

# CHAPTER 1 : DEMAND

Desire + ability to pay + Willing to buy = Demand

## Determinants of demand

- ▶ Price of commodity ( $PT \uparrow - D \uparrow$ ,  $PT \downarrow - D \downarrow$ )
- ▶ Price of related commodities:
  - Substitutes ( $PT \uparrow - DT \uparrow$ )
  - Complementaries ( $PT \uparrow - D \uparrow$ )
- ▶ Income of consumers ( $IT \uparrow - DT \uparrow$ )
- ▶ Tastes & Preferences of
- ▶ Consumers ( $Fav-DT$ ,  $Unfav-D \uparrow$ )
- ▶ Population ( $PopT-DT$ ,  $Pop \uparrow - D \uparrow$ )
- ▶ Climate & Weather ( $Fav-DT$ ,  $Unfav-D \uparrow$ )
- ▶ Gov't Policies ( $Fav-DT$ ,  $Unfav-D \uparrow$ )
- ▶ Expectations about future prices

## Types of Demand

### Price demand

Price  
 $T \uparrow$

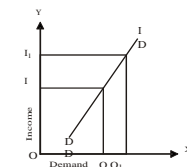
Demand  
 $T \uparrow$

### Income demand

#### Superior goods

Income  
 $T \uparrow$

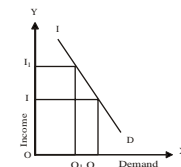
Demand  
 $T \uparrow$



#### Inferior goods

Income  
 $T \uparrow$

Demand  
 $\downarrow$

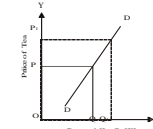


### Cross demand

#### Substitutes

Price of Tea  
 $T \uparrow$

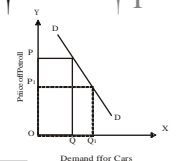
Demand for coffee  
 $T \uparrow$



#### Complementaries

Price of Petrol  
 $T \uparrow$

Demand for car  
 $\downarrow$



## Law of Demand

### Assumptions

All the determinants of demand are assumed to be constant except price

### Exceptions

- ▶ Giffen's paradox (*Generally inferior goods*)
- ▶ Demand curve-back ward bending
- ▶ Articles of distinction (*Veblen goods*)
- ▶ Demonstration effect
- ▶ Future expectations about prices
- ▶ Irrational consumer

### Importance

Useful to:

- ▶ Farmers
- ▶ Finance Minister
- ▶ Consumer
- ▶ Monopolist (*In determination of Price*)

### Reasons for downward sloping demand curve

- ▶ New Buyers
- ▶ Old Buyers
- ▶ Income effect
- ▶ Substitution effect

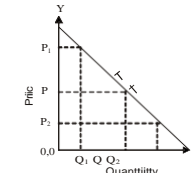
## Changes in demand

### Caused by Change in price

#### Extension & contraction

#### Movement along the same demand curve

#### Change in quantity demanded



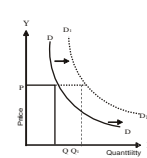
### Caused by Change in other factors

#### Increase & Decrease

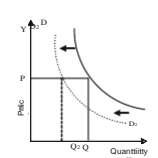
#### Shift in the demand curve

#### Change in demand

#### Increase



#### Decrease

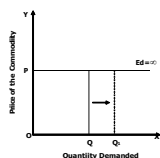


## CHAPTER 2 : ELASTICITY OF DEMAND

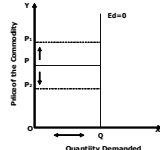
### Price elasticity of demand

#### Degrees

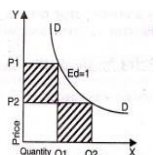
##### 1) Perfectly elastic( $\infty$ )



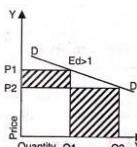
##### 2) Perfectly inelastic (0)



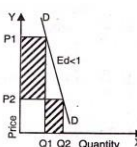
##### 3) Unitary elastic (1)



##### 4) Relatively elastic ( $>1$ )



##### 5) Relatively In elastic ( $<1$ )

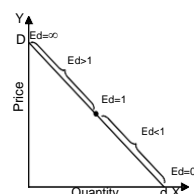


#### Methods

##### 1) Point Method

$$E_p = \frac{dq}{dp} \times \frac{p}{q} \text{ Or } E_d = \frac{\text{lower segment}}{\text{Upper segment}}$$

