AGEC

1114

Fall Semester, 2009
Exam 1

Test Version ______A________

Name ____

Credit Card Number ___________________________

Credit Card Expiration Date ______________________

Exam 1 contains 23 multiple choice questions which should be answered on both the scantron and the test. Questions 24-26 are math/graphing questions which can only be answered on the test. For the multiple choice questions, the answers you write on the scantron will be considered the official answers.

Make absolutely sure to write your name on this test booklet and the scantron sheet.

Make absolutely sure that under "course number" on the scantron sheet you write in the correct version corresponding to the test version you receive

Test Version Course Number
Test Version A – 1111
Test Version B – 1112
Test Version C – 1113
Test Version D – 1114

(1) Within the field of economics, ______________ regards the psychology of humans and its consequences for economic questions, while ________________ studies how to mitigate pollution at a low economic cost.

(a) microeconomics, macroeconomics
(b) behavioral economics, environmental economics
(c) microeconomics, environmental economics
(d) agricultural economics, macroeconomics
(e) psycho-economics environmental economics

(2) Which of the following are valid criteria for judging economic models?
(a) ability of a model to predict accurately
(b) ability of a model to reflect most of the details and complexities of the world
(c) usefulness of a model in addressing the economic question
(d) the consequences of the model for political considerations

(a) a,b,c,d
(b) a,b,c
(c) a,c
d) b,d
(e) a,b,d

(3) The Federal Reserve decides to print money and give it to people. This will cause the _________ price of all goods and services to ___________.

(a) nominal, rise
(b) real, rise
(c) nominal, fall
(d) real, fall
(e) nominal and real, rise

(4) The U.S. and most of the world uses _______money as a medium of exchange.

(a) fiat
(b) commodity
(c) paperesq
(d) photol
(e) economal

(5) Suppose that nominal wages rise 7% while the inflation rate is 4%. How did real wages change?

(a) real wages fell 3%

(b) real wages rose 11%

(c) real wages fell 11%

(d) real wages rose 3%

(e) real wages rose 7%

(6) Why did the buffalo almost go extinct as Europeans settled the U.S. but the cow did not?

(a) all buffalo were worth more dead than alive, but not cattle

(b) buffalo could only live in the great plains while cattle could live everywhere

(c) cattle met the *homo economo* criteria for investment but buffalo did not

(d) the white men wanted to get the buffalo before the Indian could

(e) cattle were owned but buffalo were not

(7) A prison uses cigarettes as money. The price of a Coke is 3 cigarettes and the price of a sardine can is 15 cigarettes. What is the real price of sardine can?

(a) 15 cigarettes, this is a trick question

(b) 3/15 = 0.2 Cokes

(c) 5 Cokes

(d) 3/15 = 0.2 sardine cans

(e) 5 sardine cans

(8) The nominal interest rate equals

(a) (real interest rate)(1 - inflation rate) - (inflation rate)

(b) (real interest rate)(1 + inflation rate) + (inflation rate)

(c) (real interest rate)(1 - expected inflation rate) - (expected inflation rate)

(d) (real interest rate)(1 + expected inflation rate) + (expected inflation rate)

(9) A bank lends a borrower money at a 15% nominal interest rate. The inflation rate during the period the money is lent is 5%. The real interest rate is then...

(a) 10%

(b) 9.52%

(c) 19.05%

(d) 20.75%

(e) 20%

(10) A bank lends a borrower money at a 15% nominal interest rate. The inflation rate during the time the money was lent ends up being lower than was expected. How does this unexpected low inflation impact lenders and borrowers?

(a) lenders benefit borrowers hurt

(b) lenders hurt borrowers benefit

(c) lenders benefit borrowers benefit

(d) lenders hurt borrowers hurt

(e) neither lenders nor borrowers are affected

(11) A farmer can make $150, $130, and $120 dollars in profits for each acre of soybeans, cotton, and peanuts produced. If the profits from growing peanuts rises to $125, how does the opportunity cost of growing soybeans change?

