

ANSWER KEY

Economics 1012B
Introduction to Macroeconomics
Spring 2006
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First Midterm Examination
February 2, 2006

Answer all of the following questions by selecting the most appropriate answer on your bubble sheet. Be sure to read each question carefully. Each question is worth 2 points (100 points total) and will count as 20 per cent of your final course grade.

NOTE: The use of calculators is prohibited.

1. The study of economics does NOT include which of the following:

- A) Decisions made by individuals with finite resources.
- B) Decisions made by individuals with infinite resources.
- C) The Canadian government deciding whether to send troops to support the American war effort in Iraq.
- D) General Motors deciding where to build a new plant.

Ans: B

Feedback: Except for individuals with infinite resources (including time), all of the choices above involve either individuals, firms or governments trying to make choices from a set of alternatives when faced with scarce resources.

2. Economics assumes all of the following EXCEPT:

- A) Decision makers often make choices that are not in their best interests.
- B) Decision makers have alternatives.
- C) Decision makers make optimal choices.
- D) Decision makers have scarce resources.

Ans: A

Feedback: See definition in the textbook. Economics studies situations where decision makers act in their own self-interest, whatever that may be.

3. An economic model:

- A) includes all the factors that determine the decisions of consumers.
- B) simplifies the real world.
- C) includes assumptions that are true for all decision makers in the real world.
- D) all of the above.
- E) none of the above

Ans: B

Feedback: See definition of an economic model in the textbook

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4. Which of the following is true of economic models?
- A) They include assumptions of the behaviour of decision makers that MAY NOT always be true of all decision makers in the real world.
 - B) They include assumptions on the behaviour of decision makers that ARE always true of all decision makers in the real world.
 - C) Includes all the factors affecting decision makers in the real world.
 - D) They never simplify the real world.

Ans: A

Feedback: See the discussion of economic models in the textbook.

5. The sunk costs of studying for a test are 100; the marginal benefits are 200. Following economic reasoning, you should:
- A) study for the test.
 - B) not study for the test.
 - C) study for the test until the marginal benefit falls to 100.
 - D) obtain more information before making a decision.

Ans: D

Feedback: To be able to make a decision you need to know the marginal costs, not the sunk costs.

6. The table below shows how the marginal benefit of video tape rentals varies for Carol with the number rented per month.

Tapes rented per month	Marginal benefit of Renting an additional tape
1	\$6.00
2	\$5.00
3	\$4.00
4	\$3.00
5	\$2.00

The price of each tape rental is reduced from \$2.99 to \$1.99. Assuming that the price of a rental accurately reflects the marginal cost to Carol and that she is rational:

- A) she will increase the number of tapes rented per month from 1 to 2.
- B) she will increase the number of tapes rented per month from 2 to 3.
- C) she will increase the number of tapes rented per month from 3 to 4.
- D) she will increase the number of tapes rented per month from 4 to 5.

Ans: D

Feedback: The economic decision rule is to do it if the relevant (marginal) benefits exceed the relevant (marginal) costs. If they don't, don't do it. Following the economic decision rule, Carol initially purchased 4 video tape rentals because the marginal benefit of only the first four rentals exceeded the marginal cost of \$2.99. When the price dropped

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to \$1.99, the marginal benefit of even the fifth rental exceeded its marginal cost, so Carol purchased 5 rentals.

7. Alan is sitting in a bar drinking beers that cost \$1 each. According to the economic decision rule, Alan will quit drinking when:

- A) the marginal benefit to him of an additional beer is less than \$1.
- B) the marginal cost to him of an additional beer is less than the marginal benefit.
- C) the marginal cost to him of an additional beer is greater than \$1.
- D) the marginal benefit to him of an additional beer is greater than \$1.

Ans: A

Feedback: Alan will quit drinking only when the marginal cost exceeds the marginal benefit.