$E_d = \frac{\text{lower segment}}{\text{Upper segment}}$



##### 2) Percentage Method

$$E_d = \frac{\% \text{ Change In demand}}{\% \text{ Change in price}}$$

$$\frac{\Delta q}{q} \times \frac{p}{\Delta p} = \frac{\Delta q}{\Delta p} \times \frac{p}{q}$$

##### 3) Arc Elasticity Method

$$E_d = \frac{q_2 - q_1}{p_2 - p_1} \times \frac{p_1 + p_2}{q_1 + q_2}$$

##### 4) Total out lay Method

Price	-	T.Exp
$T \uparrow$		$\uparrow T$ ( $E_d > 1$ )
$T \uparrow$		$\uparrow T$ ( $E_d < 1$ )
$T \uparrow$		Same ( $E_d = 1$ )

#### Factors

##### 1) Availability of Substitutes

*[If Available - Elastic  
If not Available - Inelastic]*

##### 2) Type of want

*[Necessary - Inelastic  
Comforts, luxuries - Elastic]*

##### 3) Consumer habits

*[Habitual consumers - Inelastic  
Others - Elastic]*

##### 4) No of purposes (uses)

*[Can be used -elastic  
Can't be used -inelastic]*

##### 5) Price Range

*[Very high /low -inelastic  
Middle range-elastic]*

##### 6) Postponement

*[Yes- elastic  
No -inelastic]*

##### 7) Proportion of Expenditure

*[Small -inelastic  
High -elastic]*

#### Importance/uses

- ▶ Useful to business firms
- ▶ Determination of Price & output
- ▶ Determination of prices
- ▶ Useful to super markets
- ▶ Useful to finance minister
- ▶ Pricing factors of production
- ▶ Explains the paradox of plain theory
- ▶ Useful in foreign exchange rates
- ▶ Nationalising an industry
- ▶ Granting protection to industry

### Income elasticity of demand

#### Formula

$$E_I = \frac{\% \text{ Change in demand}}{\% \text{ Change in income}} = \frac{\Delta q \times \frac{y}{q}}{\Delta y}$$

#### Degrees

Negative ( $<0$ ) - Inferior goods  
Positive ( $>0$ ) - Superior goods  
0 to 1 - Necessaries  
 $>1$  - comforts/ luxuries

