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) (10 points) Answer EITHER Part A OR Part B.
A) Without drawing a graph, explain why the labor supply curve slopes up for low wages but slopes down for high wages.
B) When drawing the market for an input like oil, why do we label the lines ME and MRP?

2) (12 points) Answer EITHER Part A OR Part B.
A) Explain the difference between an English auction and a Dutch auction. When do you think a Dutch auction might be the best? Explain your logic.
B) What is the *winner's curse*? Is that more likely to happen with an open auction or a sealed auction? Explain your logic.

3) (14 points) Answer EITHER Part A OR Part B.
A) Write the decision tree for a sequential game with the following description. Coke decides whether or not to build a new factory. Then Pepsi decides whether to charge a high price or a low price. If the factory is built and Pepsi charges a high price, then Coke gets a payoff of 10 and Pepsi gets nothing. If the factory is built and Pepsi charges a low price then Coke gets a payoff of 3 and Pepsi gets 8. If the factory is not built and Pepsi charges a high price then Coke gets a payoff of 7 and Pepsi gets 6. If the factory is not built and Pepsi charges a low price then Coke gets a payoff of 15 and Pepsi gets 4. Find the equilibrium. Explain how you found it.
B) When we run a repeated game, we said it may be possible to achieve the cooperative equilibrium if the game is infinitely repeated. However this makes some assumptions about the benefits of cheating and the penalty imposed. What are those assumptions? Explain your logic using an example where cooperation is not feasible.

4) (20 points) Answer EITHER Part A OR Part B.
A) Draw the kinked demand curve. Explain why it takes its shape. Find the marginal revenue curve for the firm. Explain how you found it. Why does it cause price rigidity?
B) In the price leadership model, a.k.a. dominant firm with a competitive fringe, draw the industry demand, competitive fringe's supply, the residual demand for dominant firm, and the dominant firm's marginal cost curve. Explain how you got the residual demand. Find the dominant firm's output, the fringe's output, and the price charged. Explain how you found them.

5) (20 points) Answer EITHER Part A OR Part B.
A) Draw an indifference curve/budget constraint diagram for income vs. leisure. Draw an increase in the wage rate. Explain why the line(s) moved as drawn. Given your diagram, are you in the upward sloping or the downward sloping part of the supply of labor curve? Explain your logic.
B) Why is the MRP_L the same as the D_L for a firm when capital is fixed? Draw the demand for labor when capital is variable and at least two MRP_L lines. Explain why it is not the same as the MRP_L. Explain how you found it.

6) (24 points) Copy the payoff matrix into your bluebook. Find all pure Nash equilibria, the cooperative strategies, and the secure (maximin) strategies. Does either person have a dominant strategy? Briefly explain how you found every answer.

Question #6		Dick		
		High Quality	Medium Quality	Low Quality
Jane	High Quality	10 14	8 6	7 13
	Medium Quality	11 4	5 8	14 15