100 points. Each question has an equal weight. Some questions will take longer than others to answer, so allocate your time efficiently. Good luck.

1. Mastering the economic way of thinking is learning to reason in terms of supply and demand. Your answers are less important than the reasoning with which you arrive at those answers. You should probably begin each case by sketching a demand and supply graph. Then ask yourself whether the event described would affect the supply curve or the demand curve, in which direction the curve would move, and what effect that would have on the price and the quantity exchanged. Don't be content merely to conclude that the price will rise or fall. Would you expect a large or a small change in price or in quantity exchanged? Are you predicting a very short-run effect or are you thinking about the long-run effect?

   a. What effect would you expect each of the following to have (or have had) on the market for gasoline?

      (i) The state of California requires companies that own more than ten vehicles to convert them to run on natural gas.
      (ii) Tire companies invent tires that automatically inflate or deflate to keep tires at the proper tire pressure at all times. (Vehicles get better gas mileage when tires are properly inflated).
      (iii) The United States invades Iraq to destroy its nuclear weapons facilities.

2. In August 2001, the Bush administration announced that it would consider encouraging airports to charge airlines a premium for scheduling flights at busy travel hours as a way to ease air-travel gridlock. The idea has been embraced by some economists as a market-based way to get airlines to spread out the timing of flights, thereby reducing air-traffic congestion. Explain how the scarce resource of takeoff and landing slots are allocated if airports charge the same fee for takeoffs and landings at peak demand times as they do for other times in the day. How would the charging of higher fees at peak demand times (which would mean higher ticket prices) actually make many airline travelers better off?

3. Residents of your city are charged a fixed weekly fee of $6 for refuse collection. They are allowed to put out as many cans as they wish. The average household disposes of three cans per week in this way.

   a. Now suppose that your city changes to a “tag” system. Each can of refuse collected must have a tag affixed to it. The tags cost $2 each.
   b. What effect do you think the introduction of the tag system will have on the total quantity of trash collected in your city? Explain.
4. Figure 6-2 presents a demand curve and supply curve for soybean oil. The market-clearing price, as you can see, is $0.20 per pound. If the government levies a tax on all soybean oil sold, requiring seller to remit $0.05 for each pound they sell, what will happen to the market price of soybean oil and the quantity exchanged. What will be the net price received by sellers?
3. Were the users of electricity in California in the summer of 2000 better off because of the retail price regulation of electricity rates? Explain why the market for electricity in California was such a mess, while others states did not experience the same problems. Can we conclude that government intervention in the market for electricity in California created additional net benefits? Explain.