### Cross elasticity of demand

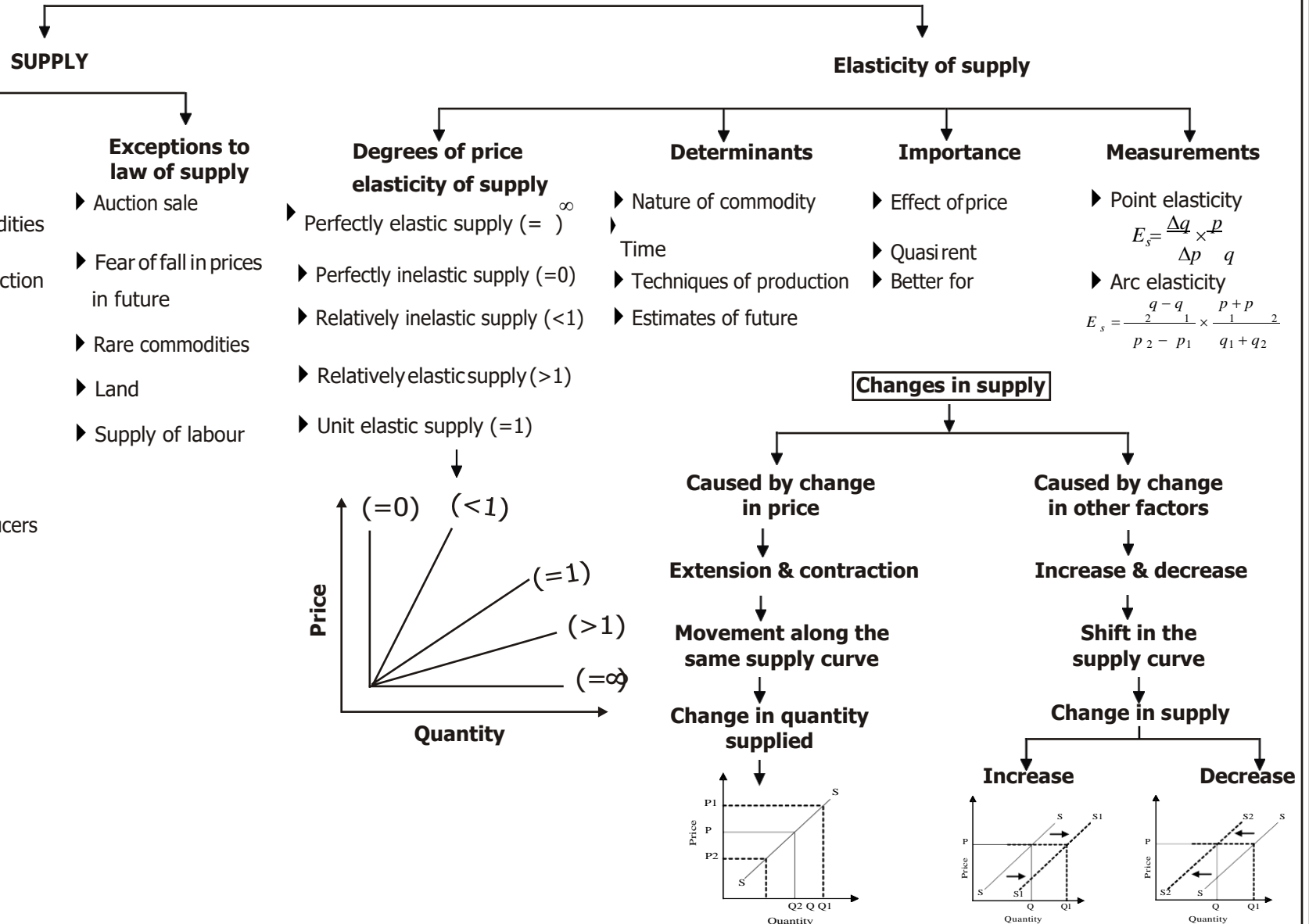
#### Degrees

Negative ( $<0$ ) - Complementaries  
Positive ( $>0$ ) - Substitutes  
Zero - Unrelated goods/ Independent goods

#### Formula

$$E_C = \frac{\% \text{ Change in demand of } x}{\% \text{ Change in price of } y} = \frac{\Delta q_x}{\Delta p_y} \times \frac{p_y}{q_x}$$

## CHAPTER 3: SUPPLY & ELASTICITY OF SUPPLY



## CHAPTER 4: THEORY OF CONSUMER'S BEHAVIOUR

### UTILITY

#### Cardinal (1,2,3...) Marginal Utility analysis developed by Marshall

$$\begin{aligned} MU_n &= TU_n - TU_{n-1} \\ &= TU_{n+1} - TU_n \\ &= \frac{\Delta TU}{\Delta Q} \end{aligned}$$

##### Assumptions:

- ▶ Measurability of utility
- ▶ Marginal utility of money is constant
- ▶ Independent utility

#### Ordinal (I, II, III..... ) Indifference curve Analysis developed by Hicks & Allen

##### Assumptions

- ▶ Rational consumer
- ▶ Scale of preference
- ▶ Diminishing marginal rate of substitution
- ▶ Assumption of consistency
- ▶ More units, more preference
- ▶ Scale of preference is

##### Properties

##### Indifference curve:

- slopes downwards from left to right
- are always convex to origin
- can never intersect with each other
- do not meet the axes
- need not be parallel to each other
- higher indifference curve gives higher level of satisfaction than lower one

##### Superiority

- ▶ Assumptions are near to reality
- ▶ Non measurability of utility
- ▶ Marginal utility of money is not constant
- ▶ Explain cause for Giffen Goods
- ▶ Two commodity model
- ▶ Marginal rate of Substitution

### Marginal Utility Analysis

#### Law of Diminishing Marginal Utility

##### Assumptions

- ▶ Standard Units
- ▶ Identical Units
- ▶ No time interval
- ▶ No change in tastes & habits
- ▶ Some goods of special Nature
- ▶ Availability of substitutes &

##### Importance

- ▶ Price determination
- ▶ Finance minister
- ▶ Explains paradox of value
- ▶ Basis for economic laws
- ▶ Advantage to

