

Question One

Determine whether the following statements are **True or False** and give a brief (one sentence) explanation on the answer you have chosen.

- a) Money is a resource and it is classified as capital.
- b) A Canada Savings Bond is classified as a capital good.
- c) If the main opportunity cost of going to college is the foregone earnings, then college enrolment should increase during periods of high unemployment.
- d) A production possibility curve that is concave to the origin reflects the law of increasing opportunity costs.
- e) Adam's Smith's invisible hand concept describes how corporate business (like professional hockey owners) reaches into the pockets of consumers like "an invisible hand".
- f) Economic growth can be represented by a shift of the production possibility curve.
- g) To a student, the opportunity cost of going to a Dino's basketball game would include the price of the ticket and the value of the time that could have been spent studying.
- h) The term ceteris paribus means that economic theory keeps changing.
- i) If an economy is operating on its production possibility frontier (PPF), it must be using its resources efficiently.
- j) If an economy is operating on its production possibility frontier, it must produce less of one good if it produces more of another.
- k) Points outside the PPF are attainable but not efficient.
- l) Normative statements can be refuted with empirical evidence.

Question Two

Classify the following as land, labour, capital or financial capital:

- a) Computer
- b) Money
- c) Accountant
- d) Forest
- e) Water
- f) Canada Savings Bonds
- g) iron ore
- h) Jerome Iginla
- i) Bill Gates starting Microsoft
- j) Oil

Question Three

Suppose an economy has the following production possibility for two goods, computers and jet airplanes

Feasible production bundles	A	B	C	D	E
Computers	0	24	40	50	55
Jet Airplanes	40	30	20	10	0

- a) Plot the production possibilities frontier (PPF) for this economy
(Note: plot Jet Airplanes on the vertical axis and computers on the horizontal axis)
- b) On your graph, indicate a point inside the PPF and explain what this means
- c) On your graph, indicate the unattainable region. Why are these combinations unattainable?
- d) Using the information in the table above, demonstrate the increasing opportunity costs. In your own words, explain why the opportunity costs are rising.
- e) Suppose that technological progress doubles the productivity of the process for making Computers but there is no change in the process for Airplanes. What would the numbers in the production possibilities table be now? Plot the new PPF.

Feasible production bundles	A	B	C	D	E
Computers	0	48	80	100	110
Jet Airplanes	40	30	20	10	0

- f) Why is it that, despite the fact that there is no change in the productivity of Airplane production, it is now possible for this economy at any given level of production of computers to produce more Jet Airplanes?

1. Which statement best describes the way economists study the economy?
 - a. Economists study the past, but do not try to predict the future.
 - b. Economists develop hypotheses based on educated guesses, determine the relevant variables, collect data, and then analyze the data to reject or not reject the hypothesis.
 - c. Economists develop hypotheses based on observations, determine the relevant variables, collect data, and then analyze the data to reject or not reject the hypothesis.
 - d. Economists use controlled experiments much the same way a biologist or physicist does.

2. Which are terms used by an economist?
 - a. vector spaces and axioms.
 - b. comparative advantage and torts.
 - c. ego and cognitive dissonance.
 - d. endogenous and exogenous variables.

3. What is meant by scientific method?
 - a. the use of modern electronic testing equipment to understand the world.
 - b. the development and testing of theories about how the world works from real world observations.
 - c. the use of controlled experiments in understanding the way the world works.
 - d. finding evidence to support preconceived theories about how the world works.

4. Why do economists make assumptions?
 - a. to diminish the chance of wrong answers.
 - b. to make a complex world easier to understand.
 - c. because all scientists make assumptions.
 - d. to make certain that all necessary variables are included.

5. Why are historical episodes valuable to economists?
 - a. They allow economists to see how far the discipline has evolved.
 - b. Hindsight is always 20/20.
 - c. It is easier to evaluate a past situation than to predict a future situation.
 - d. They allow economists to evaluate economic theories of the present.

6. What is a circular-flow diagram?
 - a. a visual model that shows the relationship between real flows and money flows.
 - b. a mathematical model of how the economy works.
 - c. a model that shows only the effects of government and consumers on the economy.
 - d. a visual model of the relationship between money, prices, and businesses.