8. The marginal benefit of another T-shirt this month to Mary is \$15. If the \$10 price of T-shirts reflects their marginal cost to Mary and Mary uses economic reasoning, then:

- A) she will sell the T-shirts she has to others who are willing to pay \$10.
- B) she cannot gain by buying more T-shirts.
- C) she will buy more T-shirts this month.
- D) she will not buy any T-shirts this month.

Ans: C

Feedback: The economic decision rule is do it if the marginal benefit exceeds the marginal cost and don't do it otherwise. Since the marginal benefit of buying more shirts exceeds the marginal cost, Mary will buy more shirts.

9. Marginal analysis suggests that you will engage in more of an activity if:

- A) the total benefit of the activity is less than the total cost.
- B) the additional benefit from the activity exceeds the additional cost.
- C) the total benefit from the activity exceeds the total cost.
- D) the additional cost of the activity exceeds the additional benefit.

Ans: B

Feedback: The economic decision rule is do more of something if the marginal benefit exceeds the marginal cost.

10. Your opportunity cost of taking this course is:

- A) the tuition you paid for the course.
- B) the net benefit of the activity you would have chosen if you had not taken the course.
- C) the net benefit of taking this course.
- D) the cost of the activity you would have chosen if you had not taken the course.

Ans: B

Feedback: Opportunity cost is what you must sacrifice when you choose an activity. By taking this course, you are sacrificing the benefit you could have obtained from the activity you would have chosen if you had not taken the course.

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11. The invisible hand theory argues that:

- A) markets allocate resources inefficiently unless the government intervenes.
- B) prices fall when quantity supplied is less than quantity demanded.
- C) prices rise when quantity supplied is greater than quantity demanded.
- D) markets allocate resources efficiently through the price mechanism.

Ans: D

Feedback: See the definition of the invisible hand in the text.

12. The fact that the price of a litre of milk is likely to be more expensive at a convenience store than at a supermarket is an example of:

- A) market forces.
- B) political forces.
- C) social forces.
- D) normative economics.

Ans: A

Feedback: The higher price of milk at convenience stores is the effect of the invisible hand, or market forces.

13. Market economies require private property rights because without these rights:

- A) governments planning would be impossible.
- B) equitable outcomes would be more difficult to achieve.
- C) market incentives to produce would be inadequate.
- D) self-interest would overwhelm selflessness and too little output would be produced.

Ans: C

Feedback: Private property rights give individuals control over private property. Without this control, incentives to produce and sell goods would be too limited to support markets.

14. In a market economy it is not by the benevolence of the butcher or baker that we expect our dinner, but by:

- A) their good will.
- B) their self-interest.
- C) their kindness.
- D) their civic mindedness.

Ans: B

Feedback: Markets emphasize selfishness and greed, not kindness and good will.

15. Markets coordinate economic decisions, according to Adam Smith:

- A) by relying on individuals to temper self-interest with concern for the good of society.
- B) by relying on the government to temper individual self-interest and direct it to social goals.

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- C) by assuming that self-interest, will be balanced by both social and political forces.
D) by relying on the market to channel individual self-interest toward the good of society.

Ans: D

Feedback: The quote by Adam Smith in the text can be summarized by, "markets coordinate economic activity by using the price mechanism to direct individuals' self-interest into society's interest."

16. In which of the following is the best example of a command economy:

- A) Canada.
B) The United States of America.
C) North Korea.
D) All of the above are good examples of command economies.
E) None of the above are good examples of command economies

