# Department of MBA CMRIT Bengaluru

## QP and Answer scheme

## **Managerial Economics**

## VTU Sem exam 2023 Batch Second semester

(	Q	Su	Question and Answer:	
]	No	No.		
	l.	a.	Define managerial Economics.	
"The integration of economic theory with business practice for the purpose of facilitating dec				
1	nak	ing an	d forward planning by management."	

## b. Explain the role and responsibilities of managerial economist.

## Roles of a Managerial Economist

- 1. Economic Analysis:
- 2. Demand Forecasting:
- 3. Cost Analysis:
- 4. Pricing Decisions:
- 5. Investment Appraisal:
- 6. Risk Assessment
- 7. Policy Formulation:
- 8. Strategic Planning
- 9. Regulatory Compliance
- 10. Profit Planning:

## Responsibilities of a Managerial Economist

- 1. Data Collection and Interpretation:
- 2. Advising Management:
- 3. Monitoring Economic Policies:
- 4. Problem Solving:
- 5. Communication:
- 6. Collaboration:

## c. Explain Baumols model

## Answer:

Key Aspects of Baumol's Managerial Model

- 1. Sales Revenue Maximization:
  - o Managers may prioritize maximizing sales revenue instead of profits.
  - Higher sales revenue often leads to greater prestige, market share, and salaries for managers.
  - Shareholders are typically satisfied as long as the firm achieves a minimum acceptable level of profit.

## 2. Constraints:

- While focusing on sales revenue, managers must ensure that the firm earns at least a minimum level of profit, referred to as profit constraint, to keep shareholders and other stakeholders satisfied.
- This constrained optimization reflects a balance between managers' goals and owners' expectations.
- 3. Rationale Behind Revenue Maximization:
  - Managers' compensation and career prospects may be linked more closely to sales revenue and market share than profits.

o Sales revenue is often seen as a measure of the firm's size and influence in the market.

## 4. Profit as a Constraint:

- The firm does not ignore profit entirely. Instead, it ensures that profits remain sufficient to:
  - Meet dividend expectations of shareholders.
  - Finance investments.
  - Retain confidence among investors and creditors.
- 5. Implications for Pricing and Output:
  - Baumol's model predicts that firms would price their products lower and produce higher output compared to a profit-maximizing firm, aiming to increase sales revenue.

## Assumptions of Baumol's Model

- 1. The firm is managed by professional managers who prioritize sales revenue.
- 2. There is a minimum profit level required for the firm's survival and to satisfy shareholders.
- 3. Sales revenue maximization is pursued over a long-term horizon.
- 4. Costs and production capacities are constant.

## Comparison with Profit Maximization Model

Aspect	Profit Maximization	Sales Revenue Maximization
Objective	Maximize total profit	Maximize total sales revenue
Managerial Motivation	Align with shareholders' interests	Align with managerial incentives
Pricing and Output	Higher prices, lower output	Lower prices, higher output
Profit Role	Primary goal	Constraint to be met

#### Criticisms

- 1. Assumption of Managerial Behavior:
  - o Critics argue that managers do not always prioritize sales revenue and often align closely with shareholders' profit-driven objectives.
- 2. Oversimplification:
  - o The model oversimplifies managerial motivations and ignores complex factors like competition, regulatory pressures, and stakeholder expectations.
- 3. Lack of Empirical Evidence:
  - Limited empirical support exists for the idea that firms systematically prioritize sales revenue over profits.

## **Practical Applications**

- Marketing Strategy:
  - Firms may adopt aggressive marketing and pricing strategies to maximize sales revenue.
- Corporate Governance:
  - Shareholders and boards may design incentive structures to align managerial interests with profit maximization.
- Economic Policy:
  - The model helps policymakers understand firm behavior and market dynamics when profits are not the sole driver.

Baumol's managerial theory provides a useful lens to analyze non-profit-maximizing behavior in firms, emphasizing the influence of managerial objectives on decision-making.

## 2. a. State Law of Demand

When Price increases demand will decrease and viceversa

b. Explain various Price elasticities of demand

#### Answer:

- 1. Perfectly elastic
- 2. Perfectly in elastic
- 3. Relatively elastic
- 4. Relatively Inelastic
- 5. Unitary elastic

## Explain various methods of demand forecasting

#### Answer:

c.

