Directions

1. Do not open exam until you are instructed to begin.

2. I do not tolerate academic dishonesty of any sort. In the event that I detect dishonest behavior, I will ask that the maximum possible penalty allowed by the university be imposed. 

3. Fill in your name, the time of your class (9:30 or 11:00) and social security number on the scanner sheet provided.

4. There are 32 multiple choice questions in this exam. All questions have equal point value. Credit will be given only for the answers that you mark on your scanner sheet.

5. You have until the end of the class period to complete the exam. No additional time will be provided.
To answer the next 4 questions, suppose there is a small island economy with 100 Irish workers and 200 Scottish workers. Each Irish worker is capable of catching either 20 fish or gathering 40 coconuts in a day. Each Scottish worker is capable of catching either 30 fish or 30 coconuts in a day.

1. Who has the comparative advantage in fishing?
   a. the Irish
   b. the Scottish.

2. The "kink" in the PPF for this economy occurs at a combination of ___ fish and ____ coconuts.
   a. 4000; 6000.
   b. 6000; 4000.
   c. 2000; 6000;
   d. none of the above.

3. If the economy produces 3000 fish, the maximum amount of coconuts gathered would be:
   a. 5,000
   b. 6,000
   c. 7,000
   d. none of the above.

4. If the economy produces 3000 fish and maximizes its coconut production, the Scottish will catch ____ fish and gather _____ coconuts.
   a. 3000; 7000
   b. 3000; 3000
   c. 0; 6000
   d. none of the above.
5. Which of the following would NOT shift the demand curve for turkey?
   a. An increase in income.
   b. A decrease in the price of ham.
   c. A change in tastes for turkey.
   d. A change in the price of turkey.

6. Beef and leather belts are complements in production. If concern about health and diet shifts the demand curve for beef leftward, the result in the market for leather belts will be
   a. a lower equilibrium price and a smaller equilibrium quantity.
   b. a lower equilibrium price and a larger equilibrium quantity.
   c. a higher equilibrium price and a larger equilibrium quantity.
   d. a higher equilibrium price and a smaller equilibrium quantity.

7. Leather belts and leather shoes are substitutes in production. If style changes increase the demand for leather belts,
   a. the supply curve of leather shoes will shift leftward and the price will rise.
   b. the demand curve for leather shoes will shift leftward and the price will fall.
   c. the supply curve of leather shoes will shift rightward and the price will fall.
   d. the demand curve for leather shoes will shift rightward and the price will rise.

8. Which of the following could explain a decrease in the equilibrium price of coffee and an increase in the equilibrium quantity?
   a. bad weather that destroys much of the coffee crop.
   b. a series of news reports indicating that coffee is very bad for your health
   c. a reduction in the wages of workers that harvest coffee.
   d. an increase in the price of tea which many consider to be a substitute for coffee.
9. If a rightward shift of the supply curve for hamburger causes a 6 percent decrease in price and a 5 percent increase in quantity demanded, the price elasticity of demand is
   a. 0.30.
   b. 0.83.
   c. 0.60.
   d. 1.20.

10. If the elasticity of demand for Bengals tickets is 2.5, then a 10 percent increase in the price of Bengals tickets would cause the number of tickets sold to ____ and the total revenue from tickets sold to ______.
   a. decrease 25 percent; decrease 15 percent.
   b. decrease 25 percent; increase 15 percent.
   c. decrease 4 percent; increase 6 percent.
   d. decrease 4 percent; decrease 6 percent.

11. A demand curve that has a price elasticity of
   a. 1 will be horizontal.
   b. 0 will be vertical.
   c. 1 will be vertical.
   d. 0 will be horizontal.

12. A fall in the price of lemons from $10.50 to $9.50 per bushel raises the quantity demanded from 19,200 to 20,800 bushels. The price elasticity of demand in this part of the demand curve is
   a. 1.20.
   b. 8.00.
   c. 0.80.
   d. 1.25.
13. Suppose that the route from Cincinnati to Orlando is served by Delta and three other airlines but the route from Cincinnati to Chicago is served by only Delta. The demand for tickets from Cincinnati to Orlando is likely to be:
   a. less price elastic than the demand for tickets from Cincinnati to Chicago.
   b. more income elastic than the demand for tickets from Cincinnati to Chicago.
   d. less income elastic than the demand for tickets from Cincinnati to Chicago.
   d. more price elastic than the demand for tickets from Cincinnati to Chicago.

14. The cross elasticity of demand between Coca-Cola and Pepsi-Cola is
   a. negative __ that is, Coke and Pepsi are complements.
   b. positive __ that is, Coke and Pepsi are substitutes.
   c. negative __ that is, Coke and Pepsi are substitutes.
   d. positive __ that is, Coke and Pepsi are complements.

15. Fred's income has just risen from $940 per week to $1,060 per week. As a result, he decides to purchase 9 percent more steak per week. The income elasticity of Fred's demand for steak is
   a. 0.75.
   b. 0.90.
   c. 1.33.
   d. 1.00.

16. If the marginal benefit of the fifth slice of pizza is greater than the marginal cost of the fifth slice of pizza then the output level is
   a. efficient and less pizza should be produced.
   b. inefficient and more pizza should be produced.
   c. efficient and more pizza should be produced.
   d. inefficient and less pizza should be produced.