(a) increases to $125

(b) increases to ($130 + $125) / 2 = 127.5

(c) decreases by $5

(d) increases by $5

(e) opportunity cost does not change

(12) Growing obesity in the U.S. appears to be caused by

(a) falling opportunity cost of food

(b) falling opportunity cost of eating at restaurants, which have fattier food

(c) falling opportunity costs of snacking

(d) falling opportunity costs of being obese

(e) none of the above

(13) You are considering spending $100,000 today for an investment that pays $115,000 in three years. Using a discount rate of 5%, is this a good investment?

(a) No, because the present value of $115,000 in three years is $99,341, which is less than $100,000

(b) Yes, because the present value of $115,000 in three years is $102,341, which is more than $100,000

(c) Yes, the rule of 5% ensures that the present value of $115,000 in three years is $115,000(1-0.05)= $109,250

(d) Yes, the rule of 5% ensures that the present value of $115,000 in three years is $115,000(1-2*0.05)= $103,500

(e) No, the rule of 5% ensures that the present value of $115,000 in three years is $115,000(1-3*0.05)= $97,750

(14) What is the scientific definition of "value"?

(a) there is no scientific definition of value

(b) the amount of money people would pay for something, if unconstrained by income

(c) the happiness people extract from a good or service measured using the monetary-happiness scale

(d) the maximum amount of money people will and can pay for something

(15) What is marginal opportunity cost?

(a) the accounting cost of producing one additional unit

(b) the opportunity cost of producing one additional unit

(c) the average accounting cost of all units produced

(d) the average opportunity cost of all units produced

(16) If firms receive a higher price for their product,

(a) producer surplus will rise

(b) producer surplus will fall

(c) producer surplus will be unchanged

(17) If fixed costs for a firm increase, the optimal quantity to produce and sell at any given price will

(a) rise

(b) fall

(c) not change

(d) depend on the degree of fixed cost increase

(18) Whether an individual firm or all firms in an industry, producer surplus measures...

(a) total revenues minus total variable costs

(b) total revenues minus total variable and total fixed costs

(c) total profits minus fixed costs

(d) total revenues minus total fixed costs

(19) If the price is greater than the equilibrium price?

(a) the market will still be in equilibrium, and price will not change

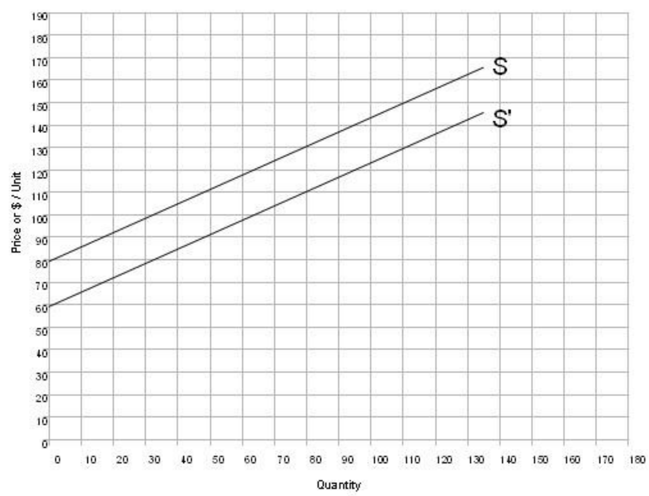
(b) consumers will want to purchase more than producers will want to sell, thus, price will fall

(c) producers will want to sell more than consumers will want to purchase, thus, price will fall

(d) consumers will want to purchase more than producers will want to sell, thus, price will rise

(e) consumers will want to purchase more than producers will want to sell, thus, price will rise

(20) Below is a diagram showing an old supply curve S and a new supply curve S'. Which set of statements accurately describes this change? Select the ONE correct answer.



