SECOND MIDTERM – VERSION #1

A total of 100 points are possible.

Last Name: _____   First Name: _____

Your Student ID Number: __ __ __ - __ __ - __ __ __ __

Please check your TA and the section number you were <u>assigned</u> to:

#01	Ryan Brady	#07	Jared Rodecker
#02	Ryan Brady	#08	Marcella Carrillo
#03	Bryan Murray	#09	Nichole Renda
#04	Bryan Murray	#10	Seungjoon Lee
#05	Jared Rodecker	#11	Seungjoon Lee
#06	Marcella Carrillo		

Part A: Multiple Choice Questions
(14 questions, each of which is worth 5 points)

Instructions: Answer these multiple choice questions on your Scantron. Write on the Scantron your name (last name first), student ID number, date, exam version number, and your section number in the "name," "subject," "date," "test no." and "hour" boxes respectively. For example,

NAME	McComb, Madeline		
SUBJECT	530-66-6271	TEST NO.	Vers. 1
DATE	2/4/2000	HOUR	Sect 4

** Warning **
If you first fill in an answer and then erase it to fill in a different one, and the first answer is not fully erased, the Scantron reader may detect two answers and not accept either one. Do not fill in an answer till you are sure this is the one you want to give, or you may not receive credit for the question.

1.
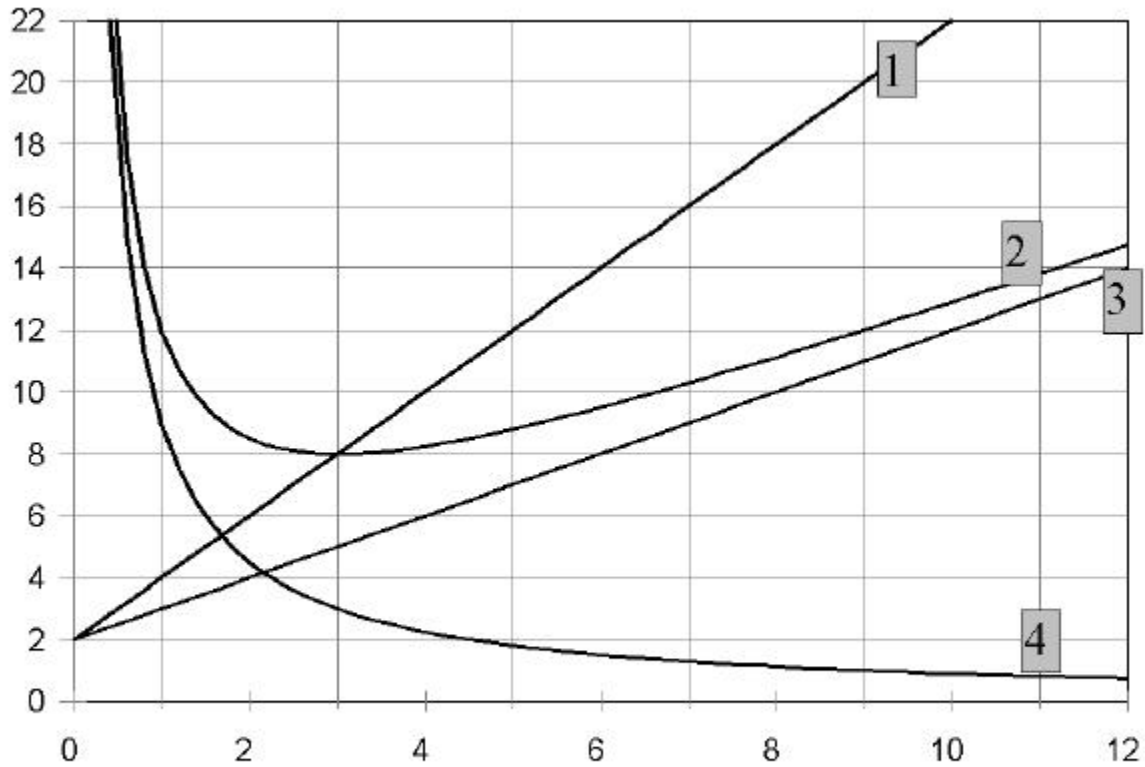
The above figure shows AFC, SATC, SAVC and SMC for a firm. Which is the correct labeling of the curves in the diagram?

	1	2	3	4
A.	SATC	SAVC	SMC	AFC
B.	AFC	SMC	SAVC	SATC
C.	*SMC*	*SATC*	*SAVC*	*AFC*
D.	SAVC	SATC	AFC	SMC
E.	SMC	AFC	SATC	SAVC

2.	Suppose that the firm in the above figure is a perfectly competitive one, and that the market price is $20. What is the closest approximation to the firm's profits in the short run?

