UNIVERSITY OF EASTERN AFRICA, BARATON

SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT

QUESTIONS FOR MASTERING KEY CONCEPTS FOR THE COURSE ECON 210 : INTRODUCTION TO PRINCIPLES OF MICROECONOMICS

Prepared By

Dr. WILLIAM ONDARI PhD.

1. **Economics, Scarcity ,Choice and Opportunity Cost.**

Assignment 1.1

Key Idea: Economics is the science of scarcity.

1. Define economics.
2. Define scarcity.
3. List the three effects of scarcity
4. State how economists divide resources
5. Explain why competition exists.
6. Define Opportunity cost.
7. Use the concept of opportunity cost to explain why some things are not done.
8. Explain why economists consider costs and benefits, instead of only benefits.
9. Explain why it is important to consider unintended effects.

Assignment 1.2.

Key Idea: Economics is sometimes broken down into different categories.

1. Define positive and normative economics.
2. Write your own example of a positive economic statement and normative economic Statement
3. Define microeconomics and macroeconomics.

4 Give your own examples of microeconomic and macroeconomic questions or issues.

Assignment 1.3.

Key Idea: The Production Possibilities curve (PPC) is a framework used to examine production and to demonstrate several economic concepts.

1. Explain what the production possibilities curve represents.
2. Analyze what it means for the PPC to be bowed out from the origin (curved), and what it means for the PPC to be a straight line.
3. Define productive efficiency and use the PPC to demonstrate it.
4. Use the PPC to demonstrate unemployment.
5. Use the PPCs to show economic growth and list the sources of economic growth.

2. Demand and Supply, Theory and Practice: The basics of Economics Analysis.

Assignment 2.1.

Key Idea: Economists build theories.

1. Define an economic model and an economic theory.
2. Explain why economists build theories.

3. Identify the basic elements of an economic model and explain how its validity can be tested.

Assignment 2.2.

Key Idea: Markets have two sides. One side of the market is the demand side.

1. Define demand.
2. State the law of demand.
3. Draw the demand curve and label each axis.
4. Describe why the law of demand holds.

Assignment 2.3.

Key Idea: Movements long a demand curve are called changes in quantity demanded, while shifts to new demand curves are called changes in demand.

1. Explain the differences between a change in quantity demanded and a change in demand
2. List the six major determinants of demand.
3. Define the following terms:
    a) Normal good.
    b) Inferior good.
    c) Substitute
    d) Complement.
4. Graphically illustrate the difference between an increase in quantity demanded and an increase in demand.
5. Graphically illustrate the difference between a decrease in quantity demanded and a decrease in demand.
6. List the changes that would shift the demand curve rightward.
7. List the changes that would shift the demand curve leftward.

Assignment 2.4

Key Idea: Markets have two sides. One side of a market is the supply side.

1. Define supply
2. State the law of supply
3. Draw the supply curve and label each axis.
4. Explain why the supply curve is usually upward-sloping.
5. Explain why the law of supply does not always hold.
6. List the changes that would shift the supply curve upwards
7. List the changes that would shift the supply curve leftwards

Assignment 2.5

Key Idea: Movements along a supply curve are called changes in quantity supplied, while shifts to new supply curves are called changes in supply.

1. Explain the difference between a change in quantity supplied and a change in supply.
2. List the determinants of supply.
3. Define the following terms:
    a) Relevant resource
    b) Technology

c) Tax
d) Subsidy.

4. Graphically illustrate the difference between an increase in quantity supplied and an increase in supply.
5. Graphically illustrate the difference between a decrease in quantity supplied and a decrease in supply.
6. List the changes the would shift the supply curve rightward.
7. List the changes that would shift the supply curve leftward.

Assignment 2.6

Key Idea: Market adjustments occur to eliminate shortages and surpluses.

1. Define market equilibrium
2. Define the following terms:
    a) Surplus
    b) Shortage
    c) Equilibrium price
    d) Equilibrium quantity
3. State what will happen to price when there is a surplus.
4. State what will happen to price when there is a shortage.

Assignment 2.7

Key Idea: A change in a factor of demand or a factor of supply (or both) (i.e. the ceteris paribus conditions) will change the point of market equilibrium in a predictable way.

1. Tell what will happen to equilibrium price and equilibrium quantity in the following cases:
    a) Demand rises and supply is constant.
    b) Demand falls and supply is constant
    c) Demand is constant and supply rises
    d) Demand is constant and supply fall
    e) Demand rises by more than supply falls.
    f) Demand rises by the same amount that supply rises.
    g) Demand rises by less than supply.
    h) Demand rises by more than supply falls.
    i) Demand rises by the same amount that supply falls.
    j) Demand falls by more than supply rises.
    k) Demand rises by less than supply falls.
    l) Demand falls by the same amount that supply rises
    m) Demand falls by less than supply rises.
    n) Demand falls more than supply falls.
    o) Demand falls by the same amount that supply falls.

