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Second SEM 2016/2017

UNIVERSITY OF SWAZILAND

RE- SIT / SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: BSC in Agricultural Economics and Management

COURSE CODE: AEM 201

TITLE OF PAPER: INTERMEDIATE MICROECONOMICS

TIME ALLOWED: THREE HOURS

INSTRUCTION
1. ANSWER ALL QUESTIONS
2. EACH QUESTION CARRIES TWENTY FIVE (25) POINTS

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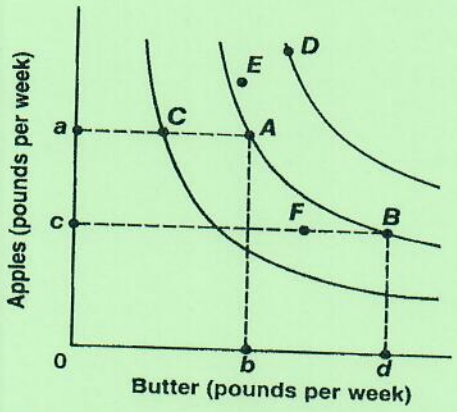
Question 1 Multiple Choice (1 point each)

1. Suppose that a market basket of two goods is changed by adding more to one of the goods and subtracting one unit from the other.

   a. The consumer will rank the market basket more highly after the change.
   b. The consumer will rank the market basket less highly after the change.
   c. The consumer will be indifferent between the market baskets.
   d. Any of the above statements may be true.

When answering questions 4-6, consider the accompanying graph of a person's consumption-indifference curves:



2. This graph indicates that the consumer

   a. at *A* is indifferent between 0*a* of apples and 0*b* of butter
   b. At *A* is consuming either 0*a* of apples or 0*b* of butter.
   c. Is indifferent between 0*a* of apples and 0*b* of butter on the one hand and 0*c* of apples plus 0*d* of butter on the other.
   d. Is correctly described by all of the above.

3. This graph also indicates that the consumer prefers combination

   a. *A* to *B*.
   b. *C* to *B*.
   c. *B* to *D*.
   d. *E* to *F*.

4. This graph also shows the consumer's marginal rate of substitution in the *AB* range to be

   a. 0*a* of apples for 0*d* of butter.
   b. 0*a* of apples for 0*b* of butter.
   c. 0*c* of apples for 0*d* of butter.
   d. *Ac* of apples for *bed* of butter.

5. Which of the following is not an assumption of ordinal utility analysis?
   a. Consumers are consistent in their preference.
   b. Consumers can measure the total utility received from any given basket of good.
   c. Consumers are non-satiated with respect to the goods they confront.
   d. All are necessary.
   e. None of the above.

6. As long as the principle of diminishing marginal utility is operating, any increased consumption of a good

   a. Lowers total utility.
   b. Produces negative total utility.
   c. Lowers marginal utility and, therefore, total utility.
   d. Lowers marginal utility, but may raise total utility.

7. Among all the combinations of goods attainable by a consumer, the one that maximizes total utility is the one that
   a. Maximizes the marginal utilities per dollar of each good.
   b. Maximizes the marginal utilities per pound (or other physical unit) of each good.
   c. Equates the marginal utilities per dollar of each good.
   d. Equates the marginal utilities per pound (or other physical unit) of each good.

8. A utility contour (or indifference curve) shows all the alternative combinations of two consumption goods that

   a. Can be produced with a given set of resources and technology.
   b. Yield the same total of utility.
   c. Can be purchased with a given budget at given prices.
   d. Equate the marginal utilities of these goods and, therefore, make the consumer

indifferent between them.

9. Suppose an individual spends all his income on only two goods, good X and good Y. Moreover, suppose that you were asked to derive his price consumption curve for good Y. Which of the following would be allowed to vary?

   a. Money income.
   b. The tastes of the consumer.
   c. The price of good X
   d. The price of good Y.

10. As long as all prices remain constant, an increase in money income results in

   a. An increase in the slope of the budget line.
   b. A decrease in the slope of the budget line.
   c. An increase in the intercept of the budget line.
   d. A decrease in the intercept of the budget line.
   e. Both (a) and (c).

11. If the prices of both goods increase by the same percent, the budget line will

   a. Shift parallel to the left.
   b. Shift parallel to the right.
   c. Pivot about the x axis.
   d. Pivot about the y axis.
   e. None of the above.

12. The substitution effect of a price decrease for a good with a normal indifference curve pattern

   a. Is always inversely related to the price change.
   b. Measures the change in consumption of the good that is due to the consumer's feeling of being richer.
   c. Is measured by the horizontal distance between the original and the new indifference curves.
   d. Is sufficient information to plot an ordinary demand curve for the commodity being considered?

13. The *income effect*

   a. Always makes a consumer buy more of a good with a lowered price, all else being equal (because lowered price implies higher real income).
   b. Always makes a consumer buy less of a good with an increased price, all

else being equal (because increased price implies lower real income).
c. Is correctly described by (a) and (b).
Is correctly described by neither (a) nor (b).

14. In 2015, the price of gasoline fell significantly. At the new lower price, gasoline is

a. Relatively more price elastic.
b. Relatively more price inelastic.
c. Unaffected in terms of elasticity.
d. Unitarily elastic.
e. None of the above.

