ECO 610
Problem Set #5
Fall 2019

Instructions: This is a team assignment, so turn in one paper per team. Due 12/3/19.

1. (15 pts.) Team assignment: Choose one of the following two options. Then do some research and write a two-to-three-page summary of your findings and analysis.
   a) Kentucky Kingdom wants to re-assess their pricing strategy. They feel like they have some localized monopoly power, in that there aren't any other roller-coaster amusement parks within an hour's drive. They contract with your team to help them out. They would like a general assessment of how different amusement parks price their products. Clearly the ability to identify and sort customers according to willingness to pay is critical, so they would like you to compare how they do things with how other firms in the same product space but different geographic spaces set their prices.
   b) Greece has been struggling financially as a country for a decade, and would like to increase revenues from tourism. The Greek government contacts you to do some marketing analysis for their national treasures like the Acropolis and Parthenon. They have a monopoly on the Parthenon, but are not sure they are extracting the maximum possible surplus from the various different types of customers who visit Greece. They currently charge the same price for admission to everyone (who is not a Greek citizen), but they realize that more sophisticated pricing strategies and market segmentation might increase revenues. Analyze their current pricing and marketing strategy, as well as those of similar national treasures in other European countries. You might also consider how private for-profit entities market and price their "treasures", e.g. Disneyland Paris.

2. The state of Kentucky decides to develop a state park in a fairly remote location in eastern Kentucky, high in the mountains along a river that cuts a deep canyon and has abundant trails and overlooks. They anticipate that lots of outsiders (tourists) will want to visit the park, and some of them may even want to stay overnight. They decide that, rather than the state government owning and operating a hotel/lodge, they will outsource this part of the resort to a private-sector owner-operator. You see an opportunity here, and decide to study demand and costs to determine whether this would be economically profitable. Here is what you discover. Demand is seasonal, with six months on-season and six months off-season. On-season demand is given by $Q = 20 - P$, where Q is the number of rooms demanded per night and P is the price of a room in dollars. Off-season demand is given by $Q = 10 - P$. [Note: the year is 1954, and a dollar would purchase much more in 1954 than in 2019.] Average variable costs, average total costs, and marginal costs are as illustrated in the attached diagram. Now for the question.

   a) (10 pts.) What price and quantity (number of rooms rented per night) will maximize profits or minimize losses in the off-season? In the on-season? What will daily profits or losses be in each period? Explain how you arrive at your answers, and carefully illustrate in the diagram.

   b) (5 pts.) Is this an economically viable proposition? If the state decides to auction off the rights to operate this monopoly hotel/lodge to the highest bidder, explain briefly how you would formulate your bid.

Teams:

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3. A Cobb, J. Witty, P. Crespo
4. S. Daniels, X. Wu, E. Devan
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8. S. Rast, C. Sumner, A. Moody
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Diagram for Question # 2: