GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING FOR WOMEN
(Autonomous)
(Affiliated to Andhra University, Visakhapatnam)
II B.Tech. - I Semester Regular Examinations, Nov – 2025
MANAGERIAL ECONOMICS
(CSE (AI&ML) Branch)

Subject Code: 24HM11RC01 SCHEME OF VALUATION R-24

UNIT-I

1 a. Define Economics. Explain its Wealth, Welfare, and Scarcity definitions-7M

Economics definition-1M

In early age economics is treated as **science of wealth.** 18th century Adam Smith, Father of Economics, defined economics as 'The study of nature and uses of national wealth'.(OR)

In 19th century Dr. Marshall defined as "Economics is a study of man's actions in the ordinary business of life, it enquires how gets his income and how he uses it."(OR)

The science which studies the human behaviour as a relationship between ends and scare means which have alternate uses. - Prof Robbins

Wealth definition-2M

Economist may define wealth as " The total of anything of value". Wealth can be categorized into 3 principle categories.

- **Personal** – Homes, properties etc.
- **Monetary savings-** accumulation of past income
- **Capital wealth-** Real estate, stocks, bonds etc

Welfare definition-2M

It is on one side a study of wealth, and on the other side a study of human welfare based on wealth.

Characteristics:

- It is primarily the study of mankind.
- It takes into account ordinary business of life.
- It emphasizes on material welfare & human welfare/ people welfare.

Scarcity definition-2M

scarcity is the fundamental problem of unlimited human wants and needs clashing with limited resources, such as time, money, and raw materials.

b. Differentiate between Micro and Macro Economics-7M

- **Macro Economics : 3M**

  It deals with economics system as a whole and it aggregates like total employment, total output, total demand and supply, national income and inflation etc.,

- **Key concepts:**
  - Gross Domestic Product (GDP)

  - Inflation and general price levels
  - Unemployment
  - National income and economic growth
  - Monetary and fiscal policies

- **Micro Economics: 4M**

  It deals with small units of the economy like individual consumers, producers, firms, wages, prices, rent, profit, etc.,

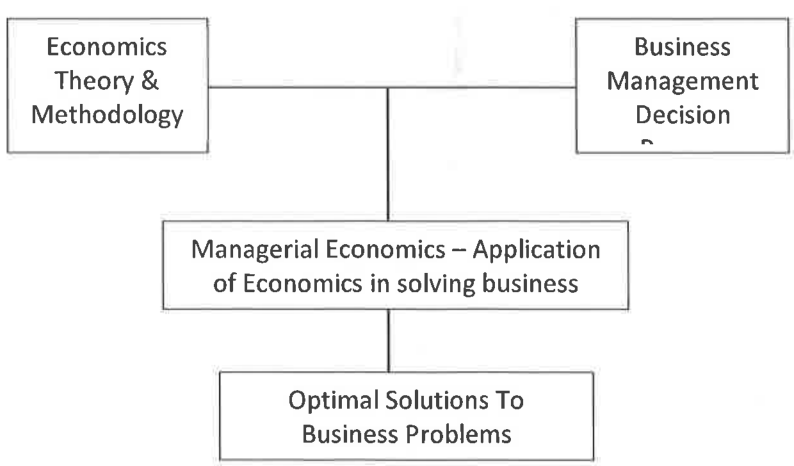
- **Key concepts:**
  - Supply and demand
  - Pricing of goods and services
  - Consumer and producer behavior
  - Production, consumption, and welfare
  - Individual wages and profits

2a) <u>MANAGERIAL ECONOMICS:-7M</u>

<u>Definition-2M</u>

Managerial economics is defined as the integration of economics theory with business practice for the purpose of facilitating the decision making and forward planning by management practice for the purpose of facilitating the decision making and forward planning by management. - Spencer & Seigelman.