(a) marginal costs increase for every unit producers produce more at any given price

(b) marginal costs decrease for every unit producers produce more at any given price

(c) marginal costs decrease for every unit producers produce less at any given price

(d) marginal costs increase for every unit producers produce less at any given price

(21) Which of the following could be a cause of the supply curve shift shown in Question 20? Assume that the supply curve refers to the supply of cotton.

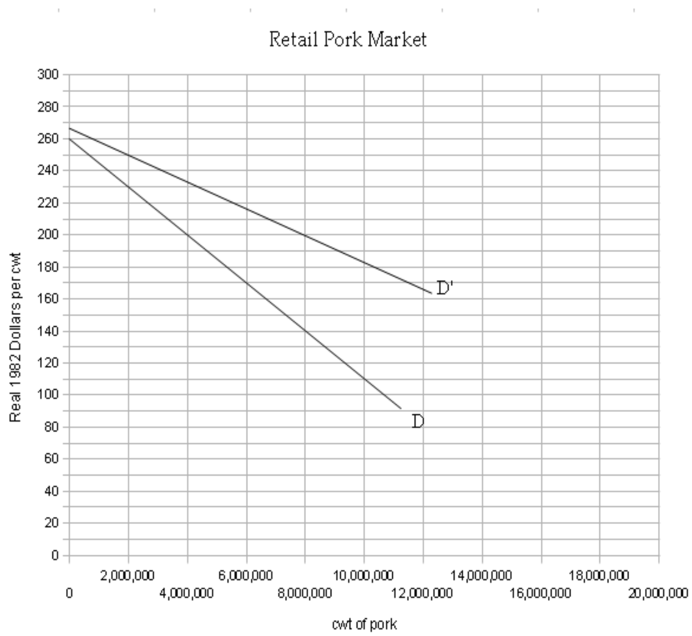
(a) price of cotton falls

(b) price of cotton rises

(c) increase in the cost of fertilizer

(d) decrease in the price of soybeans

(22) Below is a diagram showing an old demand curve D and a new demand curve D'. Which set of statements accurately describes this change? Select the ONE correct answer.



(a) marginal value decreases for every unit
consumers will purchase more at any given price

(b) marginal value increases for every unit
consumers will purchase less at any given price

(c) marginal value increases for every unit
consumers will purchase more at any given price

(d) marginal value decreases for every unit
consumers will purchase less at any given price

(23) Suppose that the demand curve in Question 23 refers to the demand for pork. Which of the following could be a cause for the demand curve shift in Question 21?

(a) price of pork falls

(b) a major recession hits, leaving people with much less money than before

(c) decrease in fertilizer costs, for fertilizer used to grow the corn that is fed to the pigs