Ans: C

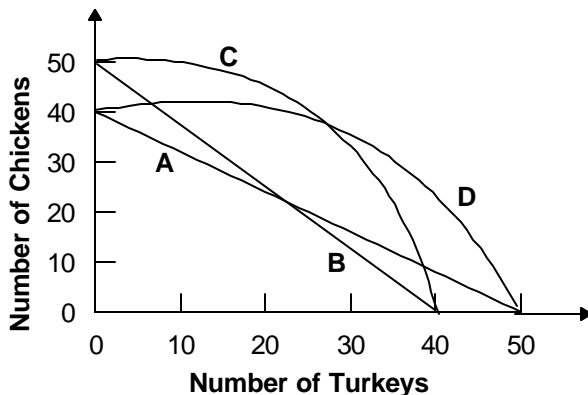
Feedback: North Korea is the closest example of a command economy and used by the textbook as an example of one. The textbook uses the Canada as an example of a mixed economy. The United States is also an example of a mixed economy

17. Adam Smith's invisible hand is used to explain how:

- A) economic activity is organized under capitalism.
B) government intervention was used under mercantilism.
C) social traditions and customs affected economic activity under feudalism.
D) the Industrial Revolution helped create a market economy.

Ans: A

Feedback: The invisible hand was used by Smith to show how economic activity would be coordinated under capitalism.



18. Refer to the graph above. Suppose that the opportunity cost of producing 10 chickens is always 8 turkeys. Given this, the relevant production possibility curve must be

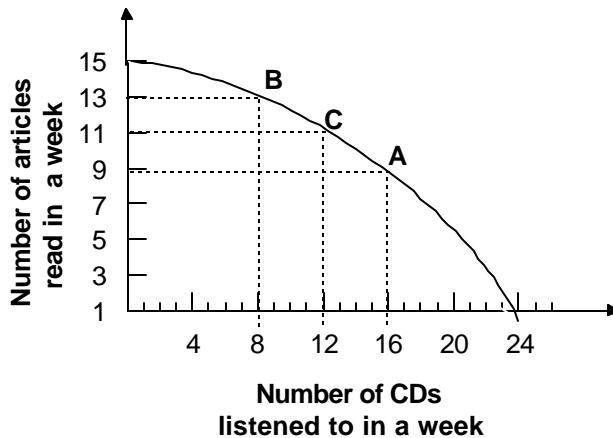
- A) A

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- B) B
- C) C
- D) D.

Ans: B

Feedback: This is the only curve along which opportunity cost is constant and equal to 0.8 turkeys per chicken.



19. Refer to the graph above. Given Vineetstan's production possibility curve of listening to CDs or reading magazine articles in one week, when moving from point B to point A the opportunity cost of listening to each CD in terms of reading articles is:

- A) $\frac{1}{2}$ article.
- B) 1 article.
- C) 2 articles.
- D) 3 articles.

Ans: A

Feedback: Moving from point B to A means giving up 4 articles for 8 CDs. Thus, the opportunity cost is $\frac{4}{8}$ or $\frac{1}{2}$.

20. If you move from a point inside the production possibility curve to a point on the production possibility curve, it follows that:

- A) efficiency is increased because the economy is now on the production possibility curve.
- B) efficiency is increased only if production of both goods increases.
- C) efficiency is increased as long as the combined output of both goods increases.
- D) efficiency is reduced if less of one good is produced.

Ans: A

Feedback: According to the text, efficiency is increased when the economy moves from a point inside the production possibility curve to a point on this curve. This is because resources are allocated more effectively as a result of this movement.

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21. An increase in productive resources available for use in an economy will:

- A) imply that the law of increasing costs no longer applies.
- B) shift the production possibilities curve inward.
- C) shift the production possibilities curve outward.
- D) have no effect on the production possibilities curve.

Ans: C

Feedback: An increase in productive resources will shift the production possibility curve out.

22. Economic growth accelerated after the seventeenth century because:

- A) markets fostered competition that pushed individuals to find better ways of doing things.
- B) the development of markets led to greater specialization.
- C) the development of markets resulted in greater trade among individuals and nations.
- D) all of the options are true.

Ans: D

Feedback: See the text for a discussion of each of these propositions.

23. In the factor market:

- A) households supply factors of production to business and are paid by business for doing so.
- B) households supply factors of production to business and are paid by government for doing so.
- C) business produces goods and services and sells them to households and government.
- D) government produces goods and services and supplies them to households and business.