- 1. Qualitative Methods
- a. Delphi Method
- b. Market Research
- c. Sales Force Opinions
- d. Executive Judgment
- e. Historical Analogy

## 2. Quantitative Methods

- a. Time Series Analysis
  - o Moving Average: Average demand over a fixed time period.
  - Exponential Smoothing: Assigns higher weights to recent data points for more accurate predictions.
  - Seasonal Decomposition: Separates demand data into trend, seasonal, and residual components.

#### b. Regression Analysis

- Simple Regression: Examines the relationship between demand and one independent variable.
- o Multiple Regression: Considers multiple variables to predict demand.

## c. Econometric Models

• Uses economic theories to establish equations linking demand with economic variables (e.g., GDP, inflation, consumer confidence).

## d. Input-Output Models

• Examines interdependencies between industries to forecast demand based on changes in production or consumption.

## e. Artificial Intelligence and Machine Learning

- Advanced methods like neural networks, decision trees, and clustering analyze large datasets for highly accurate forecasts.
- Useful for dynamic environments and handling complex relationships.

## f. Simulation Models

- Simulates various scenarios using computer programs to estimate demand under different conditions
- Effective for forecasting in uncertain or dynamic markets.

## 3. a. Define production

## Answer:

Production refers to the process of combining resources (inputs) such as labor, capital, raw materials, and technology to create goods or services (outputs) that satisfy human needs and wants. It involves transforming inputs into outputs through various methods, including manufacturing, farming, mining, and service provision.

b. Explain cost-output relationship in the short run and in the long run.

#### Answer:

## Short-Run Cost-Output Relationship

In the short run, some inputs (e.g., capital, machinery) are fixed, while others (e.g., labor, raw materials) are variable. As a result, costs are categorized into fixed costs and variable costs.

- 1. Types of Costs in the Short Run
  - Fixed Costs (FC): Costs that do not change with output (e.g., rent, salaries of permanent staff).
  - Variable Costs (VC): Costs that vary directly with output (e.g., raw materials, hourly wages).
  - Total Cost (TC): Sum of fixed and variable costs: TC=FC+VCTC = FC + VCTC=FC+VC.
  - Average Cost (AC): Cost per unit of output: AC=TC/QAC = TC / QAC=TC/Q.
  - Marginal Cost (MC): Additional cost of producing one more unit of output:
     MC=ΔTC/ΔQMC = \Delta TC / \Delta QMC=ΔTC/ΔQ.

#### 2. Cost Behavior

- Law of Diminishing Marginal Returns:
  - o Initially, as output increases, average and marginal costs decrease due to better utilization of fixed resources.
  - Eventually, diminishing returns set in, leading to higher marginal and average costs as additional output strains the fixed resources.
- U-Shaped Cost Curves:
  - o The Average Variable Cost (AVC) and Average Total Cost (ATC) curves are typically U-shaped due to increasing and then diminishing returns.
  - The Marginal Cost (MC) curve intersects the AVC and ATC curves at their minimum points.

## Long-Run Cost-Output Relationship

In the long run, all inputs are variable, and firms can adjust their production processes, including the scale of operations. This flexibility leads to a different cost-output relationship.

- 1. Types of Costs in the Long Run
  - There are no fixed costs in the long run; all costs are variable.
  - The focus is on long-run average cost (LRAC) and long-run marginal cost (LRMC).
- 2. Economies and Diseconomies of Scale
  - Economies of Scale:
    - o Occur when increasing the scale of production leads to lower average costs.
    - o Reasons include:
      - Bulk purchasing of inputs.
      - Specialization of labor and management.
      - Efficient use of capital and technology.
    - Represented by the downward-sloping portion of the LRAC curve.
  - Constant Returns to Scale:
    - Occur when scaling production leads to proportional increases in output without affecting average cost.
    - o Represented by the flat portion of the LRAC curve.
  - Diseconomies of Scale:
    - Occur when further increasing the scale of production leads to higher average costs.
    - Reasons include:
      - Managerial inefficiencies.
      - Communication and coordination difficulties.
    - o Represented by the upward-sloping portion of the LRAC curve.

## 3. Long-Run Cost Curve

- The LRAC curve is an envelope of the short-run average cost (SRAC) curves, showing the minimum cost of production for each output level when the firm can fully adjust its inputs.
- The shape of the LRAC curve depends on economies and diseconomies of scale.