<u>Block diagram-2M</u>



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NATURE OF MANAGERIAL ECONOMICS: 3M

- Micro Economics
- Theory of Firm
- Uses Macro Economic Analysis
- It is pragmatic
- Managerial Economics is normative
- Integrate theory with business practice
- Managerial economics is an art and a science

b. Explain its relationship with other disciplines.-7M

Managerial economics is closely related with many other disciplines such as
Economics-**1m**
Accountancy-**1m**
Mathematics-**1m**
Statistics-**1m**
Operations Research-**1m**
Psychology-**1m**
Organizational Behaviour-**1m**

UNIT-II

3a) State and explain the Law of Demand. Are there any exceptions to the law?-7M

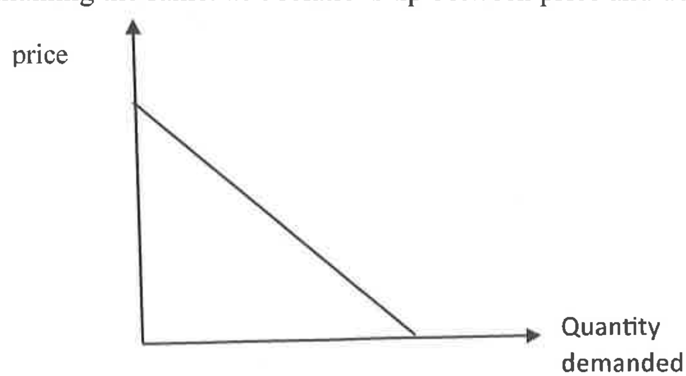
Definition of demand:1M

The product or service is said to have demand only when it satisfies the following three conditions.

- Desire to buy the product.
- Willing ness to pay for the product.
- Ability to pay for it.

LAW OF DEMAND-2M AND GRAPH-1M

The Law of demand states that the higher the price lower the demand and vice versa. Other things remaining the same. The relationship between price and demand is inverse.



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EXCEPTIONS TO THE LAW OF DEMAND-3M

1. veblen goods
2. speculative effect
3. Giffen goods
4. Ignorance
5. Fear of shortage
6. Necessaries

b. Describe the Elasticity of Demand and its types.-7M

Elasticity of demand:-2M

The term elasticity is defined as the rate of responsiveness in the demand of a commodity for a given change in price or any other determinants of demand.

TYPES OF ELASTICITY: 5M

The following are the four types of elasticity of demand:

(a)Price elasticity of demand

(b)Income elasticity of demand

(c)Cross elasticity of demand

(d)Advertising elasticity of demand

(a) Price Elasticity of Demand:

It refers to the quantity demanded of a commodity in response to a given change in price. Price elasticity is always negative which indicates that the customer tends to buy more with every fall in price. The relationship between price and demand is inverse.

$$\text{Price elasticity of demand} = \frac{\text{Proportionate change in the quantity demanded for product X}}{\text{Proportionate change in the price of X}}$$

ED>1 (elastic demand): Percentage change in quantity demanded greater than percentage change in price. Revenue increases with every fall in price.

ED=1(unity elasticity): Percentage change in quantity demanded is equal to percentage change in price. Revenue remains unchanged even though there is fall in price.

ED<1(Inelastic demand): Percentage change in quantity demanded less than percentage change in price. Revenue decreases when price is lowered.

(b) Income Elasticity of Demand:

It refers to the quantity demanded of a commodity in response to a given change in income of the consumer. Income elasticity is normally positive, which indicates that the consumer tends to buy more with every increase in income.

$$\text{Income elasticity of demand} = \frac{\text{Proportionate change in the quantity demanded for product X}}{\text{Proportionate change in income}}$$

(c)Cross Elasticity of Demand:

It refers to the quantity demanded of a commodity in response to a given change in price of a related good, which may be substitute or complement.

$$\text{Cross elasticity of demand} = \frac{\text{Proportionate change in the quantity demanded for product X}}{\text{Proportionate change in price of product Y}}$$

(d)Advertising Elasticity of Demand:

It refers to increase in the sales revenue because of change in the advertising expenditure. In other words there is a direct relationship between the amount of money spent on advertising and its impact on sales. Advertising elasticity is always positive.

$$\text{Advertising Elasticity of demand} = \frac{\text{Proportionate change in the quantity demanded for product X}}{\text{Proportionate change in advertising costs}}$$

4 a. Explain briefly various statistical methods of Demand Forecasting-7M

DEMAND FORECASTING:-

Demand forecasting helps to assess the likely demand for products and services and to plan production accordingly. It is helpful not only at the firm level but also at the national level. It is the key driver for the success or failure of a business. Future demand of the product acts as a game changing factor in today's competitive business environment. Demand forecasting is helpful to guard the future against any surprises.