Ans: A

Feedback: See the definition of the factor market in the text.

24. Governments do all of the following *except*:

- A) oversee the interaction of households and businesses in the goods and factor markets.
- B) demand labour services from households in the factor market.
- C) demand goods and services from businesses in the goods market.
- D) supply labour services to businesses in the factor market.

Ans: D

Feedback: Households, not the government, supply labour services to businesses.

25. In Canada, businesses decide what to produce based primarily on:

- A) the amount of resources allocated to them by state planners.
- B) what was produced in the past.
- C) what they believe will sell.
- D) what is most socially beneficial.

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Ans: C

Feedback: Businesses are motivated by profit. They decide what to produce based upon what they believe consumers will buy, not what is in society's best interest.

26. Which group has ultimate control over the economy?

- A) Business
- B) Households
- C) Multinationals
- D) Government

Ans: B

Feedback: Ultimately, households have control because households own businesses and elect governments.

27. Federal government's largest expenditures are on

- A) defense.
- B) social services.
- C) interest.
- D) education.

Ans: B

Feedback: Social services comprises the largest component of federal expenditures.

28. Since the early 1970s, Canada's merchandise trade balance has

- A) been in deficit.
- B) been in surplus.
- C) balanced for each year.
- D) been in deficit except for two years in the 1990s.

Ans: B

Feedback: Canada's exports of merchandise have consistently been greater than the imports.

29. To which country or region does Canada export the *most*?

- A) Japan.
- B) France.
- C) United States.
- D) European Union.

Ans: C

Feedback: See the trade data in the text.

30. International trade differs from domestic trade in all the following ways *except*:

- A) the law of comparative advantage does not apply in domestic trade.
- B) there may be tariffs on goods traded internationally

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- C) international trade typically requires the use of foreign exchange markets.
- D) all of the above

Ans: A

Feedback: The law of comparative advantage applies to different producers, whether they are within one country or in different countries.

31. An important way in which international trade differs from domestic trade is:
- A) international trade typically involves foreign exchange markets
 - B) the use of different communication systems.
 - C) the use of different transportation systems.
 - D) that money is not used in international trade.

Ans: A

Feedback: International trade involves potential barriers to trade.

32. If the price of chicken rises and the price of beef doesn't rise, consumers will respond by:
- A) substituting beef for chicken.
 - B) substituting chicken for beef.
 - C) reducing purchases of beef and chicken.
 - D) increasing purchases of beef and chicken.

Ans: A

Feedback: If the price of chicken has risen but the price of beef has not, the quantity of chicken demanded will fall as demanders substitute beef for chicken.

33. The distinction between demand and the quantity demanded is best made by saying that:
- A) demand is represented graphically by a curve and quantity demanded as a point on that curve.
 - B) the quantity demanded is represented graphically by a curve and demand as a point on that curve.
 - C) the quantity demanded is in a direct relation with prices, whereas demand is in an inverse relation.
 - D) the quantity demanded is in an inverse relation with prices, whereas demand is in a direct relation.

Ans: A

Feedback: Demand refers to a schedule of quantities that will be bought per unit of time at various prices. It refers to the entire demand curve. Quantity demanded refers to a specific amount that will be demanded per unit of time at a specific price. It refers to a point on a demand curve.

34. We would speak of a movement along the demand curve, rather than of a shift in demand, if:

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- A) price of that good rose.
- B) income rose.
- C) expectations changed.
- D) prices of other goods changed.

Ans: A

Feedback: A change in the price of good results in a movement along a demand curve. All other changes that affect demand result in a shift in demand.

35. Which statement is *not* consistent with the law of supply?
- A) More of a good will be supplied, the higher the price, other things constant.
 - B) Less of a good will be supplied, the lower the price, other things constant.
 - C) Quantity supplied of a good is directly related to the good's price.
 - D) Quantity supplied of a good is inversely related to the good's price.

