ECONOMICS 101
COLUMBIA COLLEGE

FINAL EXAM A

You have three (3) hours.
A. Multiple Choice (80 pts) Choose A, B, C, D or E. Clearly mark your choice in the space provided.

1. B Economics is the study of the use of scarce resources:
   /A. Because “scarce” resources are the ones which have money prices.
   /B. Which have alternate uses.
   /C. Because scarce resources are one for which we have shortages.
   /D. Because luxuries which aren’t scarce are not something we have to worry about.
   /E. But since there are many different opinions, there is no body of tested knowledge.

2. C Our textbook understands “prices” as:
   /A. Obstacles which prevent us from getting things we want.
   /B. Arbitrary. Any set of prices could work just as easily as any other set of prices.
   /C. Messengers giving us news about what is desired by some and possible to produce by others.
   /D. Only meaningful if they are given to us in a “hard” money (like gold or US dollars).
   /E. Information which is often wrong because not everyone knows all of the options which are available.

3. B If the supply of carrots shifts to the left, the demand for carrots:
   /A. Will increase because the price decreases.  /B. Won’t change even if the price does change.
   /C. Will decrease as the price rises.  /D. Will increase because of the higher price.
   /E. Won’t change because the price won’t change.

4. C If the government sets the price of bananas below the equilibrium level:
   /A. Consumers will buy more than what producers sell.
   /B. Producers will sell more than what consumers want to buy.
   /C. Consumers won’t be able to buy as many bananas as they want at this price ceiling.
   /D. Producers won’t be able to sell as many bananas as they want at this price ceiling.
   /E. The government will have to store lots of unsold bananas.

5. D What should we call the area under the equilibrium price, but above the supply curve?
   /A. Consumer Surplus.  /B. Value.
   /C. Cost.  /D. Producer Surplus.
   /E. Total gains from trade.  /F. Total losses from trade.

6. A Why are there so few gasoline stations in downtown areas of large cities?
   /A. Landowners can make more money from other opportunities.
   /B. A downtown gas station would be so busy that it couldn’t make money.
   /C. It is dangerous to locate gasoline stations close to so many people.
   /D. Most people don’t want to buy gasoline when they are downtown.
   /E. Local laws don’t allow them to be built downtown.

7. C Profits and losses are important in a market system because:
   /A. Profitable companies can affect government policy, but losing companies can’t.
   /B. A loss is how the market tells us that not enough resources are being used by a company.
   /C. A loss tells us that a business will have to change in order to survive.
   /D. Profits tell us that a company is charging prices which are too high.
   /E. Lucky companies make profits but unlucky companies make losses.

8. A The best explanation for the success of companies such as Standard Oil, Walmart etc., is:
   /A. They grew big by finding ways to bring costs down and pass these savings on to customers.
   /B. They grew big by buying up their competitors and raising prices.
   /C. They grew big by making peace with their competitors and sharing the market.
   /D. They grew big by using special government regulations which made it difficult for competitors to copy.
   /E. They grew big by using profits to keep innovations that would damage their products off the market.
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9. C If a company has market power (monopoly), it can maximize producer surplus by:
   /A. Lowering prices below equilibrium to increase sales to new customers.
   //B. Sell more product but at a higher price. 
   //C. Reduce production so costs are lower and selling prices are higher than before.
   //D. Reduce production to sell at a lower price. Earnings will rise because costs will decrease even more.
   //E. Raising prices and even though costs rise, they rise by less so that profits rise.

   B Who is most likely to complain that a company is engaging in “predatory pricing”?
   //A. Suppliers.
   //B. Competitors.
   //C. Consumers.
   //D. Economists.
   //E. Government regulators.

   D Suppose there is a bond which promises to pay $50,000 a year for five years and on the fifth year also returns the $1m (principal). The value of this bond will increase if:
   //A. The company which issued this bond has a terrible year and there are fears it will go bankrupt.
   //B. Many companies issue new bonds which promise even higher returns.
   //C. Interest rates rise.
   //D. Interest rates fall.
   //E. It looks like the stock market is going to rise a lot faster over the next few years.