METHODS OF DEMAND FORECASTING:

(I)Survey Method-2M

(a)Survey of buyers intention

(i)Census method

(ii)Sample method

(b)Survey of Sales Force

(II)Statistical methods: -3M

(1)Trend Projection Methods

(a)Trend line by observation

(b)Least squares method

(c)Time series analysis

(d)Moving averages method

(e)Exponential Smoothing

(2)Barometric techniques

(3)Equation method

(4)(i)Correlation method

(ii)Regression method

(III)Other methods: 2M

(1)Expert opinion method: (DELPHI METHOD)

(2)Test marketing:

(3)Controlled experiments

(4)Judgmental Approach

b. Explain the Law of Diminishing Marginal Utility and list out the limitations.-7M

This law explains the trends of total product average product and marginal product.

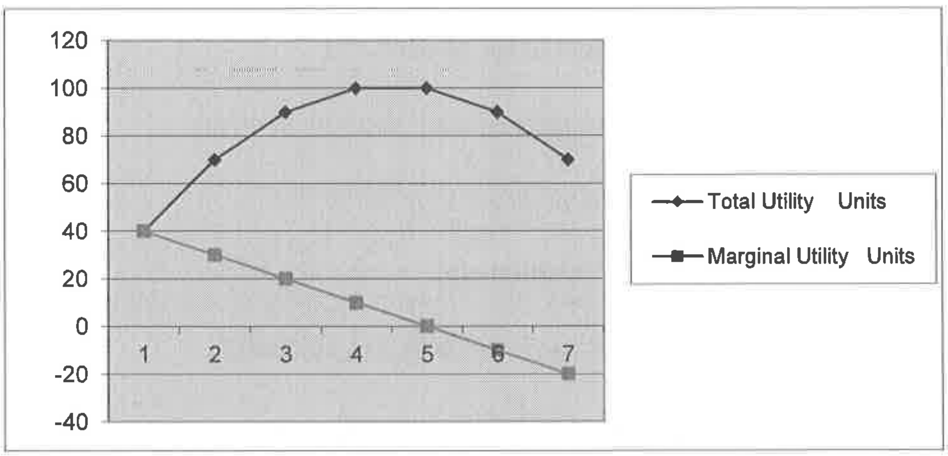
Prof.Benham:
"As the proportion of one factor in a combination of other products increased, after a point, the marginal and average product of that factor will diminish.

EXAMPLE-2M

NO. OF BANANAS	TOTAL UTILITY	MARGINAL UTILITY
1	40	40
2	70	30
3	90	20

4	100	10
5	100	0
6	90	-10
7	70	-20

GRAPH-2M



Limitations of the law of diminishing marginal utility-3M

- Homogeneous units
- Standard units
- Continuous consumption
- Inapplicability to certain goods
    - Money
    - Prestigious/rare goods
- "Abnormal" consumers
- Immeasurable utility
- Constant prices
- Supplementary goods

UNIT-III

5 a. Describe the importance of Production Function in decision-making.-7M

The production function is crucial for decision-making because it helps managers determine the optimal combination of inputs to maximize output and minimize costs.

Importance of the production function in decision-making

- Resource allocation and cost management
- Production planning
- Efficiency analysis

- Input substitution
- Pricing and profitability
- Technology adoption.
- Understanding returns to scale
- Informing policy

b. If sales is 10,000 units and selling price Rs.20 per units, variable cost Rs.10 per unit and fixed cost is Rs.80000, find out BEP in units and in sales revenue. What is profit earned? What should be the sales for earning a project of Rs. 60000?-7M

Contribution per unit=selling price per unit- variable cost per unit=20-10 =10rs

Contribution ratio=contribution per unit/selling price per unit=10/20=0.5

BEP in units= fixed cost/contribution=80000/10=8000units

BEP in sales revenue=fixed cost / contribution ratio= 80000/0.5=1,60,000RS

Total sales revenue= total sales * selling price=10000*20=2,00,000.

Total variable cost=10000*10=1,00,000

Profit
=total sales revenue- total variable cost-total fixed cost= 2,00,000-1,00,000-80,000=RS20000

Sales for target profit=(fixed cost + target profit)/ contribution=1,40,000/10=14000 units.

6 a. Write a short note on Fixed Cost, Variable Cost and Opportunity Cost with examples
<u>(I)Fixed cost: 2M</u>

Fixed costs are those costs that are fixed in the short run. Whether production is taken up or not, we have to incur certain expenses.

Ex: rent for factory and office buildings, insurance, telephone, electricity etc.

(Even if the output is zero fixed costs will be positive. Fixed costs are also known as historical costs or sunk costs. They are costs already incurred and cannot be changed hence become part of history hence they are called historical costs.)

