PRODUCTION

Production refers to an economic activity that aims at transforming raw materials into finished consumable products (goods and services).

OR production refers to the process of creating utility in goods and services in order to satisfy human wants.

Purpose of production

- To satisfy individual desires and needs of other people (human wants)
- To increase the economic welfare of the people (standard of living).
- To create employment opportunities in the economy
- To utilize the existing resources such as land
- To utilize the existing infrastructure
- To attain a given political objective

Categories of production

- **Primary production**
  This involves production of raw materials or extraction of raw materials from natural resources such as farming, mining, fishing etc
- **Secondary production**
  This involves the process of transforming raw materials into finished consumable products such as food processing, carpentry, construction, manufacturing etc
- **Tertiary production**
  This is the production of services such as banking, ware housing, advertising, transportation, insurance, services by doctors, teachers etc. The services produced are both commercial and direct.

Direct and indirect production

Direct production is the production of goods and services for producer's own consumption. It is sometimes called subsistence production.

While

Indirect production is the production of goods and services for exchange with other people /for market.

***Note*: Production as a process of creating wealth**—production involves making economic goods and services which form the real wealth of individuals or nations. A wealth nation or individual therefore is one with a lot of economic goods and services.

Factors of production (Agents of production)

These are the resources that are employed in the production of goods and services so as to satisfy human wants.

The factors of production include:

- Land
- Labour
- Capital
- Entrepreneurship

LAND

Refers to all gifts of nature on, under, and above the earth's surface such as soils, vegetation, water, climate, etc

Characteristics of land

- The supply of land is fixed(it experiences a perfectly elastic supply curve)
- It is a free gift of nature
- It is geographically immobile but can be occupationally mobile.
- Payment to land is called rent
- Its productivity can be changed using units of other factors especially labour and capital.

Uses of land

- Land is used for agricultural production
- It is a source of raw materials.
- Provides space where production can take place.
- It is a source of food such as water, fish etc
- Used to establish recreational facilities such as beaches, football grounds etc

Payment to land

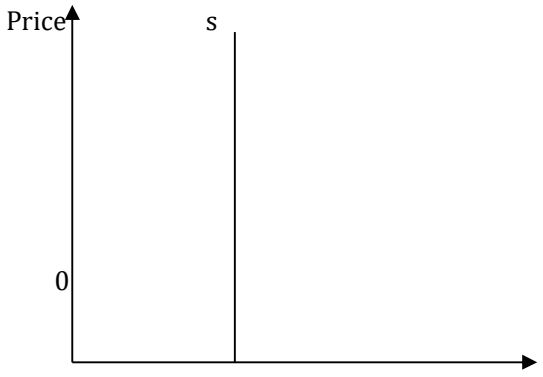
The payment to land is rent--economic rent.

Economic rent refers to the payment / reward to a factor of production over and above its supply price.

A Supply price/ transfer earnings refers to the minimum reward to a factor of production in order to keep it in its present occupation.

Reasons why the payment to land is economic rent

1. **The supply of land is fixed / perfectly inelastic**.



Q_0

Units of land

Amount of land OQ_0 is available not only at price p_1 but at any price whether p_2 or p_3 even at 0 price.

2. **Land is a free gift of nature with no supply price**. Economic rent depends on the elasticity of supply. The more inelastic the supply of the factor, the greater the amount of the economic rent and the more elastic the supply of the factor, the smaller the amount of economic rent.

LABOUR

Refers to any mental or physical effort of people which is used in the production of goods and services.

Characteristics of labour

- Labour cannot be separated from the worker.
- Labour cannot be stored (it if remains idle for some time it causes labour shortage)
- Labour is human
- It is a factor of production with varied productivity (the variation in productivity depends on the level of education and training, level of technology etc)
- Labour is a very mobile factor of production both geographically and occupationally.
- Labour as a factor of production is rewarded/ paid wages.

Labourforce refers to the proportion of the population made up of the working age group in the country between 16—64years, but excluding full-time students and house wives.

(OR Labour force refers to the total number of people of the working age group that is available for employment at a given time)

Categories of labour force

The labour force consists of the unskilled, semi-skilled, skilled and professionals.

1. The ***unskilled labour.*** This labour force consists of workers who have no special training and have a few/ no specific skills. It is labour in raw form.
2. **Semi-skilled labour.** This labour has recived some form of education and training which ia however not adequate to make it fully productive to handle special tasks. For example labour provided by students in vacation.
3. ***Skilled labour.*** This consists of workers who have received the necessary special education and training to do their jobs and have specific skills.
4. ***Professionals.*** These are the workers who have received advanced qualifications to do their jobs such as lawyers, doctors, teachers, etc.

FACTOR MOBILITY /MOBILITY OF A FACTOR OF PRODUCTION

Refers to the ease with which a factor of production moves from one geographical location to another or from one occupation to another.

Mobility of labour

Refers to the ease with which labour moves from one geographical location/place to another or from one occupation to another

Forms of mobility of labour

A. **Geographical mobility**. Refers to the ease with which labour moves from one geographical location /place to another.
B. **Occupational mobility** .Refers to the ease with which labour moves from one occupation/job to another.
   Occupational mobility of labour can either be horizontal or vertical
   - ***Vertical labour mobility***. Refers to the ease of movement of labour from a low-grade job to a job of a senior grade such as from the post of accountant to that of a chief accountant, from deputy head teacher to head teacher.
   - ***Horizontal labour mobility***. Refers to the ease of movement of labour from one job to another but of the same grade. For example an accountant leaving one bank to join another but still as an accountant, from nurse in one hospital to nurse in another hospital.

Factors determining labour mobility

1) ***The cost of movement/transfer from one place to another***. High cost of transfer to places of alternative jobs implies that many workers find it expensive to move and thus labour is immobile. However low cost of transfer makes many workers afford to move to find new jobs and thus labour is mobile.
2) ***The level of awareness of the existing alternative jobs by workers***. More knowledge about the available occupations such as due to adequate publicity makes labour mobile because they easily find the alternative jobs while ignorance about the alternative jobs such as due to inadequate publicity makes the labour immobile.

3) ***The level of development of transport infrastructure***. Poorly developed transport network such as poor roads, absence of railway transport make it difficult for people to move to places with alternative jobs and thus labour is immobile. However better transport network in some areas encourages people to move to places to get new jobs and thus labour is mobile.
4) ***The political situation in areas of alternative jobs***. Political stability in areas of alternative jobs enhances labour mobility because the workers do not stay in panic of their lives and are assured of the security of their property. However political instability in some areas of alternative jobs makes labour reluctant to move to such areas and hence immobility of labour.
5) ***The cost of living in the current or alternative work place***. High cost of living/high prices of goods and services in some places with alternative jobs limits labour mobility because many people fear to move to such areas (where life is hard to sustain) even when there are better jobs while low cost of living in some areas encourages labour mobility.
6) ***The level of education and training of labour***. Highly educated / trained labour is in most cases immobile occupationally because they are highly specialized in a particular activity and hence cannot easily change to a new job while less educated labour is more mobile occupationally because they are generalists who are in position to perform many activities.
7) ***The length of training period for the new job***. Shorter training period for alternative jobs makes labour mobile because they easily join the new jobs while long training period for alternative jobs makes labour immobile since it takes long to acquire the required skills.
8) ***Level of skills of labour***. Labour with the required skills easily moves to different locations or occupations –hence enhancing labour mobility while inadequate job specific skills required makes labour immobile.
9) ***The level of wages (paid to workers).*** High/ better wages paid to workers at the current occupation makes labour reluctant to leave because they largely contented while lower wages paid to workers at the current occupation make labour unsettled and therefore looking for better paying jobs –hence mobile.
10) ***The working conditions***. Poor working conditions in alternative jobs /locations such as lack of job security, absence of medical and housing allowances makes labour immobile because they reluctant to join such places of work. However good working conditions in alternative jobs such as job security and many allowances make labour mobile.
11) ***Level of specialization of labour***. High degree of specialization of labour in the current occupation makes labour immobile occupationally because the workers do not easily take up alternative jobs (since they concentrate on that one activity). However labour that is not specialized is more mobile occupationally.
12) ***The health status of the worker***. Poor health conditions of workers such as sickness, old age, physical disability make labour immobile since they do not easily perform many alternative jobs. However good/sound health conditions of workers such as being physically fit make labour mobile.
13) ***Discrimination in the labour market according to race, tribe, religion, sex etc***. High degree of discrimination in the labour market such as favouring certain races, religions among others – makes many workers unable to acquire alternative jobs and hence labour is immobile. However limited /no discrimination in the labour market makes more jobs available to workers and thus labour is mobile.
14) ***Level of social ties***. Strong social ties make many people fear to move because they do not want to leave behind their friends and relatives and establish new social relationships in a

new area—hence labour is immobile. However weak social ties favour labour to move to places with alternative jobs and hence enhancing labour mobility.

15) ***Level of trade union restriction into and out of a given profession***. Restricted entry and exit by professional associations such as trade unions for certain occupations makes labour immobile because they do not readily enter or leave certain jobs. However free entry and exit makes labour mobile since they readily take up new jobs.
16) Variations in climatic conditions
17) Government policy on labour movement

Barriers to mobility of labour

Geographical barriers

1) High cost of transfer from one location to another/ to alternative place of work.
2) Poor infrastructural development such as poor roads, poor housing facilities.
3) Political instability in the alternative places of work.
4) Apathy and conservativeness of certain groups of people. Some people prefer working in their birth places.
5) High cost of living in some places with alternative jobs.
6) Prospects of promotion at the current place of work.
7) Fear of the unknown at the alternative place of work.
8) Better wages offered at the current place of work.
9) Old age of the worker.
10) Social ties such as strong family attachment.
11) High discrimination in the labour market.
12) Permanent investment one has put in the current place of work. Many people prefer working in places where they have long-term/ permanent investment.
13) Government policy restricting labour movement.
14) Harsh climatic conditions in places with alternative jobs (such as very cold conditions, semi-arid conditions).

Occupational barriers

1. Inadequate information about existing/ alternative job opportunities.
2. High cost of training required for alternative /new job.
3. Long training period required for the new job.
4. Long and tedious procedures /formalities involved in acquiring new jobs (such as examinations, interviews, probation period).
5. Better/good working conditions at the current job such as job security.
6. Ignorance about alternative jobs elsewhere.
7. Professional associations limiting entry of workers in certain jobs.
8. Better/high level of wages paid in the current job.
9. Limited skills required for the new job.
10. High degree of specialization of labour in the current occupation/ high degree of specificity of a factor of production.
11. Social restrictions to a worker such as family, culture, religion.
12. Political instability in some areas of alternative jobs.
13. Poor health status of workers such as sickness, old age.

14. Prospects of promotion at the current occupation.
15. High discrimination in the labour market.

Advantages of labour mobility

1) Helps labour to earn more wages /higher wages due to looking for better jobs as they move since employers do not offer the same wages. This in turn leads to fairer distribution of income.
2) Results into greater productivity and efficiency of labour. Labour is able to acquire more skills through exposure .Labour is also able to move from one job or place where it is not fully utilized to a new environment where its productivity is higher.
3) Geographical mobility of labour is helpful in creating a sense of international community. As people from different countries work together, they become broad-minded and racial differences reduce/disappear.
4) Leads to high employment level/ minimizes unemployment and under employment. This is because the workers move from areas where opportunities are not readily available to places where job opportunities are available.
5) Through labour mobility a country is able to acquire more skilled labour from other countries. .
6) Labour mobility discourages over exploitation of workers b under payment and poor working conditions because labour has the opportunity to move.
7) Labour mobility promotes competition in the labour market which promotes efficiency in the long run
8) Promotes balanced regional development by allowing exchange of ideas and skills.

Disadvantages of labour mobility

1) Encourages brain drain –leading to loss of skilled personnel to other countries and this negatively affects domestic production.
2) Labour mobility makes manpower planning difficult since labour keeps on moving from one occupation to another.
3) Frequent occupational mobility of labour undermines labour productivity. It does not allow the labourer to improve on skills and gain experience in a particular job since it keeps changing from one job to another.
4) Labor mobility makes it difficult for labour to organize itself into strong trade unions to advocate for more benefits since it keeps moving place to place or occupation to occupation.
5) Geographical and occupational labour mobility involve sometimes high monetary cost such as renting a new house, transfer of property, and transport to the new place of work.
6) Results into disintegration of social ties and opportunities. Social relationships in a given locality would facilitate enterprise but mobility disrupts this.
7) At times some labourers move to other places with the firm's equipment which is a loss to the employer/ firm.

Policies to facilitate/ promote labour mobility

1) Provision of more training centres where workers learn new skills such as through short courses.
2) Encouraging on-job training to promote occupational mobility of labour. Labour is position to acquire new skills to take on new jobs.

3) Provision of adequate financial assistance during the period when labour is searching for a new job or undergoing training.
4) Government should ensure a (relatively) balanced wage system which encourages workers to take on jobs in any part of the country.
5) Ensuring balanced development of basic infrastructure such as roads to enable people to move from one place to another.
6) Availing more information about the existing jobs such as through the media (publicizing the existing job opportunities). The government should also embark on the creation of employment offices purposely for getting awareness of the existing jobs.
7) Government should ensure political stability in all parts of the country to promote geographical mobility of labour.
8) Encouraging and promoting education for all to widen the scope of skills for labour.
9) Using sensitization and incentives to firms in order to fight against discrimination in the labour market.
10) Government regulating the period of training for various courses.
11) Improving the health conditions of of workers
12) Improving the working conditions in various areas

Assignment:

Explain the advantages and disadvantages of labour immobility

Specialization and division of labour

Specialization refers to the concentration of labour on doing a particular activity/job in which he/she has the greatest ability.

OR refers to the concentration of an individual of country in the production of a commodity in which the individual or country has the greatest ability.

Forms of specialization

a) Specialization by craft.
This was the early form of specialization where some families concentrated on doing particular activities such as hunting, pottery, fishing, farming etc and in turn exchanged with other families.

b) Specialization by process
This is where people concentrate in different stages of production in the production process.

c) Regional specialization
This is where regions concentrate on what they produce more efficiently and exchange with other regions.

d) International specialization
This is where each country concentrates / produces what it can do best and exchange it with other countries.

Division of labour

Division of labour refers to the distribution of tasks to particular individuals in the production process that they can do best. For example in the manufacture of garments/ textiles different workers are responsible for particular tasks.

Note: The division of labour may not necessarily be according to skill, ability or talent.

Advantages of specialization and division of labour

1. Workers attain greater skills since each worker does what is best for him and thus becomes more skilled at that. This in turn increases efficiency in production.
2. Makes use of machinery in the production process possible. Machines are easily introduced to assist workers because the work is relatively specific / simple (and yet machines are made for specific purposes).
3. Less time is spent training each worker to do his job. Each worker is quickly trained to perform a single operation and therefore labour becomes more productive in a short period of time.
4. Duplication of tools and tasks is prevented. Individuals only have tools needed in a particular stage of production and this results into production of quality work.
5. Specialization leads to greater output. This is because workers specialize according to their ability. This in turn leads to high rate of economic growth.
6. Promotes mutual understanding among workers and hence the spirit of team work. This is due to high degree of interdependence among the tasks to complete the production process.
7. Leads to improvement in the quality of final output. This is due to use of modern specialized technology, hence better standards of living.
8. Reduces fatigue for labour due to carrying out a particular task repeatedly. The workers do not need to move around the factory from one job to another but instead remain in one place and operate one machine.
9. Regional and international specialization enables countries to fully exploit their natural resources and exchange. They concentrate on a given commodity and buy what they cannot produce with other countries.
10. Enables people to exploit their talents/skills in full. This is because division of labour is based on what one does best and this in turn increases the level of individual incomes.
11. Leads to increased invention and innovation in production. This is because each worker concentrates on one job/ task and gains experience, and becomes more productive.

Disadvantages of specialization and division of labour

1. Results into monotony of work and boredom. This is because the worker does the same work over and over and this leads to inefficiency which leads to absenteeism and increased risk of accidents.
2. Decline in craftsmanship due to employment of machinery. The workers become less innovative and creative, and this is because they turn into attendants of machines.
3. There is greater risk of unemployment since the workers are specialists who are less mobile occupationally. This occurs due to fall I demand for a particular skill or product produced by the worker in the market.
4. Leads to reduction in the quality of output due to collective responsibility in the production process. This is because no single worker is responsible for work done and thus no single worker is blamed for bad products.

5. Leads to discontinuity in production in case one of the key workers misses such as being sick or going on strike. This is because of a high degree of interdependence among workers.
6. Leads to over exploitation of natural resources such as over fishing, over mining etc and hence quick resource exhaustion. This is due to faster production/ large-scale production and which negatively affects the future generation who may not benefit from the resources.
7. Specialization leads to mass production which is at times difficult to market due to narrow market and therefore wastage of resources in that country.
8. Labour gets relatively lower wages since wages are paid to many workers instead of paying one worker who does all the work.
9. International specialization leads to over dependence of one country on other countries. This also discourages diversification of activities within a particular country.
10. There is no flexibility in production since machines are made for specific purposes.

Productivity of labour and efficiency of labour

Productivity of labour refers to the amount/quantity of output produced per unit of labour employed in a given period of time. (OR refers to the quantity of any commodity that a unit of labour can produce in a given period of time)

While/where as

Efficiency of labour refers to the measure of quantity and quality of output produced by a unit of labour employed in a particular period of time.

Factors that determine efficiency of labour (and productivity of labour)

1. ***Level of wages.*** High the level of wages motivates the workers to produce more quality and quantity of output hence more efficiency of labour while low level of wages discourages workers and therefore low efficiency of labour.
2. ***Level of education and training/level of skills of labour***. Labour which highly educated and trained has the required skills to produce more quality and quantity output-hence more labour efficiency while labour which is less trained/ possessing less skills is less efficient.
3. ***Degree of specialization of labour***. Labour that is highly specialized is in position to concentrate on a particular activity to realize better quantity and quality output and therefore more efficient while labour that is less specialized does not concentrate on a particular activity and hence less efficient.
4. ***Working conditions of labour (at the place of work)***. Favourable working conditions such as higher job security, more allowances to workers, availing the required tools in time among others encourage the workers to be more efficient while unfavourable working conditions such as absence of allowances to workers result into low efficiency of labour.
5. ***Availability and quality of co-operant factors***. Readily available and quality co-operant factors of production to labour such as land and capital (modern capital) lead to more efficiency of labour while inadequate and poor quality co-operant factors limit labour efficiency.
6. ***Level of expertise/experience of labour***. Highly experienced labour produces more quality and quantity output due to serving for a long period of time-hence more efficiency while less experienced labour is less efficient due to serving for a short period.

7. ***Physical/health conditions of labour***. Good health conditions of labour result into more labour efficiency since the workers devote more time to do quality and quantity work while poor health conditions of labour such sickness reduces efficiency of labour due to absenteeism.
8. ***Level of technology employed***. High level of technology encourages workers to produce more quality and quantity output—hence more efficient while low level of technology limits the quality and quantity of output by workers-hence less efficient.
9. ***Quality of management/supervision and organizational ability during production process.*** Good management and organization of the production process reduces laziness of workers because the managers monitor and guide the workers, and hence more labour efficiency. However poor management and organization at the work place leads to more laziness and excuses from workers-hence less labour efficiency.
10. ***Attitude of workers towards work***. Positive attitude of workers towards work such as keeping time and reduced absenteeism, leads to more efficiency of labour. However negative attitude towards work such as workers not keeping time, and increased absenteeism, leads to less efficiency of labour.
11. ***Level of risks involved during production***. Highly risky production process such involving more accidents or workers more exposed to ill health as they work results into less labour efficiency while less risky work encourages the workers to perform, hence more efficiency of labour.
12. ***Natural ability/talent of workers***. Highly talented labour is in position to produce more quality and quantity output—hence more efficient while less talented labour is less efficient during production.
13. ***Availability of on-job training to workers***. On-job training (in-service training) such as through seminars, workshops increases the skills possessed by labour (-leading to more innovations and inventions) and therefore it becomes more efficient while absence of on-job training limits the opportunities of labour to perform more efficiently.
14. ***Expectation of promotion at the place of work***. Labour that expects promotion at the work place works more efficiently to please managers/supervisors while labour that does not expect any promotion at the work place is less motivated to perform-hence less efficient.
15. ***Political climate***. Political stability of an area increases the confidence of workers making them more efficient while political instability/insecurity scares the workers and hence making them less efficient.

Guiding questions

1. *(a) Distinguish between productivity of labour and efficiency of labour (4mks)*
   (b) Explain the factors which affect efficiency of labour in your country (16mks)
2. *(a) What is meant by the term 'efficiency of labour'? (4mks)*
   (b) Discuss the factors which increase efficiency of labour in an economy? (16mks)

Labour demand/Demand for labour

Labour demand refers to the number of workers that employers are willing to employ (offer jobs) and retain in employment at a given wage rate in a given period of time.