#### Law of Equi-Marginal Utility

$$\frac{MU_a}{P_a} = \frac{MU_b}{P_b} = \dots = \frac{MU_n}{P_n} = MU \text{ of money}$$

##### Assumptions

- ▶ Indivisibility of goods
- ▶ Ignorance
- ▶ Unlimited resources
- ▶ Customs & fashions
- ▶ Measurability of Utility
- ▶ Constant utility of money

##### Importance

- ▶ Consumption
- ▶ Production
- ▶ Exchange
- ▶ Distribution
- ▶ Government

#### Theory of consumer's surplus

Consumers surplus = Willing price - Actual price

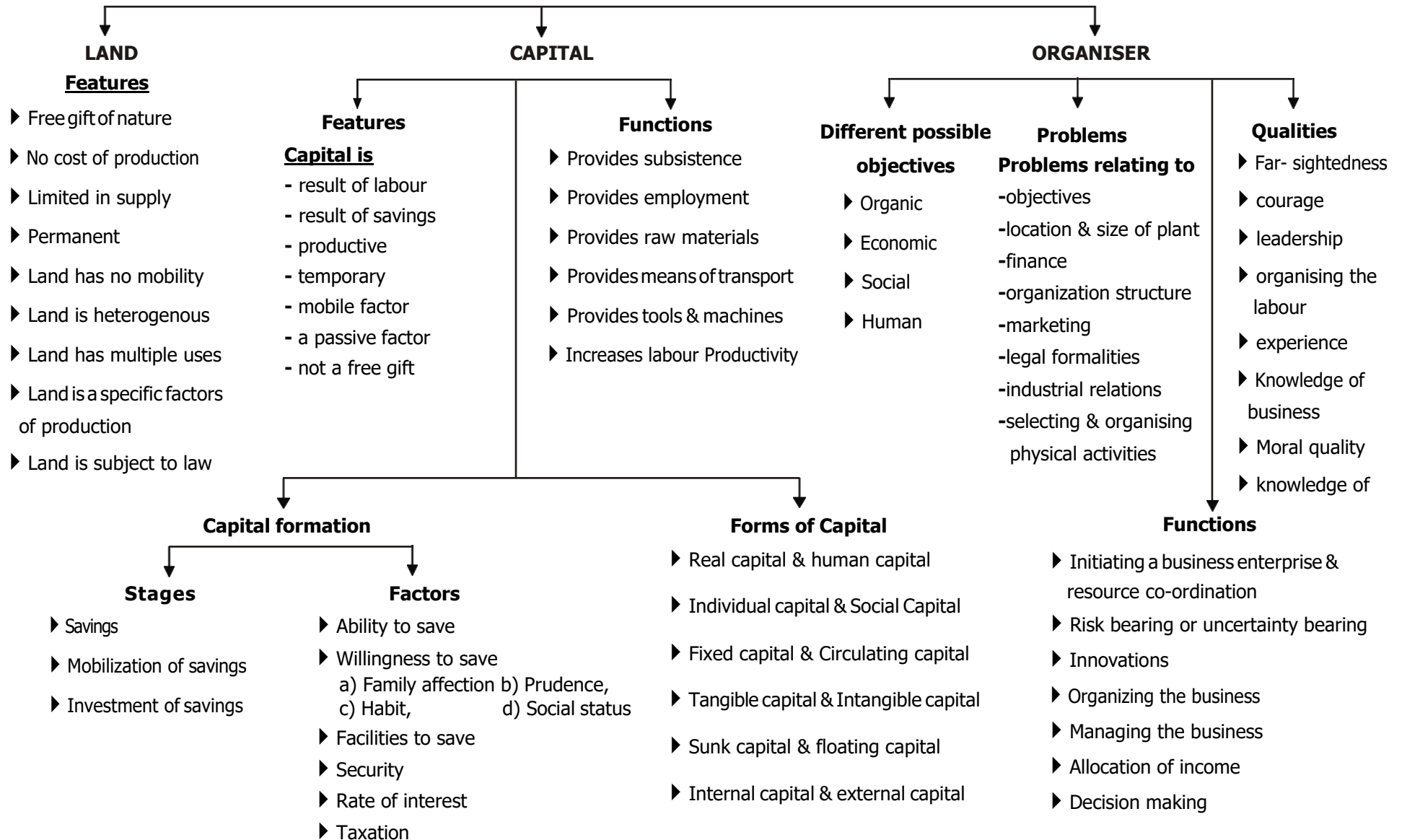
##### Criticisms

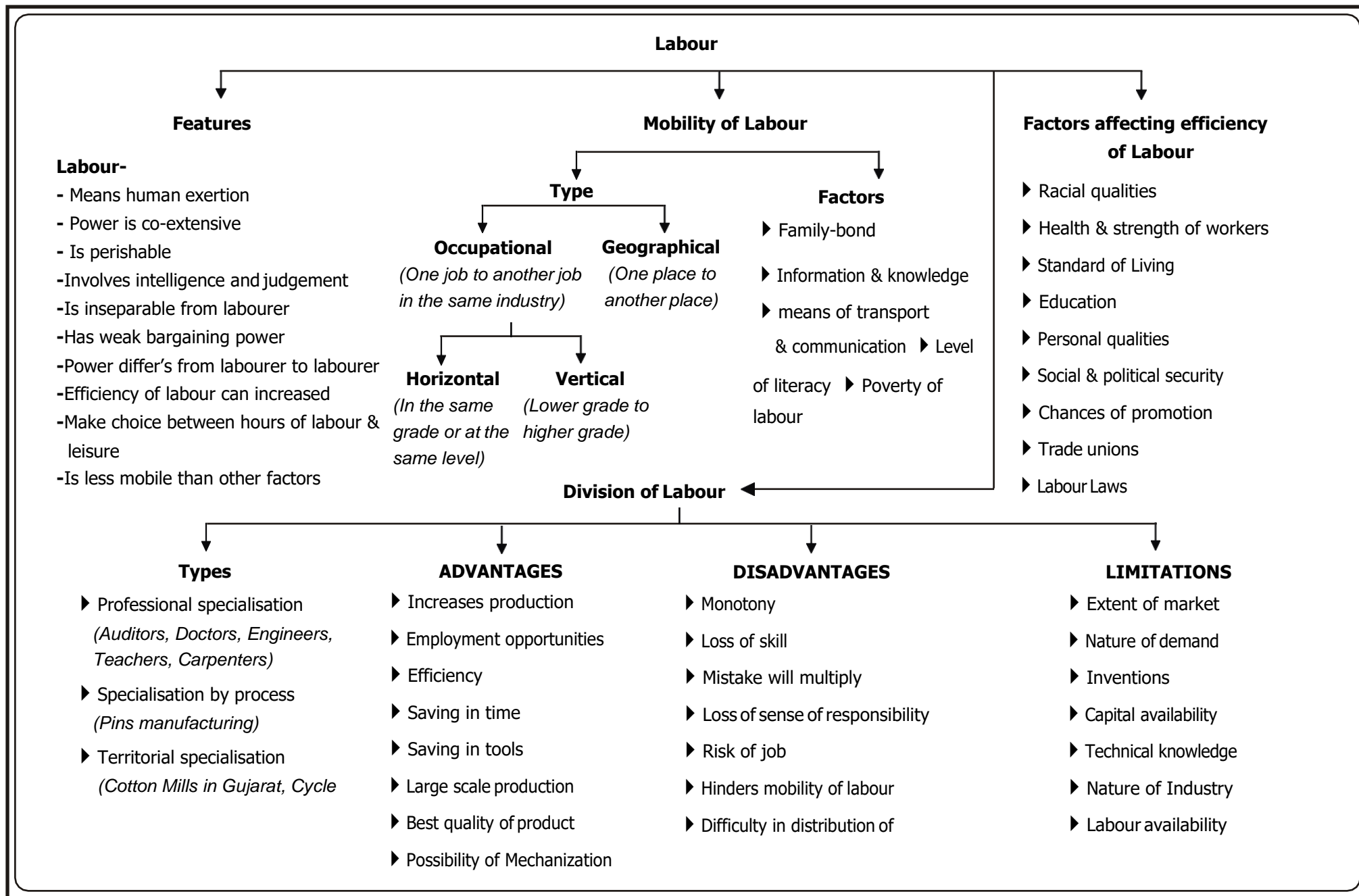
- ▶ Imaginary
- ▶ Measures mental satisfaction
- ▶ Difficult to calculate willing price
- ▶ Marginal utility of money is not constant
- ▶ Apply only in inflation
- ▶ Prestigious goods
- ▶ Changes from person to