7. What are factors of production?
 - a. the mathematical calculations firms make to determine production.
 - b. weather and social and political conditions that affect production.
 - c. the physical relationships between economic inputs and outputs.
 - d. inputs that are used for the production of goods and services.

8. In the simple circular-flow diagram, who are the decision makers?
 - a. firms and government.
 - b. households and firms.
 - c. households and government.
 - d. households, firms, and government.

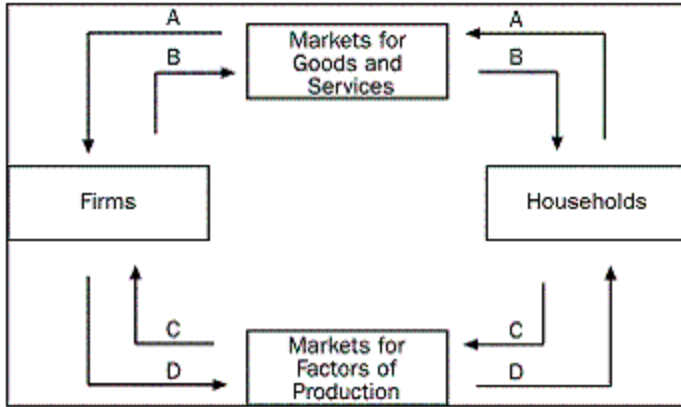
9. Money is referred to as financial capital and not capital because:
 - a. not everyone has money.
 - b. money does not explain why the economy produces negative externalities so it's not included as a factor of production.
 - c. Money is not needed in an economy as most people use debit and credit cards.
 - d. Money in itself does not produce anything but modern economies would have a much lower standard of living without it.

10. In a circular-flow diagram, which flows are involved?
 - a. Taxes flow from households to firms, and transfer payments flow from firms to households.
 - b. Income payments flow from firms to households, and sales revenue flows from households to firms.
 - c. Resources flow from firms to households, and goods and services flow from households to firms.
 - d. Inputs and outputs flow in the same direction as the flow of dollars, from firms to households.

11. Which of the following is a characteristic of the circular-flow model?
 - a. Firms are sellers in the resource market and the goods market.
 - b. Firms are buyers in the goods market.
 - c. Households are sellers in the resource market.
 - d. Households are buyers in the resource market.

12. In the *factors of production* market, how do households and firms interact?
 - a. Households are sellers and firms are buyers.
 - b. Households are buyers and firms are sellers.
 - c. Households and firms are both buyers.
 - d. Households and firms are both sellers.

Figure 2-1



13. Refer to Figure 2-1. Which arrow shows the flow of goods and services?
 - a. arrow A.
 - b. arrow B.
 - c. arrow C.
 - d. arrow D.

14. Refer to Figure 2-1. Which arrow shows the flow of spending (or money flow) by households?
 - a. arrow A.
 - b. arrow B.
 - c. arrow C.
 - d. arrow D.

15. Refer to Figure 2-1. Which arrow shows the real flow of the factors of production?
 - a. arrow A.
 - b. arrow B.
 - c. arrow C.
 - d. arrow D.

16. Refer to Figure 2-1. Which arrow shows the money flow of income payments?
 - a. arrow A.
 - b. arrow B.
 - c. arrow C.
 - d. arrow D.

17. In economics, what does capital refer to?
- the finances necessary for firms to produce their products.
 - buildings and machines used in the production process.
 - the money households use to purchase firms' output.
 - the value of stock market shares to investors.
18. What revenue received by firms is NOT used to pay for factors of production?
- rent.
 - wages.
 - profit.
 - interest.
19. What does a point on a country's production possibilities frontier represent?
- a combination of two goods that an economy will never be able to produce.
 - a combination of two goods that an economy can produce with a given level of resources and technology.
 - a combination of two goods that an economy can produce using some of its resources and technology.
 - a combination of two goods that an economy may be able to produce sometime in the future with additional resources and technology.
20. Why are production possibilities frontiers usually bowed outward?
- the more resources a society uses to produce one good, the fewer resources it has available to produce another good.
 - it reflects the fact that the opportunity cost of producing a good falls as one produces more and more of it.
 - resources are specialized; therefore, there is a diminishing effect on productivity when resources are transferred from one sector to another when technology and other resources are increased.
 - resources are specialized; therefore, there is a diminishing effect on productivity when resources are transferred from one sector to another, ceteris paribus.
21. Why are production possibilities frontiers usually bowed outward?
- constant opportunity cost.
 - increasing opportunity cost.
 - decreasing opportunity cost.
 - increasing productivity.
22. Suppose an economy produces two goods: food and machines. This economy always operates on its production possibilities frontier. Last year, it produced 50 units of food and 30 machines. This year, it is producing 55 units of food and 33 machines. Which of the following would NOT explain the increase in output?
- a reduction in unemployment.
 - an increase in the labour force.
 - an improvement in technology.
 - an increase in worker productivity.