Assignment 2.8

Key Idea: Sometimes due to failures of the market mechanism the government may intervene and does not allow price to be a rationing device.

1. Define the following terms:
    a) Price Ceiling

b) Price Floor.

2. Describe situations where price ceilings and price floors have no effects.
3. List the undesirable effects of price ceilings.
4. List the undesirable effects of price floors.

Assignment 2.9

Key Idea: One theory widely used to explain and predict is the theory of demand and supply.

1. Use supply and demand curves to demonstrate what will happen to the price of marijuana if the purchase and sale of marijuana was legalized.
2. Use demand and supply curves to demonstrate how the music industry can reduce music piracy.
3. Use demand and supply curves to demonstrate what will happen if there is not enough food in Kisumu.
4. Use demand and supply curves to demonstrate the effects of a minimum wage law.
5. Use demand and supply curves to show what will happen if parliament passes the price control bill on food and fuel.
6. Use demand supply curves to demonstrate why the prices of some goods are the same everywhere while the prices of other goods aren't the same everywhere.
7. Use demand and supply curves to demonstrate that paying all professors the same salary would create shortages and surpluses.
8. Use demand and supply curves to demonstrate who wins and who loses from price floors.
9. Use supply an demand curves to demonstrate the shortage of freeway space during rush hour.

3. Elasticity: Measure of Responsiveness .

Assignment 3.1

Key Idea: Elasticity provides a technique for estimating the responsiveness of one variable to changes in some other variable, and has numerous applications in economics.

1. List and define the various elasticity concepts covered in class.
2. What is arc elasticity of demand?
2. State the midpoint formula for calculating the price elasticity of demand.
3. Describe elastic demand.
4. Describe inelastic demand.
5. Describe unit elastic demand.
6. Tell when demand would be perfectly elastic.
7. Tell when demand would be perfectly inelastic.
8. Explain how price elasticity of demand affects the relationship between price and total revenue.
9. What are the main factors that determine price elasticity of demand?

Assignment 3.2

Key Idea: Cross elasticity of demand measures the responsiveness of the quantity demanded of one good to changes in the price of another good.

1. State the formula for calculating cross elasticity of demand .
2. Explain how cross-elasticity of demand is calculated.
3. Define the range of values of the coefficients of cross elasticity of demand when two goods are:
    i) Substitutes
    ii) Complements
    iii) Independent
5. Explain the importance of price elasticity of demand

Assignment 3.3

Key Idea: Income elasticity of demand measures the responsiveness of the quantity demanded of a good to changes in income.

1. State the formula for calculating income elasticity of demand.
2. Explain how income elasticity of demand is used.
3. Define the range of the values of the coefficients of the income elasticity of demand when a good is inferior and when it is normal.
4. Define the range of the values of the coefficients

Assignment 3.4

Key Idea: Price elasticity of supply measures the responsiveness of quantity supplied of a good to a change in the price of that good.

1. State the formula for calculating price elasticity of supply.
2. Describe elastic supply.
3. Describe inelastic supply
4. Describe unit elastic supply
5. Tell when supply would be perfectly elastic.
6. Tell when supply would be perfectly inelastic.
7. Explain how price elasticity of supply changes over time.

4. Demand and Consumer Behavior

Assignment 4.1

Key Idea: Utility is important for understanding consumer choice.

1. Define total utility.
2. Define marginal utility.
3. State the law of diminishing marginal utility.
4. State when a person is in consumer equilibrium.
5. State the condition for consumer equilibrium.

Assignment 4.2

Key Idea: An indifference curve shows all the bundles of two goods that give an individual total utility.

1. Explain the main assumptions made about consumer preferences
2. Describe the characteristics of indifference curves.

3. Define the marginal rate of substitution
4. Describe the slope of an indifference curve in terms of the marginal rate of substitution.
5. Why does marginal rate of substitution decline from left to right along an indifference curve?

Assignment 4.3

Key Idea: The budget constraint shows all possible combinations of two goods that may be purchased with a given income.

1. Describe the effect of a price change on the budget constraint.
2. Describe the effect of an income change on the budget constraint.
3. Describe the effect of an equal proportionate change of all prices on the budget constraint.

Assignment 4.4

Key Idea: Consumers maximize their utility subject to their budget constraints.

