UNIVERSITY OF TORONTO
Faculty of Arts and Science

APRIL/MAY EXAMINATIONS 2009

ECO 100Y1 Y

Duration: 3 hours

Examination Aids allowed: Non-programmable calculators only

INSTRUCTIONS: **Students are required to do Part I and ONE of Parts II, III, IV, or V. Part I is the multiple choice section and is worth 50%. Record all your answers for Part I on the SCANTRON sheet provided and in the examination booklets (Note: in case of any disagreement, the answer to be marked is the one on the SCANTRON sheet). For the Scantron sheets please use a black pencil or a black or blue ball-point pen. There is no penalty for guessing in the multiple choice so be sure to provide an answer for every question. Answers for the other Part will be written in examination booklets. The blank pages may be used for rough work (which will not be marked).**

PART I To be answered by all students.

PART II To be answered by students from Professor Pesando's section (L0101)

PART III To be answered by students from Professor Indart's section (L0201)

PART IV To be answered by students from Professor Carr's section (L0301)

PART V To be answered by students from Professor Wolfson's section (L5101)

PART I [50%]

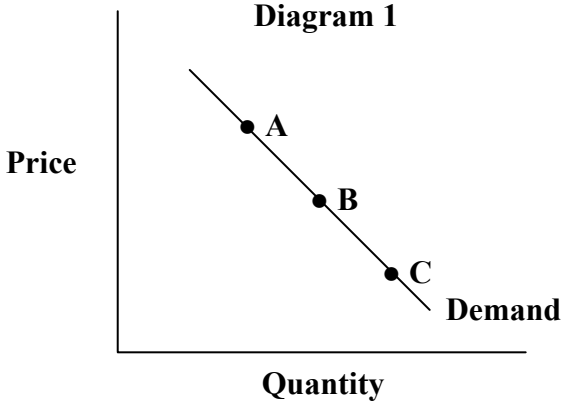
MULTIPLE CHOICE QUESTIONS

(To be answered by all students)

INSTRUCTIONS:

- Multiple choice questions are to be answered using a **black pencil** or a **black or blue ball-point pen** on the separate **SCANTRON sheet** being supplied.
- **Be sure to fill in your name and student number on the SCANTRON sheet!** Write the **name of your instructor** on the **SCANTRON sheet** (in the area where it says "DO NOT WRITE IN THIS SPACE").
- Each question is worth 1 mark. **No deductions will be made for incorrect answers.**
- **Write your answers to the multiple choice questions ALSO on the first page of the first examination booklet used for short answer questions.** You may use this question booklet for rough work, **and then transfer your answers to each multiple choice question onto the separate SCANTRON sheet.** Your answers **must be** on the SCANTRON sheet. In case of a disagreement, **the answer to be marked is the one on the SCANTRON sheet.**

Diagram 1



1. In Diagram 1, the price elasticity of demand

   a) at point A is greater than at point C.
   b) is equal at points A, B, and C.
   c) at point A is less than at point C.
   d) at point A is equal to that at point C.
   e) none of the above.

2. If the net tax rate is 50 percent of income and the marginal propensity to consume (MPC) out of disposable income is 0.8, what is the marginal propensity to consume out of GDP?

   a) 0.1.
   b) 0.2.
   c) 0.4.
   d) 0.8.
   e) none of the above.

3. Price elasticity of demand

a) is greater than one if the percentage increase in the commodity's price is greater than the percentage decline in quantity demanded.
b) is higher for an entire group of related products than it is for a particular product in that group.
c) is a positive number because price and quantity demanded move in the same direction.
d) is very small when good substitutes are readily available for the commodity.
e) usually increases over time.

4. A profit-maximizing monopoly, facing a positive marginal cost, will never produce at an output level

a) at which it would make economic losses.
b) where marginal revenue is less than price.
c) at which average cost is greater than marginal cost.
d) in the inelastic range of its demand curve.
e) in the elastic range of its demand curve.

