Q = 110 million units. Which of the following is the best possible explanation for this change in market equilibrium?

A) There has been a decrease in supply of mineral X.
B) There has been a decrease in global demand for mineral X.
C) There has been a simultaneous increase in demand and increase in supply for mineral X.
D) There has been an increase in demand for mineral X.
E) there has been a simultaneous increase in supply and decrease in demand for mineral X.

6) Assume that apples and oranges are substitute goods. Given the initial supply and demand curves for apples, a reduction in the price of oranges will tend to

A) increase the price of apples.
B) decrease the price of apples.
C) increase the demand for oranges.
D) decrease the demand for oranges.
E) increase the demand for apples.

Consider the following information about the production of two goods, X and Y, in two countries, A and B:

- In Country A it takes X_a units of resources to produce one unit of X and Y_a units of resources to produce one unit of Y.
- In Country B it takes X_b units of resources to produce one unit of X and Y_b units of resources to produce one unit of Y.
- Assume the amount of resources used to produce the goods in the two countries can be compared unambiguously.

TABLE 32-1

7) Refer to Table 32-1. Country A has an absolute advantage in producing good X if

A) X_a is less than X_b.
B) (X_a/Y_a) is less than (X_b/Y_b).
C) X_a is less than Y_a.
D) $X_a = X_b$.
E) (X_a/X_b) is less than (Y_a/Y_b).

8) Refer to Table 32-1. Country A has a comparative advantage in producing good X if

A) (X_a/Y_a) is greater than (X_b/Y_b).
B) (X_a/Y_a) is less than (X_b/Y_b).
C) (X_a/X_b) is greater than (Y_a/Y_b).
D) $X_a = X_b$.
E) X_a is less than Y_b.

9) Refer to Table 32-1. There is no scope for gains from trade due to specialization between the two countries if

A) (X_a/Y_a) is equal to (X_b/Y_b).
B) X_a is less than X_b.
C) (X_a/Y_a) is greater than (X_b/Y_b).
D) X_a is less than Y_b and Y_a is less than Y_b.
E) X_a is equal to Y_b.

10) Undesired or unplanned inventory accumulation is likely to occur when
A) consumption exceeds investment.
B) actual aggregate expenditure exceeds desired aggregate expenditure.
C) desired aggregate expenditure exceeds actual aggregate expenditure.
D) investment exceeds consumption.
E) autonomous expenditure exceeds induced expenditure.

11) Suppose aggregate output is demand-determined. If the business community decreases its planned investment expenditures by $4 billion, causing equilibrium national income to fall by $12 billion, the marginal propensity to spend must be
A) 1/3. B) 1/2. C) 2/3. D) 4/5. E) 3.

Consider the following information for an economy with demand-determined output and a constant price level. There is no government or foreign trade.

1. $Y = C + I$
2. $C = 100 + 0.8Y$
3. $I = 200$

TABLE 21-8

12) Refer to Table 21-8. This economy's equilibrium level of national income is
A) 1000. B) 500. C) 600. D) 1500. E) 750.

13) Refer to Table 21-8. The simple multiplier in this economy is
A) 3.0. B) 4.0. C) 5.0. D) 2.0. E) 2.5.

14) Consider a simple macro model with a constant price level and demand-determined output. If the marginal propensity to spend is 0.9, the simple multiplier is
A) 1.0. B) 0.9. C) 1.1. D) 0.1. E) 10.0.

