The Market for the Factors of Production

The demand for a factor of production is a **derived demand**.

- A firm's demand for labor, land, and capital is *derived* from its decision to produce and sell goods and services

The price of different factors of production; is determined by the forces of demand and supply.

- E.g. demand for labor is high but the supply of labor is low ⟶ **SHORTAGE** ⟶ price of labor is **high.**
- Demand for capital is low and supply of capital is high ⟶ **SURPLUS** ⟶ price of capital is **low.**
- The availability of factors of production determines the quantity available.
- PRODUCTIVITY of FOP

What is **Productivity**?

Output ÷ Input = Productivity

Productivity is expressed or measured as a mathematical division of following parameters (functions).

Output / Input = Productivity

Per unit of time& per unit of FOP. MCQ

Difference Between Production & productivity

Labor intensive vs Capital Intensive.

Labor intensive is when a larger **proportion** of labor is used in a production process as against **K**

Capital intensive is when a larger **proportion** of K is used in a production process as against **labor.**

https://www.youtube.com/watch?v=M9XYrLNAxSM

The Difference between Production & Productivi

Exam reports confirm that it is important for students to make clear the distinction between **production** and **productivity**

- **Production**
  - Production is a measure of the value of the output of goods

The Difference between Production & Produc...

Exam reports confirm that it is important for students to make clear the distinction between **production** and **productivity**

- **Production**
  - Production is a measure of the value of the output of goods and services e.g. measured by national GDP or an index of production in specific industry such as car manufacturing
- **Productivity**
  - A measure of the efficiency of factors of production
  - Measured by output per person employed
  - Or by output per person hour
- An increase in production **DOES NOT** automatically mean an increase in productivity – it depends on how many factor inputs have been employed to supply the extra output

8. Location factors
1. Technical factors
2. Production factors
7. Government factors
Productivity
3. Organizational factor
6. Management factors
5. Finance factors
4. Personnel factors

Factors that affect or influence Productivity.

Improvement in

- Tech
- SET
- MET
- RAW materials
- Quality and quantity
- Culture of the firm. Japanese KAIZEN continuous improvement in small firms.

Influences on Production:

Production can be increased by

- Employing more factors of production.
- Improvement in the quality and quanntity of FOP.
- Favourable climate conditions with fertile soil etc.
- Discovery of new resources; e.g. Saudi Arabia discovered oil and enjoyed massive economic prosperity.
- Advancements in technology
- **Improvement infrastructure**
- Government policies .
  8 MKS QUES EXTREMELY IMPORTANT CONCEPTS

Chapter 5

FIRMS COST, REVENUE AND OBJECTIVES

COST OF PRODUCTION

PROFITS are factor income for enterprise.

COSTS   REVENUE

REVENUE DOES NOT MEAN PROFIT(technically incorrect)

In economics, the cost of production is defined **as the expenditures incurred to obtain the factors of production such as labor, land, and capital,** that are needed in the production process of a product. Rent, wages, and interest (bank loans)

- Total cost (TC)

  The sum of fixed and variable cost.

TC= FC+ VC

- Fixed cost
  FC **does not vary with the level of output** and remains fixed whether the business is producing anything or not FC has to be paid.
  FC is incurred at zero level of output e.g rent, interest and insurance.IRI

- Variable cost

  Variable cost varies directly with the level of output. It is **not incurred at zero level** of output. E.g. are **cost of raw material, wages** these are zero when output is zero.

- Average Total cost /Ac is U-shaped
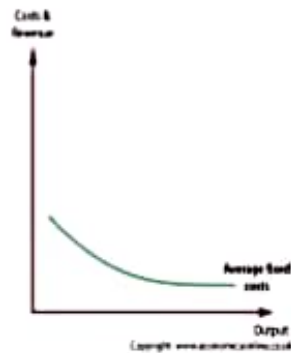
  The total cost divided by the level of output.

  1.Initially when variable fop (Lab) is combined with the fixed fop(land or K), output increases at **an increasing rate.**

  2.This implies that AC falls till the **best combination** of fixed and variable fop is attained

  3.As **output continues to increase,** the **combination between** the fixed and variable fop becomes less favorable resulting in **AC rising**

Short-Run Average Cost Curve for a Single Plant Size
Showing Decreasing then Increasing Variable Cost per Unit

3. As output continues to increase, the combination between the fixed and variab fop becomes less favorable resulting in **AC rising**

Short-Run Average Cost Curve for a Single Plant Size
Showing Decreasing then Increasing Variable Cost per Unit

AVC = Average variable cost per unit.
X = Units of output produced.
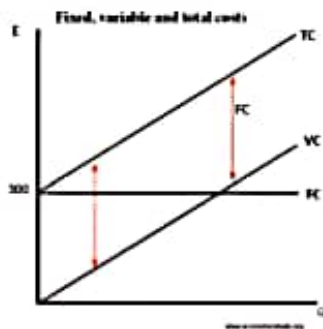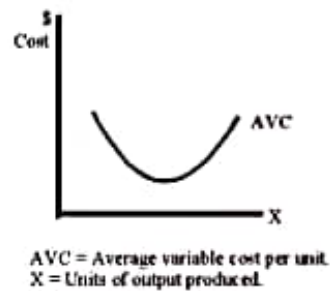
FC is incurred at zero level of output and **REMAINS constant**

VC rises as output increases and is not incurred at 0 level of output

AC= FC+VC/ Output

The combination between the fixed and variable fop were favorable till 8 level of output AC falling

The combination between the fixed and variable fop were not favorable after the 8 level of output rising

