Review Questions for Test Three:

Chapter Fourteen:
1. Tables 14.1 and 14.4 in your textbook both involve two firms each choosing between low and high outputs, but only one of the tables illustrates a prisoner’s dilemma. Explain why the nature of the market in which firms interact may sometimes produce a prisoner’s dilemma and sometimes not.

2. Why do you think game theory has become the preferred method of analyzing oligopolistic markets? What advantages does it have over simply assuming, say, Cournot behavior?

3. College instructors know more about the quality of their courses than prospective students. Does this mean that the lemons model is appropriate? How does this model differ from the one assumed in the pure lemons model?

4. Suppose that a college town has a large number of firms selling a homogeneous product—pizza—and that there are two types of consumers in town. The town’s permanent residents are fully informed about the prices charged by all firms and always shop at the firm or firms with the lowest price. On the other hand, the students attending college (temporary residents) are completely uninformed; they do not know anything about prices and simply choose among firms on a random basis. Explain why, in such a setting, a single price may prevail in the market for pizza.

5. In 2002, Allergan, the company making the wrinkle-fighter Botox, put together a $50 million advertising campaign to hook the masses on the anti-aging drug. Botox is derived from the neurotoxin that causes botulism, a deadly food poisoning. Injected under the skin, it relaxes facial muscles that cause lines. Botox was approved by the FDA in 1989 to treat crossed eyes and uncontrolled blinking. Word spread, however, in the late 1990s regarding its ability to control wrinkles. A 15-minute doctor’s office treatment costs around $500. Customers have to get repeated treatments since the effects wear off in roughly four months. In light of this, evaluate the statement made by a political activist stating that Botox advertising should be banned by the federal government since it promotes a product that has “no socially redeeming value and [that] merely manipulates vulnerable customers into buying a product with short-lived positive effects that they don’t really need.”

6. Define adverse selection and moral hazard. Give examples of each.

7. How do single-period games differ from repeated games? Why does this difference lead to different expectations about the likelihood of cartels being successful? Why can’t game theory be used to state with certainty whether a particular cartel will be successful or not?

8. Suppose there are 1000 used cars in a market, with 600 being poor quality and 400 high quality. The high quality cars are worth $10,000 and the low quality cars are worth $5,000.

A) If buyers can tell by observation whether a car is high quality or low quality, what will be the market equilibrium?

B) If neither buyers nor sellers know the quality of a car, what will be the market price for cars?
C) If asymmetric information applies, what will happen?
9. Explain the difference between adverse selection and moral hazard. How is asymmetric information inherent in both?

Chapter Sixteen:
1. Rank the following labor supply curves in terms of their elasticities. How does your answer depend on whether you consider short-run or long-run supply curves? Explain your answer.
   A. The supply of economists to the federal government
   B. The supply of taxi drivers to Chicago
   C. The supply of college professors to Ohio State University

2. Suppose that firms in an industry use two inputs, labor and capital. If the price of labor increases, then the firms will demand less labor and more capital. True, False, or Uncertain? Explain your answer.

3. "Recently the demand for DVD players has increased rapidly, while the demand for radios has hardly budged. Therefore, the fact that workers are better paid in the DVD player industry is not surprising." Would you be surprised if the assertion about wages turned out to be correct? Support your position with a graphical analysis.

4. Studies find that controlling for other factors, university professors’ earnings tend to decline with experience. In other words, the more seniority a faculty member has with a particular institution, the lower his or her salary after accounting for other factors such as productivity, degree, and field of study. Explain why this phenomenon may reflect monopsony power being exercised by universities because of the greater moving costs faced by more senior faculty members.

5. If the demand for personal computers rises, the productivity of workers engaged in making personal computers does not necessarily increase. Why then, does the demand for such workers increase?

Chapter Seventeen:
1. "Since only a few people have the ability to become nuclear physicists, the long-run supply curve of nuclear physicists is vertical." True or False? Explain.

2. High-tech industries are not extensively unionized in the United States. Explain why this is the case, knowing that software programming, semiconductor manufacturing, and even customer service representative positions can be outsourced by companies such as Intel, Microsoft, and Amazon to locations in India, Singapore, and Malaysia. Rely on the model of input market monopoly developed in Section 17.6 in your answer.

3. Workers in countries such as Sweden and Germany work fewer hours per week, on average, than do workers in the United States. Does this mean that Swedes and Germans are lazier than Americans? Explain how laziness could be interpreted in the context of the work-leisure choice model. What other information might you want to gather to determine whether Swedes or Germans were indeed less work-oriented than Americans?
4. A speeding car swerves to avoid a rattlesnake slithering across the road but accidentally runs over and kills a lawyer walking along side the road. The lawyer was expected to make $90,000 per year over the next and final 10 working years of her life before her untimely demise. If the relevant interest rate is 10% and the lawyer’s family sues the driver, for how much can the family sue in terms of lost earnings due to the accident?

5. A Fijian island resort offers customers the opportunity to buy 30 vacation days at current prices with the opportunity to spend the purchased days on the island anytime over the next 5 years. The money on any days not spent on the island, plus 10% annual interest, is refundable at the end of the 5 years. If the interest rate over the same period on a typical money market fund is expected to be only 5%, is investing in the vacation days a good idea? Explain your answer.

If we have time at the end of the semester, we will cover relevant topics from Chapter 20:

Chapter Twenty:
1. What two characteristics define a public good? Which of the following are public goods: parks, police services, welfare payments to the poor, production of energy, space exploration?
2. Why will private markets produce an inefficient output of a public good? Explain how the efficient level of a public good is determined.
3. What is meant by the free-rider problem? How does it relate to the provision of public goods? How can it be corrected?
4. From a public good perspective, critique the use of patents.
5. Education is sometimes cited as a source of external benefits. In what way, if at all, does your receiving a college education benefit other people?
6. Using the concept of property rights, explain why the buffalo nearly became extinct in the late 1800s while cow herds proliferated.