Note: Unlike demand for a commodity, the demand for labour and all factors of production is derived demand, being majorly determined by the demand for final products which that labour can produce.

Factors that influence/determine labour demand in an economy

1. ***The level of demand for products labour produces***. More demand for the products leads to increased demand for labour to produce the products. However a decrease in demand for products leads to lower demand for labour.
2. ***Level of wages***. High level of wages makes the labour more expensive to pay and hence reducing labour demand while low level of wages makes labour cheap to employers and thus increased labour demand.
3. ***Level of skills of labour***. Higher level of skills possessed by labour makes it more attractive to employers and this leads to higher demand for labour while lower skills possessed discourages employers, hence lower demand for labour.
4. ***The proportion of labour costs to total costs of production/of the firm***. With labour costs accounting for a small proportion of total costs, the demand for labour increases because labour is cheap to employ. However with labour accounts for a big proportion of total costs, its demand reduces—since it becomes expensive.
5. ***The degree of substitution of labour with other factors/ level of substitutability of labour***. Labour being easily substituted with other factors of production especially capital, its demand reduces unlike labour which is not easily substituted with other factors.
6. ***Availability of co-operant factors which compliment labour/cost of co-operant factors such as capital.*** With co-operant factors of production readily available, the demand for labour increases while inadequate co-operant factors limit the demand for labour.
7. ***The marginal productivity of labour (productivity/efficiency of labour).*** Labour with high marginal productivity (more additional output per unit) has higher demand while labour with low marginal productivity has lower demand.
8. ***The degree of complimentarity of labour with other factors***. With high degree of complimentarity, demand for labour increases-since it is highly needed to work alongside others factors. However low level of complimentarity of labour with other factors reduces demand for labour.
9. ***The elasticity of supply of labour***. Labour with inelastic supply has higher demand since such labour is difficult to get while labour with elastic supply has low demand.

Supply of labour

Supply of labour is the number of people in the working age group that are willing and able to work at a given wage rate in a given period of time.

Or Labour supply refers to the number of hours of work offered by a labourer at a given wage rate.

Determinants of labour supply

1. ***Wage rate/level***. A high/ better wage rate induces/encourages many workers to supply more effort hence increasing labour supply while a low/ reduced wage rate discourages many people from working, leading to reduced/low labour supply. However at very high

wages the supply of labour reduces since leisure becomes more attractive (back ward bending supply curve of labour).

2. ***The population size and proportion of working population to total population***. A big size of the population and a high proportion of the working population imply increased labour supply-since more people are available to do work and vice versa.
3. ***Sex composition of the population***. Generally a population with a large number of women is likely to have low labour supply-since females are at times away from work(such as during maternity leaves) while that population with few females is likely to have high labour supply.
4. ***The working conditions of labour***. Favourable working conditions such as higher job security, more allowances (housing, medical allowance, leisure facilities) to workers attract more people to offer labour hence higher labour supply while unfavourable working conditions such as limited allowances to workers limit labour supply.
5. ***Immigration and emigration rate***. Immigration involves people entering the country while emigration involves people leaving the country. Higher rate of immigration (and lower rate of emigration) leads to more labour supply because more people are available to do work while lower rate of immigration (and increased emigration rate) leads to reduced labour supply.
6. ***People's attitude towards work***. Negative attitudes towards work and many people unwilling to work lead to low labour supply. However positive attitudes towards work and more people willing to work lead to higher labour supply.
7. ***Level of education and training/level of skills***. This mainly determines the supply of skilled labour. With more people attaining a high level of education and training the supply of skilled labour increases , since more people can do the technical work . However with the majority having less skill/training, the supply of technical labour is low.
8. ***Age structure of the population***. With most people falling in the working age bracket (15-64 years), the supply of labour increases because the majority are able to work While labour supply is low with most people falling in young and old age groups.
9. ***The nature of work***. With most jobs being risky, dangerous and unpleasant and therefore discouraging many people from joining them leads to less labour supply, while with most jobs being pleasant and thus attracting more people labour supply is high/increases.
10. ***The demand for labour***. High demand for labour leads to more supply of labour since there are more opportunities for work while low demand for labour reduces labour supply due to few opportunities available.
11. ***The retirement age***. A lower retirement age leads to low supply of labour since more aged people are not allowed to be in active service while a higher retirement age leads to more supply of labour.
12. ***Study duration/ length of training period***. A short training period and a low average age of leaving school leads to higher the supply of labour because more people are able participate in work early enough. However a long training period, prevents many people from joining working class early enough and hence low supply of labour.
13. ***Minimum working age in the country***. A high minimum working age leads to low supply of labour since many young people are not allowed to work by law while a lower minimum working age leads to high supply of labour since many people are able to work.
14. ***The degree of mobility of labour (both geographically and occupationally)***. A high level/degree of labour mobility leads to higher supply of labour since many people are able to move from place to place or job to job. However low level of labour mobility reduces

supply of labour because few people are able to take up jobs in various regions or occupations.

CAPITAL

Capital refers to all man-made resources/ aids which are used in the production of other goods and services. It includes the stock of goods existing in a given period of time (and it is created in the process called investment).

Forms of capital

1. **Real capital**
   This refers to the stock of physical assets that have money value and are capable of producing other goods and services. Examples are: machinery, office equipment, buildings.
2. **Money/nominal capital**
   This is capital in form of currency notes. It is usually a form of payment but it is not directly productive.
3. **Private /individual capital**
   Refers to capital owned by an individual and yields income to the individual owner or a business unit such as investment in business, shares in companies and bank deposits.
4. **Public/social capital**
   Refers to physical assets owned by the government on behalf of all people/individuals in an economy. Examples are: roads, public parks, hospitals, railway among others.
5. **Fixed capital**
   Refers to capital in form of assets that are capable of being used for a long period of time such as machinery, and factory buildings. It is capital in form of durable or permanent assets.
6. **Floating capital**
   Refers to capital that can be used for a number of purposes and in a variety of ways. Examples are: money, raw materials.
7. **Sunk/specialized capital**
   Refers to capital that cannot easily be adapted to an alternative use. Or It is specific capital which cannot be used for any other purpose apart from what it has been made for. Examples are: a railway locomotive, ice cream plant.
8. **Circulating/variable capital / working capital**
   This is capital in form of raw materials, other inputs of the firm; money used to pay workers, pay taxes and other expenses of the firm. (These are things used in production only once and are exhausted in a single operation).

   Note: Human capital. Refers to capital in form of human beings who have acquired training and education, and have skills and knowledge.

Characteristics of capital

- It is man-made resources/aids to production
- Can be accumulated over time

- Has money value
- Subject to depreciation/ wear and tear (losing value)
- Capital can become outdated or obsolete (no longer useful or not functioning any more)
- The reward to capital as a factor of production is interest
- Capital is either specific or unspecific

Role of capital in an economy

1) ***Facilitating optimum resource utilization/ increases resource utilization***. Due to capital investment idle resources are put to use and this minimizes resource wastage.
2) ***Encouraging technological development and transfer***. Capital is used to carry out research hence improving the techniques of production, and enables a country to transfer modern technology from other countries.
3) ***Facilitation of research***. Capital is used to carry out research on new production methods, new products, and market survey for products-which in turn increases production.
4) ***Improving the quality of output***. This is because machines are capable of doing better work and hence improving the standard of living.
5) ***Simplifying and quickening the production process*** leading to increased output. This makes production and supply of goods more reliable on the market.
6) ***Facilitation of industrialization process in the economy***. Capital enables building of more industries and hence more goods and services are produced, hence increasing national income.
7) ***Enables the country to import from other countries technical knowledge*** in form of experts and other forms of locally scarce labour. This in turn promotes domestic production, which reduces dependence.
8) ***Increases efficiency and productivity of other factors of production***. For example, land is better utilized and this leads to production of more goods and services.
9) ***Promotes of specialization and division of labour in the production process***. People concentrate at particular stages and hence advantages enjoyed such as increased output and exchange with other regions.
10) ***Facilitates exchange and therefore enhancing commercial production***. People produce more output and sale to others, which in turn promotes transformation of the economy from subsistence to monetary economy.
11) ***Facilitates/ promotes infrastructural development***. For example develops roads, railways, banks, power supply, hospitals –which in turn promote various productive activities in the economy.
12) ***Facilitates further capital formation through borrowing and lending***. This is because fixed assets like machines, premises, buildings are used as collateral security to acquire loans used for further investment.

***Factors influencing the supply of capital**

1) **The level of interest rate on loans**. A high interest rate on loans limits the supply of capital while a low interest rate on loans leads to more capital supply.
2) **The demand for goods and services produced by capital**. High demand for goods and services results into more supply of capital while low demand for goods and services leads to low supply of capital.

3) **Government monetary and fiscal policies**. Restrictive government policy such as through high bank rate leads low supply of capital while expansionary monetary policy of government increases the supply of capital.
4) **Level of capital inflow and outflow**. High capital inflow and low capital outflow increases the supply of capital. However high capital outflow and low capital inflow reduces the supply of capital.
5) **The marginal efficiency of capital**.

Capital accumulation/ capital formation

Capital accumulation refers to the process of increasing a country's stock of real capital intended for the production of more goods and services *(over a given period of time).*

Or refers to the net investment in fixed assets intended for the production of more goods and services.

Capital accumulation is necessary because it increases resource utilization, the standard of living and it is a basis of economic development.

Factors determining/influencing capital accumulation

1) ***Level of income of individuals /in the economy***. High income levels lead to increase in savings and hence high level of capital accumulation. However low income levels lead to low savings and thus low level of capital accumulation.
2) ***The level/stock of existing capital stock***. Adequate existing capital stock leads to more investment and hence higher capital accumulation. However limited existing capital stock leads to low level of investment, hence low level of capital formation.
3) ***The rate of interest on loans***. High rate of interest on loans discourages borrowing for investment leading to low level of capital accumulation. However low interest rate on loans encourages borrowing for investment leading to high level of capital accumulation.
4) ***Demonstration effect in consumption***. High demonstration effect-with many people consuming commodities because others are consuming them results into reduced savings and hence low level of capital accumulation. However low demonstration effect encourages savings and hence promotes capital accumulation.
5) ***Rate /level of capital inflow and outflow***. High capital inflow and low capital outflow in form of investments, profits, donations results into high level of capital accumulation. However low capital inflow and high capital outflow leads to reduced investment and hence low level of capital accumulation.
6) ***Level of development of infrastructure***. Developed infrastructure such as banking facilities, roads encourages savings and investment leading to high level of capital accumulation. However under developed infrastructure such as poor roads leads to low savings and investment leading to low level of capital accumulation.
7) ***The population growth rate***. High population growth rate increases the dependence burden leading to low savings and hence low level of capital accumulation. However low population growth rate reduces the dependence burden leading to high savings and hence high level of capital accumulation.
8) ***Rate of inflation in the country/ level of prices for goods and services***. High rate of inflation discourages people from saving and commercial banks from lending due to fear of

money losing value and hence low level of capital accumulation. However low rate of inflation encourages savings and borrowing leading to high level of capital accumulation.

9) ***Level of entrepreneurship in the country***. Presence of more people who invest in various activities leads to increased production, savings and hence high level of capital accumulation. However low level of entrepreneurship reduces production, savings and hence low level of capital accumulation.
10) ***The size of the market for goods and services***. Large market size encourages production which leads to more savings and hence high level of capital accumulation. However small market size discourages production leading to reduced savings and low level of capital accumulation.
11) ***The investment climate/ government policy in relation to resource allocation***. Favourable investment climate such as with low taxes, tax holidays, and subsidization of firms encourages production and hence high level of capital accumulation. However a poor investment climate with high taxes on investors, absence of subsidization discourages production leading to low level of capital accumulation.
12) ***Level of technology in the country***. Efficient technology leads to increased production of goods and services, more savings and hence high level of capital accumulation. However inefficient technology limits production, savings and hence low level of capital accumulation.
13) ***The political climate***. Political stability encourages investment and savings in the country leading to high level of capital accumulation. However political instability discourages investment and savings leading to low level of capital accumulation.
14) ***Degree of accountability/ level of corruption in the financial sector***. Existence of corruption limits the level of investment especially in the public sector leading to low level of capital accumulation. However absence of corruption promotes investment and hence leading to low level of capital accumulation.
15) ***Level of conservatism/ cultural factors***. High level of conservatism / strong cultural beliefs such as preferring of extended family system, low desire for work in preference of social functions(like weddings, drinking etc) leads to low production , low savings and hence low level of capital accumulation. However low conservatism / people preferring small families, low desire for social functions promotes production, savings and hence high level of capital accumulation.
16) ***Time preference of an individual***. Time preference refers to the choice an individual makes between saving and consumption currently or in the future. Consuming less and saving more currently promotes investment leading to high level of capital accumulation. However consuming more and saving less currently limits investment leading to low level of capital accumulation.

Note:

- **Capital appreciation**—refers to the increase in value of assets or capital goods over time.
- **Depreciation**—refers to the wear and tear of capital goods during the process of production. Or it is the loss in value of capital goods due to wear and tear during the production process.
- **Depreciation allowance/capital consumption allowance**—refers to the amount of money set aside to maintain the capital goods and take care of wear and tear.

Sources of capital

1) **Savings.** Both private and public savings are increased so as to widen the base of capital accumulation. (Savings is that part of the disposable income that is not consumed in the current period but put aside for future use).
2) **Profits/ retained earnings** and other forms of proceeds from business ventures form a major source of capital. Profits are used to expand business by re-investment/ ploughing back.
3) **Floating government securities** such as bonds, treasury bills. The government sells securities to the public to raise capital.
   National rotary run by the state is also intended to mobilize capital on voluntary basis through sell of raffles.
4) **Selling of shares.** Firm sell shares to the public and in this way the public contributes capital in order to earn dividends.
5) **Taxation.** Government facilitates the process of capital formation by widening the tax base thereby increasing tax revenue.
6) **Attraction of foreign aid.** Foreign aid/ grants from bodies (like IMF, IDA) and friendly countries form another source of capital for the recipient country.
7) **Loan advances.** Loans are obtained from financial institutions in order to build up investment capital. However loans usually require collateral security.
8) **Trade credits**. This involves a business unit obtaining goods from another firm without making immediate payment and payments are made after selling the credit.
9) **Compulsory savings scheme.** This includes motor insurance payments, social security fund and this also forms a source of capital formation.
10) **Fund raising campaigns.** When successfully conducted act as a source of capital.
11) Commercial bank system of multi-credit creation

Productivity of capital

Productivity of capital refers to the average output per unit of capital employed during the production of a commodity.

$$\textbf{Productivity of capital} = \frac{\text{Total output}}{\text{Units of capital employed}}$$

Marginal productivity of capital

Marginal productivity of capital refers to the additional output produced as a result of employing an extra unit of capital.

Marginal efficiency of capital

Marginal efficiency of capital refers to expected monetary returns on additional unit of capital used in the production process.

Or MEC refers to the expected quantity and quality of output that can be realized by employing an additional unit of capital in the production process.

$$\textbf{MEC} = \frac{\text{Expected monetary returns on a unit of capital}}{}$$

Supply price of capital asset

Factors determining the MEC /marginal productivity of capital

1) **The quality and efficiency of co-operant factors of production (such as labour)**. Efficient co-operant factors of production lead to high MEC since the capital is better utilized while inefficient co-operant factors of production lead to low MEC.
2) **Government policy on investment/Level of taxation by government**. High taxes on investment projects lead to low MEC while low taxes charged on investment projects lead to high MEC.
3) **Rate of interest charged on capital**. High interest rate on capital leads to low MEC while low interest rate leads to high MEC.
4) **Size of market for commodities/ level of demand for commodities**. A large market size encourages productivity of capital while limited market leads to low productivity of capital.
5) **Level of expected output**. Expectation of high output from capital invested leads to high MEC while low output expected leads to low MEC.
6) **Rate of depreciation of capital goods**. High rate of depreciation leads to low productivity of capital since high costs are incurred to replace /repair it while low rate of depreciation leads to high productivity of capital.
7) **Price level of commodities.** High price level of output leads to high MEC while low price level of output leads to low MEC.
8) **Level of excess capacity**. Presence of high excess capacity leads to high MEC since more resources are available to be utilized while limited excess capacity leads to low MEC.

ENTREPRENEURSHIP

An entrepreneur is a person who undertakes the risk of initiating, financing, and controlling business with a major aim of making profits.

Entrepreneurship refers is the capacity/ ability to identify and generate innovative business ideas, mobilize resources, organizing other factors of production and manage risks for the growth of the business.

Functions of an entrepreneur

1) **Initiates/starts the business**. This is the prime function of an entrepreneur/ he comes up with the idea to start a business.
2) **Co-ordinates the other factors of production**. He coordinates and combines other factors such as land, labour and capital; and makes arrangements for rewarding the factors.
3) **Undertakes risks**. Undertakes risks and uncertainties when investing (such as losses and industrial action/ strikes)
4) **He is a decision taker**. Makes major decisions in business such as what to produce and the method to be used.
5) **Controller of the business**. He manages the enterprise, supervises and controls all activities of the firm.

6) **He is an innovator**. Improves on the existing structure of the business such as improving on the buildings, improving on the production techniques to ensure good running of business.

Factors determining the supply of entrepreneurship

1) **Level of education and training**. High level of education and training widens people's exposure to opportunities and thus leads to high level of entrepreneurship while low level of education and training limits people's exposure to opportunities and thus reduces the supply of entrepreneurship.
2) **Natural and acquired qualities**. A large number of people with vast natural abilities leads to high supply of entrepreneurship while a small number of people with natural talents leads to low supply of entrepreneurship.
3) **Level of economic rent**. High economic rent leads to high supply of entrepreneurship while low economic rent results into low supply of entrepreneurship.
4) **Social—cultural factors** such as religion, cultural beliefs. Strong belief in social and cultural norms limits the supply of entrepreneurship since many people fear under taking risks in business and attach a lot of value to the norms. However less value attached to social norms leads to high supply of entrepreneurship.
5) **Government policy of taxation and subsidization towards investment**. Favorable government policies such as reduced taxation on investment leads to high supply of entrepreneurship while poor policies like high taxation of investment leads to low supply of entrepreneurship.
6) **Availability of capital and other economic resources**. More capital available encourages entrepreneurship while shortage of capital leads to low supply of entrepreneurship.
7) **Size of the market of commodities**. A large market size for commodities produced encourages entrepreneurship while a small market size for the commodities produced leads to low supply of entrepreneurship.
8) **Price level of commodities**. Higher price level encourages production and thus increases the supply of entrepreneurship while low prices of commodities discourages production and thus low supply of entrepreneurship.
9) **Political climate of the country**. Political stability encourages production leading to high supply of entrepreneurship while political instability discourages the supply of entrepreneurship.
10) **Level of development of economic infrastructure**. Improved infrastructure such as better roads, banking, and power supply encourages production hence leading to high supply of entrepreneurship while poorly developed infrastructure such as poor roads discourages production leading to low supply of entrepreneurship.

FACTOR PRICE

Factor price refers to the monetary payment to factors of production for their contribution towards the production of goods and services during the production process.

The factor prices include:

- Rent for land
- Wage for labour
- Interest for capital
- Profits for entrepreneurship

Supply price/ transfer earnings—refers to the minimum payment necessary to keep a factor of production in its present/ current employment *(without transferring to an alternative use).*

Economic rent—refers to the excess earning by a factor of production over and above its transfer earnings.

OR refers to the payment to a factor of production in excess of what is necessary to keep it in its present employment.

1) Given that a factor of production has a supply price of sh.6000 and the actual earnings are sh.8500. Determine the economic rent.
   Economic rent= actual rent –transfer earnings
   =8500-6000
   =sh.2500.
2) Given that a factor of production receives a transfer earning of sh. 150,000 and its economic rent is twice its transfer earnings. Calculate the factors actual earnings.
   Actual earnings= transfer earnings+ economic rent.
   =150,000 + (150,000 x 2)
   =150,000 +300,000

   Actual earnings = sh.450, 000
3) Given that a piece of land (I hectare) when used for cultivation its cost is sh.10, 000 and when used for building its price is sh.100, 000. Calculate the economic rent for the land.
   Economic rent= actual earnings-transfer earnings
   =100,000-10,000
   = sh.90, 000.