1. Describe the condition necessary for achieving consumer equilibrium.
2. Explain how to derive a demand curve from indifference curves.
3. Define and show graphically a price consumption curve and an income consumption curve.
4. Define and show an engel curve.
5. Explain the shape of an engel curve when both goods are normal good and when one is inferior good.

5. Firms and Production.

Assignment 5.1

Key Idea: The purpose of any firm is to turn inputs into output.

1. Define a production function
2. Define total physical product.
3. Define marginal physical product.
4. Define average physical product.
5. State the law of diminishing marginal returns.
6. State the equation of the average physical product of labor.
7. Explain the difference between a fixed input and a variable input
8. Define a short run production function.
9. State the average marginal rule

Assignment 5.2

Key Idea: An isoquant is a curve that shows the various combinations of two inputs that will produce the same amount of output.

1. Describe the characteristics of isoquants.
2. Describe the slope of isoquants in terms of the marginal rate of technical Substitution.
3. Explain why isoquants are typically convex.
3. Graph and describe the shape of isoquants for a production function where inputs are perfectly substitutable.

4. Graph and describe the shape of isoquants for a production function where inputs are used in fixed proportions.

Assignment 5.3

Key Idea: An isocost is a line that includes all possible combinations of two inputs that can be purchased for a given total cost.

1. Describe the effect of a change in input price on the isocost line.
2. Describe the effect of a change in total cost on the isocost line.
3. State the economic interpretation of the slope of isocost line.

Assignment 5.4

Key Idea: Producers minimize total costs of producing a given level of output subject to a given total cost outlay.

1. Describe the condition necessary for achieving producer equilibrium.
2. Describe the firm's expansion path.

Assignment 5.5

Key Idea: Returns to scale is the rate at which output increases in response to proportional increases to all inputs

1. Explain constant returns to scale.
2 Explain increasing returns to scale.
3. Explain decreasing returns to scale.
4. Illustrate each of these concepts using isoquant maps.

6. Costs of Production

Assignment 6.1

Key Idea: Economists think of costs differently from accountants

1. Explain the difference between accounting costs and economic costs
2. Explain the difference between explicit costs and implicit costs.
3. Explain the difference between accounting profits and economic profits.
4. Define normal profits.

Assignment 6.2

Key Idea: Costs can be defined in the short run or in the long run. The short run is a period in time in which some inputs are fixed, while the long run is a period in time in which all inputs can be varied.

1. Define marginal cost.
2. State the law of diminishing returns
3. Explain why the MPP and the MC move in opposite directions.
4. Define Fixed, Variable and Total costs.

Assignment 6.3

Key Idea: Fixed, Variable and Total costs can all be turned into average magnitudes by dividing each by the firm's output.

1. State the equation for average fixed cost.
2. State the equation for the average variable cost.

3. State the equation for average total cost.

Assignment 6.4

Key Idea: The shape of the TC, TVC, MC ATC and AVC curves are determined by the shape of the production function.

1. Describe the shapes of the TC, MC and ATC curves with constant returns to scale and sketch them.
2. Describe the shapes of the TC, MC and ATC curves with increasing returns to scale and sketch them.
3. Describe the shapes of the TC, MC and ATC curves with decreasing returns to scale and sketch them.
4. Describe the shapes of the TC, MC and ATC curves for a firm with an optimal scale and sketch them.

Assignment 6.5

Key Idea: The MC curve intersects the AVC and the ATC curves at their respective minimum points.

1. State the average marginal rule
2. Draw a graph depicting the relationships between MC, ATC, and AVC.
3. Explain why the AVC curve comes closer and closer to the ATC curve as output increases.

Assignment 6.6

Key Idea: Sunk costs should not be considered when making decisions.

1. Define sunk cost.
2. Explain why economists advise individuals to ignore sunk costs.

Assignment 6.7

Key Idea: Firms have greater flexibility in the long run than in the short run.

1. Explain why there are no fixed costs in the short run.
2. Explain how to derive a long run average total cost curve (LRATC).
3. Define economies to scale, diseconomies of scale and minimum efficient scale.
4. Draw a LRATC curve and use it to show where economies of scale, constant returns to scale, and diseconomies of scale exist. Also use it to show minimum efficient scale.
5. Give reasons why economies of scale occur.
6. Give reasons why diseconomies of scale occur.
7. Define optimal size of plant.

Assignment 6.8

Key Idea: There are several factors that can shift cost curves.

1. List the changes that will shift a firm's MC, AVC, and ATC downward.
2. List the changes that will shift a firm's MC, AVC, and ATC curves upward.

Assignment 6.9

Key Idea: The firm's objective is to maximize profit.

