Try not to spend too much time on any one question. Make sure to write something for every question, as partial credit will be given.

1. a. (6 pts) Briefly describe how Rawls’ notion of justice would justify a government welfare system.

b. (7 pts) How could a government try to reduce the potential inefficiency due to the moral hazard which results from a welfare system?

c. (6 pts) For which type of people does the Earned Income Tax Credit tend to increase labor supply and for which type of people does it tend to decrease labor supply? Explain.

2. a. (6 pts) This question follows the analysis in Feldstein (1973): Suppose an individual has insurance such that his copay is $10 per visit to the doctor’s office. The social marginal cost of a visit to the doctor’s office is $100. Draw a demand curve for visits to the doctor’s office, the private marginal cost curve and the social marginal cost curve for doctor’s office visits. Indicate on your graph the deadweight loss due to having health insurance, according to Feldstein.

b. (7 pts) What are some factors that make the deadweight loss found in part a an overestimate of the efficiency loss due to health insurance?

c. (6 pts) Describe an advantage and a disadvantage of a single-payer health insurance system compared to a privatized health insurance system?

3. a. (7 pts) Briefly describe how the availability of public education can lead to crowding out of private education. What assumptions are made to lead to this conclusion?

b. (6 pts) Give an argument in favor and an argument against school vouchers.

4. a. (7 pts) Suppose the marginal tax rate on the first $15,000 of taxable income is 10¢ per dollar, and the marginal tax on the next $46,200 is 15¢ per dollar. Calculate the average income tax rate for an individual with a taxable income of $40,000 and a gross income of $60,000, showing all your work, OR write the formula you would need to calculate it, using the information provided.

b. (6 pts) How can you tell if a tax system is progressive?

c. (7 pts) List the major sources of tax revenue (types of taxes) for federal, state and local governments in the United States.

5. a. (7 pts) What is an annuity? How does asymmetric information in the private annuities market result in less trade of annuities than if insurers knew as much as customers about their life expectancy?

c. (5 pts) Is it possible that with high enough population growth, a pay as you go Social Security system could yield more benefits than a funded system? Give some explanation.

6. Consider the diagram below representing provision of a radio broadcast. The radio broadcast is a public good in the sense that every unit available to one person is available to everyone. MC means marginal cost of an additional unit of provision, $MB_i$ means the marginal benefit to person $i$ of an additional unit of provision. There are two people, 1 and 2, who listen to the radio station. Its only source of funding comes from their donations.

a. (4 pts) Draw the socially efficient level of provision. Indicate how you got your answer.

b. (8 pts) What level of provision will there be in Nash equilibrium? Explain. Is there a free-rider problem in this market? Explain.