## c. Explain the production function with one variable input

#### Answer:

Stages of Production Function with One Variable Input

As the variable input increases while keeping other inputs fixed, the output typically goes through three stages due to the law of diminishing marginal returns:

- 1. Increasing Returns to the Variable Input
  - Characteristics:
    - o Output increases at an increasing rate.
    - o Marginal Product (MP) is rising.
    - Occurs because the fixed inputs are underutilized, and the additional variable input makes them more productive.
  - Reason: Better coordination and utilization of fixed inputs.
- 2. Diminishing Returns to the Variable Input
  - Characteristics:
    - o Output increases at a decreasing rate.
    - o Marginal Product (MP) is positive but declining.
    - o Occurs when the fixed input becomes a constraint, limiting the effectiveness of additional units of the variable input.
  - Reason: Overuse of the fixed input, leading to reduced productivity of the variable input.
- 3. Negative Returns to the Variable Input
  - Characteristics:
    - o Output decreases as more of the variable input is added.
    - o Marginal Product (MP) becomes negative.
    - Occurs when the excessive use of the variable input overcrowds or disrupts the fixed input.
  - Reason: Overloading the fixed input to the point where productivity is adversely affected.

## 4. a. Define Monopoly

## Answer:

Monopoly is a market structure characterized by a single seller or producer that dominates the entire market for a particular good or service. The monopolist has significant control over the market price and supply, and there are high barriers to entry that prevent other firms from entering the market.

b. Explain the determination of price under perfect competition.

#### Answer:

Determination of Price in the Market

- 1. Market Demand and Supply:
  - The equilibrium price is determined at the intersection of the market demand curve (representing buyers' willingness to purchase) and the market supply curve (representing sellers' willingness to produce).
  - o At this point, the quantity demanded equals the quantity supplied.

#### QD=QSQ D=Q SQD=QS

- o Equilibrium Price (PEP EPE): The price at which the market clears.
- o Equilibrium Quantity (QEQ EQE): The quantity bought and sold at PEP EPE.

## Graphical Representation:

The demand curve is downward-sloping (indicating inverse relationship between price and quantity demanded).

- The supply curve is upward-sloping (indicating direct relationship between price and quantity supplied).
- The intersection determines the equilibrium price and quantity.

## Firm's Behavior at the Equilibrium Price

Once the market price is determined, each individual firm in a perfectly competitive market takes this price as given (price taker) and decides its level of output based on the cost structure.

- 1. Revenue in Perfect Competition
  - Total Revenue (TR):  $TR=P\times QTR=P \times QTR=P\times Q$
  - Average Revenue (AR): AR=TR/Q=PAR = TR / Q = PAR=TR/Q=P (equals the market price).
  - Marginal Revenue (MR): Additional revenue from selling one more unit, also equal to the price (MR=PMR = PMR=P).

## 2. Profit Maximization

A firm maximizes its profit by producing the quantity of output where:

MR = MCMR = MCMR = MC

- P=MCP = MCP=MC: Since MR=PMR = PMR=P in perfect competition.
- 3. Short-Run Equilibrium
  - A firm will produce output where its marginal cost curve (MCMCMC) intersects the market price.
  - If P>ACP>ACP>AC, the firm earns supernormal profits.
  - If P=ACP = ACP=AC, the firm earns normal profits (break-even point).
  - If P<ACP < ACP<AC, the firm incurs losses but may continue production if P>AVCP > AVCP>AVC.
- 4. Long-Run Equilibrium
  - In the long run, firms can enter or exit the market freely.
  - If supernormal profits exist, new firms enter, increasing supply and lowering the market price until profits are normal.
  - If losses occur, firms exit, reducing supply and raising the price until losses are eliminated.
  - In the long run, the firm operates where: P=MR=MC=ACP = MR = MC = ACP=MR=MC=AC
    - o Firms earn only normal profits.
    - The market price equals the minimum average cost, ensuring allocative and productive efficiency.
  - c. Explain features and pricing under monopolistic competition

## Answer:

Features of Monopolistic Competition

- 1. Many Sellers:
  - o There are a large number of firms in the market, similar to perfect competition, but each firm offers a slightly differentiated product.
- 2. Product Differentiation:
  - Firms sell products that are similar but not identical. This differentiation can be based on quality, branding, features, customer service, etc. As a result, each firm has some degree of control over the price of its product.
- 3. Free Entry and Exit:
  - Firms can enter or exit the market easily, much like in perfect competition. This freedom ensures that in the long run, firms can only earn normal profits.
- 4. Imperfect Information:
  - Unlike perfect competition, consumers may not have perfect information about all available options. Product differentiation and branding often influence purchasing decisions.
- 5. Non-Price Competition:

 Firms engage in non-price competition through advertising, product design, quality improvements, and customer service. This allows them to distinguish their products from competitors' offerings.

