Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (12 points) For EITHER interactive marketing OR mass marketing, give an example of it and explain why a firm may want to use that type of marketing.
2) (12 points) Answer EITHER Part A OR Part B.
A) When we discussed search goods, the topic of online purchases of clothing came up. In some cases, they are search goods, but in other cases they are not. What is the big determinant as to whether or not it was a search good? Explain why that is important.
B) Give an example of an experience good. Explain why it fits that definition.
3) (12 points) Answer EITHER Part A OR Part B.
A) Would having a large number of firms help the industry to keep a cartel or would it be more likely to break up a cartel? Explain your logic.
B) Would having prices which change frequently help the industry to keep a cartel or would it be more likely to break up a cartel? Explain your logic.
4) (12 points) Answer EITHER Part A OR Part B.
A) Does a perfectly price-discriminating monopolist or a non-discriminating monopolist produce closer to the socially optimal point? Explain your logic.
B) What is the relationship between the demand curve and the marginal revenue curve for a perfectly price-discriminating monopolist? Explain how you reached that conclusion.
5) (14 points) Answer EITHER Part A OR Part B.
A) Create a payoff matrix which has no Nash equilibrium. Explain how you know it has no equilibrium.
B) For the payoff matrix on the back, find the Nash equilibrium, cooperative equilibrium, and dominant strategies if they exist. Explain how you found them.
6) (16 points) Do EITHER Part A OR Part B.
A) Suppose the sales of 9 firms were $\$ 100, \$ 100, \$ 100, \$ 100, \$ 200, \$ 200, \$ 200, \$ 200$, and $\$ 800$. Calculate CR4, CR8, CR10, and HHI. Show all work.
B) What is the range that the HHI can take? Explain how you reached those conclusions. What are the guidelines the Department Of Justice uses to determine if a merger should be allowed. For ONE of the criteria, explain why it makes sense.
7) (22 points) Answer EITHER Part A OR Part B.
A) Draw the ATC/AVC/MC/D diagram for a monopolistically competitive firm which is making negative profits, but still in business. Find the quantity sold and price charged. State how you found the price and quantity. How do you know they are making negative profits. Do NOT draw the profits because the diagram will be too hard to read. Illustrate the effects of the market moving towards the long-run equilibrium. Explain why the curve(s) moved as drawn. What happens to the price and
quantity sold?
B) Draw the ATC/AVC/MC/D diagram for a monopolistically competitive firm in the long-run equilibrium. Find the price and quantity produced. How can you tell it is in the long-run equilibrium? On the same graph, draw the demand curve for a perfectly competitive firm in the long-run equilibrium. Find the price and quantity produced. How can you tell it is in the long-run equilibrium? How do the two firms' prices and quantities compare?

This is for question \#5B.

|  |  | Less Than Jake |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | High Price |  | Low Price |  |
| Dropkick <br> Murphys | High Price |  | 11 |  |