1. Define Total Revenue and Marginal Revenue.
2. Graphically show how to determine the profit maximizing level of production using total revenue and total cost.
3. Graphically show how to determine the profit maximizing level of production using marginal revenue and marginal cost.
4. Explain why profits are maximized at a level of output that equates marginal revenue to marginal cost.

Market Structures

7. Perfect Competition

Assignment 7.1

Key Idea: Every firm is like other firms in that it finds itself operating within a certain market structure.

1. State what a market structure is.
2. State the main characteristics that differentiate market structures.
3. Name the four main market structures studied in economics.

Assignment 7.2

Key Idea: The theory of prefect competition rests on five basic assumptions

1. State the five basic assumptions of perfect competition.
2. Explain why perfectly competitive firms are price takers.
3. Draw a graph showing the relationship between a representative firm and the total market.

Assignment 7.3

Key Idea: A perfectly competitive firm will set MR = MC in order to maximize profit in the short run.

1. Graphically show a perfectly competitive firm's profit maximizing price and Quantity.
2. Tell whether or not perfectly competitive firms achieve resource allocative efficiency.
3. Explain how the perfectly competitive firm decides whether to operate or shut down in the short run.
4. Define the firm's shutdown point in terms of price and AVC; and in terms of TFC and losses.

Assignment 7.4

Key Idea: The perfectly competitive firm's short run supply curve is that portion of its marginal cost curve that lies above the AVC curve.

1. Draw a perfectly competitive firm's MC and AVC curves and use them to find the firm's short run supply curve.

Assignment 7.5

Key Idea: The market supply curve for a perfectly competitive industry is the horizontal summation of each individual firm's supply curve.

1. Draw the market supply curve for a perfectly competitive industry

Assignment 7.5

Key Idea: Long run competitive equilibrium exists when P = MC = SRATC = LRATC.

1. State the conditions that characterize long run competitive equilibrium.
2. Explain what will happen if price is above or below short-run average total cost in a perfectly competitive industry.
3. Explain why perfectly competitive firms achieve productive efficiency in the long run.
4. Explain why long run competitive equilibrium is considered the efficiency ideal or social optimum to which other market structures are compared.

Assignment 7.6

Key Idea: The slope of the long run supply curve depends on whether the industry in question is constant-cost, increasing-cost, or decreasing-cost industry.

1. List the characteristics of a constant-cost, increasing-cost and decreasing cost industries.
2. Explain what will happen in a constant-cost competitive industry if demand increases.
3. Explain what will happen in an increasing-cost competitive industry if demand increases.
4. Explain what will happen in a decreasing-cost competitive industry if demand increases.
5. Draw the long-run supply curves for a constant-cost, increasing-cost and decreasing cost industry.

8. Monopoly.

Assignment 8.1

Key Idea: The theory of monopoly rests on three assumptions

1. State the three basic assumptions of monopoly
2. Describe the types of barriers that prevent entry into the monopoly.

Assignment 8.2

Key Idea: A monopolist sets MR = MC in order to maximize profit in the short run.

1. Explain why the monopolist's demand curve is downward sloping.
2. Explain why the monopolist's demand and marginal revenue curves are not the same.
3. Draw a downward-sloping demand and label it according to price elasticity, given information on MR
4. Graphically show a monopolist's short run profit maximizing price and quantity when making:
   a) an economic profit

b) a loss
c) an economic profit of zero.

5. Explain why a monopolist does not have a supply curve.

Assignment 8.3

Key Idea: There are important differences between perfect competition and monopoly.

1. Compare the demand curve for a perfectly competitive firm and that of a monopolist.
2. Compare the price charged by a perfectly competitive firm and that a monopolist.
3. Compare the amount of consumer's surplus received by consumers under monopoly with the amount received under perfect competition.

Assignment 8.4

Key Idea: Monopoly is often considered to be inefficient compared to perfect competition.

1. List the reasons why monopoly is often considered to be inefficient compared to perfect competition.

Assignment 8.5

Key Idea: Under certain conditions, monopolist could practice price discrimination.

1. Define price discrimination.
2. List and describe the three types of price discrimination.
3. Explain why a monopolist wants to price discriminate.
4. State the conditions of price discrimination.
5. Explain why a perfect price discriminating monopolist will achieve resource allocative efficiency.

9. Monopolistic Competition.

Assignment 9.1

Key Idea: The theory of monopolistic competition rests on three basic assumptions.

1. State the three basic assumptions of monopolistic competition.
2. State in what way monopolistic competition is similar and also different with perfect competition.
3. State in what way monopolistic competition is similar and also different with monopoly.