## 6. Some Control Over Price:

 Due to product differentiation, each firm has a limited ability to set prices. The firm's market power allows it to influence prices, but it is still constrained by the availability of close substitutes.

## 7. Downward-Sloping Demand Curve:

Each firm faces a downward-sloping demand curve because its product is differentiated. As a result, it can increase prices without losing all of its customers, but the demand will still be affected.

## Pricing Under Monopolistic Competition

Pricing under monopolistic competition is determined by the interaction of demand, cost, and the firm's market power. The key features of pricing in monopolistic competition are as follows:

## 1. Short-Run Pricing

- In the short run, firms in monopolistic competition can earn supernormal profits or incur losses depending on their position in the market.
- The firm sets its output where Marginal Revenue (MR) = Marginal Cost (MC) to maximize profit.
- The price is determined by the demand curve at the profit-maximizing output level.
  - o If the price (as determined by the demand curve) is above the Average Cost (AC) curve at the chosen output, the firm earns supernormal profits.
  - o If the price is below AC, the firm incurs losses.

## Graphical Representation:

- o The firm's demand curve is downward sloping.
- The firm will produce at the point where MR = MC, and the price is determined by the demand curve at that output level.

#### 2. Long-Run Pricing

- In the long run, supernormal profits attract new firms to enter the market, increasing the supply of differentiated products and leading to a shift in the demand curve for each firm.
  - As new firms enter, the demand curve facing each firm becomes more elastic (flatter), reducing the price it can charge.
  - Over time, as firms enter and exit, the market reaches a point where firms only earn normal profits (i.e., zero economic profit).

## In the long-run equilibrium:

- o Price = Average Cost (P = AC).
- The firm operates where its demand curve is tangent to its average cost curve at the output level where MR = MC.
- At this point, firms earn just enough revenue to cover their total costs, including a normal profit. Any supernormal profits are competed away due to the entry of new firms.

## 3. Price Determination

- The price in monopolistic competition is higher than the price in perfect competition because of product differentiation, but lower than in a monopoly where a single firm dominates the market.
- The firm has some degree of price-making ability, but the existence of close substitutes limits its power.

## Efficiency and Welfare in Monopolistic Competition

- Allocative Inefficiency:
  - o In monopolistic competition, firms typically do not produce at the level where Price = Marginal Cost (P = MC), leading to allocative inefficiency.

- As a result, the quantity produced is less than the socially optimal level that would occur under perfect competition.
- Productive Inefficiency:
  - o In the long run, firms in monopolistic competition do not operate at the minimum point of their average cost curve. This is because the firm produces at a quantity where AC > MC, meaning they are not operating at the lowest possible cost.

## 5. a. Define SMEs

#### Answer:

SMEs (Small and Medium-sized Enterprises) refer to businesses that are characterized by a relatively small scale of operations in terms of revenue, workforce, and market share compared to large corporations. SMEs play a crucial role in the economy by driving innovation, providing employment, and contributing to the growth of various sectors

## b. Explain various types of fiscal policy

#### Answer:

Types of Fiscal Policy

- 1. Expansionary Fiscal Policy
  - Purpose: To stimulate economic growth, especially during periods of recession or when the economy is underperforming.
  - How it Works:
    - Increase Government Spending: The government increases its spending on public goods and services, such as infrastructure projects, healthcare, and education. This boosts demand and creates jobs.
    - Reduce Taxes: By cutting taxes, the government increases disposable income for households and businesses, encouraging consumption and investment.
  - Effect: The goal is to increase aggregate demand (the total demand for goods and services in the economy), leading to higher output and reduced unemployment.
     This type of policy is commonly used during periods of economic slowdown or recession.
  - o Examples:
    - A government might increase spending on infrastructure projects, creating jobs and stimulating business activity.
    - Tax cuts for individuals and corporations to encourage spending and investment.
- 2. Contractionary Fiscal Policy
  - o Purpose: To slow down an overheating economy or reduce inflationary pressures.
  - How it Works:
    - Decrease Government Spending: The government reduces spending on public services and infrastructure to lower aggregate demand.
    - Increase Taxes: By raising taxes, the government reduces disposable income, which in turn reduces consumer spending and business investment.
  - Effect: The goal is to decrease aggregate demand in the economy, reduce inflation, and prevent the economy from growing too quickly, which could lead to unsustainable economic conditions.
  - Examples:
    - The government might reduce subsidies or delay spending on public projects to curb excessive demand.
    - Raising income taxes or sales taxes to reduce consumer spending.
- 3. Neutral Fiscal Policy

