Econ 3144 – Spring 2002 Name__________________

Test 2 – Rupp – Essay Questions (25 points) & 25 Multiple Choice Questions (75 points)

Note the following formula maybe helpful in this exam: $E_P = (P/Q) * (1/slope)$.

1. The market demand for tennis racquets is given by P = 100 – 0.10Q, where P is price in dollars per tennis racquet and Q is the number of tennis racquets purchased per day. If the price per tennis racquet is $50, answer the following questions:

a. Find the price elasticity of demand (4 points)

b. Based on your calculation above, is demand elastic, inelastic, or unit elastic? (4 points)

c. Tell me in words what the number calculated in (a) means (hint: don't just say "elastic"). (4 pts)

d. To increase revenue, what should the tennis racquet seller do? (3 points)

2. Draw 3 indifference curves labeled I_1, I_2, and I_3 (where I_3 is most preferred) in each case below (2.5 points each):

a. You need 4 tires per car.

Tires

______________________Cars

b. You like both apples and pears.

Apples

___________________________Pears

c. You like corn and you hate broccoli.

Broccoli

___________________________Corn

d. Coke and Pepsi are perfect substitutes.

Coke

_____________________________Pepsi

Multiple Choice Section:

- On Scantron, write and bubble in (1) name and (2) social security number.

Use the following information to answer the next 6 questions. Income is $1. Price of gum is 0.10 per stick and price of lollipops are 0.20 each. Graph the budget constraint in the space below:

Lollipops

__________________________Gum

1. Where does the budget constraint intersect the y-axis?
A) 0.2
B) 1
C) 2
D) 5
E) 10

2. Where does the budget constraint intersect the x-axis?
A) 0.1
B) 1
C) 2
D) 5
E) 10

3. What is the slope of the budget constraint?
A) 0.5
B) -0.2
C) -0.5
D) -2
E) 2

4. An increase in the price of gum will cause
A) an inward rotation of the budget curve.
B) an outward rotation of the budget curve.
C) an inward shift of the budget curve.
D) an outward shift of the budget curve.
E) no change in the budget curve.

5. If income doubles from $1 to $2 and no changes in the price of either good will cause
A) an inward rotation of the budget curve.
B) an outward rotation of the budget curve.
C) an inward shift of the budget curve.
D) an outward shift of the budget curve.
E) no change in the budget curve.

6. If the price of lollipops falls and everything else is unchanged will cause
A) an inward rotation of the budget curve.
B) an outward rotation of the budget curve.
C) an inward shift of the budget curve.
D) an outward shift of the budget curve.
E) no change in the budget curve.

7. This year the ECU men's basketball team beat Louisville. Louisville beat DePaul. DePaul beat ECU. This example shows that basketball games violate which preference assumption:
A) completeness
B) convexity
C) more is better
D) transitivity

8. The marginal rate of substitution is
A) the price of good x.
B) the tradeoff between the two goods under consideration at any particular point.
C) the total utility at that point.
D) the price of good y.
E) the relationship between the quantity of X consumed (on the horizontal axis) and income (on the vertical axis).

9. True or False: Indifference curves can intersect.
A) True.
B) False.

10. Holding the price of X & Y constant, this curve shows the set of optimal bundles as income varies is called
A) income consumption curve
B) income effect
C) Engel curve
C) budget constraint
D) indifference curve

