ECON 1010 Principles of Macroeconomics
Exam #1

Section A: Multiple Choice Questions. (40 points; 2 pts each)

1. We have to make choices because:
    A) we have unlimited income.
    B) resources are scarce.
    C) resources are infinite.
    D) with good planning, trade-offs can be avoided.

2. The production possibility frontier illustrates:
    A) the maximum quantity of one good that can be produced given the quantity of the other good produced.
    B) that when markets don't achieve efficiency, government intervention can improve society's welfare.
    C) the inverse relation between price and quantity of a particular good.
    D) that people usually exploit opportunities to make themselves better off.

3. Alexander has a straight-line, or linear, production possibility frontier when he produces soybeans and corn. If he uses all of his resources to grow soybeans, he can produce 200 bushels of soybeans; if he uses all of his resources for corn production, he can produce 400 bushels of corn. Which of the following combinations of corn and soybeans are NOT possible for him to produce?

    A) 200 bushels of soybeans and zero bushels of corn
    B) 600 bushels of corn and 200 bushels of soybeans
    C) 400 bushels of corn and zero bushels of soybeans
    D) 100 bushels of soybeans and 200 bushels of corn

4. The phrase "gains from trade" refers to the:

    A) profits obtained from sales of a good or service.
    B) increase in total output that is realized when individuals specialize in particular tasks and trade with each other.
    C) gains that one obtains by taking advantage of an uninformed buyer and selling at a higher than average price.
    D) gains that one obtains by taking advantage of a temporary discount or "sale" price.

5. The law of demand states that other things equal:

A)   as the price increases, the quantity demanded will increase.
B)   as the price decreases, the demand curve will shift to the right.
C)   as the price increases, the demand will decrease.
D)   as the price increases, the quantity demanded will decrease.

6.

Table: The Demand for Chocolate-Covered Peanuts

Price per Bag	Quantity Demanded (bags per month)		
	George	Barbara	Dan
$0.90	10	0	60
0.80	15	10	80
0.70	20	20	100
0.60	25	30	120
0.50	30	40	140
0.40	35	50	160
0.30	40	60	180

__(Table: The Demand for Chocolate-Covered Peanuts) Examine the table The Demand for Chocolate-Covered Peanuts. If George, Barbara, and Dan are the only three buyers in the market and the price of a bag of chocolate-covered peanuts is $0.80, the total market quantity demanded is _____ bags per month.

A)   70
B)   80
C)   105
D)   280

7. The demand for meals at a local Applebee's will shift to the left if:

A)   the Olive Garden offers a 10% discount coupon in the local newspaper.
B)   the price of a meal at Applebee's rises.
C)   local incomes increase and Applebee's is a normal good.
D)   the price of gasoline falls in the local area.

8.

Price of coconuts (vertical axis)

Quantity of coconuts (horizontal axis)
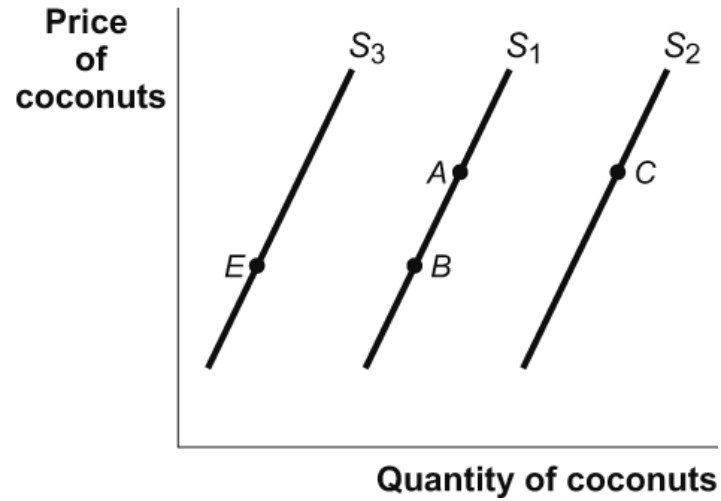
__(Figure: Supply of Coconuts) Examine the figure Supply of Coconuts. If the prices of inputs (e.g., labor, fertilizer, and fuel) used to produce and transport coconuts decreased, it would be represented in the figure as a movement from:

A) *A* to *B*.
B) *B* to *A*.
C) *C* to *A*.
D) *E* to *B*.

9. A price ceiling will have *no* effect if:

A) it is set above the equilibrium price.
B) the equilibrium price is above the price ceiling.
C) it is set below the equilibrium price.
D) it creates a shortage.

10.

Table: The Market for Chocolate-Covered Peanuts

Price (per bag)	Quantity Demanded (bags per month)	Quantity Supplied (bags per month)
$0.90	70	280
0.80	105	245
0.70	140	210
0.60	175	175
0.50	210	140
0.40	245	105
0.30	280	70

__(Table: The Market for Chocolate-Covered Peanuts) Examine the table The Market for Chocolate-Covered Peanuts. If the price of chocolate-covered peanuts is $0.50, there is:

A)   a surplus of 35 bags per month.
B)   a shortage of 35 bags per month.
C)   a surplus of 70 bags per month.
D)   a shortage of 70 bags per month.

11.

Rent (per apartment per month)	Quantity Demanded (millions of apartments)	Quantity Supplied (millions of apartments)
$1,400	1.6	2.4
1,300	1.7	2.3
1,200	1.8	2.2
1,100	1.9	2.1
1,000	2.0	2.0
900	2.1	1.9
800	2.2	1.8
700	2.3	1.7
600	2.4	1.6

__(Table: Market for Apartments) Look at the table Market for Apartments. If a government price ceiling of $900 is imposed on this market, an *in*efficiency will result in the form of a:

A)   surplus of 0.6 million apartments.
B)   shortage of 0.6 million apartments.
C)   surplus of 0.2 million apartments.
D)   shortage of 0.2 million apartments.