Ans: D

Feedback: The law of supply states that, other things equal as the price of a good goes up, the quantity supplied goes up and as the price of a good goes down, the quantity supplied goes down. Price and quantity supplied are directly related.

36. Suppose farmers can use their land to grow either wheat or corn. The law of supply predicts that an increase in the market price of wheat will cause:
- A) an increase in the quantity supplied of wheat as farmers substitute production of wheat for production of corn.
 - B) an increase in the quantity supplied of corn as farmers substitute production of wheat for production of corn.
 - C) a decrease in the quantity supplied of wheat as farmers substitute production of corn for production of wheat.
 - D) an increase in the supply of wheat as farmers substitute production for wheat for the production of corn.

Ans: A

Feedback: The increase in the price of wheat causes a movement along the supply curve for wheat (change in quantity supplied), not a shift.

37. Suppose when you are offered \$5.00 per hour to work in the campus library, you choose not to work, but when you are offered \$8.00 per hour, you accept a part-time position. Your behaviour can best be explained by the fact that your supply of labour curve is:
- A) horizontal.
 - B) vertical.
 - C) downward-sloping.
 - D) upward-sloping.

Ans: D

Feedback: When the wage rate rose, the quantity of labour hours supplied rose, so the

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labour supply curve slopes upward.

38. Suppose a recent and widely circulated medical article reports new benefits of exercise. Simultaneously, the price of the parts needed to make bikes falls. What is the likely effect on the equilibrium price and quantity of exercise bikes sold?

- A) Price of exercise bikes decreases and quantity sold remains the same.
- B) Price of exercise bikes increases and quantity sold also increases.
- C) Price of exercise bikes remains the same and quantity sold increases.
- D) The change in price is ambiguous, but the quantity sold increases.

Ans: D

Feedback: The report shifts the demand for bikes to the right and the fall in input prices for bikes shifts the supply for bikes to the right. The effect on price is ambiguous, but the quantity sold increases.

39. Season tickets to the Toronto Maple Leafs games are sold out at \$30 a game and some people who wanted to get tickets couldn't buy them. As the season progresses, it is clear that Toronto will make it to the playoffs. What is the effect on the resale price of Toronto games, assuming resale is legal?

- A) Resale price will remain at \$30 a game.
- B) Resale price will rise and quantity supplied will rise.
- C) Resale price will rise and supply will rise.
- D) Resale price will decline as supply rises.

Ans: B

Feedback: Prospects of seeing a playoff team will shift demand for resale tickets to the right. As a result the price of resale tickets will rise as will quantity supplied.

40. In the 1990s, the Internet has begun to provide services before only provided by high-end PCs. At the same time, the price of computer chips to make high-end PCs has fallen by 75 percent. What is the effect of the events on equilibrium price and quantity of high-end PCs?

- A) Price falls continuously as does quantity sold.
- B) Price rises then falls while quantity sold falls continuously.
- C) Price falls continuously while quantity falls initially but then rises, recouping earlier losses.
- D) Price falls continuously and quantity rises continuously.

Ans: C

Feedback: The innovations of the Internet as a substitute for high-end PCs shifts the demand for high-end PCs to the left reducing both their price and quantity sold. The reduction in the price of chips to make computers, however, shifts the supply of high-end PCs to the right which further depresses prices, but leads to increased quantity sold (recouping earlier losses).

41. A decrease in quantity and price is most likely caused by:

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- A) a leftward shift in demand keeping supply constant.
- B) a leftward shift in supply keeping demand constant.
- C) a rightward shift in supply and demand
- D) a rightward shift in demand and a leftward shift in supply.

Ans: A

Feedback: Only a leftward shift in demand keeping supply constant will lead (with certainty) to a decrease in quantity and price. A rightward shift in supply and demand increases quantity, but has an indeterminate effect on price. A rightward shift in demand and a leftward shift in supply increases price but has an indeterminate effect on quantity.