The following information pertains to the Bank of Edmonton.

Assets:		Liabilities:	
Reserves	\$100	Deposits	\$1,000
Loans	\$900		

- _____ 1. **Refer to Table 29-4.** If the Bank of Edmonton has loaned out all the money it wants given its deposits, then its reserve ratio is
- 1%
 - 5%
 - 10%
 - 15%
 - 20%
- _____ 2. **Refer to Table 29-4.** Assume that the Bank of Edmonton is holding the required percent of deposits as reserves. Also, assume all other banks hold only the required percent of deposits as reserves, and that people hold only deposits and no currency. What is the money multiplier?
- 1
 - 5
 - 10
 - 15
 - 20

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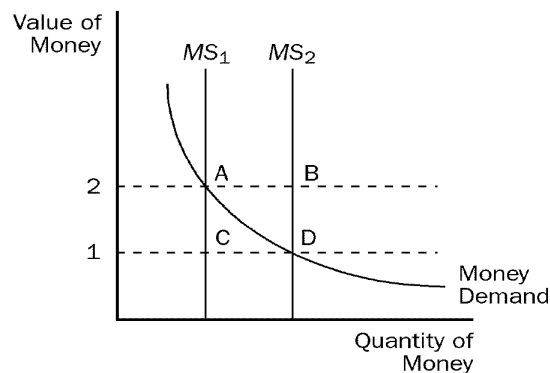
- _____ 3. **Refer to Table 29-4.** If the Bank of Canada requires banks to hold 5 percent of deposits as reserves, how much in excess reserves does the Bank of Edmonton now hold?
- \$5
 - \$25
 - \$50
 - \$55
 - \$75
- _____ 4. **Refer to Table 29-4.** Assume that all other banks hold only the required 5 percent of deposits as reserves and people hold only deposits and no currency. If the Bank of Edmonton decides to hold exactly 5 percent reserves, by how much would the economy's money supply increase?
- \$500
 - \$1,000
 - \$1,500
 - \$2,000
 - \$2,500
- _____ 5. If the reserve ratio is 10 percent, banks do not hold excess reserves, and people do not hold currency, then when Bank of Canada purchases \$20 million of government bonds, bank reserves
- increase by \$20 million and the money supply eventually increases by \$200 million.
 - decrease by \$20 million and the money supply eventually increases by \$200 million.
 - increase by \$20 million and the money supply eventually decreases by \$200 million.
 - decrease by \$20 million and the money supply eventually decreases by \$200 million.

- _____ 6. If the reserve ratio is 10 percent, and banks do not hold excess reserves, when Bank of Canada sells \$10 million dollars of bonds to the public, bank reserves
- increase by \$1 million and the money supply eventually increases by \$10 million.
 - increase by \$10 million and the money supply eventually increases by \$100 million.
 - decrease by \$1 million and the money supply eventually increases by \$10 million.
 - decrease by \$10 million and the money supply eventually decreases by \$100 million.

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Use the figure below for the following questions.

Figure 30-1



- _____ 7. **Refer to Figure 30-1.** If the money supply is MS_2 and the value of money is 2,
- the value of money is less than its equilibrium level.
 - the price level is higher than its equilibrium level.
 - money demand is greater than the money supply.
 - the money supply is greater than money demand.
 - None of the above are correct.
- _____ 8. **Refer to Figure 30-1.** If the money supply is MS_2 and the value of money is 2, there is excess
- demand equal to the distance between A and C.