Assignment 9.2

Key Idea: A monopolistic competitor sets MR = MC in order to maximize profit in the short run.

1. Explain why the monopolistic competitor will most likely earn no economic profit in the long run.
2. Graphically show a monopolistic competitor's short run profit maximizing price and quantity when the firm is making.
    a) an economic profit
    b) a loss

c) an economic profit of zero.

Assignment 9.3

Key Idea: The monopolistic competitor will most likely earn no economic profit in the long run.

1. Explain why firms operating monopolistically competitive markets probably won't earn an economic profit in the long run, and explain why they might.

Assignment 9.4

Key Idea: The excess capacity theorem states that a monopolistic competitor will produce an output smaller than the one that will minimize its unit costs of production.

1. Graphically compare the monopolistic competitor's profit maximizing output with the output that would minimize its unit costs of production.
2. Discuss whether excess capacity is good or bad.
3. Discuss the relationship between:
    a) excess capacity and product differentiation.
    b) product differentiation and elasticity of demand.
4. Define non-price competition and the role of advertising in monopolistic competition

Assignment 9.5

Key Idea: The monopolistic competitor is neither resource allocative efficient nor productive efficient.

1. State why the monopolistic competitor is neither resource allocative efficient nor productive efficient.

10. Oligopoly.

Assignment 10.1

Key Idea: There is one theory of oligopoly, but different theories of oligopoly have three common characteristics.

1. State the three assumptions common to the different theories of oligopoly.
2. State the three classes into which oligopoly is divided

Assignment 10.2

Key Idea: One theory of oligopoly is the cartel theory.

1. Define a cartel.
2. State the key behavioral assumptions of the cartel theory.
3. Describe the problems associated with forming and maintaining a cartel.
4. List the conditions necessary for a cartel to succeed.
5. Discuss the factors that limit or facilitate market coordination

Assignment 10.3

Key Idea: One theory of oligopoly is the kinked demand curve theory.

1. Graphically show the demand curve and marginal revenue curve for a firm facing a kinked demand curve.

2. Explain why the kinked demand curve theory explains price rigidity.
3. List the basic shortcomings of the kinked demand curve theory.

Assignment 10.4

Key Idea: One theory of oligopoly is the price leadership theory.

1. State the key behavioral assumption of the price leadership theory.
2. Graphically show price leadership with a dominant firm and competitive fringe firms.

Assignment 10.5

Key Idea: Game theory is a mathematical tool used to analyze the behavior of decision makers.

1. Explain why economists use game theory.
2. Tell which game illustrates a case where individually rational behavior leads to a jointly inefficient outcome.
3. State under what condition oligopoly firms may find themselves in a prisoner's dilemma.

Assignment 10.6

Key Idea: There has recently been a focus on the issue of entry into and exit out from an industry.

1. Describe the conditions under which a market is contestable.
2. State the conclusions of contestable market theory.

11. Factor markets: With Emphasis on the Labor Market

Assignment 11.1

Key Idea: There is a demand for and supply of a factor or resource

1. Define a product market and factor market and state the relationship between them.
2. Draw a factor demand curve and label each axis.
3. Explain the there characteristics of the demand for a factor of production
4. Define and show the calculation necessary for:
    a) marginal physical product (MPP)
    b) value of the marginal physical product (VMP)
    c) marginal revenue product.(MRP)
    d) marginal resource cost.(MRC)
5. Explain why a factor demand curve is downward sloping.
6. Explain under what conditions MRP will equal VMP.
7 State the profit-maximizing rule for a firm hiring a resource in terms of MRP and MRC.
8. Define a monopsonist.
9. Use a factor market diagram using VMP, MRP, D (demand for the factor),MRC, and S (supply for a factor) to illustrate the differences when there is:
    a) Pure competition vs monopoly in the product market.
    b) Pure competition vs monopsony in the factor market.

10. Explain monopsonistic exploitation in terms of a competitive wage vs a Monopsonistic wage.

Assignment 11.2

Key Idea: The basic factor concepts can be used to build a specific theory of the demand for and supply of labor.

1. List the factors that can shift a perfectly competitive firm's labor demand curve.
2. Explain why the market demand curve is not the horizontal summation of the firms' demand curve for labor.
3. List the determinants of elasticity of demand for labor.
4. Draw the market labor supply curve.
5. Describe the substitution effect of an increase in the wage rate.
6. Describe the income effect of an increase in the wage rate.
7. Tell when an individual's labor supply curve will be upward-sloping.
8. List the factors that can shift the market.
9. Graphically show labor market equilibrium.
10. Explain why wage rates differ between markets.
11. State the marginal productivity theory's prediction about factor payments.

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