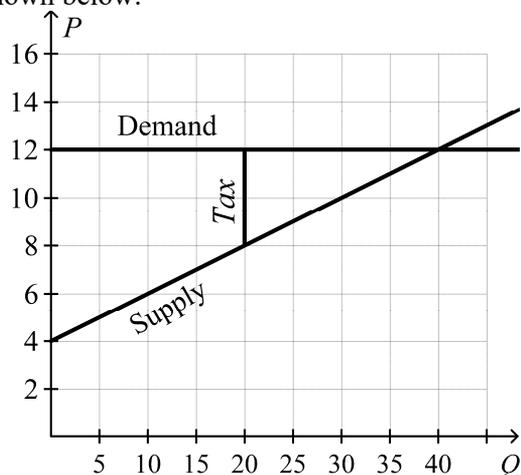


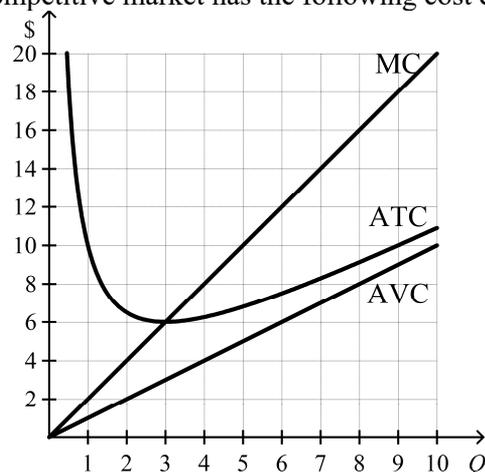
1. International trade raises the economic well-being of a nation in the sense that
 - a. governments choose to trade the products that are most beneficial to the nation.
 - b. the gains of the winners exceed the losses of the losers.
 - c. the value of the nation's currency rises when it begins to trade.
 - d. everyone in an economy gains from trade.

Figure TXA. Suppose the government enacts an excise tax in this perfectly-competitive market as shown below.



2. **See Figure TXA.** What proportion of the tax is paid by consumers and producers?
 - a. Consumers pay the entire tax.
 - b. Consumers and producers each pay 50 percent of the tax.
 - c. It depends on who sends the tax to the government.
 - d. Producers pay the entire tax.
3. **See Figure TXA.** The loss of social surplus caused by the tax is
 - a. 160.
 - b. 90.
 - c. 0.
 - d. 40.
4. **See Figure TXA.** The total reduction in consumer surplus as a result of the tax is
 - a. 0.
 - b. 240.
 - c. 120.
 - d. 40.

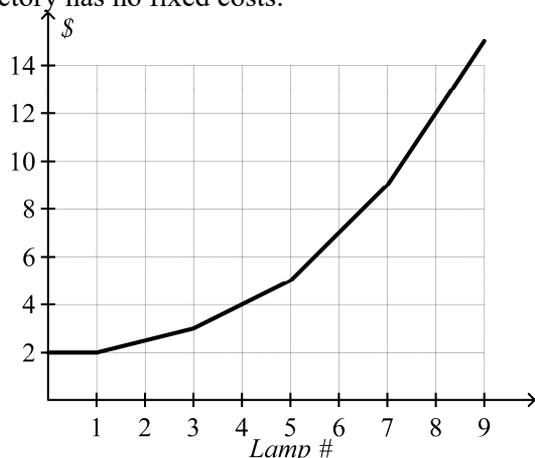
Figure QMB. Suppose each firm in a perfectly competitive market has the following cost curves:



5. **See Figure QMB.** Each firm has a fixed cost of approximately
 - a. 0.
 - b. \$9.
 - c. \$6.
 - d. MORE information is needed.
6. **See Figure QMB.** Each firm will remain open *in the short run*
 - a. only if the MC is less than \$6.
 - b. only if the price is at least \$6.
 - c. at any price greater than zero.
 - d. only if the AVC is at least \$6.
7. **See Figure QMB.** If the price is \$6, then in long-run equilibrium, each firm will
 - a. produce 3 units.
 - b. earn profits of \$9 per period.
 - c. shut down.
 - d. continue to expand.
8. Suppose the price elasticity of demand for widgets is -1 . At a price of \$20, a store sells 200 widgets per month. The store owner decides that she wants to sell 220 widgets per month. What price should she set?
 - a. \$19.00
 - b. \$8.40
 - c. \$18.00
 - d. \$14.00
9. Meat in a supermarket is
 - a. rivalrous but nonexcludable.
 - b. excludable and rivalrous.
 - c. excludable but nonrivalrous.
 - d. a public good.