11. An Engel curve
A) always slopes up.
B) always slopes down.
C) may slope up or down.
D) has a U shape

12. Price elasticity of demand is
A) always positive
B) always negative
C) sometimes positive and sometimes negative

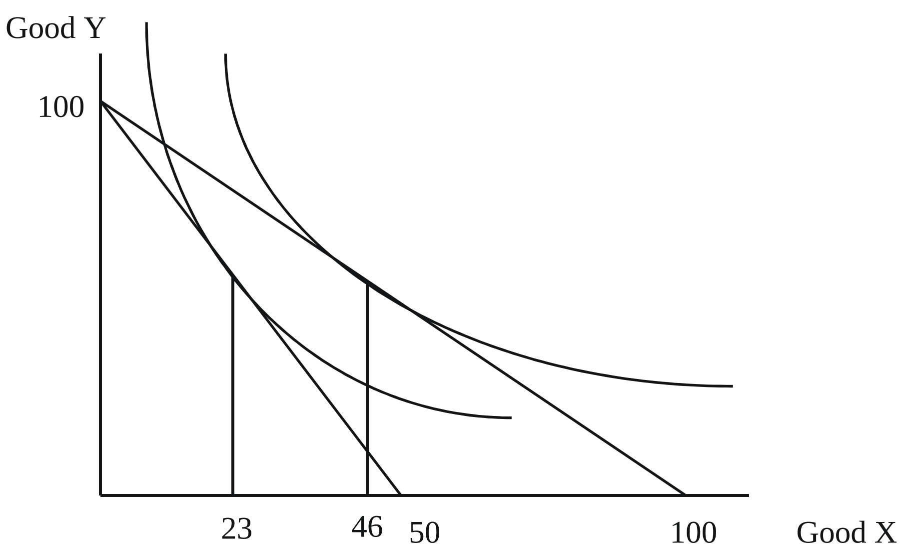
13. If the demand for beer is inelastic, revenues will ______if the price of beer decreases.
A) increase
B) fall
C) remain the same

14. Which of the following is likely to increase the elasticity of demand for good x?
A) an increase in income
B) a change in price of good y
C) a change in price of good x
D) a longer period of time

15. The demand curve for insulin by a diabetic is
A) perfectly elastic.
B) perfectly inelastic.
C) unit elastic.

16. A one-word definition for elasticity is
A) price
B) change
C) slope
D) revenue
E) responsiveness

17. Income elasticity of demand is
A) always negative
B) always positive
C) sometimes negative, sometimes positive



18. On the graph above, if the price of good Y is $1 and the price of good X is $2 and income is $100, what is the best affordable bundle?
A) A
B) B
C) C
D) D
E) E

19. (Refer to the graph on the previous page) If the price of good X falls to $1 and all else is unchanged, the total effect is represented by moving from point_____ to point______.
    A) D to B
    B) B to D
    C) A to B
    D) D to C
    E) B to A

20. The total effect is comprised of
    A) price effect and income effect
    B) normal effect and price effect
    C) normal effect and income effect
    D) substitution effect and price effect
    E) substitution effect and income effect

21. A good is considered "normal" if:

    A) consumers buy more when the price rises.
    B) consumers buy less when price rises.
    C) consumers buy less when income rises.
    D) consumers buy more when income falls.
    E) consumers buy more when income rises.

22. Bob likes sugar in his tea in the following ratio: 1 teaspoon sugar per 8 ounces of tea. Sugar costs 10 cents per teaspoon and tea costs 5 cents per ounce. Bob has $10 income all spent on sugar and tea. How much does Bob buy?
    a. 10 teaspoons sugar, 180 ounces tea
    b. 10 teaspoons sugar, 80 ounces tea
    c. 15 teaspoons sugar, 130 ounces tea
    d. 20 teaspoons sugar, 160 ounces tea
    e. 24 teaspoons sugar, 132 ounces tea

23. If Mary and Bob's demand curves are $P = 4 – 2Q_M$ and $P = 4 – Q_B$, what is the market demand curve?
    a. $P = 4 – (2/3)Q$
    b. $P = 4 – 3Q$
    c. $P = 8 – (1/3)Q$
    d. $P = 4 – (1/3)Q$
    e. $P = 8 – 3Q$

24. Coke and Pepsi have a cross-price elasticity of 0.7. Interpret this number:
    a. a $1 increase in price of Pepsi causes $0.70 increase in Coke expenditures.
    b. a 1 percent increase in price of Pepsi causes a 7 percent increase in quantity demanded of Coke.
    c. a $1 increase in price of Pepsi causes $0.70 decrease in Coke expenditures.
    d. a 1 percent increase in price of Pepsi causes a 0.7 percent increase in quantity demanded of Coke.
    e. a 1 percent increase in price of Pepsi causes a 0.7 percent decrease in quantity demanded of Coke.

25. If the price elasticity of demand for milk is estimated to be –0.4, then a 1 percent price increase in milk causes a:
    a. 4 percent decrease in quantity demanded.
    b. 4 percent increase in quantity demanded.
    c. 0.4 percent decrease in quantity demanded.
    d. 0.4 percent increase in quantity demanded.
    e. 40 percent increase in quantity demanded