5. When a negative externality occurs in the production of a good, which of the following statements is true?

a) Market price will be too high relative to the socially efficient price.
b) The market supply schedule would be higher if all costs were included.
c) The market supply curve overstates the total costs of production.
d) Market equilibrium output will be too low relative to the socially efficient level of output.
e) None of the above is true.

6. If there is only one chartered bank, the public holds no currency, and the bank's desired reserve ratio is 10 percent, a new bank deposit of $500,000 arising from an open market operation results in the bank's deposits eventually increasing by _____ and an increase in the bank's reserves of _____.

a) $500,000; $5,000,000.
b) $5,000,000; $500,000.
c) $9,500,000; $500,000.
d) $500,000; $50,000.
e) None of the above.

7. Oil sands projects require two to six barrels of water to produce one barrel of oil and all this water is ultimately disposed as waste material containing highly toxic chemicals. Economic efficiency requires that in oil sands projects the

a) marginal private cost of producing oil must equal its marginal benefit.
b) firms operating the projects must reduce the quantity of water they use to produce a barrel of oil.
c) marginal private cost plus the marginal external cost of producing oil must equal its marginal benefit.
d) marginal social cost of pollution be at a minimum.
e) None of the above.

8. Consumers will bear a larger burden of an excise tax if

a) demand is relatively elastic and supply is relatively inelastic.
b) the tax is collected by firms rather than remitted directly to the government by consumers.
c) both demand and supply are relatively elastic.
d) demand is relatively inelastic and supply is relatively elastic.
e) both demand and supply are relatively inelastic.

9. Suppose a market is in equilibrium at price P_0, and then an excise tax of t dollars per unit of the good is imposed. At a price of $(P_0 + t)$ there will be excess _____ for the good unless the demand curve is _____.

a) tax; unit elastic.
b) supply; vertical.
c) demand; vertical.
d) supply; horizontal.
e) demand; horizontal.

10. An art collector recently sold a piece of pottery for $300. He had purchased it for $200 only two years earlier. How will the most recent sale affect current GDP?

a) GDP will increase by $300.
b) GDP will increase by $200.
c) GDP will decrease by $100.
d) GDP will not change.
e) GDP 2 years ago must be adjusted downwards by $200, and current GDP will rise by $300.

11. Suppose that between year 1 and year 2 the nominal GDP of an economy increased from $1 billion to $3 billion and that the appropriate index of prices increased from 100 in year 1 to 200 in year 2. GDP for year 2 in terms of year 1 prices would be

a) $6 billion.
b) $3 billion.
c) $1.5 billion.
d) $2 billion.
e) None of the above.

The following data show the total output for a firm when specified amounts of labour are combined with a fixed amount of capital. When answering the questions, you are to assume that the wage per unit of labour is $25 and the cost of the capital is $100.

TABLE 1

Labour per unit of time	**Total Output**
0	0
1	25
2	75
3	175
4	250
5	305

12. Refer to Table 1. The marginal cost of producing the 250^{th} unit is approximately

a) 33 cents.
b) 41 cents.
c) 45 cents.
d) 74 cents.
e) 82 cents.

13. Refer to Table 1. The average total cost for 250 units of output is approximately

a) 33 cents.
b) 40 cents.
c) 63 cents.
d) 80 cents.
e) $1.00.

14. Suppose that the quantity demanded of a good rises from 90 units to 110 units when the price falls from $1.20 to 80 cents per unit. The price elasticity of demand for this product is:

a) 4.0.
b) 1.5.
c) 2.0.
d) 1.0.
e) 0.5.

15. If per capita income increases by 10 percent and household expenditures on fur coats increase by 15 percent, one can conclude that the price elasticity of demand for fur coats is:

a) positive.
b) not determinable from the information given.
c) elastic.
d) unity.
e) inelastic.

16. If Michelle used $1000 from her savings account, which was paying 6 percent interest annually, to invest in her brother's new sporting-goods store, the opportunity cost of her investment on an annual basis would be

a) her share of the store's profits.
b) $60.
c) $1,000.
d) $1,060.
e) None of the above.