10. Patents and copyrights often lead to
 - a. monopolistic competition.
 - b. legal monopolies.
 - c. perfect competition.
 - d. natural monopolies.

Figure BMC. The marginal costs of producing lamps for a factory in a perfectly competitive market. The factory has no fixed costs.



11. **See Figure BMC.** If the price of lamps is \$5, the factory will obtain about \$_____ of producer surplus. [Choose the closest value.]
 - a. 0.00
 - b. 8.50
 - c. 4.50
 - d. 17.00
12. **See Figure BMC.** How many lamps will the factory produce when the price of lamps is \$8?
 - a. 8
 - b. 0
 - c. 6
 - d. **MORE** information needed
13. **See Figure BMC.** The variable cost of producing 4 lamps is about \$_____. [Choose the closest value.]
 - a. 11.50
 - b. 16.50
 - c. 5.00
 - d. more than 50.00
14. When you calculate your opportunity cost of going to college, what portion of your college living expenses should be included?
 - a. all of your college living expenses
 - b. your college living expenses minus living expenses if you weren't in college
 - c. none of your college living expenses
 - d. your college living expenses minus the income you earn while attending college

15. Perfectly discriminating monopolies would
 - a. produce the quantity at which average cost is minimized.
 - b. sell to consumers at prices equal to their willingness to pay.
 - c. ignore cost when deciding how much to sell.
 - d. charge price less than marginal cost.

Scenario MRZ. Suppose Firm XYZ produces in a perfectly competitive market and has the following marginal costs: for each unit from 1 to 200, $MC = \$20$, and for each unit from 201 to 500, $MC = \$30$. The firm cannot produce more than 500 units. XYZ has no fixed costs.

16. **See Scenario MRZ.** If the market price is \$25, then the firm will produce _____ units and get a producer surplus of _____.
 - a. 1000, \$5000
 - b. 200, \$1000
 - c. 0, \$0
 - d. **UNDEFINED**, because price doesn't equal marginal cost
17. **See Scenario MRZ.** If the market price is \$40 then Firm XYZ will
 - a. shut down
 - b. produce 500 units.
 - c. continue to produce until price equals marginal cost.
 - d. **NONE** of the above
18. **See Scenario MRZ.** Suppose that a change in safety regulations creates a fixed cost of \$20. If the market price is \$40, then XYZ's profit will be
 - a. \$0
 - b. \$6980
 - c. \$4980
 - d. \$480
19. Binding rent controls are likely to
 - a. increase racial discrimination by landlords.
 - b. cause the demand curve to shift to the left.
 - c. increase the quality of rented apartments.
 - d. decrease illegal payments to landlords.
20. Capital formation is difficult in poor countries, because
 - a. their population cannot afford to save very much.
 - b. they cannot increase their money supply without creating inflation.
 - c. most poor countries are undemocratic.
 - d. they lack advanced digital technologies.

Scenario BST. Suppose farmers begin to treat cows with the hormone BST, which causes the cows to produce a lot more milk. Moreover, consumers don't know about BST, and the milk tastes the same to them. [Hint: Draw the graph on your own paper to help you answer.]