A.	$0
B.	$8
C.	$9
D.	*$72*
E.	$81

3. Suppose the demand curve in a competitive market is given by $P = 12$. The market price is 12. **Consumer surplus** in this market is:

A.	***$0***
B.	0
C.	$12
D.	12
E.	$24

4. Suppose that in previous question that the supply curve is given by $Q_s = 20$. If the government imposes a **tax of $2 on consumers,** consumer surplus falls by:

A.	***$0***
B.	0
C.	$40
D.	40
E.	$24

5. Suppose that the demand curve for aspirin is given by $Q_d = 123$. At a market price of $8 what is the elasticity of demand for aspirin?

A.	-1
B.	***0***
C.	1
D.	8
E.	Infinity

6. Suppose the **income elasticity of demand** for aspirin is 0.1. This implies that

A.	Aspirin is only purchased by poor people.
B.	A 1% increase in price of aspirin will reduce demand by 0.1%.
C.	A 1% increase in price of aspirin will increase demand by 0.1%.
D.	***Aspirin is a necessity.***
E.	The share of income spent on aspirin rises as the price of aspirin increases.

7. We saw in lecture that rent control on apartments in San Francisco will induce rent seeking losses. Which of the following amendments to the rent control law would eliminate this form of loss.

A.	Rent controlled apartments are available only to people with incomes below $20,000.
B.	Rent controlled apartments are available to only to people who have not finished high school.
C.	Rent controlled apartments are available only to people who do not own BMWs.
D.	***Occupiers of rent controlled apartments can choose who will replace them if they move (and can accept money from the potential new renters).***
E.	Occupiers of rent controlled apartments can pass them on to their children.

8. You are a profit maximizing firm. Your marginal revenue is 8 irrespective of the amount of output you produce. Your marginal cost is 2+3Q. Which of the following statements is **FALSE**.

A.   Your profit maximizing output is $Q = 2$.
B.   ***You are a monopolist.***
C.   You produce an efficient level of output.
D.   You may make negative profits.
E.   You have an increasing marginal cost.

9. Firms whose technology shows **increasing returns to scale** have

A.   Increasing long run marginal costs.
B.   Increasing long run average costs.
C.   Constant long run marginal costs.
D.   Constant long run average costs**.**
E.   ***Decreasing long run marginal costs.***

10. Which of the following is an example of an **increasing cost perfectly competitive** industry?

A.   Coffee shops.
B.   Gas stations.
C.   ***Dairy farms.***
D.   Auto manufacture.
E.   Funeral homes.

11. Competitive and monopolistically competitive industries can only exist if individual firms eventually experience rising average costs. The most likely source of such rising costs is:

A.   Increasing returns to scale.
B.   The existence of large set-up costs.
C.   The Clinton-Gore corporate tax system, which seizes the earnings of corporations to subsidize trial attorneys.
D.   ***The difficulty of motivating and supervising non-family workers.***
E.   Consumers' preferences for dealing with smaller firms.

12. Which of the following statements is *positive*?

A.	Consumers have a right to purchase goods in competitive markets.
B.	Producers do not deserve to earn supernormal profits.
C.	Competitive markets are the best way to organize the economy.
D.	***In a competitive market the quantity demanded will equal the quantity supplied.***
E.	Because competitive markets are efficient, the government should not interfere in them.

13.   A *budget contraint* represents

A.   the set of all possible combinations that yield the same level of utility to the consumer
B.   the set of all possible combinations that maximize a consumer's utility
C.   ***the set of all possible combinations of goods that can be purchased, given the consumer's income and the price of the goods***
D.   the set of all equilibrium points for a consumer's budget
E.   The set of all incomes that constrain the consumer.

14.   Movie theaters typically charge customers $5 for a bucket of popcorn that costs $2 to produce. This shows that:

| A.	Consumer's are being overcharged by theaters.
B.	Movie theaters are making supernormal profits.
C.	Movie theater pricing is inefficient.
D.	Movie theaters are not perfectly competitive.
E.	***Both C and D.***

(Worth 30 points. Points for each part in parentheses.)

Instructions: Write your answers on this exam sheet. Show any calculations needed to derive your answer.

1.   Suppose that in Davis there are 400 downtown parking places. Suppose also that the demand for these places (in $ per hour) is given by the formula $P = 10 – Q/100$. Suppose also that the places are free for two hour parking.