Factors that determine / influence the level of economic rent

1. ***The level of demand of a factor of production***. High level of demand of a factor makes it receive economic rent while low levels of demand makes a factor receive no economic rent.
2. ***The level of supply of the factor of production***. The factor that is adequately supplied does not earn economic rent while that factor in short supply receives economic rent.
3. ***The degree of specificity of a factor***. Factors of production that are specific receive no economic rent while those that are flexible receive economic rent. This is because they are able to shift from one job to another / do many jobs at the same time.
4. ***The degree of mobility of a factor***. Factors that mobile receive economic rent while those that are immobile do not receive economic rent.
5. ***Elasticity of demand of a factor***. A factor whose demand is inelastic receives economic rent while a factor whose demand is elastic does not receive economic rent.

6. ***The degree of substitutability of a factor***. Factors that are easily substituted by other factors or machines do not receive economic rent while those not easily substituted receive economic rent.

Quasi rent –refers to the extra earnings by a factor of production over and above the supply price that is earned in the short run due having inelastic supply but elastic supply in the long run.

Or Quasi rent refers to the extra earnings to a factor of production which has inelastic supply in the short run but elastic supply in the long run.

[It is a type of economic rent that arises in the short run because a factor of production is paid highly in the short run due to its scarcity and low price in the long run when supply increases. For example in the short run doctors tend to be few and highly paid but in the long run the supply increases and they are paid low wages for their services]

****Commercial rent*** –refers to the payment to an owner for temporary use of a building or any other asset. Or Refers to the hire price of a durable asset. (it is the cost of renting).

****Differential rent*** --refers to the extra payment to a factor of production because of putting it in alternative use or location. It is the extra earning/payment to a factor of production above the usual rate because of that specific factor's quality.

****Ability rent***— refers to the high wages paid to scarce forms of labour whose demand is higher than its supply in the short run.

(Or refers to a type of economic rent earned by labour which is talented in more than one field). [The ability rent disappears in the long run when the supply of that type of labour increases].

***Rent of entrepreneurship**—refers to the payment to an entrepreneur which is over and above the supply price and therefore it tends to attract new firms into the industry.

Supply of factors of production—refers to the amount of factors of production on the market at a given price in a given period of time.

Factors determining the supply of factors of production

- The mobility of a factor of production
- Government policy regarding the supply or use of the factor.
- The price of the factor of production
- The level of entrepreneurship in the country.

Factors that determine the demand for factors of production

- The price of the factor such as rent, interest rates, and level of wages.
- The demand for the product the factors produce.
- The marginal productivity of the factors
- The degree of substitutability of the factors in production process
- Complimentarity of the factors of production in production.

- Percentage cost of the factors prices to the total cost of production.
- Government policy by influencing factor prices and their use.

Basic concepts

1. **Physical factors of production**—refers to the tangible resources used to produce goods and services such as real capital , money capital , land etc
2. **Non-physical factors of production**—refers to the intangible resources used to produce goods and services such as skills, special talents etc
3. **Specific/fixed factors of production** —refer to the factors of production whose use is fixed/ particular such that they cannot be changed to serve other purposes.
   [They are factors of production which cannot be adapted to any other alternative use other than what it was meant for].
4. **Non-specific factors of production** —refer to the factors of production which can serve various purposes / not specialized and therefore mobile between occupations.
   [These are factors of production which can easily be transferred from one use to another].
5. **Specificity of a factor of production**—refers to the extent to which a factor of production cannot be adapted to alternative use other than what it was meant for.
   (Or Refers to the degree to which a factor of production cannot be transferred from one use it is meant for to another).
6. **Technical progress/technological progress**—refers to improvement in the quality of capital through innovations and inventions and such changes lead to better production. It involves the application of new and superior processes and products in production.
7. **Invention**—refers to the discovery of new and efficient methods of production. [This is due to scientific research and enlarges the productive capacity].
8. **Innovation**—refers to the improvement in the existing methods of production (or refers to use of newly invented techniques in production).
9. **Capital widening**—refers to the process of increasing the use of capital in the production process alongside other factors in the same ratio.
10. **Capital deepening**—refers to the process of increasing the ratio of capital to labour in the production process. It is the increase in the availability of capital per unit of labour. [The production process becomes more capital intensive].
11. **Capital inflow**—refers to the net movement of real and financial capital into a country, in form of increased purchases of domestic assets by foreigners or reduced purchasing of foreign assets by domestic residents.
12. **Capital outflow**—refers to the net movement of real and financial capital out of a country, in form of reduced purchases of domestic assets by foreigners or increased purchases of foreign assets by domestic residents.
13. **Labour turn-over** –refers to the rate at which a worker changes occupation to occupation or place to place/measure of mobility of labour. A high degree of labour turn-over is inefficient and costly because each time a worker leaves his job and a replacement is needed the employer incurs costs in form of : a fall in output, costs of training a new worker, loss of skilled worker's output while training the new entrant.
14. **Transfer payment**—refers to what an individual gets without working for it / without exchange of goods and services.

Relate specificity of a factor to its mobility

Highly specific factors of production are less mobile occupationally while less specific factors of production are more mobile occupationally.

SUBSISTENCE PRODUCTION AND COMMERCIAL PRODUCTION

Subsistence production

Subsistence production refers to the production of output mainly for consumption by the producer and not for sale.

Or Refers to the economic undertaking in which production of output is mainly for producer's own use/consumption and not for sale.

Note:

- ***Subsistence output*** refers to the output which is produced mainly for consumption/use by the producer. It is sometimes called non-marketed output or household's own account output.
- ***Subsistence economy*** refers to an economy in which production is mainly for own consumption by the producers. It is not market oriented and the standard of living is limited to basic needs or necessities life such as food,, shelter and medical care.
- ***Subsistence sector*** refers to that part of the economy where production is mainly for own consumption by the producers.

Characteristics of subsistence production

- Production is not profit motivated but self-satisfaction (but mainly undertaken to satisfy needs of the family).
- Mainly involves use of simple and rudimentary traditional tools such as sticks, pangas, hoes, axes etc
- Mainly practiced in the agricultural sector and mainly in the rural areas.
- Use of mainly family labour–usually self employed and mainly employs unskilled labour.
- Produces generally low output since producers aim at meeting their domestic requirements.
- Produces mainly/generally low quality of output
- Exchange is mainly limited to barter system.
- Poor standards of living among the people and dominance of traditional beliefs and ways of life. The standard of living is limited to basic needs or necessities of food, shelter, medical care.
- Limited capital investment in production, low incomes and rampant poverty among producers.
- Mainly uses labour intensive techniques of production.
- High conservatism and traditionalism among the population and hence limited innovations and inventions in production.
- There is no specialization in production as the individual tries to provide everything on his own.
- Terms of services or conditions of work are not provided for such as there is no agreement, provision for housing and medical care.

- There is accidental marketing of output to meet the major cash needs of the household such as clothes, salt, utensils etc.
- *The law of diminishing returns is more prevalent

Advantages of subsistence production

1. Creates employment to the majority of the rural poor people (those who are unskilled and semi-skilled). This reduces pressure on government by the would be job seekers.
2. The producer is able to meet the basic needs of the family such as ensuring production of food for the family.
3. The management of the sector is simple since it is organized on small holdings/scale and few workers are employed.
4. The method of production is cheap since no training is required, uses abundant family labour, and the simple tools are easy to acquire.
5. Contributes a small percentage to the gross national product (GNP).
6. It is not inflationary since there is no use of money as a medium of exchange.
7. Production is flexible. The producers easily change from one item to another since it is undertaken on small scale.
8. There is little wastage of resources since whatever is produced is consumed and surplus is sold off.
9. There are no transport costs incurred between the producer and the consumer. This is because the producers are at the same time the consumers and production is within their locality.

Disadvantages of subsistence production

1. Discourages specialization and division of labour hence advantages foregone. For example there is failure to increase labour skills.
2. Leads to low levels of output and poor quality products. This is due to poor tools and small scale operations.
3. The sector generates low levels of income and poor standards of living. This is because most of what is produced is consumed leaving little for sale.
4. Retards/ limits the development of infrastructure such as roads, schools, medical facilities always associated with commercial production. This undermines economic development.
5. Leads to underutilization of resources especially land and labour (producing at excess capacity). This is due to inadequate capital and skills.
6. Experiences the disadvantages of barter exchange such as problem of valuation and indivisibility of some commodities to be exchanged.
7. Limits the development of entrepreneurial ability among the people involved. This is because it isolates them from economic influences like price, demand and supply.
8. Leads to technological backwardness and stagnation because it is associated with conservatism. This also undermines economic development.
9. Makes computation of national income statistics difficult leading to over or under estimation. It is difficult to value the real contribution of this sector to national income.
10. Does not employ many people and it is much associated with disguised unemployment. The marginal productivity of labour in this sector is very low and at times zero or negative. *(It is therefore difficult to break the vicious circle of poverty with such a sector*).

11. Narrows the tax base and therefore low tax revenue to government. This is because on limited value added on products and the producer being generally poor (with low taxable capacity).
12. Limits foreign exchange earning capacity of the country, since production is mainly for self-satisfaction or consumption.

Qn. Account for the need to reduce the size of subsistence sector in an economy

- To increase productivity of factors of production. –individuals to produce in excess of their needs.
- It is a step towards monetization of the economy.
- To improve the standards of living of especially the rural people.
- To improve the quality of final goods/output, since commercial production promotes competition.
- To generate more employment opportunities and thus check on disguised employment.
- To reduce income inequality between the rural people and those engaged in commercial and formal sectors.
- To widen the tax base due to increasing commercial production.
- To accelerate rural transformation into modern sector.
- To increase/promote innovation and creativity in production due to competition.
- To increase capital accumulation in the economy.
- To expand the industrial sector since it leads to expansion of the market for industrial output, some of which are used as inputs in the agricultural sector.
- To reduce government expenditure especially on social services.
- To improve on the country's balance of payment position.

Commercial production/ production for market

Commercial production refers to an economic undertaking in which output is meant for sale and producers are profit-motivated.

Or Refers to one which is carried out primarily for exchange, usually under taken on large scale.

Commercial production emphasizes exchange and specialization. The system involves indirect production whereby output is exchanged and is typical of a monetary economy. For example cash crop farming, plantation farming/ estate farming and large scale farming, mining sector, manufacturing sector.

Note: ***Commercialization of the economy***—refers to the deliberate act of encouraging large scale production mainly for exchange, thereby reducing the level of subsistence production.

It involves increasing the production of output for market/sale, and profit –motivated production.

Features/ characteristics of commercial production

- Production is mainly profit-motivated / production is mainly for sale in order to get profits.

- Production is usually on large scale aimed at satisfying the market.
- Production mainly involves the use of scientific and modern techniques of production/ production is mainly involves use of capital intensive techniques.
- Money is mainly used as a medium of exchange.
- High levels of income and standards of living to those engaged in it.
- Production usually involves division of labour and specialization.
- Dominated by progressive indigenous people and foreigners.
- There is a lot of research in production.
- Hired/salaried labour is mainly used.

Advantages of commercial production

1. Widens the tax base and raises the taxable capacity and this in turn increases the government revenue. This is due to increase in productive activities and incomes in the economy on which taxes are imposed. (It is also easier for tax authorities to assess taxes on marketed output).
2. Promotes production of high quality output which competes in local and international markets. This is because commercial production promotes competition, hence use of better methods of production.
3. Promotes specialization and exchange due to large-scale production resulting into monetization of the economy. In turn different regions exploit more resources to satisfy the market demand. Specialization also increases output and profits.
4. Generates more employment opportunities and thus check on disguised unemployment. Production for market expands faster and hence availing more jobs for various categories of workers (skilled, semi-skilled and unskilled labour), hence better standards of living.
5. Leads to production of more output and increased productivity since the individuals produce n in excess of their needs. This in turn leads to high rate of economic growth and in the long run economic development.
6. Promotes the development of social and economic infrastructure in the country. in order to support commercial production infrastructure such as roads to access market for output; schools, hospitals, banks, power supply are set up.
7. Promotes technological development. commercial production encourages the use of modern and scientific methods of production through innovations and inventions, which leads to efficiency.
8. Increases the foreign exchange earning capacity of the country because more output is exported. This improves the balance of payment position.
9. Leads to high incomes and higher standards of living to those involved in the sector. This is because there is increased quantity and variety of output for consumers' benefit.
10. Encourages the development of the industrial sector for example agro-based industries. Commercial production also expands the market of the industrial output, some of which are used as inputs in the agricultural sector.
11. Accelerates rural transformation into a modern sector. For example commercial production expands the market for agricultural output and increases extension services to the rural producers.

Disadvantages of commercial production

1. Leads to over exploitation of (natural) resources. There is excessive tapping of natural resources such as minerals due to the profit-motivates and this results into quick resource exhaustion.
2. It is expensive to undertake commercial production. High costs are incurred such as in distributing the final output to distant markets and maintaining sophisticated machinery. There is also high expenditure on factor inputs as producers compete for the factor inputs. *(Commercial production requires a lot of capital in form of finance and machinery, yet this is limited in developing countries. This discourages many potential local investors).*
3. Requires a lot of skilled labour for modern operations which is also limited in most developing countries. This also discourages many potential investors.
4. Encourages mass production/over production which is at times difficult to market. This is due to narrow markets in developing countries and thus wastage of resources.
5. Commercial production emphasizes cash crop production at the expense of food crop production. This is at times associated with food shortages in the country.
6. The use of money as a medium of exchange is at times inflationary—persistent increase in the general price level in an economy. This eventually undermines production.
7. Commercial production is less flexible. A change in demand or tastes of consumers against a product makes the large-scale producers to suffer great losses and waste of resources.
8. In the longrun, there is a danger of technological unemployment, as firms become capital intensive. They substitute manual labour with machines yet there is abundant unskilled and semi-skilled labour especially in developing countries.
9. Commercial agriculture that requires large pieces of land leads to land shortage, and is also a source of land conflicts in society.
10. It is associated with social costs. There is a likely danger of water and air pollution caused by the disposal of industrial waste and reclaiming of swamps for various economic activities, which reduces the quality of life.
11. It encourages rural urban migration and its negative effects. Many people move away from rural areas to urban areas where many economic activities are concentrated. This influx comes along with creation of slums, open urban unemployment and high crime rate.

Factors that have retarded the growth of Uganda's commercial sector

1. Small size of the market
2. Limited capital for large scale production
3. High level of conservatism among the people.
4. Limited skilled labour supply such in management and production.
5. Underdeveloped infrastructure
6. Limited/ weak entrepreneurial skills
7. High population growth rates
8. Insufficient supply of some strategic inputs.
9. Unfavourable government policies on investment such as high taxation.
10. Poor land tenure system especially the case of agriculture.
11. High marginal propensity to import.
12. Price fluctuations of agricultural output.
13. Poor techniques of production used by most farmers/ low level of technology.
14. Political instabilities in some parts of the country.
15. Unfavourable government policy such as high taxation of industrialists.

Measures that should be adapted to expand commercial production in your country

There should be:

- Expansion of market for locally produced goods through market research, both local and foreign.
- Strengthening regional cooperation to widen market
- Training programs to equip labour with skills
- Land reforms
- Technological development through research
- Control of the population growth rate
- Provision of a stable political climate in all parts of the country.
- Attempts to stabilize prices of primary products
- Development of infrastructures
- Provision of subsidies and tax holidays to small scale producers.
- Attraction of more foreign investors with the required capital
- Encouragement of savings for commercial production.
- Improved economic planning

Guiding questions

1. (a)*What is meant by factor mobility?(4 mks)*

   (b) Explain the barriers to factor mobility in your country (16 mks).

2. *(a) Distinguish between factor mobility and mobility of labour (4mks)*
   (b)Explain the factors limiting occupational mobility of labour in your country.(16 mks)
3. *(a) What are the causes of occupational mobility of labour in your country?*
   (b)Suggest policies that to improve on labour mobility in your country.
4. *Explain the factors that lead to:*
   (a) Occupational mobility of labour (10 mks)
   (b) Geographical mobility of labour (10 mks)
5. *(a)What do you understand by the term 'labour immobility'? (2 mks)*
   (b)Examine the factors leading to immobility of labour in an economy.(18 mks)
6. *(a)Explain the factors limiting labour efficiency and productivity in an economy(10 mks)*
   (b)Explain how labour efficiency can be improved (10 mks)
7. *(a)Distinguish between specialization and division of labour (4 mks)*
   (b)Present a case for and against division of labour in an economy (16 mks).
8. *(a)What is meant by the term specialization (4 mks)*
   (b)What are the arguments for and against specialization in your country? (16 mks)
9. *(a) Distinguish between subsistence production and commercial production (4mks)*
   (b) Examine the merits and demerits of commercial production in your country (16 mks)
10. *(a) Describe the features of the commercial sector (8mks)*
    (b) Account for the need to increase the size of the commercial sector in your country (16mks)

BUSINESS UNITS /ORGANIZATIONS

A business enterprise refers to a unit of any business organization which is actively involved in production and distribution of a good or service. In economics a unit of a business enterprise is called a firm.

SOLE PROPRIETORSHIP

Sole proprietorship refers to a business unit under the control and management of one person. Or Refers to a business unit started, financed, controlled and managed by one person.

It is one-man business and he alone provides the capital, makes decisions, takes all the profits and losses etc. Therefore a sole proprietor refers to a person who owns finances and manages a business alone.

Sole proprietorship is the most common type in developing countries such as in farming, sole trade in retailing and wholesaling among others.

Features of sole proprietorship

- Capital is contributed by the owner
- The owner is the organizer and manager, although he can be assisted by family members or a few outsiders.
- The owner is responsible for the success and failure of business (bears the risks and entitled to all profits)
- Mostly are small-scale enterprises.
- The business depends largely on the owner's personal skills and directions.
- A sole proprietor has unlimited liability.

Advantages of sole proprietorship

1. The business is easy to start up since it requires less capital and does not need many formal procedures. One just starts after getting capital and a license.
2. Quick decision making because it does not require consultations and hence delays are avoided. Therefore urgent issues are easily attended to.
3. A sole proprietor does not blame anybody in case of losses but only answerable to himself.
4. All profits and benefits go to the sole proprietor himself, and this encourages him to work hard and can easily change from one line to another.
5. A sole proprietor is independent from other people and therefore organizes his business without restrictions.
6. He enjoys top secrecy/ privacy. He is the only one who knows his business secrets and has a better chance to preserve them than any other form of ownership.
7. Easy to manage and organize due to the small size. The owner is able to establish a direct contact both with his employees and the customer (adapted to customers' special needs and easily controls the small staff).
8. The business is very flexible. He can make policy changes in a short time and can change the nature of the business or premises without seeking approval from others.

Disadvantages of sole proprietorship

1. Limited/narrow scope of capital and this makes expansion of his business difficult; since he/she raises capital from own savings or borrows on own risk.

2. A sole proprietor faces unlimited liability. He is responsible for debts incurred in business and his personal property can be seized to settle, should the business become insolvent.
3. In most cases the business lacks continuity and thus usually collapses/closes down on the death of the owner, bankruptcy, severe illness or imprisonment.
4. He bears all the risks of the business unlike other business organizations –the success or failure depends on him. However some risks are hard to overcome alone and at times the business collapses.
5. Low level of output in this business due to small scale operations—which implies low turnover and hence low income.
6. There is low employment creation due to small scale operation.
7. There can be a standstill in the event of sickness of the sole proprietor or even became closed.
8. Lacks trustworthy in financial institutions and thus cannot easily obtain loans. In most cases he lacks collateral security to acquire loans.
9. Every person has limitations and hence a sole proprietor lacks a wide range of skills and ideas—leading to inefficiency. Remember a good salesman may not be a good accountant or buyer.
10. The sole proprietor performs a wide range of activities some of which he may have no experience in. therefore there is less time for leisure each day since most or all the work is waiting for his effort.
11. Inability to carry out research in business. This is due to small size of capital and fear of risk of loss yet research is useful in competitive production.
12. It is more difficult to transfer parts of sole proprietorship business than to transfer shares in a company.

Qn. Account for the dominance of sole proprietor businesses in your country

- Limited capital
- Small profit margin in business
- Limited credit facilities
- Limited entrepreneurial ability
- Limited investment incentives
- Fear of heavy taxation
- Limited domestic market and the general low purchasing power.

PARTNERSHIPS

A partnership is a relationship which subsists between persons with a minimum of two (2) and a maximum of twenty (20) who carry out business in common/together with a view of making profits.

Or A partnership is a group of people between two (2) to twenty (20) who contribute their capital to start a business with the aim of making profits.

The partnership is recognized after signing a partnership deed or agreement.

Note: A partnership deed/ agreement. This is a written document/ statement of agreement among members of a partnership consisting of terms and conditions on which their partnership business is being formed.