17. Suppose that, in current dollar terms, GDP increased by approximately 7 percent between one period and the next, but real GDP fell by 2 percent. Which of the following explanations is most likely?

a) prices fell by 9 percent.
b) prices fell by 2 percent.
c) output rose by 2 percent.
d) prices increased by 7 percent.
e) none of the above.

18. How much would the production of a canoe add to GDP if the shell costs $250, the paint costs $20, the finisher costs $35, the manufacturer sold it to the dealer for $500, and the dealer sold it to his customer for $700?

a) $1,605.
b) $1,300.
c) $700.
d) $500.
e) $300.

19. Suppose a firm's fixed costs are $100 and marginal cost is constant regardless of output. Which of the following is then true?

a) Marginal cost will be less than average variable cost.
b) Average variable cost will be rising as output rises.
c) Average total cost will decrease when output is increased.
d) Marginal cost will equal average total cost.
e) None of the above.

20. If firms' marginal costs rise rapidly as output increases, the

a) demand curve will tend to be steep.
b) elasticity of demand will tend to be low.
c) price elasticity of supply will tend to be high.
d) price elasticity of supply will tend to be low.
e) supply curve will tend to be flat.

21. In the short run, an increase in fixed costs for a perfectly competitive firm should lead to

a) a decrease in output.
b) a decrease in the number of sellers.
c) a decrease in the units of fixed factor that the firm uses.
d) all of the above.
e) none of the above.

TABLE 2

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

- In Country A it takes Xa units of resources to produce one unit of X and Ya units of resources to produce one unit of Y.
- In Country B it takes Xb units of resources to produce one unit of X and Yb units of resources to produce one unit of Y.

22. Refer to Table 2. Country A has an absolute advantage in producing good X if

a) Xa = Xb.
b) (Xa/Ya) is less than (Xb/Yb).
c) Xa is less than Ya.
d) (Xa/Xb) is less than (Ya/Yb).
e) Xa is less than Xb.

23. Refer to Table 2. Country A has a comparative advantage in producing good X if

a) (Xa/Xb) is greater than (Ya/Yb).
b) (Xa/Ya) is less than (Xb/Yb).
c) (Xa/Ya) is greater than (Xb/Yb).
d) Xa is less than Yb.
e) Xa = Xb.

24. Suppose a firm producing digital cameras is operating at a level of output where marginal cost is higher than average total cost. If the firm produces one more camera, average total cost will

a) fall.
b) remain constant.
c) be at a maximum.
d) rise.
e) None of the above.

25. Because bagels and cream cheese are often eaten together, they are complements. We observe that both the equilibrium price of cream cheese and the equilibrium quantity of bagels have risen. What could be responsible for this pattern?

a) An increase in the price of flour (used to produce bagels).
b) A fall in the price of milk (used to produce cream cheese).
c) An increase in the price of milk.
d) A fall in the price of flour.
e) A decrease in the price of muffins, a close substitute for bagels.

26. An appreciation of the domestic currency

a) lowers the domestic price of imported goods.
b) raises the domestic price of imported goods.
c) raises the world price of imported goods.
d) lowers the world price of domestic goods.
e) None of the above.

27. One region is said to have an absolute advantage over another region in the production of good X when

a) the first region has a more productive labour force than the second.
b) there is no demand for good X in the second region.
c) the first region has a larger supply of the raw materials required to produce good X.
d) the opportunity cost of one unit of X is lower in the first region than in the second region.
e) None of the above.

28. At its present level of output of 100 units, a competitive firm discovers that: 1) its total fixed costs are $200; 2) its marginal cost is $6; and 3) its average total cost is $7. The price of the commodity being produced is $6. If the firm wishes to maximize profits, which of the following statement is correct?

a) The firm is making economic losses of $100 and should shut down production.
b) The firm is making economic losses but should continue to operate as it is.
c) The firm is making economic losses greater than its total fixed cost and should shut down production.
d) The firm should increase output to reduce its economic losses.
e) The firm should decrease output to reduce its economic losses.