- b. demand equal to the distance between A and B.
- c. supply equal to the distance between A and C.
- d. supply equal to the distance between A and B.

- _____ 9. **Refer to Figure 30-1.** When the money supply curve shifts from MS_1 to MS_2 ,
- a. the demand for goods and services decreases.
 - b. the economy's ability to produce goods and services increases.
 - c. the equilibrium price level increases.
 - d. the equilibrium value of money increases.
 - e. None of the above are correct.
- _____ 10. **Refer to Figure 30-1.** When the money supply curve shifts from MS_1 to MS_2 ,
- a. the equilibrium value of money decreases.
 - b. the equilibrium price level decreases.
 - c. the supply of money has decreased.
 - d. the demand for goods and services will decrease.
- _____ 11. **Refer to Figure 30-1.** If the current money supply is located at MS_1 ,
- a. there is no excess supply or excess demand if the value of money is 2.
 - b. the equilibrium is at point C.
 - c. there is an excess supply of money if the value of money is 1.
 - d. All of the above are correct.

- _____ 12. Changes in nominal variables are determined mostly by the quantity of money and the monetary system according to
- a. both the classical dichotomy and the quantity theory of money.
 - b. the classical dichotomy, but not the quantity theory of money.
 - c. the quantity theory of money, but not the classical dichotomy.
 - d. neither the classical dichotomy nor the quantity theory of money.
- _____ 13. According to the classical dichotomy, when the money supply doubles which of the following double?
- a. the price level and nominal GDP
 - b. the price level and real GDP
 - c. only real GDP
 - d. only the price level
 - e. the real wage rate
- _____ 14. The principle of monetary neutrality implies that an increase in the money supply will
- a. increase real GDP and the price level.
 - b. increase real GDP, but not the price level.
 - c. increase the price level, but not real GDP.
 - d. increase neither the price level nor real GDP.
 - e. None of the above are correct.
- _____ 15. The money supply in Freedonia is \$100 billion. Nominal GDP is \$800 billion and real GDP is \$200 billion. What are the price level and velocity in Freedonia?
- a. Velocity is 2 and the price level is 1.

- b. Velocity is 4 and the price level is 8.
- c. Velocity is 8 and the price level is 4.
- d. Velocity is 1 and the price level is 2.
- e. There is insufficient information to answer the question.

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1. Which of the following equations most simply represents GDP in a closed economy?

- a. $Y = C + I + G + NX$
- b. $S = I - G$
- c. $I = Y - C + G$
- d. $Y = C + I + G$

2. Which of the following equations represents national saving in a closed economy?

- a. $Y - I - G - NX$
- b. $Y - C - G$
- c. $Y - I - C$
- d. $G + C - Y$

3. In a closed economy, what does $(T - G)$ represent?

- a. national saving
- b. investment
- c. private saving
- d. public saving
- e. None of the above are correct.

4. Suppose that in a closed economy GDP is equal to 15,000, Taxes are equal to 2,500, Consumption equals 7500, and Government expenditures equal 3,000. What are private saving and public saving?

- a. 6,000 and -600
- b. 5,000 and -500
- c. 5000 and 500
- d. 6,000 and 600
- e. None of the above are correct.

5. Suppose that in a closed economy GDP is equal to 10,000, taxes are equal to 2,500 Consumption equals 6,500 and Government expenditures equal 2,000. What are private saving, public saving, and national saving?

- a. 1500, 1000, 500
- b. 1000, 500, 1500
- c. 500, 1500, 1000
- d. None of the above are correct.

6. Suppose that in a closed economy GDP is 10,000, consumption is 6,500, and taxes are 2,000. What value of Government expenditures would make national savings equal to 1000 and at that value would the government have a deficit or surplus?

- a. 2,500 and a deficit
- b. 2,500 and a surplus
- c. 1,000 and a deficit
- d. 1,000 and a surplus
- e. None of the above are correct.