Features of partnership

- There may be a minimum of two and a maximum of twenty members in a partnership. However in case of banking the number is limited to ten (10).
- Capital is contributed by the partners and no appeal for public subscriptions
- The partners in most cases have limited liability to personal property (a case for limited partnership).
- Each member can act as an agent of the firm with the authority to sell goods and services or even purchase (to enter contracts with authority).
- Every member is responsible for all debts of the business and there is unlimited liability for ordinary partnership.
- The responsibility, profits and losses are shared on an agreed basis.
- Like a sole proprietor, a partnership may be ended any time by the death, withdrawal, bankruptcy or incapacity of any member.
- A partnership may be temporary or permanent. A temporary partnership is formed for either a specified period or specific purpose, at the expiry of which the partnership is dissolved. These are sometimes called joint ventures.
  Permanent partnership is intended to continue indefinitely, that is, continues for uncertain length of time and its end is not defined at the time of formation.

Note: Contractual capacity. The partnership act provides that a person who does not have a contractual capacity cannot be a partner. This is a legal term which means that a person who, in the eyes of the law, is not a fit and proper person or who does not have enough mental capacity to conduct his own affairs , is not entitled to enter into any sort of contract (such a person is deemed to have no contractual capacity).

This is because a partnership is also a contract where partners must agree to abide by certain conditions and to undertake certain responsibilities. Therefore a mentally incapacitated person, a bankrupt person etc may have no contractual capacity.

Types of partnership

There are two types:

- **Ordinary partnership**

This is a type of partnership where all the members have unlimited liability and in case the partnership is in debts, the personal property in addition to business property can be sold to pay the debts.

- **Limited partnership**

This is a type of partnership where members have limited liability and only the property of the business can be lost in case the firm is in debts but not personal property. The liability of members is limited to the nominal amount of capital they have put in business.

Types of partners

a. **Active partner**. This is a partner who contributes capital, shares profits and losses but also involved in the day to day running of the business. (He takes part in the management and may be given a fixed area of responsibility such as a salesman).
b. **Dormant/sleeping/silent partner**. This is a partner who contributes capital for the business, shares profits and losses, but is not involved in the day to day running of the business.(it is common with busy people who have full-time jobs or businesses elsewhere).
c. **General partner.** This is a partner having unlimited liability and may be called upon to meet the firm's debts from his personal resources if the firm fails to settle them.
d. **Limited partner.** This is a partner whose liability towards the debts incurred by the business is limited to a stated sum, usually the capital contributed by him. (The firm's creditors will have no right over his personal possessions /property).
e. **Major partner.** This is one who is over 18 years of age and liable for the firm's debts.
f. **Minor partner.** This is one who is below 18 years of age and is not liable for the firm's debts beyond his capital. (He can be admitted as a partner under certain conditions / circumstances and is entitled to certain privileges). After 18 years of age, he is given 6 months to decide whether or not to continue as a major partner.
g. **Real partner.** This is one who contributes capital to the business.
h. **Quasi/nominal partner**. This is a person who does not contribute capital and does not participate in the day to day running of the business but allows the firm to use his name as a partner. (This may be a reputable businessman or a social dignitary who may be convinced to allow his name to be used in exchange for a small share of profit).
i. **Out-going/Retiring partner**. This is one who has withdrawn from the partnership. However he is liable to all debts and losses of the firm incurred before his withdrawal.
j. **Incoming partner**. This is one who has been admitted to an existing partnership. This is done only with the consent of the existing partners and rules of procedure.

A case for partnerships

1. There is a wide scope of capital raised unlike sole proprietors. This promotes faster expansion of business.
2. Promotes specialization since partners of different skills come together and divide work such as production, management and marketing. There is better combination of talent.
3. New ideas are brought into the business due to consultations to each other as two heads are better than one.
4. There are more prospects / chances of continuity. If sickness arises or death, the partnership may not close down.
5. There is more time for leisure and resting as work is shared among members.
6. The burden of losses / debts is shared among the members which prevents straining of one person. This reduces possible calamity.
7. More profits are obtained since more work is done by many people.
8. Encourages large scale production which in turn leads to economies of scale.

9. New partners are easily admitted in view of expanding the business unlike sole proprietorship having only one person. Even an employee with special qualities may be made a partner.
10. Formation of a partnership is fairly easy/ simple; with no legal requirements to be complied with except registration of the business name.
11. In the event of difficulty, mutual discussions among partners are likely to come up with an agreed position or solution.
12. Partnerships are more creditworthy, since they have more valuable items which can act as collateral security to acquire loans unlike sole proprietor.

A case against partnerships

1. There is collective responsibility for mistakes by one partner, due to collective work (such as a poor deal). This is referred to as joint involvement.
2. Although it has continuity chances, some risks such as death, withdrawal; can cause /arouse disagreements which can press for drafting a new partnership deed.
3. Some risks pose great problems to the partnership business most especially the death or withdrawal of a very active member or the largest shareholder.
4. There is delayed decision making since there is no urgent attention. There is need for mutual consultations on any policy. For example an attractive business opportunity may be missed.
5. Most times non-encouraging profits are given to members because profits are shared among many members, and this may discourage some members.
6. The disagreements on certain matters and or being suspicious to each other, may affect the smooth running of the business.
7. Sometimes there is unlimited liability to personal property of some members/partners although a limited liability partnership can be formed (hence some people may fear joining due to risk of losing severely).
8. Hard working partners are discouraged by the lazy partners, yet profits arising from his labour are shared by all the partners.
9. Also when compared with other companies (joint stock), partnerships raise relatively less capital since membership is restricted to twenty (20) partners.
10. Quarrels /disputes which may arise among partners about business issues may also create long-lasting hatred for each other even in other fields.

***Factors that may lead to dissolution of a partnership**

- When/if it is a temporary partnership i.e. the duration of the business specified in the deed has expired or on the fulfillment of the purpose of the partnership intended.
- When/if one of the partners notifies or expresses his intention to dissolve the partnership to other partners in writing.
- If a partner becomes insane, bankrupt or even dies, then the partnership is dissolved.
- When a partnership becomes unlawful usually due to changes in the law. For example if a law is introduced banning the activities of the type being carried out by the firm under the partnership.
- A court can also dissolve a partnership on application from one of the partners (or another interested party) under the following circumstances :

I. When the acts of a partner are centrally to the partnership deed provisions and damage the interests of the firm.
II. When the partnership business cannot obtain profits.
III. When the prevailing circumstances make it only fair and just to dissolve the partnership.

JOINT STOCK COMPANIES/ LIMITED LIABILITY COMPANIES

This is a business unit / an association comprising of two (2) to fifty (50) or seven (7) to no maximum number of members who have contributed capital through buying shares to carry out business activities with the aim of making profits.

(It is a business unit owned by a number of individuals (share holders) who contribute capital and whose liability for the debts of the company is limited to the nominal or face value of the shares held by them).

These members are called share holders. They have limited liability implying that their liability for debts of the company is limited to their capital contribution.

A share is a unit of capital contributed to a joint stock company with the aim of earning dividends or profits. The shareholders get dividends from the profits made by the company at the end of each year.

There are two types of limited liability companies:

- Public limited company
- Private limited company

Public limited company

This is a business unit comprising of a minimum of seven (7) and no maximum limit on the number of shareholders who contribute capital with an aim of making profits.

Features of a public limited company

- They have a minimum of seven and no maximum number of shareholders.
- They have an entity of their own, quite separate from the members that constitute it. It is a legal entity in that it exists on its own and has its property. It can sue and can be sued.
- The shares are freely transferable through the stock exchange market i.e. one share holder can sell any of the shares or all the shares held by him to another person without seeking permission from other shareholders or directors.
- The company is free to sell shares to the members of the general public provided the necessary requirements have been fulfilled.
- The company is not faced by bankruptcy or insanity.
- The capital of the firm is raised through the sale of shares to the public and is called share capital. (Their capital is divided into units of equal value and each unit is called a share).
- The shareholders are the owners or members of the company.
- The shareholders have limited liability i.e. members property cannot be used to pay company debts.

- The shareholders have no direct contact with the employees or customers of the company. (The directors running the company are elected by shareholders among themselves).
- The summary of the financial position of the public company must be published to the public (publicized).

Advantages of public limited companies

1. The liability of members is limited. The financial collapse of a company does not affect the social status and financial position of its shareholders as much as under sole proprietorship or a partnership.
2. The public company is better placed to raise great amounts of capital through the sale of shares and debentures.
3. Large sums of capital enable large-scale production, which results into lesser costs of production and higher profits.
4. The company has continuity in existence and is not affected by the bankruptcy, insanity or death of a member.
5. Shares are freely transferable. A sale of shares by a member does not affect the capital of the company. This is also an incentive to the investors who are assured that they can convert their holdings into cash at any time they may wish.
6. Employees may also be allowed and encouraged to buy shares in the public company, giving them added incentive to work harder and hence increased profits.
7. The directors in the management of a company are expert people in various fields. They are also liable to be removed if the shareholders do not find their work satisfactory.
8. A public company may also issue several types of shares to suit the investment habits of different types of people. A careful investor may buy preference shares while a more enterprising investor could go for ordinary shares.
9. If a company has been declaring good dividends, a shareholder would be able to sell his shares at a much higher price than the nominal/face value and thus making financial gains.
10. Specialization s possible because of big membership which leads to efficiency.

Disadvantages of public limited company

1. The shareholders do not have a direct control over the running of the business. They normally employ experts to administer the firm.
2. The directors managing the company may have their own interests that may conflict with the interests of the company. In turn objectives may not be effectively achieved.
3. Formation of a company is a long and an expensive procedure. For example registering with registrar of companies and obtaining a certificate of trading.
4. Since all important decisions are taken by the directors and more important decisions by shareholders, decision-making may be slow and often expensive.
5. Public companies often become too large to attain maximum efficiency. Every firm has an optimum size at which profits are maximized but many public companies grow beyond their optimum points. They may in turn experience diseconomies of scale.

Private limited company

This is a business unit consisting of a minimum of two (2) but a maximum of fifty (50) shareholders, who have put together their capital through buying shares with the aim of making profits.

Features/characteristics of private limited companies

- They have a minimum of two (2) to fifty (50) members excluding employees.
- The shares are not freely transferable. The shareholders are not allowed to offer their shares to the general public and a shareholder wishing to sell his shares in a private limited company has to seek permission from all other members or directors. This makes it possible for the members to keep the business ownership to a close circle, often to a family or a group of friends.
- A private company can commence business as soon as it receives a certificate of incorporation. It does not have to wait for a certificate of trading, as is the case with public limited companies.
- They are not required to publish their accounts.
- The size of the business is relatively small to allow its owners to have direct control in its affairs.
- The promoters of the private limited company must prepare both memorandum and articles of association.

Advantages of private limited companies

1. The company enjoys Independence. A private limited company is free from legal restrictions, which apply to public companies.
2. They can attract capital so easily from the investing public because of limited liability that the owners enjoy.
3. Economies of scale are easily enjoyed as a result of their large-scale operation and lump sum capital stock.
4. The promoters of the company can usually keep control of their business by holding majority of the shares unlike in the case of public company whereby directors are the ones to take decisions and run business activities.
5. Specialization is possible since the duties can be allocated according to ability of each member.

Disadvantages of private limited companies

1. The company cannot appeal to the general public to buy shares as in the case of public companies.
2. Shares are not easily transferable and this may be a disincentive to speculative investors.
3. The principal benefits of large-scale activities are limited compared to public limited companies.
4. Total membership is restricted in number and hence the expected capital structure limited.

Formation of a company

People who have the desire of forming a company (company promoters) must submit two documents for approval to the registrar of companies. These documents are the memorandum of association and articles of association.

The memorandum of association

This is the most important document prepared when forming company and it lays down and defines the powers and limitations of the company (external rules of the company). It governs the company's relationship with outsiders.

The clauses of the memorandum of association are: name clause, situation clause, capital clause, objectives clause, liability clause, and declaration

Articles of association

This is a document that lays down the internal rules and regulations of a company. It spells out the rights, powers and duties of different classes of shareholders among others.

A certificate of incorporation –refers to a document which gives a company legal existence. It is issued when the registrar of companies is satisfied, but does not empower a public company to commence business activities although a private company may start business. (It allows the company to legally offer shares to the public for sale).

A certificate of trading –refers to a document that permits a company to start business activities. It is this document that allows a public company to start business. A certificate of trading is issued after: the minimum share capital has been raised, the directors of the public company have paid for the shares taken by them, and the directors have filed a declaration that the above requirements have been sent.

Other documents used by limited liability companies include:

A. The declaration form
B. The prospectus
C. Share certificate
D. Debenture
E. Directors' list

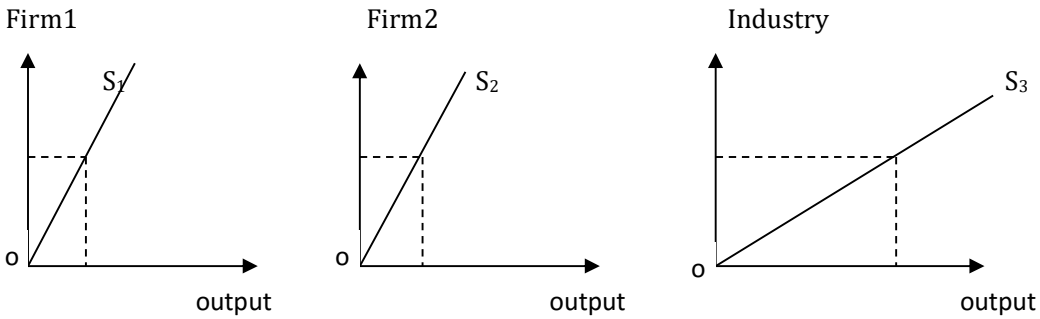
THE THEORY OF A FIRM

A firm refers to a production unit under a unified control and management.

An industry refers to a collection of firms engaged in the production of a similar or related goods and services (commodity). For some industries there is only one firm and for others there is more than one firm.

Deriving the supply curve of an industry

Since an industry is a combination of firms, its supply curve is derived by the horizontal summation of supply curves of various firms in the industry.



Equilibrium of a firm

Equilibrium of a firm refers to a point of profit maximization where the firm has no tendency to increase or reduce its level of output during production.

Or Refers to a point where a firm's marginal cost equals to marginal revenue (MC=MR).

Equilibrium of an industry

Equilibrium of an industry refers to a situation where there is no tendency of new firms entering or old firms leaving the industry.

[*Equilibrium of an industry occurs when its size has no tendency to change (neither expanding nor contracting). At this point all firms are earning normal profits—there are no abnormal profits to attract new firms and there are no losses to lead to exit of the firms within the industry].*

Objectives of a firm

1. ***Profit maximization objective***. This is the major objective of most firms and involves a firm making as much profits as possible. The total revenue must be greater than total cost.
2. ***Sales/revenue maximization***. This involves a firm aiming at producing much output and to sell the output as much as possible to enjoy much revenue (even though profits made are less).
3. ***Market share objective***. Some firms are interested in maintaining or increasing their market share (controlling the market) by producing a variety/ a range of products and being dominant.
4. ***Long run survival in the industry***. Some firms aim at maximizing chances of their survival in the market for a long time. They do this partly by producing a variety of products and efficiently.
5. ***Maintaining a good image in the public***. Some firms aim at a good public image and serving as a useful part to the community even when they are operating at a loss.
6. ***Promoting national interests***. Some firms aim at acquiring prestige and national interest like providing employment, providing security, providing essential goods (like safe water). These are usually publically-owned firms.
7. ****Provision of essential goods and services***. This is the objective of government firms. These aim at providing the community with important services at cheap price such as medical facilities.

8. ***Restricting entrance of new firms into the industry***. Some firms aim at limiting entry of new firms into the industry by setting low prices for their goods, which makes the production process expensive for infant firms and later they are kicked out of production.

Decisions of the firm

Firms make decisions on what to produce, how to produce, how much to produce, for whom to produce, where to produce, when to produce, distribution method, and determining the price of the product.

Factors that influence production decisions of a firm

1. **Objectives of the firm**. Firm with objectives to grow/ expand employ more resources to maximize output while firms with decisions to make profits reduce output so as to charge high prices.
2. **Size of the market**. Presence of a large market for output encourages investment decisions while limited market discourages investment decisions.
3. **Level of technology used**. More efficient techniques of production encourage investment decisions while underdeveloped technology discourages the investment decisions.
4. **Level of internal organization of the firm**. Good internal organization leads quicker decision making regarding production while poor organization makes it difficult to make production decisions.
5. **The ease of entry of new firms into the industry**. Firms invest more with provision of freedom of entry into the industry while restricted entry limits investment decisions.
6. **The price level of goods and services produced**. High price for products leads to quicker decision making for a firm to invest in order to maximize returns while low price for output limits the decision to invest.
7. **Government policy towards investment such as taxation and subsidization**. Unfavourable policies such as higher taxation and reduced subsidization discourage investment decisions while favourable government policies such as low taxation and increased subsidization of firms encourage investment decisions.
8. **Level of entrepreneurial ability**. High level of entrepreneurship encourages/ enhances investment decisions while low level of entrepreneurship discourages investment decisions.
9. **The existing stock of capital.** Presence of a large capital stock encourages investment decisions while limited capital stock discourages investment decisions.

Location of an industry/ firm

Location of an industry refers to a place /site where an industry is established.

Or location is the establishment of a firm / business unit in a particular area.

Factors that determine the location of an industry/ firm

1. ***Availability of raw materials***. Firms that use bulky raw materials which are costly to transport are attracted near to the source of raw materials such as Tororo cement factory, Hima cement factory in Kasese, saw mills near forests, brick making firms near clay. However firms that use light raw materials which are cheap to transport are located in various places.

2. ***Availability of market for the product***. Firms find it economical to be located nearer to the market so as to reduce the cost of transport of finished products. This is for products that are difficult to transport such as breakables, perishables (like confectionery, news papers) and direct services (like salons, garages).
3. ***Availability of source of power***. Firms using large amounts of power are located near power plants. However this is gradually changing since power is being extended to various areas and hence firms are being located in various areas.
4. ***Availability of cheap labour***. Many firms are located where there is adequate supply of cheap labour especially in the urban areas. (The cost of labour is an important factor in industrial location). However firms which are capital intensive are located in the area determined by the entrepreneur.
5. ***Level of development of transport infrastructure***. Many firms are located in urban areas or near developed transport routes to enable easy movement of raw materials to the factory or finished goods to the market.
6. ***Availability of water supply***. Some industries are located near water sources because they need water for cooling machines and others use water as an input. However firms which do not greatly depend on water supply are located in other areas.
7. **Cost and availability of land (especially for future expansion)**. Presence of cheap and extensive land encourages the setting up and future expansion of firm such as those with heavy investment or those engaged in farming. However firms which require limited land area are set up in various areas.
8. ***Government policy towards location of firms***. Government influences (encourages or discourages) the location of firms for a number of reasons such as balanced regional development, creation of employment, discouraging rural-urban migration, home of government leaders among others.
9. ***Entrepreneur's choice***. The entrepreneur sometimes makes an irrational decision without considering economic benefits such as locating a firm in one's birth place for prestigious reasons or to create employment to family members and relatives.
10. **Political climate**. Most firms are located in places which are politically stable since they are assured of the safety of their investments. However many firms are discouraged from setting up in areas of insecurity since they fear the risk of losses.
11. ***Availability of commercial services***. Most firms are located in areas with developed commercial services such as banking, insurance, ware housing, marketing and advertising agencies. However places with less developed commercial services do not attract firms.
12. ***Industrial inertia***.

    Industrial inertia refers to the tendency of industries to remain in a given location (*where other industries exist*) even when the factors that attracted them to that location no longer exist.

    This is due to the presence of established infrastructure, availability of skilled labour already used to industrial life and the high costs of relocating.

Qn. **Mention any four reasons why the government should influence the location of an industry?**

- To encourage the exploitation of some resources.
- To create more employment opportunities

- To ensure balanced regional development in the country.
- For strategic reasons
- To fulfill political obligations
- To avoid unnecessary duplication and wastage of resources
- To control monopoly tendencies
- To facilitate/influence income distribution.

Localization of a firm/ industry

Localization refers to the concentration of an industry in one particular area.

Or Localization is the tendency for both the main and subsidiary industries to concentrate in one area.

For example soap industry in Kampala and textile industry in Jinja.

***The causes of localization include**:

- Industrial inertia
- Availability of required infrastructure in a particular area such as road network.
- Existence of a pool of skilled labour used to a particular type of industry/industrial life.
- Availability of security and other services like insurance.