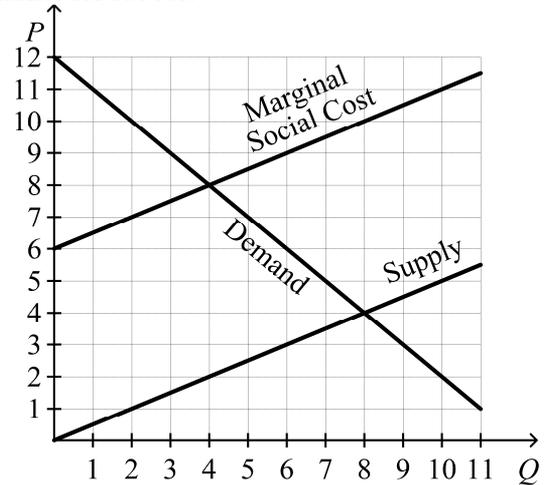
21. See **Scenario BST**. The supply curve for milk will
 - a. shift left.
 - b. be unaffected.
 - c. shift right.
 - d. rotate.
22. See **Scenario BST**. The demand curve for milk will
 - a. shift right.
 - b. rotate.
 - c. be unaffected.
 - d. shift left.
23. See **Scenario BST**. The equilibrium price of milk
 - a. will not change.
 - b. will increase.
 - c. could increase or decrease.
 - d. will decrease.

Table STX. The table below displays the willingness to pay of each consumer for his first three oranges (no one wants to eat more than three). Alex, Barb, and Carlo are the only buyers of oranges.

	1 st Orange	2 nd Orange	3 rd Orange
Alex	\$4.00	\$2.20	\$1.50
Barb	\$3.00	\$2.00	\$1.60
Carlo	\$1.60	\$0.60	\$0

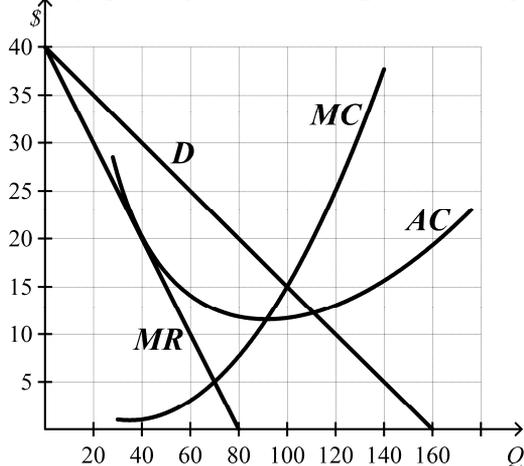
24. See **Table STX**. If the market price of an orange is \$2.10, consumer surplus will be
 - a. \$2.90.
 - b. \$2.20.
 - c. \$10.00.
 - d. \$1.40.
25. See **Table STX**. The total quantity of oranges demanded is exactly 2 if the price (P) of an orange satisfies
 - a. $\$1.55 < P < \1.65 .
 - b. $\$1.65 < P < \2.95 .
 - c. $\$2.25 < P < \2.95 .
 - d. $\$1.65 < P < \1.95 .

Figure EXT. The following graph represents the market for rubber.



26. See **Figure EXT**. If 4 units of rubber are produced and consumed, then
 - a. social surplus is maximized.
 - b. the market is inefficient.
 - c. the market is in equilibrium.
 - d. rubber must have positive externalities.
27. See **Figure EXT**. In order to reach the social optimum, the government could
 - a. apply a price ceiling of \$8 per unit.
 - b. impose a tax of \$3 per unit.
 - c. impose a tax of \$6 per unit.
 - d. impose a tax of \$2 per unit.
28. Suppose bad weather in California decreases the quantity of avocados harvested. The market for avocados is perfectly competitive. What happens to consumer surplus in the market?
 - a. Consumer surplus increases.
 - b. Consumer surplus is not affected by this change in market forces.
 - c. It depends on whether the elasticity of demand for avocados is more or less than 1.
 - d. Consumer surplus decreases.
29. Thieves steal laptop computers from unlocked BU dormitory rooms. Which of the following is **NOT** a social cost of laptop thefts?
 - a. the monetary value of the stolen laptop
 - b. the cost of the thief's time
 - c. the loss of your documents in the laptop's disk drive
 - d. the inconvenience of having to lock your dorm-room door

Figure RMN. This graph represents **Scruam Electronics**, a profit-maximizing nondiscriminating monopoly. [*AC* represents average total cost.]