15. Price elasticity of demand is defined to be

a. The change in quantity demanded resulting from a 1 cent change in price.
b. The percentage change in price resulting from a 1 unit change in quantity demanded.
c. The percentage change in quantity demanded resulting from a 1 percent change in price.
d. The maximum amount consumers will pay for 1 percent more of a good.
e. the change in the price of a good divided by the resulting change in its quantity demanded

16. Which of the following will *not* be a determinant of the price elasticity of demand for a commodity?

a. The absence of substitute for the good.
b. The presence of substitutes for the good.
c. The importance of the commodity in consumers' budgets.
d. The length of time period to which the demand curve pertains.
e. The cost of producing the commodity.

17. market demand curve can be derived by adding all the individual demand curve

a. Vertically.
b. Horizontally.
c. In parallel.
d. Any of the above as long as it is consistent.

18. If leisure is an inferior good, the individual's supply curve for labor is
a. Backward bending.
b. Completely inelastic.
c. Upward sloping.
d. Perfectly elastic.
e. Not necessarily any of the above.

19. perfect competition, when economic profits exist in the short run, they are very tenuous because

    a. Costs will inevitably increase and eliminate profit.
    b. Price will fall because market supply will increase.
    c. Firms are driven to increase output in the short run to the point where average total cost will equal price.
    d. Firms are driven in the short run to reduce output until average total cost equals price.

20. When a profit-maximizing firm is at its short-run optimum point,

    a. The average cost of the product is at its lowest possible point whether a profit is being made or not.
    b. The firm will be shut down if its price is less than the average fixed cost.
    c. The profit per unit of output will be at its maximum possible level.
    d. All the above will be true.
    e. None of the above will be true.

21. An isocost line reveals the:

    a. Costs of inputs needed to produce along an isoquant.
    b. Costs of inputs needed to produce along an expansion path.
    c. Costs necessary to purchase a plant of minimum efficient scale.
    d. Output combinations that can be produced with a given outlay of funds.
    e. Input combinations that can be purchased with a given outlay of funds.

22. Producer surplus in a perfectly competitive industry is:

    a. The difference between profit at the profit-maximizing output and profit at the profit-minimizing output.
    b. The difference between total revenue and total cost.
    c. The difference between total revenue and variable cost.
    d. The difference between total revenue and fixed cost.
    e. The same thing as total revenue

23 Price discrimination is

    a. Illegal.
    b. A technique that can improve the firm's revenue and profit performance.
    c. Immoral in most cases.
    d. Impossible if consumers have perfect information.
    e. Difficult to administer.
    f.

23. The key feature of oligopoly is
    a. Excess capacity.
    b. High profitability.
    c. Product differentiation.
    d. Interdependence of firms.
    e. The impersonal nature of the market.

24. The basic behavioral assumption of the Cournot model is

    a. Each duopolist assumes that his or her rival's price is invariant with respect to his or her own price.
    b. Each duopolist assumes that his or her rivals' output is invariant with respect to his or her own output.
    c. Duopolists recognize their mutual interdependence and agree to act in unison.
    d. Each duopolist assumes that if he or she lowers the price, his or her rivals will do the same but that if he or she raises the price, his or her rivals may not follow suit.

25. The firm under monopolistic competition is likely to produce less and set a higher price than under perfect competition because

    a. the firm faces decreasing returns to scale.
    b. the firm faces increasing costs.
    c. the firm must incur selling expenses, including advertising.
    d. the firm operates where marginal revenue equals marginal cost.
    e. the firm faces a downward sloping demand curve.

Question 2

i. Suppose that a competitive firm's MC = 3 + 2q, AVC = 3 + q, and FC = 3. Assume that the market price is $9 per unit. **(15 points)**

a) What level of output will the firm produce?
b) What is the firm's producer surplus?
c) Will the firm be earning a positive, negative or zero profit in the short run?

ii. Suppose a firm must pay an annual franchise fee or tax, which is a fixed sum, independent of whether it produces any output or not. How does this tax affect the firm's fixed, marginal and average costs? **(10 point)**

Question 3

i. What are the key characteristics of a monopolistically competitive market? Some experts have argued that too many brands of breakfast cereal are on the market. Give an argument to support this view, and an argument against this view. (**5 points**)

ii. A monopolist is deciding how to allocate output between two markets. The two markets are separated geographically (East Coast and Midwest). The monopolist's total cost is TC = 5 + 3(Qa + Qb), and thus, MC = 3. The monopolist's demand and marginal revenue for the two markets are as follows below. Calculate the monopolist's price, output, profit and the deadweight loss to society if s/he can price discriminate. (**15 points**)

Pa = 15 – Qa;	MRa = 15-2Qa
Pb = 25 – 2Qb;	MRb = 25 – 4Qb

iii. Suppose a firm can perfectly price discriminate. What is the lowest price it will charge, and what will its total output be? (**5 points**)

Question 4

Assume that scientific studies provide you with the following information concerning the benefits and costs of sulfur dioxide emissions, where A is the quantity abated in millions of tons:

Benefits of abating (reducing) emissions: $MB = 400 - 10A$
Costs of abating emissions: $MC = 100 + 20A$

a) What is the socially efficient level of emissions abatement? **(5 points)**
b) What happens to net social benefits (benefits minus costs) if you abate one million more tons than the efficient level**? (10 points**)
c) Why is it socially efficient to set marginal benefits equal to marginal costs rather than abating until total benefits equal total costs? **(10 points**)