29. Consider two countries that can produce rice and other products. If neither country has an absolute advantage in the production of rice,

a) rice will still be traded as long as one of the countries has a comparative advantage in its production.
b) the opportunity cost of producing rice must be identical in the two countries.
c) then rice should not be produced.
d) there is no possibility that either country will import rice from the other.
e) neither country can possibly have a comparative advantage in the production of rice.

30. If losses are being made by firms in a competitive industry, some firms will eventually exit. This will shift the industry

a) demand curve leftward, causing market price to fall in the short run.
b) demand curve rightward, causing market price to rise in the short run.
c) short-run supply curve rightward, causing market price to rise in the short run.
d) short-run supply curve leftward, causing market price to fall in the short run.
e) None of the above is true.

31. If Canada has an absolute advantage in the production of oil relative to the United States, then

a) the opportunity cost of producing oil is higher in Canada than in the United States.
b) Canada also has a comparative advantage in producing some good other than oil.
c) Canada also has a comparative advantage in producing oil.
d) Canada may or may not have a comparative advantage in producing oil relative to the United States.
e) the opportunity cost of producing oil is lower in Canada than in the United States.

32. A local ice cream parlour has the following data: market price is $3.50, output is 100 ice cream cones, average total cost (ATC) is $4.00, and average variable cost (AVC) is $3.00. Under these circumstances, the firm will

a) shut down in the short run since it's making economic losses of $50.
b) continue to operate since economic losses would be $150 if it were to shut down in the short run.
c) continue to operate since total fixed cost (TFC) is $100.
d) shut down in the short run since the price is less than the average total cost.
e) None of the above.

33. Assume that the following information applied to a firm in the short run at its current output: the industry price was $10; marginal revenue was $5; average total cost was $11; marginal cost was $5; average fixed costs were $3. On the basis of this information, which one of the following statements is correct in the short run?

a) the firm is not in perfect competition and is at a profit maximizing output.
b) The firm is in perfect competition and should produce a greater output.
c) The firm is not in perfect competition and should shut down.
d) The firm is in perfect competition and is at a profit maximizing output.
e) None of the above.

34. In the short run, if average total cost is increasing as output rises, then

a) marginal cost must be below average total cost.
b) average fixed costs must be increasing.
c) average total cost is no longer equal to the sum of average variable cost and average fixed cost.
d) total fixed costs must be increasing.
e) average variable cost must be increasing.

35. For a competitive firm, marginal revenue is

a) equal to both price and average revenue.
b) equal to price but greater than average revenue.
c) greater than average revenue and less than price
d) less than price.
e) equal to price but less than average revenue.

36. Suppose that in a perfectly competitive industry, the market price of the product is $6. Firm A is producing the output level at which average variable cost equals marginal cost, both of which are $5. Average total cost is $7. To achieve its optimum output, firm A should

a) reduce output.
b) increase its advertising.
c) change the price of the product.
d) expand output.
e) leave output unchanged.

37. The spaghetti sauce industry is a constant cost industry initially in long run equilibrium. Suppose that the government imposes on producers a $1 tax per pound of spaghetti sauce. What will happen to the spaghetti sauce industry in the long run?

a) Market price, industry output, firms' output, and the number of firms will not change.
b) Market price will increase, industry output will decrease, firms' output will decrease, and the number of firms will decrease.
c) Market price will increase, industry output will fall, firms' output will not change, and the number of firms will decrease.
d) Market price will remain unchanged, industry output will fall, firms' output will not change, and the number of firms will decrease.
e) Market price will rise, industry output will remain unchanged, firms' output will fall, and the number of firms will increase.

38. When the price of flour used to produce bread falls, the consumer surplus associated with the consumption of bread

a) will definitely increase.
b) will definitely decrease.
c) will increase if bread is a normal good.
d) will decrease if bread is an inferior good.
e) None of the above.