Advantages of localization

1. Promotes the development of basic infrastructure like road network, hospitals and schools; which also benefit the surrounding people. The government finds it economical to set up infrastructure to support the many firms.
2. Creates more employment opportunities in the localized area. This is generated by the need for labour by many firms (main and subsidiary) and by the associated institutions such as service firms in the area.
3. Promotes forward and backward linkages between firms and industries. For example the sugar industry linked to sugarcane firms and also linked sweets and biscuits firms. This promotes the development of both the main and subsidiary industries and also reduces costs and wastes.
4. Firms in the area enjoy economies of scale especially external economies of scale. These are the advantages enjoyed by the entire industry due to large-scale production such as transport economies, economies of information and thus reduced costs per unit output.
5. Industries jointly undertake research from which they benefit. More so the industries share/ own some facilities jointly such as research centres, recreation grounds and health facilities. These would be difficult to establish by an individual firm.
6. Localization encourages specialization and its advantages such as increased output. People concentrate at particular stages, which increases productivity.
7. Creates a pool of skilled labour used/accustomed to industrial life. Workers specialized in that field are attracted to that area and this implies production of more quality output.
8. Competition among firms promotes efficiency in production—production of high quality and quantity of output. Competition also translates into better prices for the buyers of the finished products.

9. Leads to merging of firms which combine their resources. This in turn increases the level of output and hence economic growth.
10. The localized area gains reputation for that line production. The area becomes known and the products find wide markets in other areas. (Area gains popularity and products they manufacture which bear the name of the place).
11. Promotes urbanization and related benefits such as increase in market opportunities. The increase in the number of people in the localized area leads to growth of towns.

Disadvantages of localization

1. Creates/ breeds regional imbalance in development. This is because industries are concentrated in a particular area which becomes more developed in terms of infrastructure than other areas in the country.
2. Worsens the problem of income inequality. This is because those employed in the localized area earn more than those who are not employed or those in the rural sector. This increases social evils such as theft and corruption.
3. Accelerates rural –urban migration and its associated disadvantages. This is because many people are attracted to the localized areas in the urban areas in view of getting employment, and this comes along with like urban unemployment and growth of slums.
4. Increases dependence of the country's economy on the localized area; and this results into great loss in case of a catastrophe/disaster (like war, fire, and earthquakes) affecting many people and property. [The economy as a whole is greatly affected].
5. Usually increases unnecessary/wasteful competition such as unnecessary advertisements. This leads to wastage of resources.
6. There is a greater risk of unemployment for labour in the localized area. Employment opportunities are limited to a particular type of labour and as production in the localized industry declines or stops, the specialized labour may fail to get alternative employment elsewhere.
7. Leads to persistent price increase(inflation) in the localized area due to excessive demand for goods and services. There is shortages of some goods and services relative to demand—hence demand –pull inflation
8. Encourages external diseconomies of scale—disadvantages of large-scale production. For example increased costs of factor inputs due to increased demand for them, increased air and water pollution of the environment, traffic congestion.
9. Over straining of the infrastructure such as health facilities, housing, and road network. The infrastructure serves many economic activities and a large population in the localized area, hence quickly breaking down.
10. At times the localized industries face a narrow market due to stiff competition and surplus/mass production. This leads to wastage of resources.

Delocalization of firms / industries

Delocalization refers to the deliberate act by the government of distributing industries evenly throughout the country to avoid concentration (of industrial establishments) in one particular area.

It involves locating of industries in various areas/ away from a localized area; and the major aim of delocalization is to promote balanced regional development.

Reasons for delocalization of firms/ industries

1. To promote balanced regional development. This is by distributing industries evenly in the country, for example by promoting agro-based industries in the rural areas, hence facilitating economic development.
2. To enhance rural transformation and commercialization of the economy. This is because it creates awareness among the people involved in subsistence sector who change their attitudes and produce for money.
3. To improve on the social-economic infrastructure in all parts of the country. This includes road network, railway, banks ,hospitals and power supply to support the various firms set up.
4. To encourage exploitation of resources especially the idle resources. This is by establishing firms using these are raw materials and in turn increases national output/ national income.
5. To create more employment opportunities especially in the rural areas. The setting up of industries in various areas helps to utilize the surplus cheap labour in such areas, and improving the standards of living.
6. To reduce rural-urban migration and its disadvantages such as congestion and open-urban unemployment. This is by establishing industries/ firms in various areas including rural areas which makes many people stay in the rural areas.
7. To control unnecessary duplication and wastage of resources. This is because various industries are set up in many areas to supply a wider market.
8. To reduce government expenditure in the localized area due to population pressure. The population becomes more wide spread and this makes the government to develop entire economy instead of concentration on one area.
9. For strategic reasons. It is sometimes a planned move to utilize a special resource in a given area or to pull a particular area that is lagging behind.
10. To fulfill political obligations. For example to implement promises made during campaigns and the need to win political support from the masses.
11. To facilitate fair income distribution. This is by extending employment to various people in various regions and this increases the purchasing power in the economy.
12. To minimize the diseconomies of scale in the localized area resulting from over concentration of firms such as excessive pollution, and congestion. This is by distributing the firms widely in the country.

Disadvantages of delocalization

1. Leads to high costs of production due to the scattered nature of industries. For example increased transport costs and marketing costs.
2. Limits the social interaction among people from different areas/regions. This is because they work in firms which are widely spread in the country.
3. At times it is politically-influenced resulting into location of industries in a few areas. This makes the economy fail to achieve the benefits of delocalization fully.

Size of a firm

Firms vary in size –there are large firms, medium and small firms. Firms of different sizes exist in the same industry.

(The size is measured in terms of: the amount of inputs used, annual profits of the firm, financial position of the firm, number of employees, productive capacity in terms of output and sales, and the size of the market served by the firm/market share of the business).

Growth/expansion of a firm

Growth of a firm refers to the expansion of a firm from small-scale to large-scale and this is normally due to the need to enjoy economies of scale.

(This is indicated by increase in capital, expansion of output, expansion of premises, employment of more people, improvement in technology and operations in more markets among others)

<u>Ways through which a firm grows</u>:

1. **Natural growth /internal growth**. This is the expansion of a firm using internally generated profits of the firm. Under this, the output, sales and productive capacity of the firm increase over a period of time.
   It involves increasing inputs so as to make more output or extend the range of products. (Internal growth results into efficient management which also results from internal economies of scale).
2. **External growth**
   (a) Through merging/amalgamation. Merging refers to the joining/coming together of two or more firms to form one bigger firm.
   (b) Through take-overs. This involves a firm buying the assets of another firm so as to expand. The firm whose assets are bought loses its identity.
   (c) *Through partnerships with other firms.

Factors that determine the size/growth of a firm

1. ***The amount of capital available***. Firms with large sums of capital grow bigger in size as they easily expand production by purchasing more equipment and inputs while firms with limited capital remain small because they do not easily expand production.
2. ***The size of the market/ the market share of the business***. Firms with a large market share grow bigger in size since expansion of output is encouraged to make more profits while firms with a small market share remain small in size due to discouraged expansion/ low profitability.
3. ***Objectives of the firms***. Firms aiming at sales / revenue maximization grow bigger because they produce as much output as possible while firms aiming at profit maximization produce lesser output and charge higher prices.
4. ***Working conditions/ terms of service***. Good working conditions such as presence of transport and medical allowances available ; makes workers to put in a lot a lot of effort and the firm is able to grow bigger while firms with poor conditions of work remain small in size since workers are not motivated.
5. ***Level of technology used in production***. Firms with efficient / advanced techniques of production easily expand their scale of production (are more efficient) leading to greater expansion in size while firms with inefficient techniques of production are not able to easily expand the scale of production leading to small size.

6. ***Government policy of taxation and subsidization/ towards investment***. Government encourages expansion of firms through reduced taxation, subsidies which encourage investors while government discourages expansion of firms through high taxation, removal of subsidies and regulation which discourage investors.
7. ***Time/period in production***. Firms which have stayed in production for a long period of time grow bigger in size due to purchasing of assets, hence producing more output at low average costs while firms that have just entered the industry (beginner firms) are smaller in size since they produce low output and operate at very high average costs of production.
8. ***Quality of management***. Firms with efficient management grow bigger in size since the production process is well monitored (for example the workers do not waste resource inputs) while firms with inefficient management remain small in size since production is not well monitored.
9. ***Availability/supply of basic raw materials***. Firms with readily available raw materials grow bigger in size due to the ability to produce more output while firms with inadequate raw materials are small in size since they do not easily increase output.
10. ***Nature of goods or services provided by the firm***. Firms dealing in personal or direct services remain small they require personal touch/ direct contact with the customers; and also firms which produce on special order. However firms dealing other goods or services grow bigger in size, since they even put up more distribution points.
11. ***Location and availability of land for expansion***. Firms which are strategically located where there is large land for expansion easily grow bigger in size by expanding scale of production while firms located where there is limited land for expansion remain small in size even with more profits.
12. ***Entrepreneur's choice***. Some entrepreneurs prefer or have a major objective of having large-scale firms and hence produce a wide range of products for the customers, hence growing bigger in size while other entrepreneurs perform better with small-scale firms and are less motivated to expand them.
13. ***The level of entrepreneurship skills***. Firms with high level of entrepreneurship able to do a lot of research, carry out innovations and inventions –hence expanding the scale of production easily while firms with limited entrepreneurship skills do limited research and hence remain small in size.
14. ***The number of skilled workers employed/ availability of skilled labour***. Firms with many skilled workers are more efficient since workers are more productive and hence growing bigger in size while firms with limited skilled labour are less efficient in production and hence remain small in size.
15. ***Degree of competition in the industry***. High degree of competition encourages firms to expand the level of production to capture a larger market / to out-compete the rival firms while limited competition discourages the expansion of firms since there are monopoly tendencies.
16. ***Level of development of infrastructure***. Well developed infrastructure such as power generation to run machines , better roads to transport raw materials , efficient banking facilities leads to efficient production and hence expansion of firms while underdeveloped infrastructure like poor roads, inefficient power supply lead to inefficiency of production which limits the expansion of firms.
17. ***The possibility of merging of firms***. Firms that come together grow into bigger establishments by joining the assets and entrepreneurial ideas while limited/ no merging limits the expansion of firms.

18. ***The political climate of the area***. Political stability increases the confidence of investors and thus encourages the expansion of firms while political instability reduces the confidence of investors and discourages expansion of firms.

Qn. Why may firm decide to remain small despite the advantages of large scale production?

OR

Qn. Account for the continued existence of small scale firms in your country.

1. Limited capital
2. Small market size /limited market for output.
3. Poor working conditions.
4. Low level of technology employed.
5. Some are beginner firms-firms being at the infancy stage of growth.
6. Poorly developed infrastructure.
7. Limited skilled labour supply
8. Limited supply of raw materials.
9. Choice of the entrepreneur to remain small, due to the need to maintain full /easy control and management over the firm I.e. small firms are easy to manage.
10. Limited entrepreneurship skills.
11. Poor land tenure system. For example small land holdings which discourage more production/ expansion of firms.
12. Small firms are flexible.
13. Fear of increased taxes by government/ government policy discouraging expansion of firms such as increased taxation and blocking mergers.
14. Existence of firms dealing in personal / direct services—which need direct contact with the customers (and goods for special order)
15. Some firms being used as research units / experimental firms and these work best when kept small. For example agricultural demonstration farms.

Reasons why small scale firms survive alongside large scale firms

1. Some of the small scale firms are still at their infancy stage unlike large scale firms which have stayed long in production. The small scale firms have hope of growing into large scale enterprises in the future.
2. Fear of heavy taxation by the government associated with large scale firms.
3. Limited capital available for many small firms which limits the purchase of inputs and equipment for expansion unlike large firms with more capital available.
4. Some of the firms are experimental units and so there is no need of expanding them into large scale establishments.
5. Some firms produce commodities according to special order by customers and hence there is no need for producing more than the required output unlike other firms producing for the wider market.

6. Limited market for the products of some firms, which discourages further production of output/ expansion of production unlike large firms which have a large market for their output.
7. Fear of losing control of the firm once it expands. This is especially due to limited entrepreneurial skills possessed by the owner.
8. Limited supply of some inputs, since some are imported expensively which limits expansion unlike large firms with readily available raw materials.
9. Large scale firms suffer more in case of breakdown or catastrophe unlike small firms suffering minor losses.
10. Small firms provide allowance for flexibility in production in that, they are easily changed from one line of production to another; which is not the case with large firms.
11. Government policy of encouraging small scale firms to create more employment opportunities unlike large scale firms which create less employment due to use of capital intensive technology.
12. Some of the small firms are located far from large firms and therefore monopolize local markets.
13. Some firms use by-products of large firms and therefore co-exist with large firms since they do not compete with them.

Qn. Explain why small scale firms survive /exist alongside large scale firms in your country

- Present paragraphs comparatively (answers are above)

Guiding questions

1) Explain the factors that determine the size of firms in an economy
   - Level of capital stock available.
   - Level of technology employed.
   - Level of supply of raw materials.
2) Explain the causes of differences in the size of firms in an economy
   (Use variation or differences)
   Example:
   - Variation in the level of capital available
   - Differences in the level of technology.
   - Variation in the supply of raw materials
3) Explain the factors that limit the growth of firms in your country.

- Limited capital stock
- Under developed technology
- Limited supply of raw materials

Merits of small scale firms

Note: ***Small scale firms*** are production units involving low capital investment, occupy small land area, have few workers, less mechanized and generally produce small quantity of output**.**

1. They are easy to control and manage. This helps to reduce the level of losses incurred.
2. Losses are minimized incase of industrial breakdown. The risk suffered is relatively manageable.

3. They are flexible and thus reduce wastage of resources. They can easily change from on line of production to another to meet the changing market demands and conditions.
4. They are less costly and require limited capital to start—hence are easily started by local people from personal savings and supported by small loans without dependence on foreign capital.
5. They are appropriate for the small markets available in developing countries, and hence minimizing wastage of resources. Much of the output is consumed within a small radius from the area of production.
6. They are appropriate for personal services, due to the need for personal contact between firms and the customers.
7. ***They promote entrepreneurial development skills among individuals***. They act as a training ground for entrepreneurs, hence developing innovativeness and skills of managing industries. In the longrun it promotes medium and large scale establishments.
8. Small scale firms ***encourage the use of the available local resources*** in a sustainable way. This is because of their slow rate of resource exploitation and also the use scrap materials as inputs unlike large scale firms.
9. ***They promote use of local technology***. They produce small machines like grain milling machines through research and continue improving on them. More so the small scale firms mainly use labour intensive technology.
10. ***They provide cheap/ affordable goods and services to the population***. This is because of the low cost of production incurred given the use of locally available raw materials. This in turn increases the standards of living.
11. ***Create more employment opportunities to individuals***. Collectively the small scale firms offer employment to a number of people, both trained and casual workers, hence easing the unemployment problem/ raising the income levels and improving the standards of living.
12. ***Increase the national output/ level of GDP***. Small scale firms produce more goods and services which in turn expands the country's national income.
13. ***Encourage fair income distribution and balanced regional development***. Small scale firms are located in many areas and widen the range of economic activities from which people generate income, and this reduces the income gap between the rich and the poor.
14. ***Increase / generate government revenue***. Government yields revenue from licensing and taxing the small scale firms and the revenue is used to finance government development programs.
15. ***Encourage the development of infrastructure***. The setting up of small scale firms in various areas enhances the associated/ supporting infrastructure such as better roads, baking facilities and recreation facilities.
16. ***Provide a variety of goods and services***. Small scale firms provide more products and this widens the choice of consumers and thus better standards of living.
17. Small scale firms ***promote economic diversification***. This is because they engage in a wide range of economic activities and thus the economy is able to develop the agricultural as well as industrial sectors. They also have forward and backward linkages.
18. ***They reduce foreign exchange expenditure***. This is because they produce many goods and services which would be imported which reduce expenditure on imports and thus improving the balance of payment position.

Demerits of small scale firms

1. ***Provide low tax revenue to the government***. This is because most small scale firms either pay very little tax or do not pay tax at all since many are not legally registered by government, yet taxation is a major source of government revenue.
2. ***Production of poor quality output***. This arises from use of low level of technology, low quality inputs and general failure to follow standard guidelines. This output fetches low prices on the local and international markets and hence less income/ foreign exchange.
3. ***Increase congestion in the urban and semi-urban areas***. This is because they are mostly concentrated on the margins of urban centres, and this increases the growth of slums and high crime rate.
4. Specialization is difficult and hence production is costly. It is difficult to use specialized machinery and hence benefits foregone.
5. Small scale firms do not enjoy economies of scale that large-scale firms enjoy because of increased output. The average costs remain high for each unit produced.
6. Small scale output is not easy to market in foreign markets due to lack of assured regular supply to the potential foreign buyers. This limits the amount of foreign exchange earned.
7. ***Increase administration costs by government to oversee their activities***. This is because many small scale firms come up every year and many are not officially registered.
8. ***Increase wastage of resources due to unnecessary competition through duplication***. What would have been produced by one or a few firms is produced by many small scale firms and thus irrational use of resources in the longrun.
9. ***Small-scale production contributes less to employment during the infancy stages.*** In the initial stages, they do not absorb abundant labour since much of the labour used is family labour yet there is rampant unemployment in developing countries.
10. ***Increases social costs such as pollution of the environment*** due to poor disposal of industrial wastes. This negatively affects the economic welfare/ standard of living.
11. ***Promote underutilization o resources.*** This is due to low level of technology and yet also they serve a relatively small market, hence production at excess capacity.

Implications of large-scale industrial firms

Note: ***Large-scale firms*** refer to production units involving high capital investment, occupy large land area, employ many (hired) workers, highly mechanized, and produce large quantity of output.

Positive implications

1. Facilitate easy marketing of output domestically and internationally. This is because it ensures reliable supplies and this leads to increased inflow of income.
2. Large scale firms are able to enjoy economies of scale because of increased output. The firms are able to produce at lower cost per unit of output than small scale firms. This in turn leads to low prices of final output and more sales.
3. ***Increase quality of output/ efficiency in production***. This is because they are able to employ specialists and also carryout innovations in production. This output fetches high prices on the market, hence increased income.
4. ***Creates many employment opportunities to the people*** of the country. Large scale firms depend greatly on hired labour and many are employed (*at various stages of production*) ranging from casual to skilled professionals. This increases incomes and the standard of living.

5. ***Promote development of infrastructure*** such as roads, banks, electricity and schools. This is because large scale production greatly depends on good infrastructure and this in turn benefits the surrounding communities.
6. ***Facilitate technological development and transfer***. Large scale production facilitates improvement in production methods and also enables the country to acquire advanced production techniques from other countries, leading to increased output.
7. ***Increase government revenue through taxation***. This is because large scale firms widen the tax base in terms of number of taxable items created. The revenue facilitates the provision of social services.
8. ***Promote the development of labour skills*** through constant practice/ on-job training in the production process. This in turn leads to the growth of entrepreneurship in the country.
9. ***Improve on the terms of trade*** of a country. This is through production of higher quality output for export, which fetches high prices on the world market and thus earning more foreign exchange.
10. They ***improve the balance of payment position***. They save foreign exchange through production for the home market mainly as a result of import substitution strategy. Large scale firms reduce dependence on foreign products.
11. ***Large scale firms promote forward and backward linkages with other firms***. They buy raw materials in large quantities and then sell their products for use by others firms. This promotes a more balanced sectoral development.
12. ***Large scale firms facilitate specialization and division of labour***. The firm concentrates on a particular line of production and labour concentrates at particular stages of production, and this also contributes to efficiency in production.

Negative implications

1. ***Large scale firms widen income inequality in the economy***. The income gap between those employed and those not employed; between industrialists and people in other sectors. This in turn creates social tension.
2. ***Regional imbalance in development***. This is because of uneven distribution of large scale firms in the country as they are mainly urban-based, and this lead to rural-urban migration and overcrowding in rural areas.
3. ***Limit employment creation/ increase technological unemployment.*** This is because of the use of mainly capital-intensive techniques of production-which implies use of more machines than labour, leading to technological unemployment.
4. ***Large firms increase the social costs such as pollution*** of the environment. This negatively affects the quality of life such as by causing deadly diseases.
5. Some large firms greatly depend on imported inputs and ***worsens the balance of payment problems***/ increases external resource dependence.
6. Large scale firms ***create monopoly tendencies*** and therefore exploit consumers through high prices. This is by out-competing the small/ inefficient firms.
7. ***Large scale firms increase dependence on foreign investors***. This is because they require a lot of capital to start and manage, and hence are mainly owned by foreign companies/individuals.
8. ***Continuous capital outflow through repatriation of profits*** and importation of inputs which undermines capital formation. This is because many of the large scale firms in developing countries are foreign-owned.