The diagram below shows desired aggregate expenditure for a hypothetical economy. Assume the following features of this economy:

- *marginal propensity to consume (mpc) = 0.75*
- *net tax rate (t) = 0.20*
- *no foreign trade*
- *fixed price level*
- *all expenditure and income figures are in billions of dollars.*

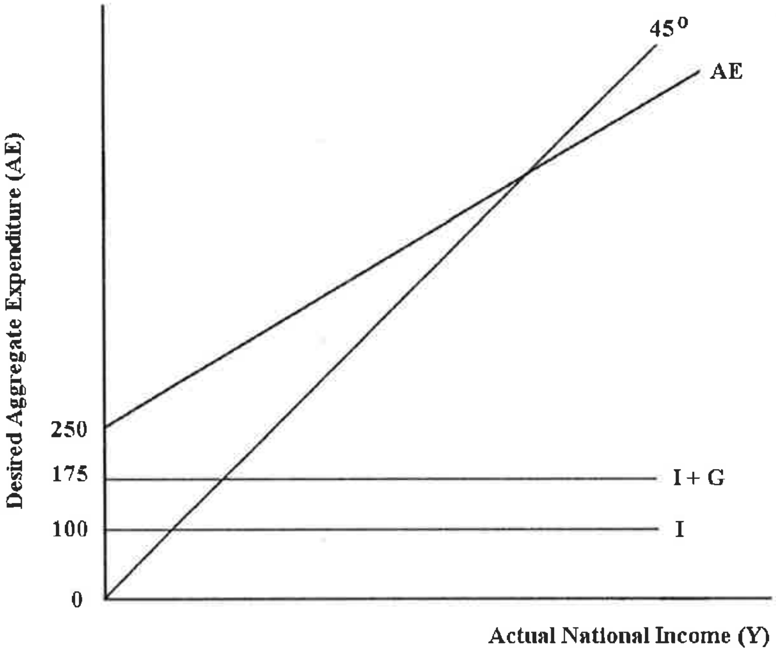


FIGURE 22- 2

15) Refer to Figure 22- 2. What is the value of the multiplier in this economy?
A) 2.0 B) 2.5 C) 6.67 D) 1.67 E) 1.33

16) Consider a model in which output is demand- determined. If the marginal propensity to spend out of national income is 0.4, then a \$0.6 billion decrease in government purchases will cause equilibrium national income to________by approximately________.
A) increase; \$1.50billion
B) decrease; \$0.24billion
C) decrease; \$1.50billion
D) decrease; \$1.00billion
E) increase; \$1.00 billion

17) If the economy is in macroeconomic equilibrium with a vertical *AS* curve, and then aggregate demand decreases, we expect the *AE* function to shift to a
A) higher level but then return to its original position as the price level falls.
B) higher level, but then shift part of the way down to its original position as the price level falls.
C) lower level and stay there.
D) higher level and stay there.
E) lower level, but then return to its original position as the price level falls.

18) Consider the basic AD/AS model. When wage rates rise faster than the increase in labour productivity, the

A) output gap falls.
B) output gap increases.
C) *AD* curve shifts left.
D) *AS* curve shifts downward.
E) *AS* curve shifts upward.

19) Consider the basic AD/AS model, and suppose there is a negative output gap. If an expansionary fiscal policy is pursued and the *AS* curve shifts right unexpectedly, the fiscal policy may be ________, and real GDP may________potential GDP.

A) too strong; rise above
B) appropriate; equal
C) too weak; rise above
D) too weak; stay below
E) too strong; stay below

20) Consider the global recession that began in late 2008. In terms of the AD/AS model, which of the following statements best describes the macroeconomic effect on Canada's economy?

A) The AS curve shifted to the left due to increased factor prices, which created a recessionary gap.
B) The AS curve shifted to the right due to increased factor prices, which created a recessionary gap.
C) The AD curve shifted to the right due to reduced demand for Canadian exports, which created a recessionary gap.
D) The AD curve shifted to the left due to reduced demand for Canadian exports, which created a recessionary output gap.
E) Potential GDP fell, which reduced actual national income.

21) The theory of economic growth concentrates on the________over the long run, not on________.

A) factor utilization rates; growth of the supplies of factors
B) growth of potential output; fluctuations of output around potential
C) growth of investment in capital goods; short- run fluctuations of investment
D) factor utilization rates; growth of real GDP
E) growth of real GDP; growth of potential GDP

22) Between the years 1960 and 2014, the Canadian economy experienced growth in real GDP at an average annual rate of________%.