(a) Draw the parking supply and the demand curve on the diagram below, labeling the curves, showing the value of the intercepts, and labeling the axes. (2)
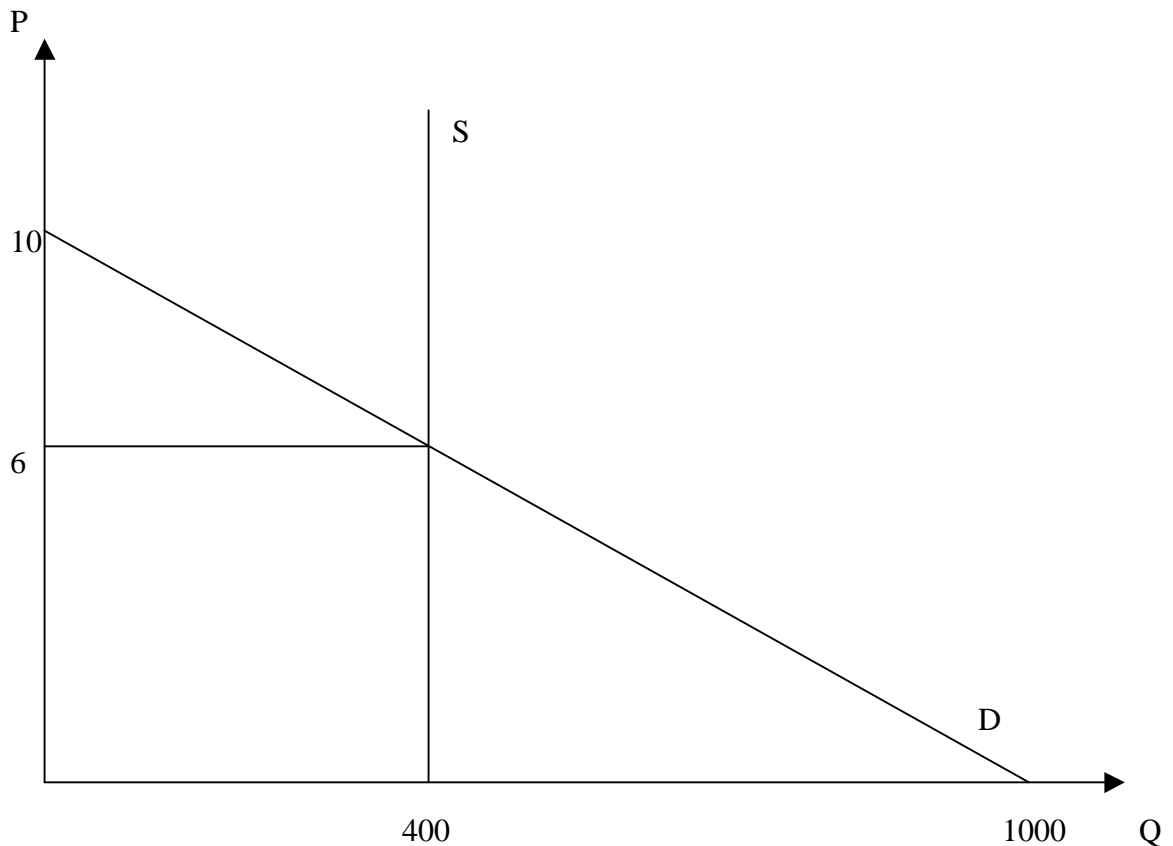
(b) What is the **efficient price** of a parking place per hour? (2)

P = $6

(c) What in $ is the social cost of the city policy of free parking spaces per hour? (2)

Social cost = $6 * 400 = $2400

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(d) Calculate the amount of **deadweight loss** per hour from this policy. (2)

DWL = $0

_____

(e) Explain two ways in which the city could determine that it had set the price of parking too low for an efficient outcome (4)
    A: If there are people who are
       1. looking for the empty parking lot,
       2. parking remotely and walk several blocks to get to her destination,
       3. paying positive price to park in private parking lot without wasting time to look for free
    parking, then, the city could determine that the price of parking is too low.

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_____

(f) Explain three ways in which the social losses of the free parking space policy will appear.
(6)
Full credit was given for any 3 of these answers:
      (1)   Because of excess demand, people will drive around looking for a parking spot and
          wasting their time, which could've been used to earn wages.
      (2)   As a result of driving around downtown Davis, they'll take whatever spot they can
          get and the spot may be far away from where they want to go.
      (3)   Because of the 2-hour limit, people may have to leave downtown sooner than they
          would have preferred and would have to rush back to their cars to avoid a parking
          ticket.
      (4) Because of the 2-hour limit, people will have to constantly go back to where they
          parked to move their cars every 2 hours. This is also a waste of time.
      (5) As a result of all the people driving around looking for parking, traffic builds up in
          the downtown area which is also a social loss because now more time is being wasted
          getting stuck behind other cars who are trying to find parking.
Partial credit was given for
      (1) Gas cost or pollution   (2) Accidents

_____
_____

2.   (a)   In a competitive market what three conditions will firms satisfy in the long run? (6)

Full credit was given for any 3 of these answers:
     (1) P = LMC
     (2) P = SMC
     (3) ? = 0
     (4) Profit maximization
     (5) P = MC

Partial credit was given for:
     (1) P = min LAC   (2) LAC = LMC   (3) MR = MC

_____
_____

(b)   Suppose the long run total cost curve for firms in a **constant cost competitive market** is

$$LTC = 125 + 10q + 5q^2$$

This implies that the long run marginal cost is 10+10q. Calculate the long run market price, and the quantity each firm supplies. (6)

LAC = 125/q + 10 + 5q
LMC = 10 + 10q

LAC = LMC

&&125/q + 10 + 5q = 10 + 10q

&& $125 + 10q + 5q^2 = 10q + 10q^2$

&& $125 = 5q^2$

&& $q^2 = 25$

&&   q = 5

&&   p = LMC (at q=5) = 10 + 10(5) = 60

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