42. After several years of slow economic growth, world demand for petroleum began to rise rapidly in the 1990s. Much of the increase in demand was met by additional supplies from sources outside OPEC. OPEC during this time was unable to restrain output among members in its effort to lift oil prices. What best describes these events?

- A) The rise in demand shifted the demand for oil to the right. OPEC actions shifted the demand for oil back to the left.
- B) The rise in demand shifted the demand for oil to the right. As price rose, supply of oil also rose.
- C) The rise in demand shifted the demand for oil to the right. As price rose, quantity of oil supplied rose.
- D) The rise in demand reflects a movement down along the demand curve as supply shifted to the right when suppliers produced more oil.

Ans: C

demand for oil is reflected by a shift to the right in the demand for oil. As a result, price rose and quantity supplied also rose. That existing suppliers supplied more oil is reflected by the movement along the existing supply curve. OPEC had no effect on the market.

43. Per capita real output:

- A) increases as real GDP increases.
- B) is unaffected by changes in real GDP.
- C) decreases as real GDP increases.
- D) increases, decreases, or does not change as real GDP increases depending on the rate of population growth.

Ans: D

Feedback: Since per capita real output is just real GDP divided by total population, what happens to per capita real output as real GDP increases depends on what happens to the total population.

44. Per capita real output:

- A) is a better measure of personal material consumption than real GDP.
- B) is a worse measure of personal material consumption than real GDP.
- C) is a better measure of the physical environment than real GDP.
- D) is a worse measure of the physical environment than real GDP.

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Ans: A

Feedback: Since per capita real output equals real GDP divided by the population, it provides a measure of a society's average level of personal consumption, unlike real GDP.

45. Economic growth:

- A) has always existed.
- B) has waxed and waned throughout history .
- C) accelerated sharply after the introduction of markets at the end of the 18th century.
- D) has slowed since 1950.

Ans: C

Feedback: See the discussion of growth rates in the text.

46. Cyclical unemployment is defined as:

- A) unemployment resulting from fluctuations in economic activity.
- B) unemployment that results from structural changes in the economy.
- C) unemployment that results from changes in technology.
- D) unemployment that results from the aging of the population.

Ans: A

Feedback: See the definition of cyclical unemployment in the text.

47. Use the following table to calculate the unemployment rate. Select the correct answer from the options below.

	In millions
Civilian population	300
People incapable of working	25
People not looking for work	75
Unemployed workers	8

- A) 2 percent.
- B) 4 percent.
- C) 6 percent.
- D) 8 percent.

Ans: B

Feedback: First find the labour force (civilian population less people incapable of working less people not looking for work: $300 - 25 - 75 = 200$). Now divide the number of unemployed workers by the labour force and multiply the result by 100 to obtain the unemployment rate. This calculation yields $(8/200)*100 = 4\%$.

48. If the price of clothing (which accounts for 5% of total expenditures in the CPI basket), rises by 10% in one year while the prices of all other goods remain constant, by

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how much will the CPI rise?

- A) 0.5 percent
- B) 5 percent
- C) 10 percent
- D) 50 percent

Ans: A

Feedback: Multiply the share by the rise in the price ($.05 \times 10\% = .5\%$)

49. If prices have risen by 5% in one year, real output:

- A) must have risen by 5% in that same year.
- B) must have risen by less than 5% in that same year.
- C) must have risen by more than 5% in that same year.
- D) may have changed by any amount in that same year.

Ans: D

Feedback: The percent change in real output equals the percent change in nominal output less the percent change in the price level. We cannot know how much real output changed without knowing the change in nominal output too.

50. A Classical economist is most likely to support government intervention when the economy is in:

- A) a recession.
- B) a boom.
- C) a depression.
- D) an expansion.

Ans: C

Feedback: Almost all economists believe government should intervene during a depression.