- Purpose: To maintain a balanced approach where government spending and taxation are set at levels that do not significantly alter the overall economic activity.
- o How it Works:
  - The government aims for a balanced budget or a small budget deficit or surplus.
  - It keeps its spending and tax policies stable, neither stimulating nor contracting the economy.
- Effect: This policy is generally used when the economy is stable and there is no need for major adjustments. The goal is to maintain economic stability over the long term.
- Examples:
  - The government does not make major changes to taxes or spending, allowing the economy to function without significant intervention.

## Additional Strategies of Fiscal Policy

- 1. Discretionary Fiscal Policy
  - O Purpose: To actively adjust government spending and taxation based on current economic conditions and forecasts.
  - How it Works:
    - This involves deliberate actions taken by the government to alter fiscal
      policy to address specific economic issues. It is not automatic and requires
      decisions made by policymakers (e.g., raising or lowering taxes, increasing
      or reducing public spending).
  - Example: During a recession, the government might decide to increase spending on welfare programs or cut taxes for businesses to encourage investment.

## 2. Automatic Stabilizers

- Purpose: To reduce the magnitude of economic fluctuations without the need for explicit government intervention.
- O How it Works:
  - These are built-in mechanisms in the economy that automatically adjust to changes in economic activity without the need for new policy decisions.
     Examples include progressive income taxes and unemployment benefits.
  - When the economy slows down, tax revenues naturally decrease (because people earn less), and government spending on benefits increases, which helps support aggregate demand.
- Example: During a downturn, more people may become eligible for unemployment benefits, which automatically increases government spending and helps stabilize income levels.

## c. Explain equilibrium under price discrimination

## Answer:

Price discrimination is the practice of charging different prices to different consumers for the same product or service. It can only occur in markets where the firm has some degree of monopoly power or control over price, and where the product can be separated into distinct groups of consumers with varying price sensitivities.

The three main types of price discrimination are:

- 1. First-Degree Price Discrimination (Personalized Pricing):
  - The firm charges each consumer the maximum price they are willing to pay. Essentially, the firm captures all the consumer surplus.
  - o Example: Auctions or negotiating prices (e.g., car sales or real estate).

- 2. Second-Degree Price Discrimination (Product Versioning):
  - o The firm charges different prices based on the quantity or quality of the product consumed.
  - Example: Bulk discounts, tiered pricing, or variations in product features (e.g., economy vs. business class tickets on an airplane).
- 3. Third-Degree Price Discrimination (Group Pricing):
  - The firm charges different prices to different groups of consumers based on observable characteristics like age, income, location, or time of purchase.
  - o Example: Student discounts, senior citizen discounts, or regional pricing.

## Equilibrium Under Price Discrimination

In a market where price discrimination is practiced, the equilibrium involves the following components:

- 1. Segmentation of Consumers:
  - The firm divides consumers into different groups (based on age, income, location, etc.) that have distinct price elasticities of demand. Some groups are more sensitive to price (elastic demand), while others are less sensitive (inelastic demand).
- 2. Different Prices for Different Groups:
  - The firm sets different prices for these groups, with the goal of capturing as much consumer surplus as possible. For example, it may charge higher prices to consumers with inelastic demand (who are less sensitive to price changes) and lower prices to those with elastic demand (who are more sensitive to price).
- 3. Maximizing Profits:
  - The firm maximizes its profits by setting the price for each group where marginal revenue equals marginal cost (MR = MC) for each segment. In each segment, the price will differ depending on the demand elasticity of that group.
- 4. Consumer Surplus and Producer Surplus:
  - o In a single-price monopoly, the monopolist captures some of the consumer surplus by charging a price above marginal cost, leading to a deadweight loss.
  - O Under price discrimination, however, the firm can convert most or all of the consumer surplus into producer surplus by charging different prices to different consumer segments. This typically reduces or eliminates the deadweight loss compared to a uniform pricing monopoly.
  - First-degree price discrimination eliminates all consumer surplus, while third-degree price discrimination leaves some consumer surplus in the market, as some groups (like students) may still enjoy a lower price.
- 5. Efficiency Considerations:
  - Allocative Efficiency: Price discrimination can lead to a more efficient allocation of resources compared to a uniform monopoly price. Since the firm adjusts its prices to reflect the consumers' willingness to pay, it produces at a quantity closer to the socially optimal level.
  - Productive Efficiency: Price discrimination does not necessarily affect productive efficiency directly, as firms still seek to minimize costs in producing goods. However, firms may invest in ways to identify and segregate markets effectively.