12. An expansion is a period in which:

    A)   unemployment rises.
    B)   output rises.
    C)   the price level falls.
    D)   output declines.

13. When the value of a nation's imports exceeds the value of that nation's exports, the nation is said to have:

    A)   hyperinflation.
    B)   a trade deficit.
    C)   price stability.
    D)   a trade surplus.

14. Households derive income from all EXCEPT:

    A)   wages or labor income.
    B)   interest from lending.
    C)   rent from allowing firms to use their land.
    D)   imports.

15. Which is an example of a final good?

    A)   tires purchased by Ford from Goodyear to go on a new Ford Explorer
    B)   lumber purchased by a construction company to be used in building a new home.
    C)   a computer purchased from Apple by a college student to be used to take online courses.
    D)   flour purchased from Pillsbury by a bakery to make birthday cakes.

16. If during 2011, the country of Sildavia recorded a GDP of $65 billion, interest payments of $15 billion, imports of $13 billion, profits of $7 billion, exports of $15 billion, and rent of $7 billion, wages during 2011 in Sildavia were:

    A) $36 billion.
    B) $38 billion.
    C) $51 billion.
    D) $64 billion.

17. To calculate real GDP, we measure the total value of output using:

    A)   the prices that prevailed during a selected base year.
    B)   current prices, with base-year quantities.
    C)   estimated quantities, based on population growth.
    D)   estimated quantities, based on average family size.

18. If nominal GDP decreases from one year to the next:

    A)   prices must have fallen from one year to the next.
    B)   real GDP must have fallen from one year to the next.
    C)   prices and real GDP must have fallen from one year to the next.
    D)   either output or prices or both must have fallen from one year to the next.

19. Enchante Inc., a designer clothing company, buys $400 worth of silk from a silk trader and $30 worth of accessories from AccessoriesRuS to produce each dress. If the value added by Enchante is equal to $200, then according to the value-added approach, the price of the designer dress should be:

    A) $630.
    B) $230.
    C) $200.
    D) $830.

20. A new wonder diet that results in a dramatic weight loss sweeps through America. The key to the diet is to eat unlimited amounts of red meat (beef) but no poultry or carbohydrate-rich foods. As millions of Americans switch to the new diet, one would expect to see:

    A)   an increase in the demand for beef, leading to a shift to the right in the demand curve for beef and higher beef prices.
    B)   an increase in the demand for beef, leading to a shift to the right in the demand curve for beef and lower beef prices.
    C)   a decrease in the supply of beef, leading to a shift to the left in the supply curve for beef and higher beef prices.
    D)   a decrease in the demand for beef, leading to a shift to the left in the demand curve for beef and higher beef prices.

Section B: Short Answer Questions. (60 points)

1. (40 pts) Econoland and Free Enterprise are two economies each producing two goods: airplanes (A) and grains (G). Currently the two economies do not trade with one another. The table below provides information about the amount of labor needed to produce one airplane or one ton of grains for each economy. Assume that labor is the only input needed to produce either airplanes or grains.

	Labor Needed to Produce One Airplane	Labor Needed to Produce One Ton of Grains
Econoland	100 hours of labor	50 hours of labor
Free Enterprise	150 hours of labor	100 hours of labor

a) (5 pts) Create a 2x2 table to show the maximum number of airplanes and tons of grain both countries can produce if they each have 3000 hours of labor available for production.

b) (5 pts) Use the information from part (a) to draw the PPFs for these two economies. Assume that both economies have linear production possibility frontiers (PPF). In each graph measure A on the horizontal axis and G on the vertical axis. Make sure you label each graph clearly as to whose PPF is represented in the graph. Also label the numerical values of the x and y intercepts in each graph.

c) (5 pts) What is the slope of each PPF and how does it relate to the opportunity cost of producing A?

d) (5 pts) Does either country have an absolute advantage in A and G? Who has a comparative advantage in producing airplanes? Explain.

e) (5 pts) Suppose Econoland produces 10 airplanes and 40 tons of grain. Suppose Free Enterprise produces 10 airplanes and 15 tons of grain. Label the points C and D. Are both countries efficient in production?

f) (5 pts) Econoland has trained their labor force and now finds that it takes only 50 hours of labor to produce one airplane. Draw an arrow on your PPF in part (a) showing how the PPF will change.

g) (10 pts) Re-draw the original PPFs (before Econoland trained their labor force) and show how each country can specialize completely in one good, trade, and operate on a point outside the PPF.

3. (20 pts) Assume the base year in the following table is 2012.

Year	Production of X	Price per unit of X ($)	Production of Y	Price per unit of Y ($)
2012	20 units	50	10 units	20
2013	40 units	100	20 units	10
2014	60 units	200	30 units	5

a) (5 pts) Calculate nominal GDP for 2012, 2013, and 2014.

b) (5 pts) Calculate real GDP for 2012, 2013, and 2014. Is the economy growing?

c) (10 pts) For each transaction, explain why it would or would not be counted in U.S. GDP.

- A Canadian software company sets up a plant in U.S.

- You are an American citizen visiting France, and use your credit card to buy a baguette.

- The U.S. government issues a bond to a German investor.

- You take a class at the University of Wyoming and pay the tuition.

- You live in your own house for the year.