##### Importance

- ▶ Price determination
- ▶ Useful to finance minister
- ▶ Price discrimination in discriminating monopoly
- ▶ Understanding the Water-diamond paradox
- ▶ Assessment of

## CHAPTER 5: PRODUCTION





## **CHAPTER 6: COST ANALYSIS**

### **Determinants of cost**

- ▶ Prices of factors of production  
(If high-cost ↑, If low-cost ↓)
- ▶ Technology  
(Advanced-cost ↓, If not-cost ↑)
- ▶ Size of plant  
(Big-cost ↑, small-cost ↓)
- ▶ Capacity Utilization or output level  
(Output level ↑-cost ↓, output level ↓-cost ↑)
- ▶ Period  
(Short run-cost ↑, long run-cost ↓)
- ▶ Stability of output  
(If stable-cost ↓, If unstable-cost ↑)
- ▶ Law of returns operating  
(Diminishing returns-cost ↑, increasing returns-cost ↓)
- ▶ Managerial efficiency

### **Components of cost**

- ▶ Prime cost  
(Direct material+direct wages+direct expenses)
- ▶ Production overheads  
(Indirect material+indirect wages+indirect expenses)
- ▶ Production cost  
(Prime cost+production over heads)
- ▶ Cost related to other functions  
(Administrative over heads+selling over heads+distribution over heads)
- ▶ Total cost

### **Relation between Average cost & Marginal Cost**

- ▶ Average cost and Marginal cost can be calculated from total cost
- ▶ When Average cost falls Marginal cost also falls
- ▶ When Average cost rises Marginal cost also raises
- ▶ Marginal cost cuts Average cost at its optimum

### **Different types of costs**

#### ▶ **Implicit costs**

(Earnings of factors of production belonging to organizer himself)

#### ▶ **Explicit costs**

(Remuneration paid to outside factors of

#### ▶ **Accounting costs**

(All payments made by the entrepreneur to the suppliers of various factors of production)

#### ▶ **Economic costs**

(Accounting cost {explicit}

#### ▶ **Outlay costs**

(Actual outlay of funds like wages, material, rent)

#### ▶ **opportunity costs**

(Cost related to foregone

#### ▶ **Direct costs**

(Identified & traced to a particular product)

#### ▶ **Indirect costs**

(Can not be identified & traced to a particular

#### ▶ **Shutdown costs**

(Cost incurred after closing down of the business)

#### ▶ **Abandonment costs**

(Cost related to retirement of fixed asset from use)