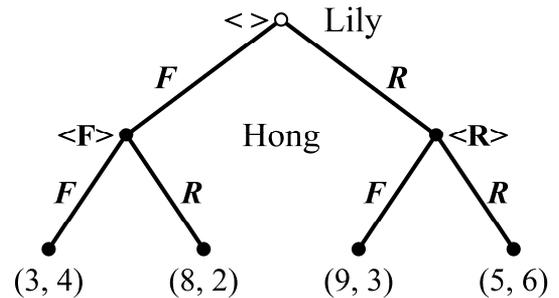
30. See **Figure RMN**. What price will Scruam charge?
- \$15.00
 - \$12.50
 - \$22.50
 - \$ 5.00
31. See **Figure RMN**. What price would a regulator set if the regulator wants to maximize social surplus?
- \$22.50
 - \$ 5.00
 - \$12.50
 - \$15.00
32. See **Figure RMN**. How many units would Scruam produce if Scruam could price-discriminate perfectly?
- 100
 - 70
 - 40
 - 80
33. Suppose the price of chicken increases by 4%, and the quantity supplied rises by 1% as a result. Then the price elasticity of supply is ____.
- 2
 - 1/2
 - 1/4
 - 1/2
34. Clean streets are public goods, partly because
- the condition of streets are regulated by local governments.
 - clean streets promote public health.
 - people can enjoy clean streets without paying for them.
 - only governments have the technology to keep streets clean.
35. Economists use models, because
- every economic situation is basically similar, so realistic details are unnecessary.
 - computers are able to process very large quantities of data.
 - models omit unimportant details and create a framework for analysis.
 - exceptions to the model make people seem to be irrational.
36. In competitive economies, many workers are often paid more than would be required to make them willing to do their jobs, because
- most workers do not enjoy their jobs.
 - competitive firms receive zero economic profits in the long run.
 - a fair wage maximizes profits.
 - firms compete with each other for labor.
37. Which of the following does **NOT** affect consumer demand for Samsung smartphones?
- the level of unemployment
 - expectations about future Samsung prices
 - the Chinese government raises the price of yttrium, needed for smartphone production.
 - iPhone prices
38. The supply of housing is more price-elastic in the long run than in the short run, because
- young people want bigger houses when they have children.
 - housing prices face price ceilings.
 - new housing takes a long time to construct.
 - housing is a big part of most people's budget.
39. Which of the following is an example of rent-seeking by EC101DD/EE teachers?
- Qingyan prepares carefully before she teaches her discussion sections.
 - Jiahao reads books on the best way to help students learn.
 - Michael gives easy tests so that students give him good evaluations.
 - Hong attends Michael's lectures so he can explain Michael's errors to students in his discussion sections.
40. Policy makers may not focus on increasing social surplus, because
- they may want to consider fairness too.
 - social surplus is not related to consumer value.
 - social surplus does not reflect damage to the environment.
 - they believe social surplus causes inflation.

Scenario RTB. Two firms, *A* and *B*, each produce the same product at $AC = MC = 40$. They each set prices: P_A and P_B . Prices can be anywhere between \$20 and \$100. If $P_A \neq P_B$, consumers buy 20 units from the low-price firm, and 0 from the high-price firm. If $P_A = P_B$, consumers buy 10 from each firm. The payoffs are the profits of each firm.