<u>(II)variable cost: 2M</u>

Variable costs are those costs that vary with the volume of production. These costs incurred only when there is production. If the production is more, more are the variable costs and vice versa.

Ex: cost of raw material, wages paid to labor etc.

(If the output is zero, the output is zero. Variable costs are also known as direct costs, prime costs, special costs etc.)

(III) opportunity cost:3M

_Opportunity cost refers to earning or profits that are foregone from alternative ventures by using given limited facilities for a particular purpose.

Opportunity cost refers to the costs of the next best alternative. If there are no alternatives, there are no opportunity costs.

b. Discuss about Economies and Diseconomies of Scale.-7M

When the firm goes for expansion it enjoys certain advantages which are treated as economies of scale and disadvantages are treated as diseconomies of scale.
Economies
Internal Economies-3M

- Managerial Economies
- Commercial Economies
- Technical Economies
- Financial Economies
- Marketing Economies
- Risk Bearing Economies
- Economies of Research & Development

External Economies-2M

- Economies of Concentration
- Economies of Information
- Economies of Decentralization

Diseconomies of scale-2M

- Managerial Diseconomies
- Financial Diseconomies
- Technical Diseconomies
- Marketing Diseconomies

UNIT-IV

7 a. Discuss the features of Perfect Competition-7M

Features of perfect competition

- Large number of buyers and sellers
- Homogeneous products or services
- Freedom to enter or exit the market
- Perfect information available to the buyers and sellers
- Perfect mobility of factors of production
- Each firm is a price taker

b. What are the various popular pricing practices? Which of them are most suitable for a firm facing competition?-7M

Popular pricing practices include: penetration pricing, cost-plus pricing, competitive pricing, value-based pricing, and price skimming; and the most suitable strategy for a firm facing competition depends on the specific market situation, but penetration pricing is often considered ideal for entering a new market with aggressive competition.

- Penetration pricing:

This strategy involves setting a low initial price to quickly gain market share, often by undercutting competitors, and then gradually increasing prices as market dominance grows.

- Cost-plus pricing:

This method calculates the total cost of production and adds a predetermined markup to arrive at the final price.

- Competitive pricing:

This strategy involves setting prices based on what competitors are charging, either to match or slightly undercut them.

- Value-based pricing:

This approach focuses on the perceived value of the product or service to the customer, rather than just production costs, allowing for higher prices if the customer perceives greater benefits.

- Price skimming:

This strategy involves launching a product with a high initial price to capture the early market of price-insensitive buyers, then gradually lowering the price as the market matures.

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8 a. Differentiate between Monopoly and Monopolistic Competition-7M

Feature	Monopoly	Monopolistic Competition
Number of Sellers	One	Many
Product	Unique, with no close substitutes	Differentiated, but close substitutes exist
Competition	No direct competition	Intense competition, especially non-price competition like advertising
Price Control	Significant control (price-maker)	Limited control due to substitutes
Barriers to Entry	High or absolute barriers	Low or moderate barriers, relatively free entry and exit
Advertising	Low selling costs, mostly informative	High expenditure on advertising and branding to differentiate products

b. Explain Pricing over the Life Cycle of a Product-7M

Pricing over the product life cycle is a strategy that adjusts a product's price to match its stage of life—introduction, growth, maturity, and decline. In the **introduction** phase, companies may use high "skimming" prices or low "penetration" prices to recover costs or capture market share, respectively. During the **growth** phase, prices can be lowered to increase sales as competition rises. In **maturity**, competitive pricing is common to hold onto customers, while the **decline** phase often involves price reductions or clearing out inventory.

Introduction

- **Skimming:** Set a high initial price for a unique or innovative product to recoup development costs from early adopters.
- **Penetration:** Set a low initial price to attract a large number of customers quickly and build market share, especially in a price-sensitive market or one with potential competition.

Growth

- As demand rises and production costs may decrease, a company might lower prices to maximize market share and compete more effectively.
- Prices can be adjusted to maintain a competitive position while still being profitable.

Maturity

- This stage is characterized by high competition.
- **Competitive pricing** is common to retain customers and differentiate from competitors.
- Prices may be stable, but companies may use sales and promotions to hold their position.

Decline

- As sales and profits decline, a company has several options:
    - **Reduce prices** to sell off remaining inventory or appeal to a niche market.
    - **Continue offering** the product at a lower price point on a smaller scale.
    - **Discontinue** the product entirely.