#### ▶ **Money costs**

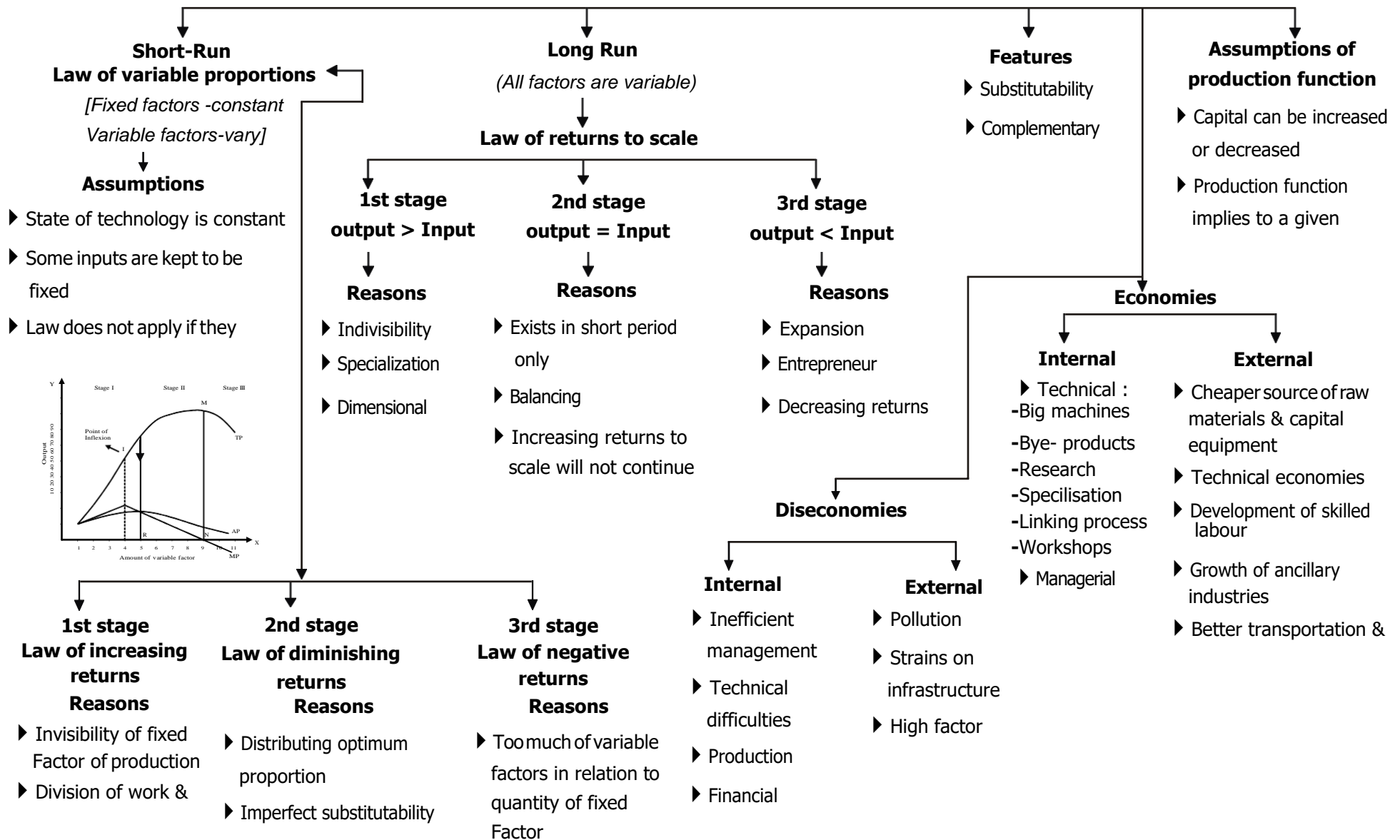
(Payment made to factors of production & other expenses)

#### ▶ **Real costs**

(Pains & sacrifices of labour or efforts &

## **CHAPTER7: PRODUCTION ANALYSIS**

## PRODUCTION FUNCTION





## **CHAPTER8: MARKETS & CHAPTER 9 : PRICE & OUTPUT DETERMINATION**

### **Features**

- ▶ Every market have some commodities
- ▶ Competition
- ▶ Area

### **Types**

#### **On the basis of area**

- ▶ Local market  
*( buyers & sellers carry on business in a particular locality)*
- ▶ National market  
*(commodity is demanded and supplied all over the country)*
- ▶ International market  
*( commodity is demanded and supplied all over the*

#### **Basis of competition**

- ▶ Perfectly competitive Market  
*(large number of sellers selling homogeneous products)*
- ▶ Monopoly  
*(single seller of the Commodity having full control over the entire market)*
- ▶ Imperfect Competition  
*(It is a combination of monopoly & perfect competition)*
- ▶ Oligopoly  
*(only few sellers of a commodity each seller can influence the price-output policy of other*

#### **Basis of period of time**

- ▶ Veryshortperiod Market  
*(supply is more or less fixed)*
- ▶ Short period market  
*(one can change variable factors only but not fixed factors)*
- ▶ Long period market  
*(both fixed and variable factors can be changed)*
- ▶ Secular period Market  
*(changes can take place even in factors of*

### **Factors effecting size of market**

- ▶ Wide demand *(If - YesT, If -No†)*
- ▶ Adequate supply *(If - YesT, If -No†)*
- ▶ Durability *(If - YesT, If -No†)*
- ▶ Portability*(If - YesT, If -No†)*
- ▶ Grading and sampling  
*(If - YesT, If -No†)*
- ▶ Transport and communications  
*(If - YesT, If -No†)*
- ▶ Level of income*(If - highT, If -low†)*
- ▶ Development of financial institutions  
*(If - YesT, If -No†)*
- Availability of banks and other financial Institutions
- Credit and banking habits of people etc

## **CHAPTER 10: PRICE & OUTPUT DETERMINATION UNDER DIFFERENT MARKETS**