(d) increase in price of beef

Math Questions – Do Not Use Scantron Sheets For This Section

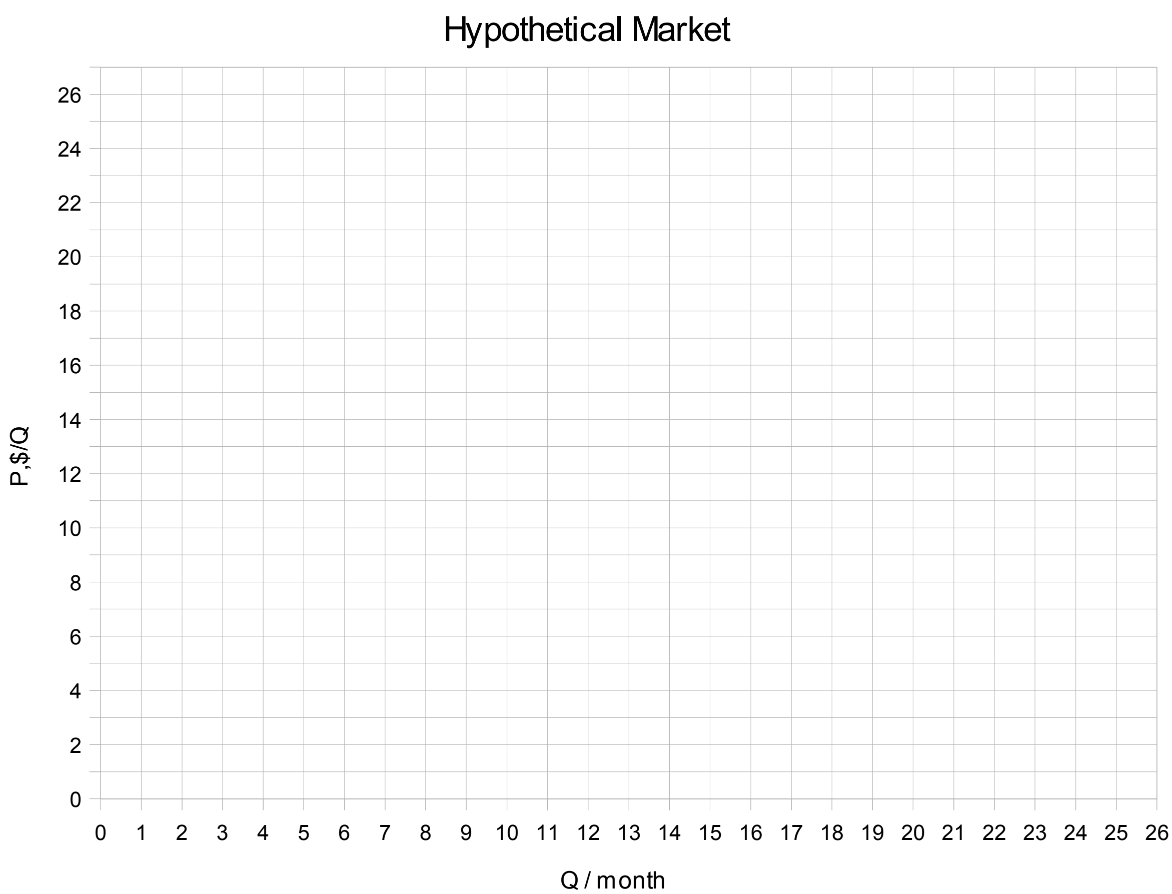
(24) *[Worth 3 Points]* The table below illustrates the rate at which a particular species of tree will grow if allowed to age. Assume that each ton of wood harvested yields a profit of $0.5 per acre. Also assume that money may be invested safely at an interest rate of 15%. Fill in ALL the shaded cells below with the proper numerical value, and then indicate the optimal harvest age for the tree stand.

Age of Stand In Years	Tons Per Acre Harvested From Stand	Accounting Profits If Harvested	Change in accounting profits from waiting one year to harvest	Opportunity cost of foregone 15% investment return
28	3,000		----------	----------
29	3,700			
30	4,000			
31	4,200			
32	4,250			

The optimal age to harvest the tree stand is ___________________________ years.

(25) *[Worth 3 Points]* Below is a supply and demand curve for a hypothetical good. Plot both curves in the figure below using bold and solid lines. Then, indicate the market equilibrium price and quantity using dotted lines and denoting the equilibrium price and quantity as P^E and Q^E, respectively. Your lines and equilibrium points do not have to be perfectly precise, just close enough that you communicate to us that you know how to graph equations.

Supply: P = 2 + 1.2(Q)
Demand: P = 22 – 1.3(Q)



(26) *[Worth 4 Points]* Using the supply and demand equations in Question 25, I want you to calculate the precise equilibrium price and quantity, using algebra, and to calculate the exact consumer and producer surplus at this equilibrium. Use exactly two decimal places always.

The equilibrium quantity is ______________________________ units.

The equilibrium price is $________________________________ per unit.

Consumer Surplus is $__________________________________ per ____________________.

Producer Surplus is $___________________________________ per ____________________..