9. Result into mass production which is at times difficult to market due to narrow markets. This causes prices to fall and adversely affects all producers due to wastage of resources.
10. Large scale firms lead to ***over exploitation of natural resources*** such as minerals, forest resources. This leads to quick resource depletion which negatively affects the future generations.
11. They exert pressure on government for protectionism and tax concessions. Large scale investors always advocate for supporting incentives from government such as tax holidays, subsidies. Tax holidays reduce government revenue yet subsidies increase government expenditure in the longrun, which lowers the net benefit from large scale enterprises.

Guiding questions

1.*(a) Distinguish between a firm and an industry (4 mks)*

(b) Assess the role of small scale industries in the development of your country (16mks)

2. (a) Explain the contribution of small-scale industries to the development of your country (10mks)

(b) What are the challenges faced by small-scale industries in your country? (10mks)

3. Examine the implications of large-scale firms in the economy of your country (20mks)

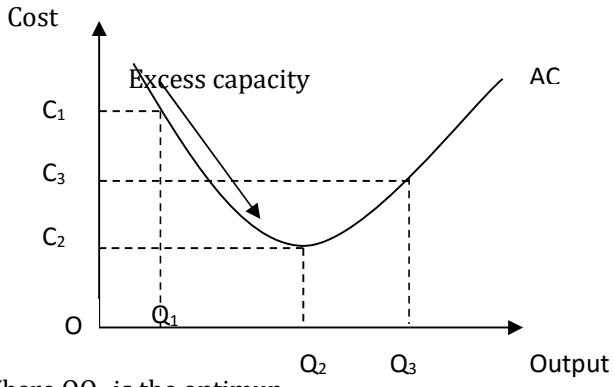
Over production and excess capacity

Over production refers to a situation where a firm or industry produces goods and services (output) in excess of demand.

While

Excess capacity refers to a situation where a firm or an industry produces output at less than installed capacity (or at less than optimum level of output).

Illustration of excess capacity



Where OQ_2 is the optimum output.

Causes of excess capacity

- Low level of technology.
- Limited basic raw materials for production.
- Poor infrastructure such as poor roads.
- High costs of production such as due to high taxes.
- Limited entrepreneurial ability.
- Political instabilities in some areas, causing uncertainty among producers.
- Desire for high profits by entrepreneurs.
- Limited skilled labour.

Solutions to production at excess capacity

- Improvement in the level of technology.
- Development of infrastructure such as power dams.
- Expansion of market size through market research.
- Training of labour to acquire entrepreneurial skills.
- Reduction of taxes on companies by government.
- Controlling monopoly tendencies such as by reduction of patent rights given some producers.
- Offering more credit facilities to producers (loans).

Merging of firms

Merging refers to the coming together of two or more firms to form one bigger firm.

Forms of merging

1. **Horizontal merging**
   Refers to the coming together of two or more firms in the same industry at the same level/ stage of production to form one big firm/ to enjoy economies of scale.
   For example merging of two restaurants, merging of two saloons
2. **Vertical merging**
   Refers to the coming together of two or more firms in the same industry but at different levels / stages of production to form one bigger firm.
   For example merging of a firm making raw materials and a firm processing raw materials – merging of a tea growing firm and a tea processing firm, merging of a sugarcane firm and a sugar factory.
   Types of vertical merging include:
   a) ***Backward vertical merging***— is where a firm joins together with another firm at the previous stage of the production process (towards the source of inputs).
      OR refers to a situation where a firm at a higher stage of production combines with another at a lower stage of production.
      For example a furniture making firm joins with a timber supplying firm, a tea processing firm joins with a tea growing firm.
   b) ***Forward vertical merging***—is where a firms joins together with another firm at the next stage of the production process.
      OR refers to a situation where a firm at a lower stage of production combines with another at a higher stage of production (with the aim of securing market for its output).

For example a furniture -making firm joins with a furniture retail shop, a tea processing firm joins with a tea distribution firm, a grain milling firm joins with a confectionary firm.

3. **Lateral merging**
   Refers to the coming together of two or more firms in the same industry but are not competing with each other.
   (**OR** This is where two or more firms which produce related commodities that can be marketed together join to become one firm).
   For example merging of shoes and shoe polish making firms, merging of blazer/jacket and shirt making firms, merging of a firm producing torches and another firm producing dry cells, a car selling firm joining with a firm dealing in car tyres.
   Lateral merging is mainly aimed at serving a wider market for the products and to avoid dependence on a particular product.

4. **Conglomerate merging (diversified merging)**
   Refers to the coming together of two or more firms in completely different industries (producing unrelated commodities). For example a restaurant merges with a studio, a dry cleaner merging with a stationary shop.

Advantages of merging /integration of firms

1. Merging reduces /controls unnecessary competition and duplication of products. This in turn reduces wastage of resources such as costly advertising and sales promotion. (Increases monopoly power and associated advantages).
2. Merging improves efficiency in management. The less efficient firm merges with a more efficient firm, and this improves management of the created firm. More so in the new firm more efficient workers are employed.
3. Reduces competition for market and in turn expands market for output. This is because a few large firms remain in production.
4. Merging promotes research. This is because the merged firms combine resources to finance the needed research, hence increasing productivity.
5. Merging accelerates the rate of innovations and inventions because of combining ideas. This in turn leads to increased output/sales and profits.
6. Reduces competition for raw materials and this is because the firms have a common source of raw materials. This promotes the level of production/output.
7. Easy mobilization of capital foe business/ increases access to loans from financial institutions. This is because financial institutions easily give money to large firms due to having collateral security (many assets). More so merging enlarges the pool of capital for business expansion.
8. Promotes efficient utilization of resources. There is optimal production due to reduced average costs of production such as due to combined management (and reduced number of workers).
9. Promotes backward and forward linkages in production especially with vertical merging. Some firms merge with raw materials supplying firms and others with market providing firms.

10. Ensures long run survival of a firm by expanding investment for example the case of conglomerate merging. The firms gains more assets to facilitate in expansion and performance in the market.

11. Merging enables the firm to access better technology. Due to more funds available, the firm acquires more efficient/ appropriate techniques by purchasing or research, which in turn increases productivity.

Disadvantages of merging/ integration of firms

1. Merging leads to loss of efficiency in the longrun. Management becomes complicated, there is bureaucracy /long chain of command leading to delayed decisions making (due to increased scale of production).
2. Reduces employment opportunities/results into unemployment. During merging restructuring of management takes place and hence some workers lose their jobs.
3. Causes conflicts in administration. There are problems during staffing such as choosing the top managers leading to misunderstandings/ hatred.
4. Enhances over production due large scale production and hence wastage of resources. This is especially due to small market size.
5. Large firms attract government attention such as by imposing higher taxes on them to raise more revenue. This reduces the profit margin.
6. Creates monopoly tendencies with their disadvantages such as over exploiting consumers by charging high prices and production of poor quality products.
7. One firm may absorb the liabilities/ debts of another firm. This slows down the progress of the new firm which has to first clear the outstanding debts and after embark on further investment.
8. Over expanding of the firm results into diseconomies of scale—disadvantages of large-scale production such as managerial and technical diseconomies.
9. There are difficulties of valuing assets of the firms before merging takes place. This leads to undervaluation or over valuation of assets, hence a potential source of conflicts in future.
10. Leads to over exploitation of resources due to large-scale production. This in turn leads to quick depletion of some resources or raw materials.
11. Leads of loss of independence and identity of certain firms. Some firms disappear completely after merging.

Limitations to merging/integration of firms

- ***Long distance between firms***. Firms that are far apart are difficult to combine since this increases administration costs.
- ***Small market for certain products***. This makes the owners of the firms reluctant to enter into mergers since the market for increased output is not assured.
- ***Fear of high taxation by government***. Large firms attract government attention in form of increased taxation and this reduces the profit margin.
- ***Government policy of restricting merging as a way of controlling monopoly***. The government is interested in promoting production of quality output and at reasonable prices, which is possible with many firms in the economy.

- ***Fear of management problems/ complexity in management due to over expansion***. As the scale of production increases, management becomes more difficult, leading to delayed decision making.
- ***Fear of unemployment that results from merging***. The employees of these firms resist integration since some of them stand to lose their jobs during restructuring the firm after merging.
- ***Fear of absorbing the liabilities/ debts of another firm***. The efficient firms fear taking on responsibilities that are not directly made by them such paying outstanding debts of one firm.
- ***Fear of loss of independence in management and control of firms***. For example as a family based business integrates with another firm the role of family members in the running of the business reduces.
- ***Inadequate supply of skilled manpower required by large firms***. It becomes increasingly difficult to acquire skilled personnel/ manpower capable of running such expanded businesses, and this undermines productivity.
- ***Fear of losing touch with customers***. Some firms lead to personal or direct contact or relation with the customers such as for goods for special order, and this is lost with merging.
- ***Differences in the level of technology employed by the firms***. The varying methods of production make the different firms difficult to combine since at times it requires completely changing one of the firms, which is costly.
- ***Differences/variation in the aims and objectives of the firms***. Some firms are majorly interested in maximizing profits while others majorly aim at maximizing sales which objectives are conflicting and this hinders merging.
- ***Production of unrelated commodities/ variation in the type of products of firms (firms being in unrelated fields).*** It is difficult to combine unrelated assets or firms which require different raw material inputs or those which no linkage *(of market or raw material)* at all.
- ***Fear of diseconomies of scale due to over expansion of the firm***. Merging leads to large-scale production, which leads to increased average costs such as managerial diseconomies.

Guiding questions

a. Outline the advantages and disadvantages of horizontal merging of firms.
b. Mention the reasons for merging /integration of firms in an economy.
c. Give the advantages of backward and forward merging of firms.

***Types of industries**

A. Rooted industries
Refers to industries set up a specific area due to the existence of locational factors (such as market, raw materials, developed infrastructure among others). For example a cement industry near the raw material source, a soft drink industry near a water body.

B. Footloose industries
Refers to industries that are not tied to any location and can therefore be located anywhere in response to any changing economic conditions. It is result of purely random selection and most small scale/ cottage industries are footloose in nature.

C. ****Tied industries***.

Refers to industries located near the market of finished goods. This is because the final products are in most cases bulky or perishable.

D. Bulk gaining/weight increasing industries

Refers to industries located near the market because the finished products become bulky. For example ship building industries.

E. Bulk reducing industries

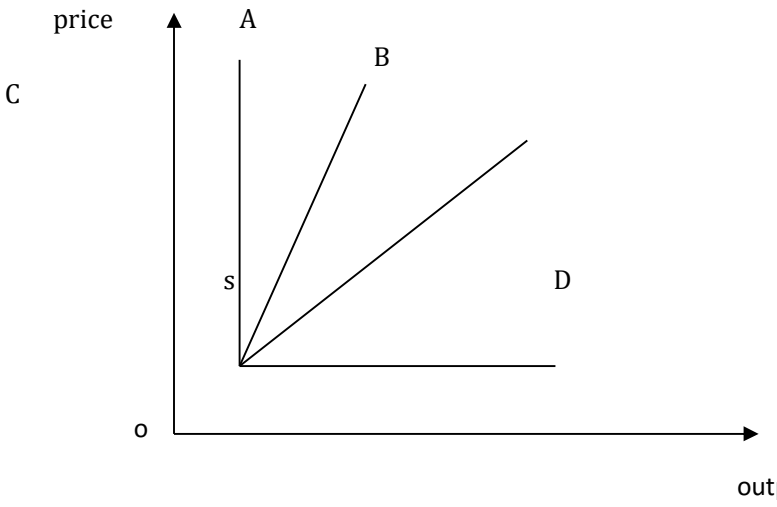
Refers to industries located at the source of bulky raw materials to reduce the costs of transportation. This is because the finished products are less bulky.

Production/Planning period of a firm

[Firms use it when making decisions. Planning periods do not refer to a specific period of time (e.g. 2 months or 1 year), but depends on what the firm is able to do within that time. The short run of one firm may be the long run of another].

1. **Market period(momentary period/ very short run)**
   This is a period which is too short for a firm to change its market supply and this period follows immediately after a price change. (If there is a change in price), the *supply is perfectly inelastic* that is, the firm is not able to vary output.
2. **Short run**
   This is a period during which a firm can vary output by varying the quantities of variable factors but not the fixed factors. The firm can vary raw materials, labour etc while other factors like rent remain fixed. [*Supply is price inelastic*]
3. **Long run**
   This is a period during which a firm varies its output by varying the quantities of all the factors of production but cannot change the state of technology. (*Supply is price elastic*).
4. **very long run(secular period)**
   This is a period that is so long that all factors of production can be varied and even the state of technology is able to change. (*Supply is perfectly elastic)*

Illustration showing supply curves in different runs/planning periods



Where the supply curves are:

A is very short run

B is short run

C is long run

D is very long run

Production function

Production function refers to the technical relationship between the level of output produced and the amount of inputs used in production at a particular time with a given state of technology.

Q=f (inputs)

$Q=f(x_1, x_2, x_3, x_4 \ldots\ldots x_n)$

Where:

Q=quantity of output

X=different inputs.

Factors determining the production function

- the level of technology
- the size of the firm
- quality and quantity of inputs
- degree of a firm's organization
- the cost of factors of production
- political climate

Revenue of a firm

Revenue refers to the amount of money received by a firm from selling its output. The revenue of a firm can be looked at in the following ways:

1. **Total revenue(TR)**
   Refers to the <u>total</u> amount of money received by a firm as a result of selling its total (all its) units of output.
   Total revenue= price x quantity
2. **Average revenue (AR)**
   Refers to the revenue received by a firm <u>per unit</u> of output sold.

$$\text{Average revenue} = \frac{\text{Total revenue}}{\text{Quantity}}$$

Qn. Prove that AR=P (Average revenue = price of each unit of a commodity sold)

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

$$AR = \frac{P \times Q}{Q}$$

$$AR = P$$

Therefore Average revenue is equal to price

3. **Marginal revenue**

Refers to the additional revenue received by a firm as a result of selling an additional unit of output.

$$\text{Marginal revenue} = \frac{\text{Change in total revenue}}{\text{Change in quantity}}$$

***Importance of the revenue curves**

- AR curve is the price line for all the producers in all market situations
- Determines the profit level of the firm—whether the firm is earning normal profits, abnormal profits or incurring losses (If related to AC curve).
- Relating AR curve and AC curve indicates whether the firm is producing at its full capacity or excess capacity.
- Determines the equilibrium position of a firm in all market situations, where MC= MR.
- MR determines the extra revenue from the sale of additional output.
- MR determines the maximum number of units of variable factor inputs to employ in attempt to maximize profits.

Product/ output

Refers to the net return of any production process. (Output is the production of a firm in terms goods and services).

OR Refers to the final return that a firm realizes after using a given combination of inputs.

Output of a firm is categorized as follows:

1. **Total product (TP)**

Refers to the total amount of output produced by a firm by using all factors of production.

2. **Average product(AP)**
   Refers to the amount/quantity of output <u>per unit of variable factor</u> employed.

$$\text{Average product} = \frac{\text{Total product}}{\text{variable factor (}\textit{units of}\text{)}}$$

3. **Marginal product(MP)**
   Refers to the <u>additional output</u> of a firm resulting from employment of an <u>additional unit of a variable factor</u>.

$$\text{Marginal product} = \frac{\text{Change in total product}}{\text{ange in variable factor}}$$

OR

$$\text{Marginal product} = \frac{\text{Change in total product}}{\text{Change in labour}}$$

4. **–Marginal product of labour**
   Refers to additional output resulting from employment of an additional unit of labour.

   $MP_L =$

Example 1:

Fixed factor	Variable factor	TP	AP	MP
5	1	10		
5	2	30		
5	3	60		
5	4	100		
5	5	120		

Determine the average product (AP) and marginal product (MP) to complete the table.

Example 2

Variable factor/labour	Total product	Average product	Marginal product

0	0	---	---
1	10	10	10
2	24	12	14
3	42	14	18
4	52	13	10
5	60	12	8
6	66	11	6
7	70	10	4
8	72	9	2
9	72	8	0
10	70	7	-2

Example 3

Land (units)	Labour units	Total product (TP)	Average product (AP)	Marginal product(MP)
2	1	10	10	---
2	2	30	15	20
2	3	60	20	30
2	4	100	25	40
2	5	120	24	20
2	6	132	22	12
2	7	140	20	8
2	8	146	18.25	6
2	9	144	16	-2
2	10	140	14	-4

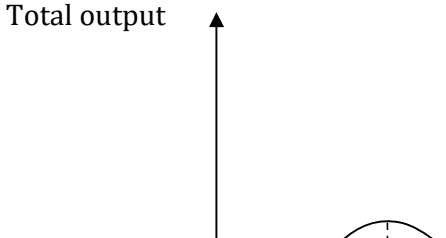
***The law of variable proportions**

The law states that, 'as more and more units of a variable factor are applied to a given quantity of fixed factor in a given state of technology , marginal product of the variable factor increases, reaches maximum and then declines'

The law of diminishing returns

The law states that, 'as more and more units of a variable factor are applied to a given quantity of fixed factor in a given state of technology, marginal product of the variable factor eventually diminishes'.

Note: The law of variable proportions is illustrated by the marginal product curve, while the downward sloping portion of the marginal product curve illustrates the law of diminishing returns.



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VF/Labour

MP_L

Assumptions of the law

- Assumes existence a fixed factor(such as land)
- Assumes that all other factors are variable
- Assumes that all units of variable factor are homogeneous
- Assumes constant technology
- Assumes a short run situation
- *The fixed factor and variable factor can be combined in a number of proportions.
- *Assumes constant factor prices (e.g. constant wages, constant rent)

Applications of the law

- Guides producers in determining the optimum level of output. This is when total product is at maximum and marginal product is at zero.
  [To determine the optimum factor ratio—the optimum amount of variable factor which if combined with the fixed factor can yield maximum output].
- Helps the firm to determine the profit maximizing point. This is where marginal product is at maximum.
- *Applicable to developing countries where increasing population is cultivating fixed land resulting into reducing/declining output.

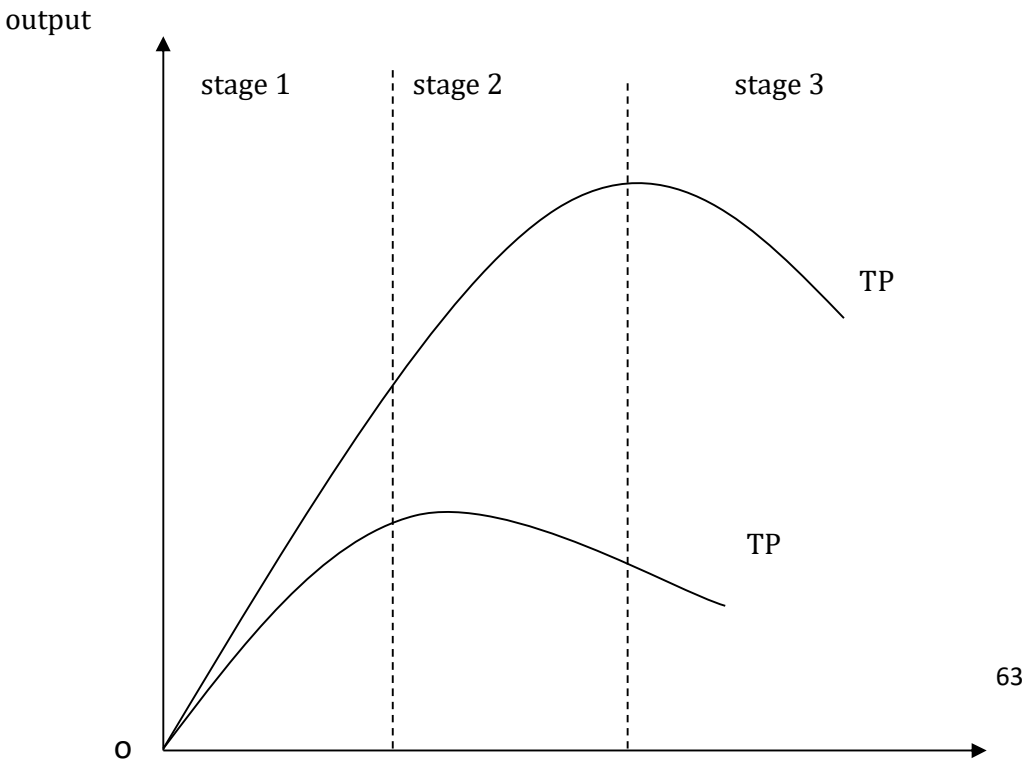
Limitations to the law

- The optimum ratio of the variable factor to fixed factor is not constant but changes with technology among other factors.
- Technology is not constant as the law assumes but is continuously changing.

- All variable factors are not homogeneous and equally efficient but vary in many cases.