17. Suppose that there is a negative externality associated with the production of a good in a competitive market. At the market equilibrium, there will be (more than, less than) the efficient level of production and the government could correct this problem with a (tax, subsidy).
   a. more than; subsidy.
   b. less than; tax.
   c. less than; subsidy.
   d. more than; tax.

18. A recent research report demonstrated that the women's demand for cigarettes is more "price inelastic" than men's. An implication of this is that;
   a. if cigarette taxes were increased cigarette smoking would decrease more (in percentage terms) among women than men.
   b. if cigarette taxes were increased cigarette smoking would decrease less (in percentage terms) among women than men.
   c. if income falls, a woman would be more likely to quit smoking than a man.
   d. if income falls, a women would be less likely to quit smoking than a man.
To answer the next 4 questions, refer to the diagram below representing the supply and demand curves for gasoline.

19. At the equilibrium price of $1 per gallon, consumers' surplus in the gasoline market is:
   a. $0 per day
   b. $75 million per day
   c. $125 million per day
   d. none of the above.

20. At the equilibrium price of $1 per gallon, producers' surplus is:
   a. $0
   b. $50 million
   c. $100 million
   d. none of the above.

21. If a price ceiling was imposed at $.90 per gallon,
   a. there would be a shortage of 250 million gallons per day.
   b. there would be a surplus of 250 million gallons per day.
   c. there would be a shortage of 350 million gallons per day.
   d. there would be a surplus of 350 million gallons per day.

22. Compared to the case where price is at $1.00, with a price ceiling of $.90 per gallon producers would be:
   a. $25 million worse off per day.
   b. $37.5 million worse off per day.
   c. $50 million worse off per day.
   d. $75 million worse off per day.
This diagram is identical to that on the preceding page and is replicated here for your convenience.

23. Compared to the case where price is at $1.00, with a price ceiling of $.90 per gallon (and assuming search costs are unaffected by the price ceiling) consumers would be:
   a. $6.25 million better off.
   b. $6.25 million worse off.
   c. $13.5 million better off.
   d. $13.5 million worse off.

24. If there was no price ceiling but a quota was placed at 250 million gallons per day, the price of gasoline would be:
   a. $.90
   b. $1.00
   c. $1.20
   d. $1.25

25. Compared to the case where gas prices are $1.00 and there is no intervention in the market, if a quota was placed at 250 million gallons per day,
   a. consumers would be $93.75 million better off and producers would be $50 million worse off.
   b. consumers would be $68.75 million worse off and producers would be $52.75 million better off.
   c. consumers would be $93.75 million worse off and producers would be $50 million better off.
   d. consumers would be $68.75 million better off and producers would be $52.75 million worse off.
To answer the next 5 questions, consider the supply and demand curves for gasoline given below. Assume that S0 is the supply curve when there is no tax on gasoline and that S1 is after a tax is imposed on gasoline.

![Supply and Demand Curves for Gasoline](image)

26. Given the effect of the tax on the supply curve, the tax per gallon of gasoline must be:
   a. $.20
   b. $.30
   c. $.35
   d. $.45

27. The tax will generate revenue of
   a. $62.5 million per day.
   b. $87.5 million per day.
   c. $125 million per day.
   d. $175 million per day.

28. The excess burden of the tax will be:
   a. $10 million per day.
   b. $43.75 million per day
   c. $62.5 million per day.
   d. $87.5 million per day.

29. If the original demand curve passed through the original equilibrium (i.e. price of $1 and quantity of 500 million gallons) but demand was more inelastic:
   a. the consumers' share of the tax would be greater.
   b. the producer's share of the tax would be greater.
   c. both the consumer's share and the producer's share of the tax would be greater.
   d. both the consumer's share and the producer's share of the tax would be smaller.
30. If the demand curve passed through the original equilibrium (i.e. price of $1 and quantity of 400 million gallons) but was more inelastic, the tax would result in:
   a. a smaller decrease in the equilibrium quantity and a larger increase in tax revenue.
   b. a larger decrease in the equilibrium quantity and a larger increase in tax revenue.
   c. a smaller decrease in the equilibrium quantity and a smaller increase in tax revenue.
   d. a larger decrease in the equilibrium quantity and a smaller increase in tax revenue.

31. Suppose that there is a quota placed on the import of peanuts. Prior to the quota, consumers paid $2 per pound for peanuts and bought 100 million pounds per year. After the quota, consumers pay $3 per pound for peanuts and buy 80 million pounds per year. Based on this information, the peanut quota makes consumers worse off by
   a. $100 million per year.
   b. $90 million per year.
   c. $80 million per year.
   d. $40 million per year.

32. Suppose that in Cincinnati there are many substitutes available for airline transportation to Chicago (e.g. trains, automobiles) but in Dallas there are relatively few substitutes available for airline transportation to Chicago. Suppose that initially, the number of tickets sold for trips to Chicago is identical in Cincinnati and Dallas. Based on this information, a tax on airline tickets to Chicago:
   a. would cause a greater decline in ticket sales and generate more revenue in Cincinnati than in Dallas.
   b. would cause a greater decline in ticket sales and generate more revenue in Dallas than in Cincinnati.
   c. would cause a greater decline in ticket sales in Dallas but more tax revenue in Cincinnati.
   d. would cause a greater decline in ticket sales in Cincinnati but more tax revenue in Dallas.
Answer key:

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