   E We want to know whether the standard of living in a country has improved. The best measure of this assuming no change in the distribution of income is:
   //A. The level of nominal gross domestic product.
   //B. The interest rate.
   //C. The inflation rate.
   //D. The nominal growth rate.

   C Which of the following transactions will count in Canada’s GDP?
   //A. A store hires 10 new workers to help clean the floors.
   //B. A charity accepts the help of 10 volunteers to help clean the floors.
   //C. The government hires 10 new workers to help clean the floors.
   //D. A foreign company hires 10 new workers to help clean the floors of its Canadian offices.
   //E. All will count in Canada’s GDP.

   A Suppose the inflation rate is bigger than the nominal growth rate. This means:
   //A. The real GDP fell.
   //B. The real GDP rose.
   //C. The CPI is larger than the deflator.
   //D. The real interest rate is larger than the nominal interest rate.
   //E. Nominal GDP fell.

   B Last year, although there was no change in the civilian non-institutional population or the number of people working, the unemployment rate rose. What can explain this?
   //A. The size of the labor force decreased.
   //B. The participation rate rose.
   //C. There are fewer people looking for work.
   //D. There are more people studying.
   //D. The difference between M1 and M2 is:
   //A. M1 includes cash inside of banks but M2 doesn’t.
   //B. M1 includes cash but M2 doesn’t.
   //C. M2 includes demand deposits but M1 doesn’t.
   //D. M2 includes savings deposits but M1 doesn’t.
   //E. M1 includes demand deposits but M2 doesn’t.
Suppose the government debt is $1000, the interest rate is 10%, tax revenue is $500 and Non-interest government spending is $600. What will the government debt be at the end of the year?

A. $200  
B. $1200  
C. $800  
D. $1000  
E. $700

Which of the following is a reason given by our text for why trade with other countries make us richer?

A. Tariffs on imports can earn lots of money for a country.  
B. Companies reduce costs through “economies of scale” when producing for the world (instead of just locally).  
C. Countries can help infant industries develop by protecting them from international competition.  
D. Countries spend more of their time on goods where they have a higher cost (and therefore higher prices).  
E. Trade is a “zero-sum” game. Exports are earnings and help, but imports hurt the economy.

What should a government do if it wants to raise the exchange rate (e = US$ per local currency)?

A. Export fewer goods. Keep them in the country for local consumption.  
B. Increase foreign reserves.  
C. Sell foreign reserves.  
D. Protect local investors by restricting (keeping out) foreign investors.  
E. Lend lots of money to other countries.

Which economist wrote The Principles of Economics (1890) which first showed us demand and supply curves:

A. Adam Smith  
B. Alfred Marshall  
C. John Maynard Keynes  
D. Milton Friedman  
E. Thomas Sowell

Demand and Supply. Here is information from Vancouver’s peanut market:

<table>
<thead>
<tr>
<th>PRICE PER UNIT</th>
<th>QUANTITY DEMANDED</th>
<th>QUANTITY SUPPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24 48</td>
<td>20 16 12 8 4</td>
</tr>
<tr>
<td></td>
<td>5 13 21 29 37</td>
<td>91 75 67 9 94</td>
</tr>
</tbody>
</table>

a. Find the equation for demand. (Q=f(P))

b. Find the equation for supply. (Q=f(P))

c. What is equilibrium P and Q?

d. What is the consumer surplus at equilibrium?

f. What is the waste (DWL) if there is a price ceiling at P=$51?  

h. What is the marginal revenue equation (MR=f(Q))?

i. What price will a monopoly charge (to get the largest possible producer surplus)?

j. What is the producer surplus for a monopoly?

k. What is the waste (DWL) caused by a monopoly?
2. Comparative Statics (5 pts) Create a diagram with a demand and supply curve. Then draw new curves caused by the change below and use arrows to show the direction of change of those curves. Then circle the best answer for each of the following four statements. (To protect your answer, give a one sentence explanation of the relationship which you think explained the shift below.)

What happens to the market for shoes in Vancouver if someone invents a new type of material that makes it much cheaper to make shoes.