A) 6.3 B) 3.3 C) 0.7 D) 1.2 E) 1.9

23) Economic growth allows increasing numbers of people around the world to enjoy higher incomes and to escape (material) poverty. Which of the following statements best describes the current limits to this growth?

A) Innovation and technological change with respect to resource development have been exhausted.
B) Increasing prices of natural resources will limit further economic growth.
C) The inability of developing countries to increase their human capital will prevent further economic growth.
D) Rising consumption due to higher incomes puts increasing pressure on the world's natural ecosystems and its ability to cope with further pollution and environmental degradation.
E) The supply of financial capital is insufficient to maintain this level of economic growth.

24) A common measure of a country's rate of economic growth is
   A) the level of real gross domestic product.
   B) the level of output per capita.
   C) the change in output per capita.
   D) the marginal efficiency of capital.
   E) the capital- output ratio.

The table below shows aggregate values for a hypothetical economy. Suppose that this economy has real GDP equal to potential output.

Potential GDP	$2800
Net tax revenues	$50
Government purchases	$200
Investment	$250
Consumption	$2350

TABLE 25- 2

25) Refer to Table 25- 2. What is the level of private saving for this economy?
   A) $400   B) $150   C) $450   D) $50   E) $100

26) Refer to Table 25- 2. What is the level of public saving for this economy?
   A) $200   B) - $150   C) - $50   D) - $200   E) $150

27) Refer to Table 25- 2. What is the level of national saving for this economy?
   A) - $200   B) $250   C) - $50   D) $150   E) - $150

28) When you pay for your $74 purchase at the grocery store with a debit card, you are
   A) withdrawing $74 from your bank account with which you pay for your groceries.
   B) essentially promising the grocery store that your bank will pay them $74 at the end of the month when debts are settled.
   C) transferring $74 of currency from your bank account to the grocery store's bank account.
   D) electronically transferring $74 of deposit money from your bank account to the grocery store's bank account.
   E) transferring your claim on $74 worth of gold to the grocery store.

29) Which of the following statements best describes the relationship between the Bank of Canada and the Government of Canada?
   A) The governor of the Bank of Canada and the minister of finance have joint responsibility for both fiscal and monetary policy.
   B) The Bank of Canada is a central- banking institution that is completely independent of the government and is fully autonomous in its conduct of monetary policy.
   C) The Bank of Canada is a privately owned banking institution that is overseen by a Board of Directors with a mandate to act in the best interests of the citizens of Canada.
   D) The Bank of Canada has the same status as the Department of Finance and is directly responsible to Parliament for its day- to- day operations of monetary policy.
   E) The Bank of Canada is a wholly owned entity of the government but is given independence in the day- to- day operations of monetary policy.

Bank North's Balance Sheet

Assets		Liabilities	
Reserves	$300	Deposits	$2000
Loans	$2200	Capital	$500
	$2500		$2500

TABLE 26- 2

30) Refer to Table 26- 2. Assume that Bank North is operating with no excess reserves. What is their actual reserve ratio?
A) 12% B) 20% C) 13.67% D) 25% E) 15%

31) Refer to Table 26- 2. What are the income- earning assets for Bank North?
A) Capital B) Loans C) Deposits D) Reserves E) Liabilities

32) The M2++ and M3 definitions of the money supply include financial assets
A) such as deposits at credit unions and caisses populaires.
B) such as a government Treasury bill.
C) such as a credit card.
D) that serve the store- of- value function and are convertible into a medium of exchange.
E) such as deposits at non- bank financial institutions.

33) A contractionary monetary policy that has been imposed to reduce inflation will most likely
A) lead to a recession that is long and severe, under any circumstances.
B) lead to a recession which will be short if inflation expectations adjust rapidly and accurately.
C) have no effect on the short- run level of GDP and unemployment.
D) not control inflation, since money supply changes have little or no effect on the price level.
E) produce long-lasting unemployment if wages adjust rapidly.