39. Suppose that the incomes of buyers in a market for a normal good decline and there is a reduction in input prices. What would you expect to occur in this market?

a) Equilibrium price would increase, but the impact on the equilibrium quantity would be ambiguous.
b) Equilibrium price would decrease, but the impact on the equilibrium quantity would be ambiguous.
c) Both equilibrium price and equilibrium quantity would increase.
d) Equilibrium quantity would increase, but the impact on the equilibrium price would be ambiguous.
e) Equilibrium quantity would decrease, but the impact on the equilibrium price would be ambiguous.

40. For Mohammad, X is a normal good and a substitute for good Y. All else equal, which of the following will cause Mohammad's demand for good X to shift to the right?

a) A decrease in the price of good X.
b) A decrease in his income.
c) An increase in the market demand for good X.
d) A decrease in the price of good Y.
e) A decrease in the supply of good Y.

41. Which one of the following would cause the demand curve in an industry to increase?

a) The price of a substitute decreased.
b) Disposable income increased and the good was an inferior good.
c) The price of a complement increased.
d) Disposable income decreased and the good was a normal good.
e) None of the above.

42. Which one of the following would be considered an expansionary monetary policy?

a) An increase in the exchange rate.
b) A decrease in personal income taxes.
c) The Bank of Canada sells government bonds.
d) The Bank of Canada buys government bonds.
e) None of the above.

43. Government bonds are as safe as money, but money is a better medium of exchange. The opportunity cost of holding money

a) rises as the interest rate paid on government bonds rises, inducing people to hold less money.
b) falls as the interest rate paid on government bonds rises, inducing people to hold less money.
c) rises as the interest rate paid on government bonds falls, but this has no effect on money holdings.
d) falls as the interest rate paid on government bonds rises, inducing people to hold more money.
e) rises as the interest rate paid on government bonds rises, inducing people to hold more money.

44. Suppose that a monopolist can sell 20 units of output per day for a price of $10 each and 21 units of output per day for $9.80 each. The marginal revenue for the 21st unit is equal to

a) -$0.20.
b) $5.80.
c) $9.80.
d) $0.20.
e) uncertain, as not enough information is provided to compute marginal revenue.

45. If marginal revenue is negative at the current level of output and the marginal cost is positive at the current level of output, then

a) the price must be negative.
b) a profit-maximizing monopoly should increase output.
c) the elasticity of demand is greater than one at that output.
d) demand must be elastic at that output.
e) a profit-maximizing monopoly should decrease output.

46. In a cartel, the incentive to cheat is significant since

a) each individual member has the incentive to restrict its own output to maximize profits.
b) the marginal cost is greater than the cartel price at the profit-maximizing output level.
c) each firm has the incentive to raise its price to reap monopoly rewards.
d) each firm has the incentive to expand output to increase its profits.
e) None of the above.

47. Consider a simple economy, where the marginal propensity to consume out of income is 0.75, and the marginal propensity to import is 0.25. There is no government spending or taxes. Suppose that investment spending rises by $100. Once a new equilibrium is reached, investment spending and consumption of domestic goods will increase by

a) $100 and $200, respectively.
b) $100 and $100, respectively.
c) $50 and $150, respectively.
d) $100 and $150, respectively.
e) $0 and $200, respectively.

TABLE 3

Price Per Ticket	Quantity Demanded
$1	4
$2	3
$10	2
$20	1

48. Refer to Table 3. The fan buys 2 tickets at $10 each. We can conclude that the fan values the two tickets at

a) $10.
b) $20.
c) $30.
d) Less than $30, but more than $20.
e) $32.

49. Refer to Table 3. Suppose the game is sold out, and the fan cannot buy tickets except from a scalper. The scalper offers to sell the fan one ticket at $20 and a second ticket at $10. If the fan accepts this offer, what is the value of consumer surplus?

a) $10.
b) $20.
c) $30.
d) More than $30, but less than $32.
e) $0.

50. If the demand for a good fluctuates, but supply is constant, then which of the following combinations would generally yield the greatest price fluctuations?

a) large demand fluctuations and inelastic supply.
b) large demand fluctuations and elastic supply.
c) small demand fluctuations and elastic supply.
d) small demand fluctuations and a unit elastic supply.
e) small demand fluctuations and inelastic supply.