- **AC falls initially as the combination between the fixed and variable fop is efficient. due to increasing returns**
- **AC is at its optimum when the combination between the Fixed and variable fop are ideal**
- **AC rises as the combination between the fixed and variable fop is less efficient. Decreasing returns.**

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- AFC= TFC divided by level of output AFC falls continuously as output increases. FC is spread ⊃ larger units of output; therefore FC per unit falls as output increases. Tuition Average Fixe cost

At 0 level of O TC=FC						
Output	FC	VC	TC	AC	AFC=FC/output	AVC=VC/Ou
0	50	0	50	-	-	-
1	50	50	100	100	50	50
2	50	78	128	64	25	39
3	50	98	148	49.3	16.6	32.66
4	50	112	162	40.5	12.5	28
5	50	130	180	36	10	26
6	50	150	200	33.3	8.33	25
7	50	175	225	32.14	7.14	25
8	50	204	254	31.75	6.25	25.5
9	50	242	292	32.44	5.55	26.8
10	50	300	350	35	5	30

REVENUE PROFIT/ Loss and breakeven

REVENUE.

- It is the money a business receives for making sales.
- TR:total money received by a firm from selling what it produced.
- Average Revenue: PRICE charged by a firm when selling various units.

Formulas

: TR= Px Q

A firms sells 10 units @ price 5

TR = 5x 10= Rs.50

Demand for Apples		
Price per lb	Demand	Total Revenue
0	6	0
1	5	5
2	4	8
3	3	9
4	2	8
5	1	5
6	0	0

AR= TR/ Output

TR= 50

O= 10

AR= 50/10= 5

AR=5

AR= P

$$\text{Average Revenue} = \frac{\text{Total Revenue}}{\text{Total Output Sold}}$$

$$AR = \frac{TR}{q}$$

- AR= TR/ QTY
- TR=PxQ/Q

Cancel out the Qs .... AR=P   VERY IMPORTANT 4 mks q___ Qs

PROFIT=

TR-TC

Where TR= PxQ

TC= TFC+ TVC

$$\text{Average Revenue} = \frac{\text{Total Revenue}}{\text{Total Output Sold}}$$

$$AR = \frac{TR}{q}$$

- AR= TR/ QTY
- TR=PxQ/Q

Cancel out the Qs .... AR=P   **VERY IMPORTANT 4 mks ques MCQs**

PROFIT=

TR-TC

Where TR= PxQ

TC=TFC+ TVC

Case 1= TR<TC= LOSS

Case 2= TR>TC= PROFIT

BREAK EVEN POINT level of output; is that level of output where there is no Profit o Loss. (NEW TO THE SYLLABUS)
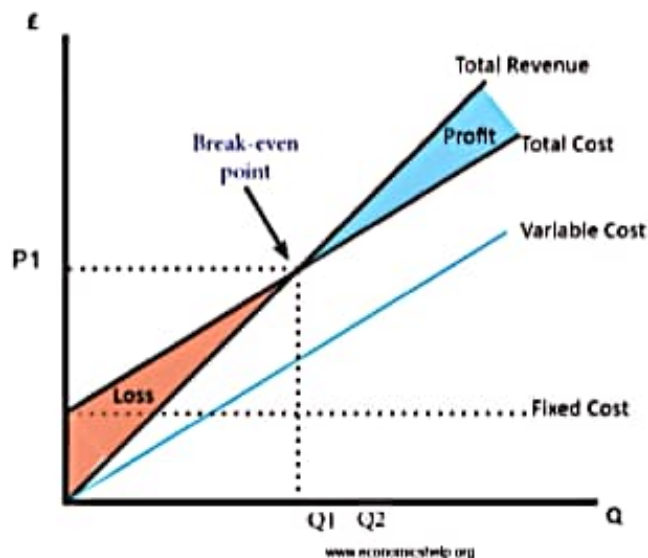
Profit margins can be increased by

- increase revenue **PVQ** (reduce price, improve quality and increase variety)
- Reduce cost by (reducing **factor incomes**(rent, wages, interest), finding alternate cheaper raw material).

Profits can be used for

- Investment in MET/expansion
- R&D
- Necessary for survival
- Reward to share holders etc

TC= FC + VC

TC= 10,000+ 0

TC=10,000

TC= FC @ ZERO LEVEL of output as there is no VC.

VC is zero @ zero level of level of output.

Alternate goals/ Objectives of a FIRM

- **Profit Satisficing**: some firms choose not to maximise profits; rather they w to maintain a satisfactory level of profits.It wants to keep its share holders hap e.g **shareholders of the firm, government , workers, consumers etc.**

- **Growth of firm / increase in market share**:the managers, directors, CE(may have growth of the firm as their main objective. So they try to maximize sales.
  The salaries, bonus etc of the above mentioned is directly linked to the size of firms. Larger the firms they run higher is their package.

- **Profit maximization:**

  PROFIT= TR-TC

  Where TR= PxQ

  TC=FC+ VC

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PROFIT= TR-TC

Where TR= PxQ

TC=FC+ VC

Case 1= TR<TC= LOSS

Case 2= TR>TC= PROFIT

Profit maximization: it is the output of the firm there is the **GREATEST**

DIFFERENCE between total revenue and total cost.

Increase Revenue and reduce Costs=PROFIT

- **Social welfare:** Firms may want to make a positive contribution to the socie There are many Non-profit firms that have social, community and charitable aims. These aims are called (CSR), this is a model that helps firms to be social responsible to itself and the society as a whole.

- **Survival:** new firms may take time to establish themselves and build up a larg customer base. Most important objective for newly formed firms.