34) Consider an open- economy AD/AS macro model. An expansionary fiscal policy will generally increase the government's budget ________ and also tends to_________and thus ________net exports.
A) deficit; appreciate the currency; decrease
B) surplus; appreciate the currency; decrease
C) deficit; depreciate the currency; decrease
D) deficit; appreciate the currency; increase
E) surplus; depreciate the currency; increase

The diagram below is for a closed economy which begins in long- run equilibrium at Y and* P_0.

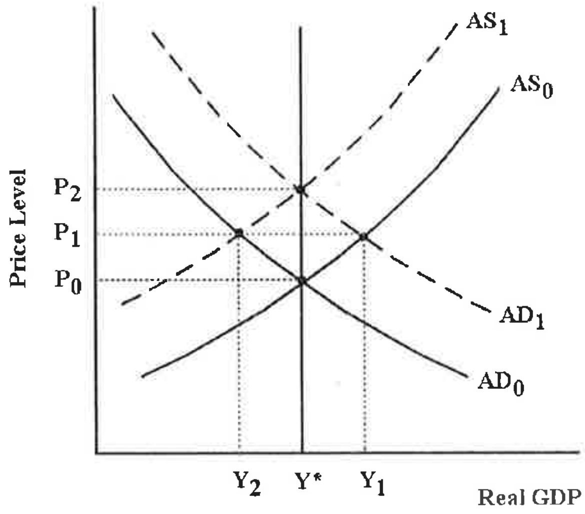


FIGURE 31- 3

35) Refer to Figure 31- 3. Suppose the government implements an expansionary fiscal policy which increases the budget deficit. The *initial* effect of this policy is the opening of a(n)_________gap, and a new short- run equilibrium with a price level of_________and real GDP of________.

A) inflationary; P_1; Y*

B) recessionary; P_1; Y_2

C) inflationary; P_1; Y_1

D) recessionary; P_0; Y*

E) inflationary; P_2; Y*

36) Refer to Figure 31- 3. Suppose the government in this closed economy implements an expansionary fiscal policy, which increases the budget deficit. When the economy reaches its new long- run equilibrium, how has the composition of national income changed?

A) consumption has increased

B) net exports have fallen

C) the composition of national income at Y* is unchanged

D) investment has fallen

E) net exports have risen

37) Refer to Figure 31- 3. Suppose the government implements an expansionary fiscal policy, which increases the budget deficit. The economy's adjustment process returns real GDP to Y* in the long run. Since real GDP is not affected in the long run, how are future generations likely to be harmed by this government policy?

A) The inflationary gap is harmful to the economy and reduces real GDP in the future.

B) Investment in public infrastructure has been crowded out, which will harm future generations.

C) The budget deficit causes an appreciation in the domestic currency which reduces the income of future generations.

D) Future generations are definitely not harmed by this policy.

E) Private investment has been crowded out, which may lead to a lower future growth rate of potential GDP.

38) A Canadian traveling to the United States converts $100 Canadian into 95 U.S. dollars. One month later he does the same thing and receives 105 U.S. dollars. There are no transactions costs. The Canadian- U.S. exchange rate has________and the Canadian dollar has________relative to the U.S. dollar.

A) fallen; depreciated
B) increased; depreciated
C) fallen; appreciated
D) increased; appreciated
E) not changed; remained stationary

39) If the Bank of Canada pursues an expansionary monetary policy,

A) interest rates will fall, there will be a capital inflow, and the Canadian dollar will depreciate.
B) interest rates will fall, there will be a capital outflow, and the Canadian dollar will appreciate.
C) interest rates will fall, there will be a capital outflow, and the Canadian dollar will depreciate.
D) interest rates will rise, there will be a capital outflow, and the Canadian dollar will depreciate.
E) interest rates will rise, there will be a capital inflow, and the Canadian dollar will appreciate.