Relationship between total product, average product and marginal product

- TP, AP and MP first increase at first and finally begin to decline.
- Marginal product equals average product when average product is at maximum.
- *Marginal product reaches maximum at a lower level of variable factor than AP does.
- When TP is at maximum, the MP is at zero.
- When TP begins to decline, MP becomes negative.
- The MP curve cuts AP curve at its maximum.
- *When AP is increasing MP is greater than AP and when AP is falling, MP is less than AP



Units of VF/L

The different stages of the production function with reference to resource utilization are explained as below:

Stage 1

This is the stage of increasing returns. The TP, AP and MP are all increasing. In this stage the fixed factors are more than the variable factors.

Stage 2

This is the stage of diminishing marginal product. It begins where AP is at maximum because labour becomes inefficient due to reduction in the fixed factor. Additional output per worker.

Stage 3

This is a stage where AP, TP and MP all decline until when MP is zero. The productivity of workers is low.

Returns to scale

Refers to the (rate of) change in output of a firm in the long run resulting from a change in the quantities of all inputs. In the long run all inputs are being varied because all factors are variable.

[Returns to scale refers to the resulting increase in output of a firm in the long run when all inputs are increased].

Returns to scale are classified as:

1. Increasing returns to scale.
2. Constant returns to scale.
3. Decreasing returns to scale.

Increasing returns to scale

This is a situation where doubling of inputs results into output more than doubling. **Or** increasing inputs by a given percentage results into a bigger percentage increase in output.

(This results into marginal product increasing and average costs falling. Increasing returns to scale is due to enjoying economies of scale).

Constant returns to scale

This is where the doubling of inputs results into doubling of output. **Or** increasing inputs by a given percentage results into an equal percentage increase in output.

(In this case marginal product and average cost are constant).

Decreasing returns to scale

This is where doubling of inputs results into output less than doubling. **Or** increasing inputs by a given percentage results into output increasing by a smaller percentage.

(In this case marginal product is falling and average cost rising).

THE THEORY OF COSTS

Costs are expenses incurred by a firm to produce a given amount of output.

Categories of costs

1. **Implicit costs**
   Refers to expenses of a firm not considered by accountants when calculating profits of a firm.
   These expenses are usually overlooked by accountants (*i.e. the opportunity cost of using self-owned resources*) like salary of a sole proprietor/owner, family labour, costs on self-owned inputs, using own building as firm premises.
2. **Explicit costs**
   Refers to the actual expenses incurred by a firm and are considered by accountants when calculating profits of a firm.
   These are direct expenses incurred by a firm in the production process such as payment for labour, payment for raw materials, payment for servicing equipment, rent, electricity charges, transport charges and other distribution costs.
3. ***Private costs**
   Refers to the (monetary) expenses incurred by a firm in the production of a given level of output.
4. **External costs(negative externalities)**
   Refers to the costs that other people other than those involved in the production process are forced to pay as a result of the production.

For example the effects of pollution.

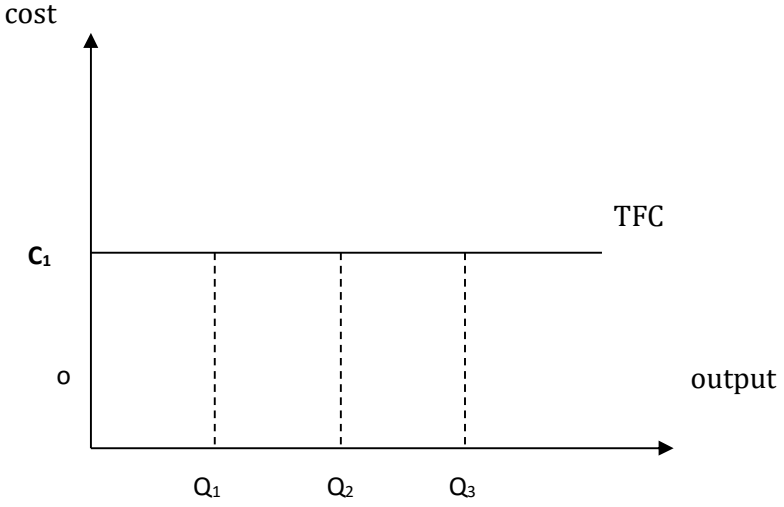
[**OR social costs** refer to the costs incurred by the society resulting from production of a commodity]

5. **Opportunity cost(real cost)**
   Refers to the next best alternative foregone when choice is made. [The cost of a good /commodity is measured in terms of the unproduced goods that could be produced using the same resource inputs].
6. ***Economic cost**
7. *** sunk costs—**refers to costs that cannot be recovered when a firm leaves the industry.

<u>Short run costs of production</u>

1. **Fixed costs/ supplementary costs/ overhead cost/ unavoidable cost/ indispensable cost/ indirect costs**
   Refers to expenses of a firm which do not vary with the level of output. They are incurred regardless of the level of output—whether production takes place or not (*even at zero output*). Examples of fixed costs include: insurance premium, rent for premises, salary to top management etc

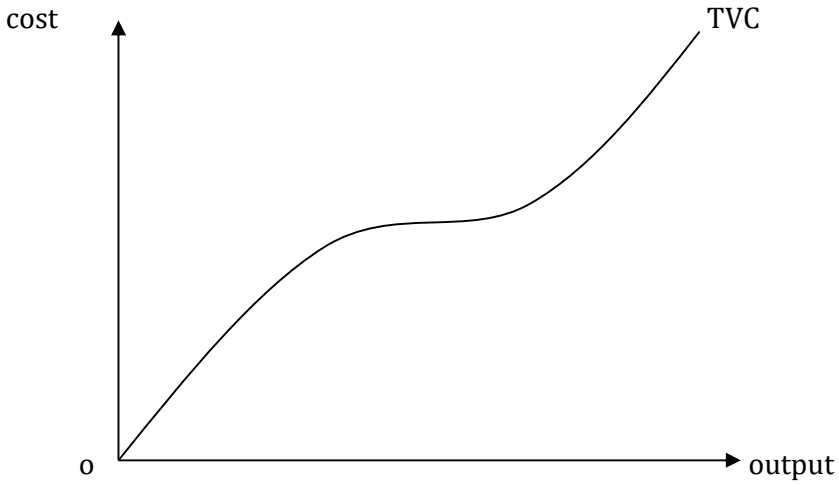
Illustration of fixed costs



At various levels of output and even at zero output the cost is constant/ fixed at C_1.

2. **Variable costs/prime cost(running costs/operating costs/direct costs)**
   Refers to the expenses of a firm which vary/change with a change in the level of output.
   When output increases they also increase, when output reduce they also reduce and at zero output the variable costs are also zero.
   Examples include: wages to labour/payment to casual labour, payments for raw materials, advertising costs, transport costs etc

Illustration of variable costs



3. **Total cost(TC)**
   Refers to a combination of total fixed costs and total variable costs of a firm.
   Total costs (TC) =TFC+ TVC

Relationship between total fixed costs total variable costs and total costs

- (*TC starts where TFC starts and*) when output is zero, then total cost is equal to TFC since there is no variable cost incurred.
- TC lies above TFC and TVC because TC is a combination of TFC and TVC.
- TC and TVC have the same shape/parallel because (*as output increases*) increase in total cost is brought about by increase in TVC, since TFC is constant.
- As output increases TC and TVC also increase. TC increases by the same amount as TVC because TFC is fixed at all levels of output.
- The gap between TC and TVC represents TFC and therefore that gap is constant.

TFC

TFC

TVC

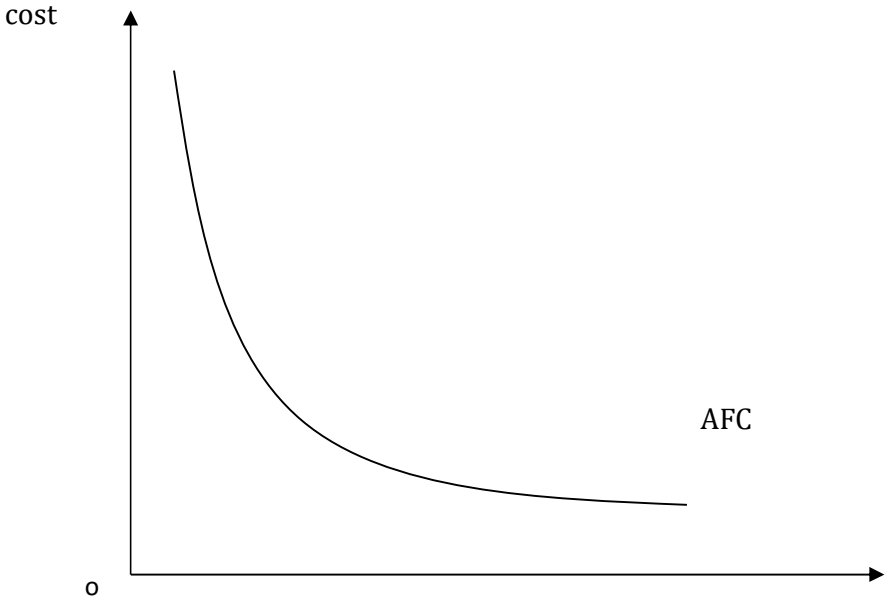
o

Variation of costs in the short run

1. **Average fixed cost (AFC)**
   Refers to fixed cost <u>per unit</u> of output. (Refers to fixed expenses incurred in the production of each unit of output).

$$AFC = \frac{\text{Total fixed cost}}{\text{Output}}$$

Average fixed cost curve



output

As output increases AFC reduces because TFC is constant (i.*e. the fixed costs are spread over a bigger level of output)*

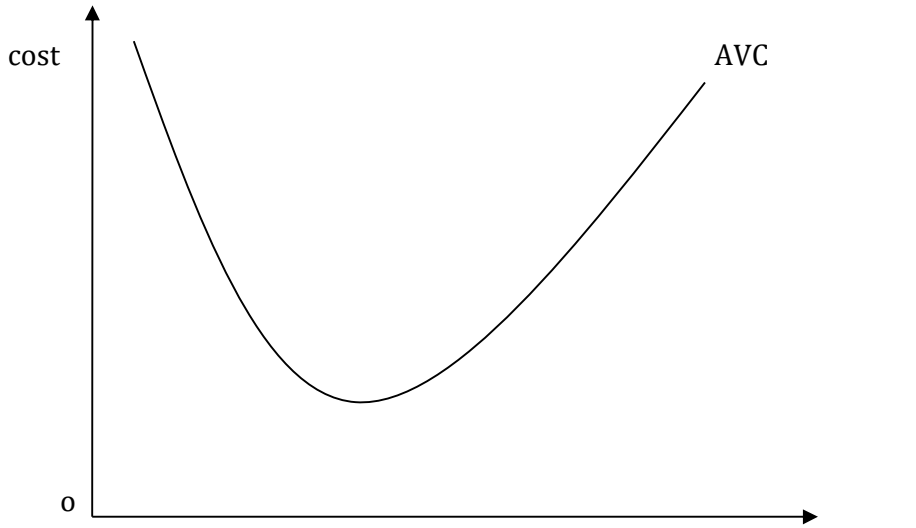
AFC is downward sloping and never decreases to zero. The AFC curve never touches any of the axes.

2. **Average variable cost (AVC)**

Refers to variable costs per unit of output.

$$AVC = \frac{\text{Total variable costs}}{\text{output/quantity}}$$

Average variable cost curve



The short run AVC is U-shaped because of the law of diminishin

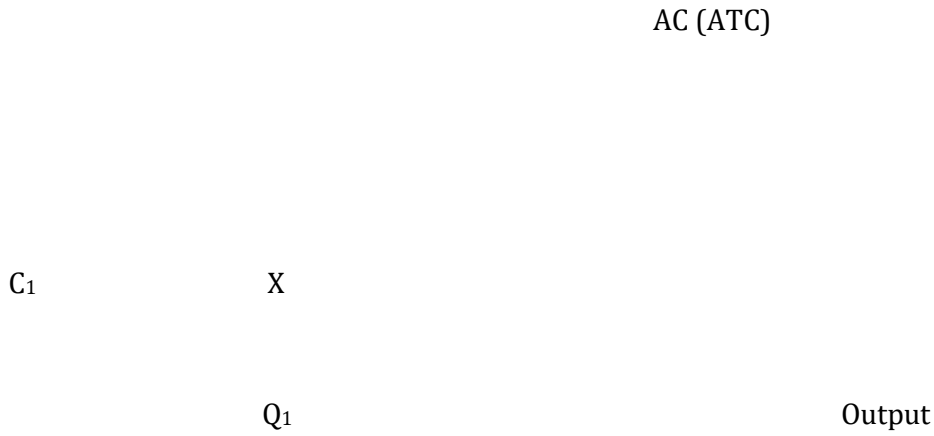
3. **Average total cost/ average cost(ATC/AC)**

Refers to total costs per unit of output.

$$AC = \frac{\text{Total cost}}{\text{Output}}$$

OR AC=AFC+ AVC

Average total cost curve/ average cost curve



Where;

X is the optimum point

OC_1 is the lowest average cost

OQ_1 is the optimum output.

In the short run the AC curve is U-shaped because of the law of diminishing returns.

Before optimum point, there are increasing returns to scale due to increased utilization of fixed factor which is adequate more than the variable factor.

After optimum point, there are reducing/diminishing returns to scale because of over utilization of the fixed factor which is less than the variable factor.

Concepts

a) **Optimum point of a firm**—refers to a point where a firm produces maximum output at the lowest average cost of production.
(*It *is the point where the firm is most efficient or where it has the best combination of factors of production at least average cost possible. The least cost combination of inputs has to be achieved because the firm aims at maximizing profits and minimizing inputs/costs)*

b) **Optimum output**—refers to the maximum output of a firm produces at lowest average cost of production.

c) **Optimum firm**—refers to a firm that produces maximum output at the lowest average cost of production.

Note: A firm producing below optimum point produces at excess capacity.

Importance of average cost

- Determines the cost per unit output during production.

- Determines the optimum level of a firm.
- Used in fixing prices for each unit of output produced (average cost pricing).
- Helps in determining profits of a firm.

Note: *__*Average cost pricing*__ is a method of pricing where the price charged by a firm is fixed to be equal to its average cost.

4. Marginal cost (MC)

Refers to the additional expenses/cost resulting from producing an extra/additional unit of output.

$$\text{Marginal cost} = \frac{\text{Change in total cost}}{\text{hange in output}}$$

Importance of marginal cost

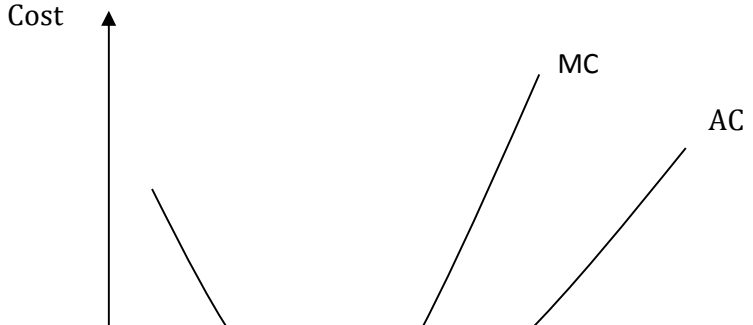
- Determines the equilibrium point of a firm where MC=MR
- Determines the cost of employing an additional unit of input
- Determines the number of variable factor units to be used to maximize profits
- Determines the amount supplied by a firm at a given price since MC is equal to the supply curve of the firm. (This is under perfect competition).
- Determines the price of an extra unit of output (marginal cost pricing).

Note: ***Marginal cost pricing*** is a method of pricing where the price is fixed to be equal to the marginal cost of the output produced.

***Relationship between average cost and marginal cost**

- When AC is minimum MC equals AC. The MC curve cuts AC from below at its minimum point (optimum point).
- When AC is rising MC is greater than AC.
- MC lies below AC when AC is falling due to increasing returns and MC lies above AC when AC is rising due to diminishing returns.
  (*When AC falls MC is less than AC because the fall in MC is related to one unit of output, while in case of AC the same decline is spread over all units of output*).

Illustration



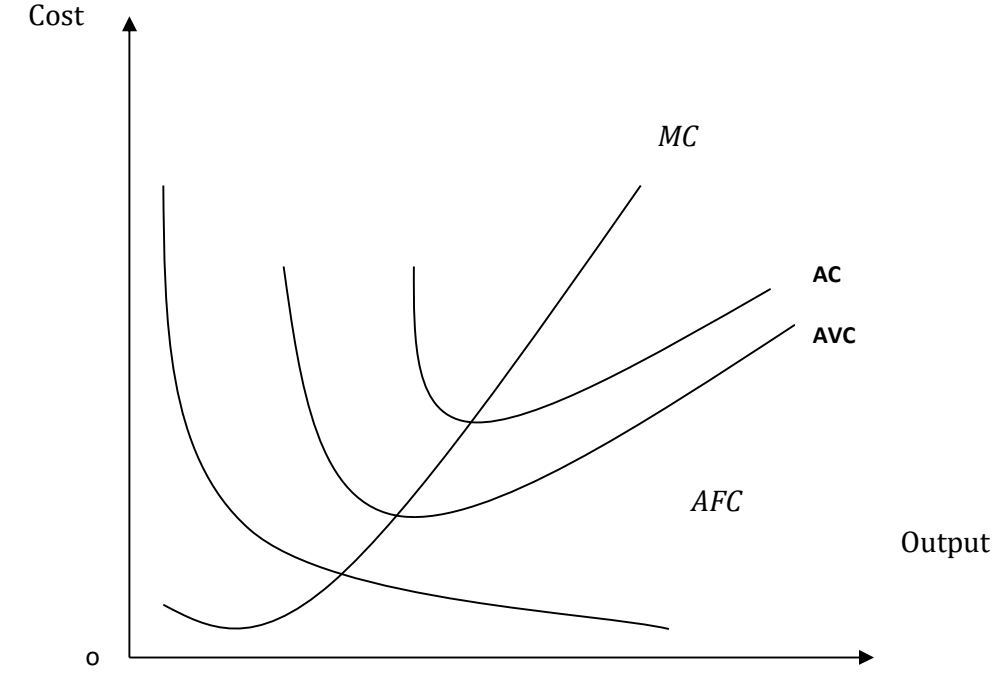
Q_0 Output

Qn. Explain and illustrate the relationship between AC and MC as the level of output of the firm is increased.

Relationship among/ between AFC, AVC, AC, and MC

- The AC, AVC and MC are all U-shaped because of the law of diminishing returns.
- AVC curve lies below AC curve because AVC is a component of AC, that is, AC=AFC+ AVC. Therefore the difference between AC and AVC is AFC at all levels of output.
- As the level of output increases, AC comes closer to AVC due to continuous fall of AFC.
- AVC cannot intersect with AC because AFC can never be zero in the short run.
- MC cuts AVC and AC at their lowest points (**because the increase in the variable cost is equal to the gain from the proceeding fixed cost)*

Illustration



Example 1

Output	TC	TFC	TVC	AVC	AFC	AC	MC
0	1000	1000	0				
1	1600	1000	600				
2	1850	1000	850				
3	2000	1000	1000				
4	2100	1000	1100				
5	2150	1000	1150				
6	2200	1000	1200				
7	2250	1000	1250				
8	2300	1000	1300				
9	2400	1000	1400				

Example 2

Output	TC	TVC	TFC	AVC	AFC	AC	MC
0	500	0	500				
1	1600	1100	500				
2	1850	1350	500				
3	2000	1500	500				
4	2100	1600	500				
5	2150	1650	500				
6	2200	1700	500				
7	2250	1750	500				
8	2300	1800	500				
9	2400	1900	500				

Example 3

Output	TC	AC	MC	FC	AFC	VC	AVC
0	1000	---	---				
1	1200	1200	200				
2	1300	650	100				
3	1350	450	50				
4	1380	345	30				
5	1400	280	20				
6	1500	250	100				
7	1820	260	320				
8	2400	300	580				

Example 4

Output	TC	TFC	TVC	AFC	AVC	AC	MC
0	18	18	0	---	---	--	
1	33	18	15	18	15	33	

2	46	18	28	9	14.3	23	
3	58	18	40	6	13.3	19.3	
4	68	18	50	4.5	12.5	17	
5	78	18	60	3.6	12	15.6	
6	88	18	70	3	11.6	14.6	
7	100	18	82	2.57	11.71	14.2	
8	113	18	95	2.25	11.87	14.1	
9	131	18	113	2	12.5	14.5	
10	153	18	135	1.8	13.6	15.3	

Example 5

Labour	capital	TP	VC	TC	AVC	MC
1	10	4	20	70	5	--
2	10	10	40	90	4	3.3
3	10	21	60	110	2.85	1.8
4	10	40	80	130	2	1.05

Example 6

Output	Costs	FC	AFC	VC	AVC	AC	MC
0	1100	1000	--	0	---	--	--
1	1400	1100	1100	300	300	1400	300
2	1620	1100	550	520	260	810	220
3	1720	1100	366.7	650	216.7	583.3	130
4	1800	1100	275	700	175	450	50
5	1850	1100	220	750	150	370	50
6	1940	1100	183.3	840	140	323.3	90
7	2190	1100	157.1	1090	155.7	312.8	250
8	2600	1100	137.5	1500	187.5	325	410
9	3250	1100	122.2	2150	238.8	361.1	650

Example 7

Quantity	TC	ATC	FC	AFC	VC	AVC
0	10,000	---	10,000	---	0	---
14	24,800	1771.4	10,000	714.3	14,800	1057.1
15	27,400	1826.6	10,000	666.6	17,400	1160
16	28,000	1750	10,000	625	18,000	1125
17	29,000	1705.8	10,000	588.2	19,000	1117.6
18	32,000	1777.7	10,000	555.5	22,000	1222.2
19	34,000	1789.5	10,000	526.3	24,000	1263.2
20	36,000	1800	10,000	500	26,000	1300

Qn. Study the table below and use it to answer questions that follow:

Output	TC
0	600
3	1050
4	1360
5	2000
6	2400
7	2800
8	3400
9	4300
10	5800

a) What is the AFC when output is 10?
b) What is the AVC when output is 4?
c) What level of output represents the break-even point of the firm? (where MC =AC)
d) What level of output represents the shutdown point of the firm? (where MC=AVC)
e) If the marginal revenue (MR)is constant at 600 per unit of output, what would be the equilibrium output of a firm? (show working)

Qn 2. Study the table below and answer the questions that follow:

Labour	TP	VC	TC	TR
6	1	300	1400	500
7	2	520	1620	1000
8	3	650	1750	1500
9	4	700	1800	2000
10	5	750	1850	2500
11	6	840	1940	3000
12	7	1090	2190	3500
13	8	1500	2600	4000
14	9	2150	3250	4500

a) Under what market structure is the firm? Support your answer with a reason
b) Calculate the average fixed cost and average total cost.
c) Determine the average revenue and marginal revenue.

