By putting you name on this exam, you promise to abide by the Georgetown University Honor Code. You also certify that all work in this exam is your own and that you have not consulted any outside sources.

Name_____

Part 1 - MULTIPLE CHOICE 16 POINTS TOTAL(Each question worth 1 point).

1) If a good is an inferior good, then its 1) _____
    A) demand curve will be upward sloping.
    B) income elasticity is negative.
    C) income effect reinforces the substitution effect.
    D) Engel curve cannot be drawn.

2) The budget constraint for a consumer who only buys apples (A) and bananas (B) is $P_A A + P_B B = I$ 2) _____
where consumer income is I, the price of apples is P_A, and the price of bananas is P_B. To plot this budget constraint in a figure with apples on the horizontal axis, we should use a budget line represented by the slope-intercept equation:
    A) $B = -I/P_B + (P_A/P_B)A$ B) $A = -I/P_A + (P_B/P_A)B$
    C) $B = I/P_B - (P_A/P_B)A$ D) $A = I/P_A - (P_B/P_A)B$

3) If prices and income in a two-good society double, what will happen to the budget line? 3) _____
    A) The intercepts of the budget line will decrease.
    B) There will be no effect on the budget line.
    C) The intercepts of the budget line will increase.
    D) Insufficient information is given to determine what will happen to the budget line.

4) Suppose a graph is drawn to show a consumer's preferences for football tickets and basketball 4) _____
tickets. The quantity of football tickets is measured on the horizontal axis. If the price-consumption curve is horizontal when the price of football tickets changes, then
    A) the demand for football tickets is unit elastic.
    B) football tickets are an inferior good.
    C) the demand for football tickets is perfectly elastic.
    D) the demand curve for football tickets will be horizontal.

5) Indifference curves are convex to the origin because of: 5) _____
    A) the assumption that more is preferred to less.
    B) transitivity of consumer preferences.
    C) the assumption of a diminishing marginal rate of substitution.
    D) the assumption of completeness.

6) The following statement "To separate the income and substitute effects, the imaginary budget line 6) _____
should be tangent to the old indifference curve and parallel to the new budget line." refers to the
    A) Hicks method   B) Slutsky method.

7) Which of the following utility functions has the same MRS as $U(q_1,q_2) = q_1 q_2$? 7) _____
    A) $q_1^{1/2} + q_2^{1/2}$ B) $q_1^{1/2} q_2^{1/2}$
    C) $(q_1^{1/2} + q_1^{1/2})^2$ D) $q_1 + q_2$

8) Let the inverse supply curve be given by P = 5Q$_S$. Suppose we place a tax of 5 per unit of output on the seller. The new inverse supply curve is

8) _____

    A) P = 5 + 5Q$_S$.   B) P = Q$_S$.   C) P = -5 +5Q$_S$.

9) If two goods are substitutes, the cross-price elasticity of demand must be

9) _____

    A) positive.   B) negative.   C) zero.   D) infinite.

10) If Px = Py, then when the consumer maximizes utility,

10) _____

    A) X and Y must be substitutes.   B) MU(X) must equal MU(Y).
    C) MU(X) will be greater than MU(Y)   D) X must equal Y.

11) Assume that popcorn is a normal good. If the price of popcorn rises, then the substitution effect results in the person buying _____ of the good and the income effect results in the person buying _____ of the good.

11) _____

    A) more, more   B) less, less   C) less, more   D) more, less

12) Joe's utility function is U = 3x + 5y. Based on this utility function, we can conclude x and y are

12) _____

    A) Giffen goods.   B) both inferior goods
    C) perfect complements   D) perfect substitutes.

13) Assume a market in which both the demand and supply curves are downward sloping. For a stable equilibrium to occur, the demand curve must be

13) _____

    A) steeper than the supply curve.   B) flatter than the supply curve.

14) From 1970 to 2010, the real price of eggs decreased. Which of the following would cause an *unambiguous* decrease in the real price of eggs?

14) _____

    A) A shift to the left in the supply curve for eggs and a shift to the right in the demand curve for eggs.
    B) A shift to the left in the supply curve for eggs and a shift to the left in the demand curve for eggs.
    C) A shift to the right in the supply curve for eggs and a shift to the left in the demand curve for eggs.
    D) A shift to the right in the supply curve for eggs and a shift to the right in the demand curve for eggs.

15) For an inferior good, the income and substitution effects

15) _____

    A) always exactly cancel each other.
    B) work together.
    C) can work together or in opposition to each other depending upon their relative magnitudes.
    D) work against each other.

16) Which of the following functions is least likely to represent a real demand curve?

16) _____

    A) Q = 120 - 3P + 2I   B) Q = 120/P
    C) Q = 120 - 2P   D) Q = 120 + 3P - 2I

1) B
2) C
3) B
4) A
5) C
6) A
7) B
8) A
9) A
10) B
11) B
12) D
13) B
14) C
15) D
16) D