ASSIGNMENT 3 ECON 101 FALL 2017 **Due: Nov 30 in class**

FORMAT: All assignments must follow the format as noted:

- **Title page noting assign #. course name, your name and CCC student number**
- **Questions in correct order**
- **Assignment stapled, 8 ½ x 11 paper and typed or *very* neatly handwritten**

QUESTION 1

The domestic demand curve for portable fans is given by Qd = 5000 − 100P, where Qd is the number of fans that would be purchased when the price is P. The domestic supply curve for fans is given by Qs = 150P, where Qs is the quantity of fans that would be produced domestically if the price were P. Suppose fans can be obtained in the world market at a price of $10 per radio. Domestic fan producers have successfully lobbied Congress to impose a tariff of $5 per radio.

a) Draw a graph illustrating the free trade equilibrium (with no tariff). Clearly illustrate the equilibrium price.

b) By how much would the tariff increase producer surplus for domestic fans suppliers?

c) How much would the government collect in tariff revenues? What is the deadweight loss from the tariff?

e) How different would the result be if the government had used a quota instead of a tariff to get a similar Q result? Explain and show on a graph is possible.

QUESTION 2

a) What does "perfect competition" mean? State a few of the underlying assumptions.
b) Explain in words why the demand curve a firm faces in a perfectly competitive market is horizontal.
c) For an individual firm in a perfectly competitive market, the marginal revenue, MR, is equal to the price, p. Why is that?

QUESTION 3

a) Describe in a few sentences how to derive the market's short-run supply curve from the individual firms' short-run MC curves.
b) Describe how to find the markets' long-run supply curve.

QUESTION 4

Countries A and B only produce 2 goods, skis and snowboards. The following table shows how many units can be produced in each country per week at two different production points. Assume that the production possibility frontier in both countries is linear.

Country Snow (production per week)		Country Ice (production per week)	
Skis	Snowboards	Skis	Snowboards
15	25	15	10

a) Develop a chart of opportunity costs and indicate who has the comparative and the absolute advantage in Skis and in Boards?
b) When these two countries trade what is the result in terms of skis and snowboards to their citizens? Explain. Do not calculate anything.

QUESTION 5

Consider the small closed economy of CCCland and its market for coffee. Currently, the domestic demand and supply curves for coffee are given by the following equations:

Domestic Demand: $P = 1000 - (1/5)Q$

Domestic Supply: $P = 200 + (1/15)Q$

Furthermore, you know that the world price of coffee is equal to $300 per unit of coffee. Hint: you will likely find it helpful to draw a sketch or several sketches as you proceed with this problem.

a. If CCCland remains a closed economy, what will be the equilibrium price and quantity in the market for coffee in this economy?

b. Suppose CCCland opens the coffee market to trade. Will CCCland import or export coffee when it changes its status from a closed economy to an open economy? Explain your answer.

c. Calculate the value of consumer surplus in the coffee market when CCCland is a closed economy and the value of consumer surplus in the coffee market when CCCland is an open economy. Will domestic consumers be in favor of opening the market to trade? Explain your answer.

d. Calculate the value of producer surplus in the coffee market when CCCland is a closed economy and the value of producer surplus in the coffee market when CCCland is an open economy. Will domestic producers be in favor of opening the market to trade? Explain your answer.

e. Suppose that the market for coffee in CCCland is open to trade but that the government of CCCland wishes to reduce imports of coffee to 1000 units of coffee through the imposition of a tariff. How big will the tariff need to be in order for CCCland to reach their goal? Explain your answer.

f. How much tariff revenue will be raised with the imposition of the tariff described in part (e)?

g. What is the deadweight loss from the imposition of the tariff described in part (e)?

QUESTION 6

You own and operate a t-shirt stand. Your demand curve is given by $P = 60 - 0.25Q$. Your marginal cost curve is $MC = 10$. Your fixed costs equal $300.

a. Graph your demand and marginal cost curves.
b. Derive and graph your marginal revenue curve.
c. Calculate and profit maximizing price and quantity, and show them on your graph.
d. Calculate your profit.
e. Calculate consumer surplus at the profit-maximizing price and quantity.
f. Explain the deadweight loss and distributional effects due to monopoly.

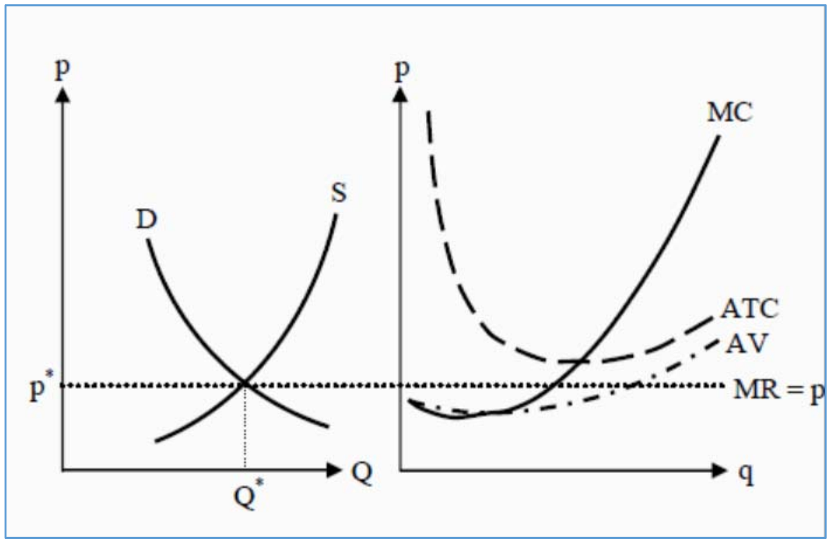
QUESTION 6

a. Describe the distinguishing characteristics of monopolistic competition?
b. How do firms in monopolistic competition compete?
c. How do monopolistic competition firm differ from perfect competition in terms of efficiency, excess capacity, profit, price markup and production decisions?

QUESTION 7

Use the following curves and graphs, market on the left-hand side and the individual firm on the right-hand side, to answer the questions in this question.

a. What type of market and firm is depicted in the graph? How can you tell this? Explain.
b. Will the firm make a profit, loss or break even in the short run? Why? How much will it produce?
c. Describe the forces that will affect this situation in the long run. How will long run equilibrium arise? What will happen to P? Q? number of firms? Profit or loss of other firms?



QUESTION 8

a. What are the two distinguishing characteristics of oligopoly?
b. Why are firms in oligopoly interdependent and tempted to collude?
c. What is prisoners' dilemma and how does it relate to oligopoly firms? Please be sure to explain the concept of prisoners' dilemma as part of your answer.