Qn 3. Study the table below and answer the questions that follow:

Quantity	Total cost	Total revenue
80	$5000	$8000
81	$5050	$8100
82	$5125	$8200
83	$5225	$8300
84	$5350	$8400
85	$5500	$8500

a) What is the price of the product?
b) At what level of output should the firm produce to maximize profits?
c) Fixed costs are $4800, determine the total variable costs. Show your working
d) Identify the market structure

Qn. (a) Study the table below and answer the questions that follow:

Total product(TP)	TC
0	300
1	600
2	700
3	750
4	800
5	900
6	1020
7	1190
8	1400
9	1650
10	2300

I. Determine the Average fixed costs (AFC) when output is 4?(2 mks)
II. Determine the Average variable costs (AVC) when out is 6?(2 mks)
III. What are the Average total costs (ATC) when output is 8?(2 mks)
(b) Explain why small scale firms exist alongside large scale firms in your country(14 mks)

Variation in costs in the long run

In the long run, the firm can build any type of plant size since all factors are variable. All costs also become variable, that is, there are no fixed factors and no fixed costs.

If the demand for the product of a firm increases, it either expands the plant or establishes a bigger one.

Assuming, there are three plants represented by three short run average cost curves (SAC) a small firm by SAC_1 , a medium firm by SAC_2 and a large firm by SAC_3.

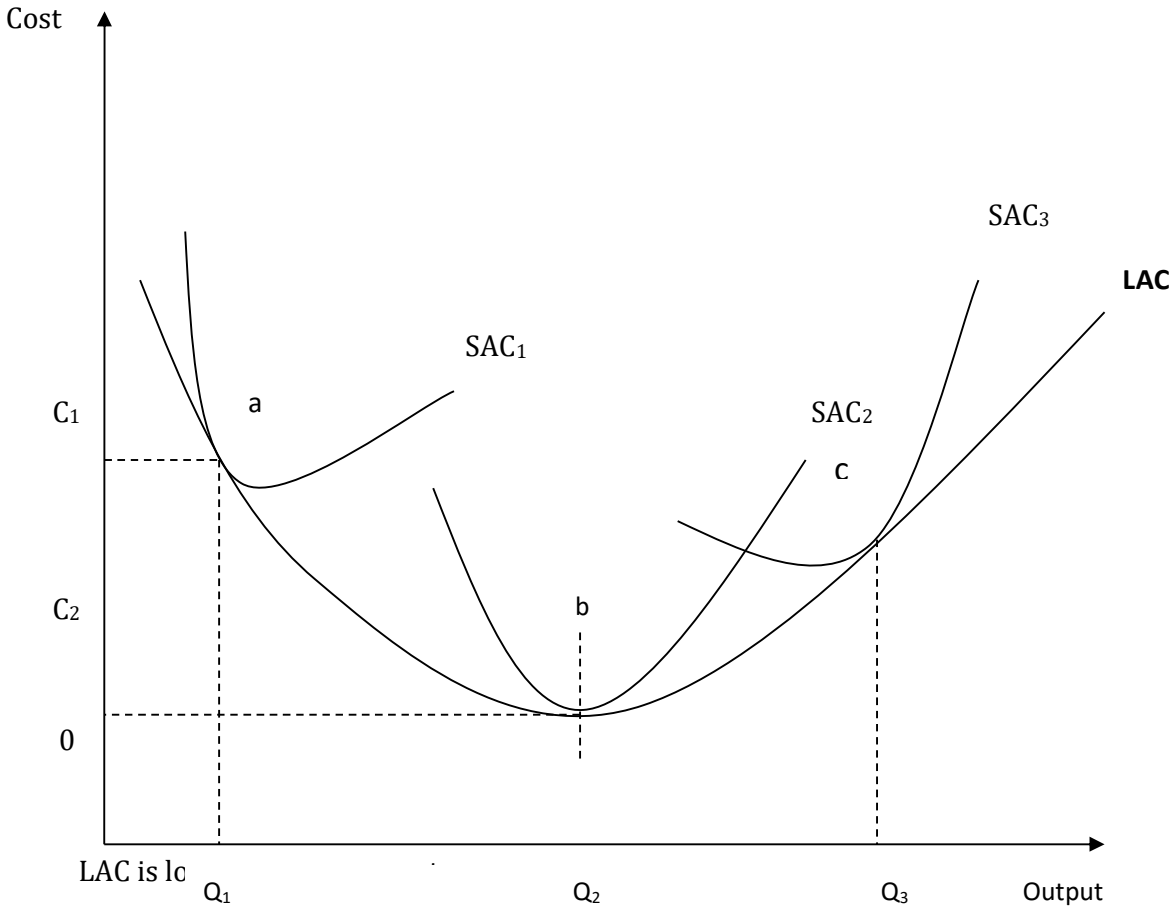
Deriving the long run average cost curve

The long run average cost curve is derived from a combination of various short run AC curves (SAC) which are tangent to it at specific levels of output.

The long run AC curve is also referred to as the **envelope curve**, since it encloses / envelopes several SAC curves. It is also called the **planning curve** since the decision of the firm to expand or establish a new plant is based on the LAC.

The LAC curve (envelope curve) is a locus of points showing the least cost of producing the corresponding output in different plant sizes. Each of these plants produces a particular amount of output as illustrated below.

The long run average cost curve of a firm



SAC is short run average cost curve.

From the above graph, to produce output OQ_1 a firm uses plant 1. This is because the costs are lower with plant 1. To produce output OQ_2 the firm uses plant 2. For output OQ_3 the firm uses plant size 3.

If the demand for the firm's product rises or is expected to increase, the firm establishes more plants.

The trend of increasing the size of the firm and reducing AC continues until point b when the AC begins to rise. After this point, the AC of production increases due to diseconomies of scale resulting from over expansion of the firm.

The LAC is U-shaped in the long run because of economies of scale and diseconomies of scale. Before optimum point, there are economies of scale due to falling average costs and increasing output. After optimum point, there are diseconomies of scale due to rising average costs of production.

(The negatively sloped portion reflects the economies of scale while the positively sloped portion reflects diseconomies of scale).

Note:

- The LAC is more flat than the short run AC curves (since it is composed of several SAC curves).
- The LAC is at its lowest (optimum) when it is tangential to lowest short run AC curve. [*The LAC is not tangent to the SAC curves at their minimum points except for the optimum plant. If LAC is falling, then it is tangent to the SAC curves to the left of the minimum points and when LAC is rising then it is tangent to the SAC curves to the right of their optimum points].*

Profits of a firm

Profits have different meanings to different people.

To accountants, profit means the difference between total revenue and total cost. (Or the excess of sales over the cost of sales)

To the economists, profit is the difference between total revenue and the opportunity cost of the factors used in the production output sold.

In this category the economists have profits of the following types:

1. **Normal profits (zero profits**). Refers to profits earned when total revenue equals total cost of a firm. Such profits do not induce new firms to join the industry nor do they force existing firms to leave the industry.
   [*Or refers to profits at a level just sufficient to induce the existing firms to continue in production without attracting new firms—and occur where average cost is equal to average revenue*].
2. **Super normal profits (abnormal profits/ economic profits)**. Refers to profits realized when the total revenue exceeds the total cost of a firm. Such profits induce new firms to join the industry. It is also called **pure profit**.
   [*Or these are profits in excess of normal profits / earnings beyond what is necessary to induce the existing firms to remain in production –and occur where average revenue exceeds average cost].*
3. ****Monopoly profits***. Refers to persistent super normal profits that are earned by monopoly firms.

4. ****subnormal profits***. Refers to profits earned by firms for investing in risky ventures/business.

How profits are different from rewards to other factors of production

- Profits may be negative (loss) while the other payments are always positive.
- Profit is a non-contractual payment and received in future, while the other factor payments are contractual i.e. they are fixed by agreement at the time of hiring them. Yet profits are only realized when the total sales exceed the total costs.
- Profits fluctuate more than the other factor payments like wage and interest (such as during boom or slump)
- Profits are uncertain yet other factors know when and how much they earn from their employment.
- Profits are residual payments which accrue to risk-takers (entrepreneurs) after all other factors have received their earnings.

Role of profits in the private sector

1. Supernormal profits induce entrepreneurs to accept/bear risks and uncertainties.
2. Profits indicate which industry should expand and which one should contract or die out.
3. Supernormal profits encourage firms to increase production. Profits not only indicate customers' wants but they also induce firms to produce more of these goods.
4. Supernormal profits provide resources for business expansion through re-investment or ploughing back.
5. Profits ensure that production is carried out by the most efficient firms. Profits are a yardstick/ measure of efficiency of a firm.
6. Profits stimulate research, innovations and inventions. This is because the profits are ploughed back.
7. Profits measure the degree of risks in business. Higher profits imply higher risks involved.
8. Small or low profits safeguard the producer form competition since no firm may be attracted to the industry with limited profit margins.
9. Profits guide the government on taxation policies. For example with most firms making high profits, the government may raise more revenue from increased tax rates.

Note: Relating profits to risks and innovations

- Highly risky ventures always earn higher profits while less risky ventures earn low profits.

- Higher profits encourage higher rate of innovations due to re-investment while lower profits limit innovations in the firm/industry.
- Higher rate of innovations also imply higher profits to be attained while low innovations lead to low profit level of the firm.

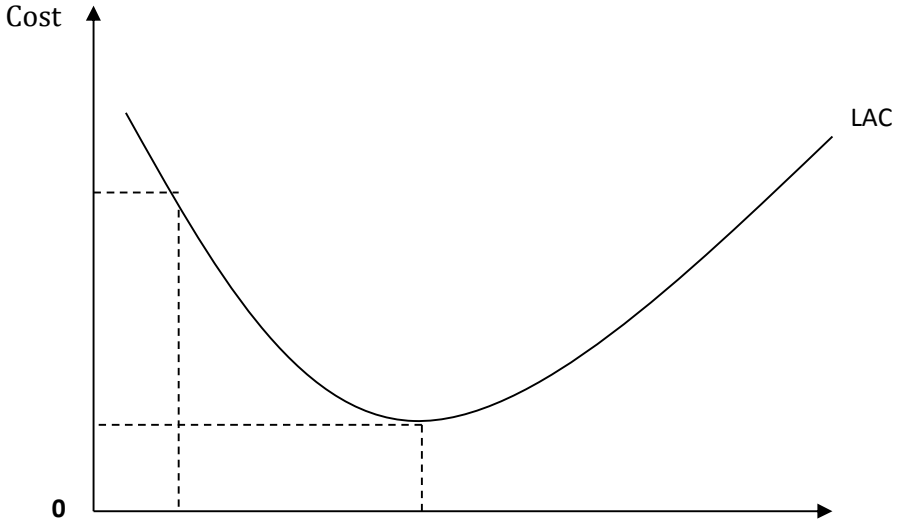
ECONOMIES OF SCALE AND DISECONOMIES OF SCALE

ECONOMIES OF SCALE

Refers to advantages enjoyed by a firm due to large scale production in form of increased output and reduced average costs of production.

Economies of scale are represented by the downward sloping portion of the LAC curve.

Illustration of economies of scale



As output increases from OQ_1 to OQ_2 the average cost falls from OC_1) economies of scale as the firm expands.

Economies of scale are either real or pecuniary.

Real economies are advantages enjoyed by a large scale firm when it uses less physical quantities of inputs to produce a given level of output. (The firm uses less physical units of factor inputs e.g. raw materials per unit of output)

While

Pecuniary economies are advantages enjoyed by a large scale firm when it pays a lower cost for a particular level of output produced. For example 18% discount on purchases in bulk and distribution at low cost due to bulk selling. (Sometimes called financial economies)

Economies of scale are categorized as:

A) Internal economies of scale
B) External economies of scale

Internal economies of scale

Refers to advantages enjoyed by a firm in form of falling average cost due to expansion in the scale of production within the firm itself. These are economies that a firm enjoys because of its own internal expansion.

Examples of internal economies of scale include:

1. **Technical economies**. Large scale firm uses better/ specialized machines and techniques of production. It also uses large machines to full capacity without proportional increase in costs.
2. **Marketing economies**. These arise due to production in large amounts, purchase of raw materials in large amounts. This results into bigger discounts offered and hence paying lower prices per unit of inputs. Also a large firm can afford to expand its market through extensive advertising.
3. **Managerial economies** (*economies of specialization*). These arise from specialization and quality of management of the firm. A large scale firm has the capacity to employ specialized staff in various stages of production such as managers, accountants and engineers. This increases efficiency and reduces average costs.
4. **Financial economies**. A large firm is capable of raising finances from various sources, for examples it can easily acquire loans from financial institutions since it has capacity to offer better collateral security(*in form of assets*), and also paying lower interest rates than smaller firms. A large scale firms can also raise more funds by floating shares and debentures.
5. **Research economies**. Large scale firms are capable of carrying out research which leads to inventions of new techniques of production and new products leading to efficiency and increased productivity. They can also own research laboratories.
6. **Risk bearing economies**. Large scale firms are able to survive for long since they can lower the occurrence of risks. This is because they produce a variety of products than can be sold in different markets (*command a large market*). They also acquire insurance policies to safeguard themselves from risks like fire, accidents.
7. **Welfare economies**. Large scale firms are capable of providing welfare services to their workers in order to increase their efficiency and morale such as medical, lunch, transport and housing allowances. They also provide recreational facilities to workers—hence reduced average costs.
8. **Transport economies**. Large scale firms transport raw materials from their sources to production units in bulk , transport finished goods to the markets in bulk and therefore reducing the per unit cost. For example it is cheaper to hire a 12-tonne lorry to transport 12 tonnes than hiring it to transport 4 tonnes.

9. **Storage economies**. Large scale firms store raw materials or commodities in bulk and hence reduced storage cost per unit. They can also have their own stores.

External economies of scale

Refers to advantages of large scale production enjoyed by all firms in the industry in form of falling average costs as the industry expands in size.

(These economies are enjoyed by all firms in the industry and arise from concentration of firms in a given area).

Examples of external economies of scale include:

1. **Economies of concentration/localization**.
   Expansion of an industry in an area makes all firms to enjoy certain common benefits such as:
   a) Development of a pool of skilled labour used to industrial life in the area.
   b) Developed economic infrastructure in the area like power and energy transport fide components at facilities
   c) Growth of specialized firms which provide components at reduced prices like a bottle-making firm where the drinks industry is concentrated. Also advertising / marketing agencies and financial institutions come up.
   d) Development of information and training institutions for labour such as polytechnics.
   e) Firms can own health facilities (hospitals) and recreation facilities (like play grounds) jointly.

2. **Security economies**. With many firms in an area, it is cheap to provide security for example by establishment of a police post, putting up patrol units and community policing.
3. **Economies of information**. Large scale firms in an area can cooperate to enhance information flow such as by introducing magazines, using radio stations among others. It is also easier for the industry to set up a research unit at lower costs and the information obtained passed on to different firms to increase efficiency.

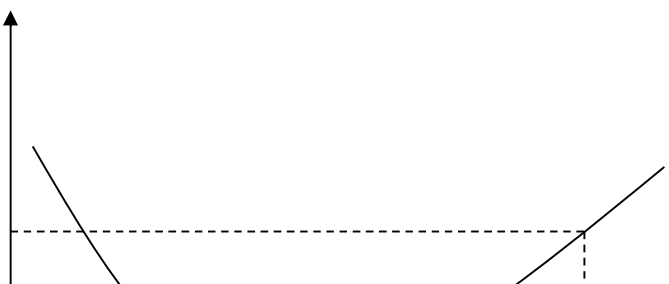
DISECONOMIES OF SCALE

Refers to the disadvantages of large scale production in form of rising average costs due to over expansion in the scale of production.

Diseconomies of scale are represented by the rising portion of the LAC curve.

Illustration of diseconomies of scale

Cost



As output increases from OQ_0 to OQ_1 , the per unit costs(AC) rise from OC_0 to OC_1 due to diseconomies of scale as the firm expands.

Diseconomies of scale are categorized as:

A) Internal diseconomies of scale
B) External diseconomies of scale.

Internal diseconomies of scale

Refers to disadvantages faced by an individual firm in form of rising average cost as a result of over expanding its scale of production.

Examples of internal diseconomies of scale include:

1. **Managerial diseconomies**. As the firm over expands it becomes difficult to manage and supervise labour, control other activities at the different stages. There is increased bureaucracy (long chain of command)—delayed decision making thus inefficiency which increases the average costs.
2. **Marketing diseconomies**. As the firm over expands it becomes difficult to secure large market for increased output and hence wastage of resources. Factor inputs also increasingly become scarce and hence higher costs for inputs. It further requires extensive advertising which ends up increasing the per unit costs.
3. **Technical diseconomies**. As the firm over expands, it experiences wear and tear of machinery, tools and equipment (the rate of capital consumption / depreciation increases). Therefore resources must be aside for maintenance of such assets and hence rising average costs.
4. **Financial diseconomies**. As the firm over expands it requires more money / finance for its operations. As such the firm may be forced to borrow at high interest rates, which increases the average costs.

5. **Labour diseconomies**. As the firm over expands, it becomes difficult to obtain skilled/ specialized labour especially in conditions of full employment. This requires the firm to make workers to work over time or attracting labour from other firms by paying them high wages, which increases average costs.
6. **Multiplication of risks**. With increased scale of operation, the risks faced also increase such as in case of fire and accidents. The losses suffered are great unlike small firms.

External diseconomies of scale

Refers to the disadvantages of large scale production faced by all firms in the industry in form of rising average costs as a result of over expansion of the industry.

(These arise due to the activities of other firms in the industry and result from concentration of firms in a given area).

Examples of external diseconomies of scale include:

1. Pollution of the environment such as water and air pollution.
2. Traffic jam / congestion due to concentration of the firms in that area. This increases the transport costs and the risk of accidents.
3. Shortage of land for expansion and settlement. This is high competition for land leading to high land rent.
4. Increase prices for social services like education, medical
5. Shortage of raw material inputs at times due to high competition for them, leading to increased costs.
6. Increases the cost of living in the concentrated area.

Guiding questions:

1) What is meant by economies of scale? (8 mks)

   Approach

   - Define economies of scale
   - Illustrate economies of scale using LAC, showing that they are represented by the falling portion of the LAC.
   - Mention that they are both internal and external
   - Give examples of economies of scale(at least four)

2) What do you understand by internal diseconomies of scale? (6 mks)
   Approach
   - Define

- Illustrate using the LAC showing that it is represented by the rising part of the LAC.
- Give examples (at least 4)

3) Explain why the average cost (AC) curve is U-shaped in the long run (4 mks)