UNIT-V

9a. Define Business Cycle and explain its characteristics.-7M

Definition -2m

Business cycles are a type of fluctuation found in the aggregate economic activity of nations that organise their work mainly in business enterprises.

CHARACHTERISTICS OF BUSINESS CYCLES-5M

- It is wave like movements
- It is synchronic in nature
- It occurs periodically and hence recurrent in nature
- It is repetitive in the sense that it has same recognized pattern
- It is to be noted that different trade cycles are different on different activities.
- The effects of different trade cycles are different on different activities
- It is self generating. The process is cumulative.
- It is international in character.
- The downward movement is more sudden and violent than the change from downward to upward.
- Profits fluctuate more than the other incomes.

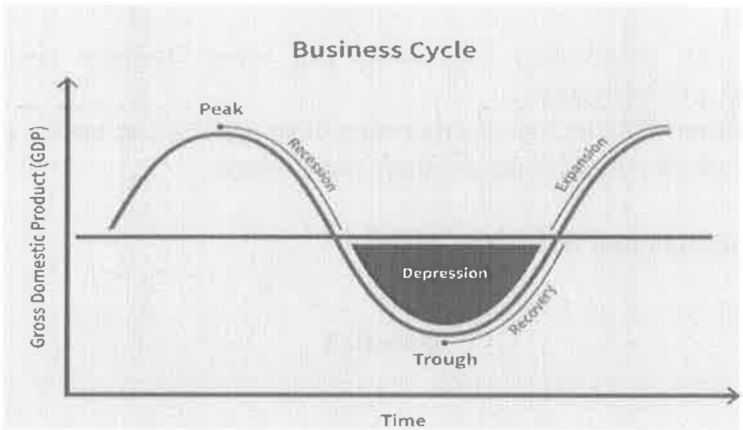
b. Discuss the phases of a Business Cycle-7M

Phases -4M

- Depression, contraction, or downswing
- Recovery or revival
- Prosperity or full employment

- Boom or over full employment or inflation
- Recession a turn from prosperity to depression

Graph -3M



10 a. Suggest measures to overcome problems arising from Business Cycles. 7M

Measures to overcome problems arising from business cycles generally fall into two main categories: **demand-side policies** (fiscal and monetary) and **supply-side policies**.

Demand-Side Policies-4M

- **Monetary Policy**
  - **During a recession (trough):** Central banks typically implement expansionary monetary policy. This involves **cutting interest rates** and potentially using **quantitative easing** to make borrowing cheaper and encourage spending and investment .
  - **During a boom (peak):** To combat inflation, central banks use contractionary monetary policy, which involves **raising interest rates** to discourage borrowing and cool down the economy
- **Fiscal Policy:** Governments use this to adjust spending levels and tax rates.
  - **During a recession:** Governments use expansionary fiscal policy by **increasing government spending** on infrastructure projects or public services and **cutting taxes** to boost disposable income and demand.
  - **During a boom:** Governments use contractionary fiscal policy, which involves **cutting government spending** and **increasing taxes** to reduce aggregate demand and control inflation.

Supply-Side Policies-3M

These long-term policies aim to improve the productive capacity and efficiency of the economy, making it more resilient to fluctuations.

- **Investment in Infrastructure and Technology:** Government spending on projects like transport, energy, and communications can boost long-term growth and create jobs, smoothing out cyclical unemployment.
- **Education and Training:** Investing in human capital can increase labour market flexibility and adaptability, helping workers move into new industries as economic conditions change.
- **Deregulation:** Reducing unnecessary regulations can lower business costs and encourage investment and innovation .
- **Promoting Competition:** Policies that ensure competitive markets can lead to greater efficiency and price stability, making the economy more robust.

b. Write a short note on Inflation and Deflation.-7M

Inflation	**Deflation**
Definition	
Inflation is defined as the increase in the price levels of goods and services in an economy	Deflation is termed as the decrease in price levels of goods and services in an economy
Impact on demand	
Demand for products and services increase in inflation	Demand for products and services decrease in deflation.
Impact on National Income	
No impact on national income	National income declines as a result of deflation
Consequences seen	
Distribution of income is not equal as a result of inflation	There is a rise in level of unemployment in the nation as a result of deflation
Is it beneficial?	
Moderate levels of inflation is considered good for the economy	Calculated based on only the amount that is availed
Impact on Purchasing Power of Money	
Decreases the purchasing power of money	Increases the purchasing power of money