(10 points) Answer both of the following essay questions (write only on the paper provided):

1. Carefully define demand for a good such as oranges. Show using indifference curve analysis (graphs) how the demand for oranges is derived. Briefly explain your answer and the graphs that you use.
2. Draw a graph showing equilibrium in the market for fruits and vegetables. Briefly explain the graph. Suppose that wages for fruit and vegetable workers decrease. Use your graph to illustrate the impact of this change upon the equilibrium price and quantity of fruits and vegetables? Briefly explain your answer.
(15 points) Answer all of the following 15 multiple-choice questions. Make sure that your answers are coded in the answer sheet provided.

1. Which of the following would not cause the demand for passenger cars to increase?
   A. The price of cars decreases.
   B. The price of pickup trucks increases.
   C. The price of gasoline decreases.
   D. It is expected that the price of cars will increase in the future.
   E. All of the above cause the demand for cars to increase.

2. If it is observed in a particular market that equilibrium price has increased while equilibrium quantity exchanged has decreased it is likely that:
   A. supply has increased while demand is constant.
   B. supply has decreased while demand is constant.
   C. demand has increased while supply is constant.
   D. demand has decreased while supply is constant.

3. Technological inefficiency occurs when:
   A. it is impossible to make someone better off without making someone else suffer.
   B. it is possible to make someone better off without making someone else suffer.
   C. the maximum output is being produced given the resources available.
   D. the maximum output is not being produced given the resources available.

4. When a market is in equilibrium:
   A. demand equals supply.
   B. demand is greater than supply.
   C. quantity demanded is less than quantity supplied.
   D. quantity demanded equals quantity supplied.
   E. firms are making no profits.

5. Opportunity cost equals:
   A. The value of all foregone alternatives when a choice is made.
   B. The value of the least valued alternative when a choice is made.
   C. The value of the next best alternative when a choice is made.
   D. The price of the alternative in dollars.

6. Point A on the graph indicates which of the following?
   A. Unemployment or technological inefficiency exists in this economy.
   B. Full employment and technological efficiency exist in this economy.
   C. Point A is unattainable with the current level of technology and productive resources.
   D. Allocative efficiency exists in this economy.
   E. Allocative inefficiency exists in this economy.

7. Which of the following statements about production possibility frontiers are true?
   I. Scarcity implies downward sloping production possibility frontiers.
   II. An increase in the availability of resources or a decrease in technology will cause an increase in the production possibility frontier.
   A. both statements are true.
   B. both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

8. Price elasticity of demand measures:
   A. the extent to which quantity demanded will change when there is a change in quantity supplied.
   B. the extent to which quantity demanded is influenced by input prices.
   C. the relationship between the current market price and the equilibrium price of a good.
   D. the responsiveness of quantity demanded to changes in the good's own price.

9. The marginal rate of substitution measures:
   A. The price a consumer pays for one good relative to a second good.
   B. The rate at which a consumer would be willing to trade one good for another.
   C. The extra utility a consumer gains by consuming additional units of a good.
   D. The marginal product of labor.

10. Which of the following is a positive statement?
    A. an unemployment rate of 7 percent is a national disgrace.
    B. unemployment is not as important a problem as inflation.
    C. when the national unemployment rate is 7 percent, the unemployment rate for inner-city youth is often close to 40 percent.
    D. inflation rates should never be allowed to climb above 14 percent.
11. Economists assume that for most consumers indifference curves are convex, which means that:
   A. indifference curves are bowed out from the origin.
   B. indifference curves are downward sloping lines.
   C. Consumers tend to prefer medium amounts of all goods they consume rather than just consuming a little of one and a lot of another good.
   D. Consumers tend to prefer consuming a little of one good and a lot of another good rather than consuming medium amounts of both goods.

12. Marginal Utility is a measure:
   A. of the total utility derived from consuming marginally beneficial goods.
   B. of the additional utility derived through the consumption of an additional unit of a good.
   C. computed by dividing total utility by the number of units of a good consumed.
   D. determined strictly by interactions of supply and demand.

13. If the price of luxury yachts rises from $500,000 to $600,000 and causes annual sales to drop from 30,000 to 10,000, then the price elasticity of demand equals:
   A. 11
   B. 2.75
   C. 5.50
   D. 13.75
   E. .19

14. Which of the following statements about budget lines are true?
   I. Budget lines reflect a consumer’s preferences.
   II. If a consumer’s income rises then the consumer’s budget line will move out parallel to his original budget line.
   A. both statements are true.
   B. both statements are false.
   C. I is true while II is false.
   D. I is false while II is true.

15. Suppose the price of wheat increases. What will happen to the supply of corn assuming that corn and wheat are substitutes in production?
   A. supply will increase.
   B. supply will decrease.
   C. quantity supplied will increase.
   D. quantity supplied will decrease.