7. You have two sets of estimates of national account numbers for a closed economy for next year. In the first set, government expenditures will be \$30 billion, transfer payments will be \$10 billion, and taxes will be \$45 billion. Under the second set, GDP will be \$200 billion, taxes will be \$50 billion, transfer payments will be \$20 billion, consumption will be \$120 billion, and investment will be \$40 billion. Based on these numbers, in the first set there should be
- a. \$15 billion surplus, and in the second set a \$10 billion surplus.
 - b. \$15 billion surplus, and in the second set a \$10 billion deficit.
 - c. \$5 billion surplus, and in the second set a \$10 billion surplus.
 - d. \$5 billion surplus, and in the second set a \$10 billion deficit.
 - e. There is insufficient information to answer this question.

8. If the current market interest rate for loanable funds is above the equilibrium level, then
- a. the quantity of loanable funds demanded will exceed the quantity of loanable funds supplied and the interest rate will rise.
 - b. the quantity of loanable funds supplied will exceed the quantity of loanable funds demanded and the interest rate will rise.
 - c. the quantity of loanable funds demanded will exceed the quantity of loanable funds supplied and the interest rate will fall.
 - d. the quantity of loanable funds supplied will exceed the quantity of loanable funds demanded and the interest rate will fall.

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9. Suppose equilibrium exists in the market for loanable funds. Use the following table to determine the quantity of funds supplied in this market.

GDP	\$8.7 trillion
Consumption Spending	\$3.5 trillion
Taxes minus Transfers	\$2.7 trillion
Government Purchases	\$3.0 trillion

- a. \$2.2 trillion
- b. \$2.5 trillion
- c. \$2.8 trillion
- d. \$3.1 trillion
- e. \$3.4 trillion

10. Suppose the market for loanable funds is in equilibrium. Using the table below, determine the quantity of funds demanded.

GDP	\$100 billion
Consumption	\$65 billion

Taxes minus Transfers	\$15 billion
Government purchases	\$20 billion

- a. \$25 billion
- b. \$20 billion
- c. \$15 billion
- d. \$10 billion
- e. \$5 billion

11. If the nominal interest rate is 10 percent and the inflation rate is 4 percent, then the real interest rate is

- a. 14 percent.
- b. 6 percent.
- c. 2.5 percent.
- d. 4/10 percent.

12. You are required to testify before Parliament concerning the effects of an increase in the government surplus. Which is the correct thing to say?

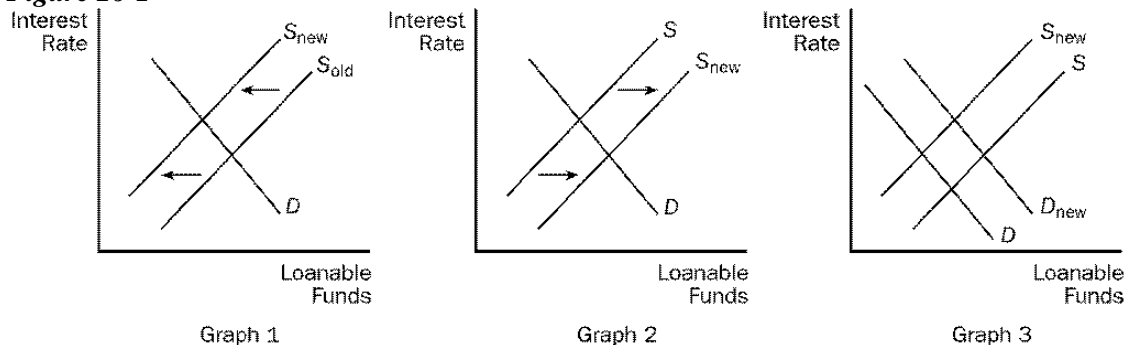
- a. The debt and interest rates will rise.
- b. The debt and interest rates will fall.
- c. The debt will rise and interest rates will fall.
- d. The debt will fall and interest rates will rise.

13. The fall in investment due to government borrowing is called

- a. the Barro Reduction.
- b. the Solow Residual.
- c. the Ricardian Principle.

Use the figure below for the following questions.

Figure 26-1



14. Refer to Figure 26-1. Which of the graphs in the figure above shows the effects of an increase in the tax rate on saving?

- a. graph 1
- b. graph 2
- c. graph 3
- d. None of the above are correct.

15. Refer to Figure 26-1. Which of the graphs in the figure above shows the effects of instituting a national sales tax and simultaneously lowering the income tax rate?

- a. graph 1
- b. graph 2
- c. graph 3
- d. None of the above are correct.

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