41. See Scenario RTB. How much profit does *each* firm receive if both firms charge \$60 per unit?
 - a. \$50
 - b. 0
 - c. \$200
 - d. \$100
42. See Scenario RTB. If both firms charge \$60 per unit, then
 - a. both firms will want to deviate.
 - b. neither firm will want to deviate.
 - c. only firm *A* will want to deviate.
 - d. only firm *B* will want to deviate.
43. See Scenario RTB. If Firm *A* charges \$40, which of the following prices is a best response for *B*?
 - a. \$40
 - b. \$50
 - c. \$60
 - d. *ALL* of the above
44. See Scenario RTB. Which of the following strategy profiles forms a Nash equilibrium?
 - a. firm *A* charges \$100 and *B* charges \$20
 - b. firm *B* charges \$100 and *A* charges \$20
 - c. both firms charge \$40
 - d. both firms charge \$100
45. The free-rider problem refers to the fact that
 - a. airline passengers with enough frequent-flyer points can fly free of charge.
 - b. it is hard to make people pay for something that they can get without paying.
 - c. public transportation always runs large deficits.
 - d. the marginal cost of allowing an additional consumer to enjoy a pure public good is zero.
46. A medical survey found that people who drink decaffeinated (decaf) coffee are more likely to get cancer than other people are. This implies that
 - a. avoiding decaf coffee would reduce the chance of getting cancer.
 - b. caffeine is unlikely to cause cancer.
 - c. chemicals in decaf coffee cause cancer.
 - d. *NONE* of the above

47. Jiahao works 20 hours per week at Stop&Shop and earns \$7.50 per hour. A new minimum-wage law in Massachusetts increases his wage to \$15.00 per hour. Then, Jiahao says to himself, "Great, now I don't have to work so many hours." This implies that
 - a. his demand curve for leisure is not downward sloping.
 - b. he does not want to 'buy' more leisure as he becomes richer.
 - c. for Jiahao, leisure is an inferior good.
 - d. the income effect on his demand for leisure is stronger than the substitution effect.

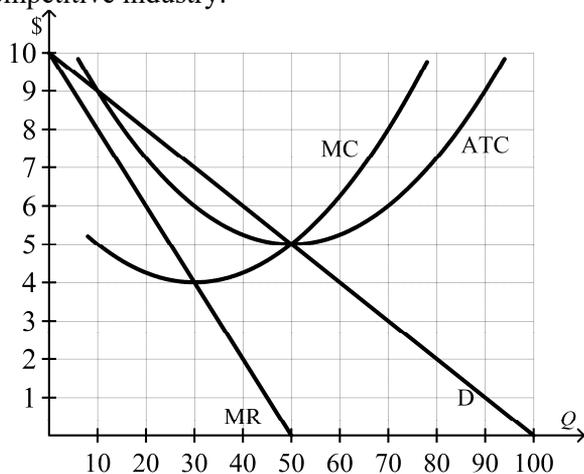
Figure LFR. In the game tree below, Lily decides whether to buy a ticket for football (F) or the opera (R). Hong looks at Lily's ticket, and then he decides between football and opera. Payoffs are given as (*Lily's payoff*, *Hong's payoff*).



48. See Figure LFR. Lily has _____ possible strategies; Hong has _____ possible strategies.
 - a. two; four
 - b. two; two
 - c. four; two
 - d. four; four
49. See Figure LFR. Which of the following is true about Lily?
 - a. She would rather see football with Hong than see it alone.
 - b. She would rather see football than opera, no matter what Hong does.
 - c. She would rather see football or opera alone than see either one with Hong.
 - d. *NONE* of the above
50. See Figure LFR. In a subgame-perfect equilibrium, Lily gets ____ and Hong gets _____.
 - a. 9; 3
 - b. 3; 2
 - c. 8; 4
 - d. 5; 6

51. Which of the following can best be provided efficiently by private firms without government assistance?
- clean rivers
 - a low crime rate
 - control of contagious diseases
 - organic fruit and vegetables

Figure XOR. The graph below describes the short-run situation of **Axon Memory Chips**, a profit-maximizing firm in a monopolistically competitive industry.