40) If Canadian inflation is 4% while Japanese inflation is 7%, purchasing power parity (PPP) theory predicts that the Japanese yen will________relative to the Canadian dollar.

A) appreciate by 3%
B) appreciate by 28%
C) depreciate by 11%
D) appreciate by 11%
E) depreciate by 3%

Part B: True/False/Uncertain Questions (20 marks)

Explain why the following statement is True, False, or Uncertain according to economic principles. A diagram or(and) a few lines of explanation should be enough. **No credit is given for unsupported answers.**

Answer **FOUR** of the following **SIX** questions. Each question is worth 5 marks.

B1. If Canada can produce 4 cars or 2 trucks with 1 unit of resource, and the US can produce 8 cars or 3 trucks with one unit of resource, there are no potential gains from trade, because the US is better at producing both goods.

B2. In an economy subject to aggregate demand shocks, a fixed exchange rate amplifies these shocks and increases the impact of these shocks on output and employment. (Diagram Required)

B3. For a government to reduce the budget deficit they must run a primary surplus. (Formula Required).

B4. Under the New Keynesian theory of long-run employment relationships, wage rates adjust instantaneously in excess labor demand or excess labor supply situations.

B5. Suppose an economy is currently operating with a recessionary gap, this economy will not return to its long run equilibrium without some policy response.

B6. In an open economy like Canada's, a policy-induced increase in the government's budget deficit tends to crowd out foreign capital investments and increase net exports.

Part C: Problem-solving Questions (20 marks)

Answer ONE of the following TWO questions.

Read each part of the question very carefully. Answer all parts and show all the steps of your calculations to get full credit. Use diagrams when required.

C1

Consider the following aggregate expenditure model of the economy:

$C = 75 + 0.9Yd$

$I = 80$

$G = 50$

$T = 0.2Y$

$X = 60$

$M = 5 + 0.12Y$

Where C is consumption, Yd is disposable income, I is investment, G is government expenditures on goods and services, T is tax net of transfers, X is exports, M is imports and Y is national income.

(A) Solve for aggregate expenditures (AE) as a function of Y and calculate the equilibrium level of national income. Illustrate your equilibrium in a diagram with AE on the vertical axis and Y on the horizontal axis. What is the value of the multiplier? Is the government running a surplus or deficit? (4 marks)

(B) Using the value of the multiplier that you have found, explain what happens to the value of AE and to GDP if the government increases its expenditures from 50 to 100 (this is an expansionary fiscal policy). How does this policy affect the government's budget balance? (4 marks)

(C) Using diagram(s) explain why the changes of AE and GDP will be less than what is predicted in part (B) when aggregate supply (AS) curve is upward sloping. (4 marks)

(D) Suppose that the economy was already at its potential output (Y^*) in part (A). Using an AD-AS diagram, predict the effects of the fiscal policy on real GDP, the unemployment rate, and the price level in the short run and in the long-run. (4 marks)

(E) Explain what effect this policy is likely to have on domestic real interest rates in the country. Would we expect to see an appreciation or a depreciation of the domestic currency? (4 marks)

C2

(A) If a serious recession begins in the U.S, what is the likely effect on Canadian aggregate demand? national income? price level? What would be the likely response by the Bank of Canada? (4marks)

(B) Using diagram(s) explain what happens to aggregate expenditure and aggregate demand subsequent to an increase in money supply. Be sure to discuss all mechanisms at work. (4 marks)

(C) Under what circumstances (money market and investment schedule conditions) is monetary policy most effective in the short run? Graph required. (4 marks)

(D) What determines interest rate in the long run? Using diagram(s) explain how interest rate, price level and output revert to long run levels. Be sure to discuss all mechanisms at work (4 marks)

(E) When does constant inflation with $Y=Y^*$ occur? Briefly explain the logic behind the notion of a self-fulfilling prophecy in this context. (4 marks)