## 6. a. Define breakeven point

## Answer:

The breakeven point is the level of sales at which a company's total revenue equals its total costs, resulting in neither profit nor loss. It represents the minimum amount of sales needed to cover all fixed and variable costs associated with producing and selling a product or service. Beyond this point, the company begins to make a profit.

b. Explain the nature of the Indian business environment

## Answer:

Key Features of the Indian Business Environment

1. Economic Environment

Rapid Economic Growth:

Service Sector Dominance:

Agriculture and Industry:

Emerging Middle Class:

Market Size and Consumption:

2. Political and Legal Environment

Democratic Government:

Government Policies and Reforms:

Bureaucracy and Corruption:

Legal System:

3. Socio-Cultural Environment

Diverse Culture:

Youthful Population:

Changing Consumer Behavior:

Social Media and Digitalization:

4. Technological Environment

IT and Software Development:

Digital Transformation:

Innovation and Start-ups:

Infrastructure and Connectivity:

5. Environmental and Ecological Factors

Sustainability and Green Business:

Climate Change and Agriculture:

Government Initiatives:

6. Global and International Environment

Foreign Trade:

Foreign Direct Investment (FDI):

Global Integration:

c. Explain the objectives and five pillars of Atma Nirbhar Bharah Abhiyan

## Answer:

## **Objectives of Atmanirbhar Bharat Abhiyan**

The main objectives of the Atmanirbhar Bharat Abhiyan are as follows:

- 1. **Promote Self-Reliance**: The core idea of this initiative is to build a self-sustaining and self-reliant economy. This includes reducing dependency on imports by promoting local manufacturing and creating a favorable environment for domestic industries to flourish.
- 2. **Economic Growth and Recovery**: The government aims to revive and boost economic growth, especially after the adverse impact of the COVID-19 pandemic. The focus is on creating jobs, increasing production capacities, and restoring economic stability.
- 3. **Strengthening Local Industries**: The initiative emphasizes boosting domestic manufacturing, increasing the competitiveness of Indian industries, and encouraging innovation and entrepreneurship in various sectors.
- 4. **Boosting Exports**: One of the key aspects of the Abhiyan is to make India a major exporter by enhancing the quality and quantity of Indian goods and services in international markets.
- 5. Creation of Jobs and Employment: The program aims to generate employment opportunities by supporting micro, small, and medium enterprises (MSMEs) and encouraging the establishment of new businesses, particularly in the manufacturing sector.
- 6. **Fostering Innovation and Technology**: The Abhiyan seeks to foster innovation and the use of technology to increase the efficiency and scale of Indian businesses. This includes embracing digitalization, research and development, and new-age manufacturing techniques.
- 7. a. Briefly explain about ISO cost

## Answer:

Equal cost incurred to produce two products is called isocost.

b. Explain the features of the New Industrial Policy

#### Answer:

- 1. Liberalization of Industrial Licensing
- 2. Privatization and Disinvestment
- 3. Foreign Direct Investment (FDI)
- 4. Industrial Growth and Development
- 5. Reduction in the Role of Public Sector
- 6. Removal of Restrictions on Expansion and Investment
- 7. Technological Upgradation
- 8. Decentralization and Regional Disparities
- 9. Environmental Protection
- 10. Regulatory Reforms and Improved Business Environment
  - c. Explain the various types of costs

## Answer:

Fixed Costs (FC)

Variable Costs (VC)

Total Costs (TC)

Average Costs (AC)

Marginal Cost (MC)

Opportunity Cost

Sunk Costs

**Explicit Costs** 

**Implicit Costs** 

**Direct Costs** 

**Indirect Costs** 

Break-even Cost

Long-Run Costs

Short-Run Costs

#### 8

Sales Rs 1,00,000

VC Rs 60,000

FC Rs 15,000

## Calculate

- 1. BEP.
- 2. P/V Ratio.
- 3. New BEP if the selling price is reduced by 10%
- 4. New BEP if VC increased by 10%.

## Answer:

**BEP**: 37.5% of Sales **P/V Ratio**: 40%

New BEP if the Selling Price is Reduced by 10%: 50% of Sales

New BEP if VC Increased by 10%: 44.1% of Sales