DEMERE will SHIFl RIGHT/SHIFT LEFT/NO CHANGE
SUPPLY will SHIFT RIGHT/SHIFT LEFT/NO CHANGE
EQUILIBRIUM PRICE will RISE/FALL/UNCERTAIN CHANGE
EQUILIBRIUM QUANTITY will RISE/FALL/UNCERTAIN CHANGE

3. 8 pts) Suppose your economy only has three goods. In 2012, Pa=$3, Qa=5, Pb=$2, Qb=2, Pc=$4, Qc=4. Assume 2012 is the base year.

\[
\frac{\text{Pa}_{2013}}{\text{Pa}_{2012}} \times 100 = 17.1 \%
\]

\[
\frac{\text{Qa}_{2013}}{\text{Qa}_{2012}} \times 100 = 95.8
\]

a. Find the real growth rate for 2013.
b. Find the GDP deflator for 2013.

4. Nominal vs Real (5 pts) What is the real growth rate if the nominal GDP rises by 4.6% when the price deflator rises from 124.6 to 126.2?

\[
\frac{1.046}{126.2} = 0.033 = 3.3\%
\]

5. Trade (18 pts) The people living in Country A can produce up to 18 units of TVs or up to 36 units of chairs. The people living in Country B can produce up to 6 units of TVs or up to 3 units of chairs. In both countries, people like to have equal numbers of TVs and chairs.

\[
\frac{12}{2} = TV
\]

a. Before trade, how many TVs and Chairs will people in country A be consuming?
b. Before trade, how many TVs and Chairs will people in country B be consuming?
c. If the countries think they are going to trade how many TVs and chairs will they produce in each country? (four numbers)
d. If the countries trade, how many TVs and chairs will they consume in each country?

6. Short Explanations (16 pts) Write a short paragraph for each of the following questions. (Diagrams will help)

PLEASE USE ATTACHED LINED SHEETS.

a. What is a shortage and what causes a shortage? Give an example of a shortage that you have seen or read about recently. Draw a D & S diagram to illustrate this shortage.

b. How is the labor force calculated? Are all the people in the country counted in it? Why not?
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D. TWO ESSAYS (24 pts) No more than 250 words each Choose one MICRO topic and one MACRO topic. Diagrams will help. PLEASE USE ATTACHED LINED SHEETS.

MACRO Topics (Choose one):
1. Some local landlords think they can increase their profits if they tear down their 3-story buildings to build high rises. But local housing activists want to save the old buildings because they say the rent is cheaper in the older buildings. Do you think it would be a good idea to pass a law to save the older buildings to keep local rents lower? Why or why not?

2. In BC, if you have a serious medical problem, your local doctor refers you to a specialist (who will decide whether you need an operation or other specialized services). The price to see a specialist is free (if you've already paid for your BC Medical Services Plan). In yesterday's newspaper, a recent study showed that “wait times” to see a specialist are getting longer - currently averaging 8.4 weeks). Can you explain why? What is the usual solution that you would expect an economist to give for this problem? Do you agree with this solution? Why or why not?

MICRO Topics (Choose one):
1. There is an organization called the Council of Canadians which opposes Canada joining the TPP (Trans-Pacific Partnership) because they say “it slashes the domestic content requirement for automobiles, putting thousands of autoworker jobs at risk”. The domestic content requirement makes sure that a certain portion of the value of a car sold in Canada must be produced in Canada. Do you think that losing this domestic content requirement will help Canada or hurt Canada? Explain.

2. The new government of Canada wants to borrow more from the rest of the world to build infrastructure (roads, transit, etc.). They think that better infrastructure will make Canada more prosperous and therefore able to pay more taxes to repay the borrowing. Would you support such borrowing? Why or why not? What can go wrong?

1. Keep land from highest value use is wasteful. Demand for housing on remnant homestead even larger than before

2. Price too low for specialist - Is there any way to allow people on waiting list to pay extra for “overtime” appointments?

1. Consumer wont cheap cars. Imported domestic white goods costs economy more. CS ken gathered with this restricted

2. If infrastructure is useful it will help economy (if that is best use of resources) Unfortunately it is difficult to tell if govt project are useful investments or just glory projects for politicians.