52. See **Figure XOR**. As described in this figure, Axon will
- earn a long-run economic profit.
 - earn a short-run economic profit.
 - suffer a short-run loss.
 - have to shut down.
53. See **Figure XOR**. In the short run, how many units of output will Axon produce?
- 30
 - 10
 - 0
 - 15
54. See **Figure XOR**. Which of the following will occur in the long run in this industry?
- Axon firm will suffer losses.
 - Axon will continue to earn economic profits.
 - Other firms will exit this industry.
 - Other firms will enter this industry.
55. See **Figure XOR**. Which answer is closest to the number of units that Axon would produce in long-run equilibrium.
- 10
 - 20
 - 40
 - 0

56. Cristiano Ronaldo is an extremely talented soccer (football) player with a salary of more than \$600,000 *per week!* What is true about Ronaldo?
- Most of his income is an economic rent to his talent.
 - Most of his income can be explained by his hard work.
 - His behavior is a good example of rent seeking.
 - NONE** of the above

Table MCB. The table below describes what happens when two fast-food chains, **Burger Pickle** and **McAful** run positive or negative advertisements (“ads”). The payoffs (**Burger Pickle, McAful**) displayed in each cell represent the percentage increase or decrease in profits for each chain.

		<i>McAful</i>	
		Positive	Negative
Burger Pickle	Positive	+1, -4	+4, +2
	Negative	-6, -2	-3, +6

Positive ads say good things about the firm’s own products; negative ads say bad things about competitor’s products.

57. See **Table MCB**. For Burger Pickle, using positive ads is
- a dominant strategy.
 - a losing strategy.
 - a dominated strategy.
 - self-defeating.
58. See **Table MCB**. In Nash equilibrium,
- Burger Pickle will use positive ads, and McAful will use negative ads.
 - both chains will use positive ads.
 - Burger Pickle will use negative ads, and McAful will use positive ads.
 - both chains will use negative ads.
59. See **Table MCB**. What is true about this game?
- The Nash equilibrium is Pareto efficient.
 - Both firms should go out of business.
 - All consumers prefer Burger Pickle.
 - The managers of the firms are irrational.
60. In Cournot competition, firms
- compete by choosing the quantities they will produce.
 - collude to fix prices and earn monopoly profits.
 - match quantities produced by their competitors.
 - compete by setting prices.

EC101 DD/EE Final Exam F21

Answer Section

MULTIPLE CHOICE

1. ANS: B	REF: R9	45. ANS: B	REF: R55
2. ANS: D	REF: R6	46. ANS: D	REF: R56
3. ANS: D	REF: R7	47. ANS: D	REF: R50
4. ANS: A	REF: R8	48. ANS: A	REF: R58
5. ANS: B	REF: R21	49. ANS: C	REF: R59
6. ANS: C	REF: R22	50. ANS: D	REF: R60
7. ANS: A	REF: R23	51. ANS: D	REF: R40
8. ANS: C	REF: R24	52. ANS: B	REF: R36
9. ANS: B	REF: R25	53. ANS: A	REF: R37
10. ANS: B	REF: R19	54. ANS: D	REF: R38
11. ANS: B	REF: R16	55. ANS: B	REF: R39
12. ANS: C	REF: R17	56. ANS: A	REF: R57
13. ANS: A	REF: R18	57. ANS: A	REF: R46
14. ANS: B	REF: R20	58. ANS: A	REF: R47
15. ANS: B	REF: R30	59. ANS: A	REF: R48
16. ANS: B	REF: R31	60. ANS: A	REF: R49
17. ANS: B	REF: R32		
18. ANS: B	REF: R33		
19. ANS: A	REF: R34		
20. ANS: A	REF: R35		
21. ANS: C	REF: R1		
22. ANS: C	REF: R2		
23. ANS: D	REF: R3		
24. ANS: A	REF: R4		
25. ANS: C	REF: R5		
26. ANS: A	REF: R27		
27. ANS: C	REF: R28		
28. ANS: D	REF: R26		
29. ANS: A	REF: R29		
30. ANS: C	REF: R41		
31. ANS: D	REF: R42		
32. ANS: A	REF: R43		
33. ANS: C	REF: R44		
34. ANS: C	REF: R45		
35. ANS: C	REF: R10		
36. ANS: D	REF: R11		
37. ANS: C	REF: R12		
38. ANS: C	REF: R13		
39. ANS: C	REF: R14		
40. ANS: A	REF: R15		
41. ANS: C	REF: R51		
42. ANS: A	REF: R52		
43. ANS: D	REF: R53		
44. ANS: C	REF: R54		