UNIVERSITY QUESTIONS2 MARKS
UNIT - 1

1) **What do you mean by Production-possibility frontier (PPF)?**

Production Possibility Curve **(PPC)** is a curve that shows the possible combinations of any two economic goods an economy can produce by using the available scarce resources. It is sometimes called Prod
uction Possibility Frontier, Production Possibility Boundary and Transformation Curve as the concept illustrates the potential productive capacity of the economy.

2. What do you understand by Macro economics?

The term **'macros'** in Greek means **large**. Macro economics is the study of aggregates (totalor whole).
It studies about aggregate (total) demand, aggregate consumption, aggregate production, aggregate income and aggregate investment, etc.
It studies all parts or components of the whole economy and it is not concerned withindividual aspects of the economy.
Macro economics examines the **forest** and not the **trees**.

3.) What do you understand by Productive efficiency?

1. Efficient selection of goods to be produced,

2. Efficient allocation of resources in the production of these goods with efficient choiceof method of production, and
3. Efficient allotment of the goods produced among consumers.

4.) State the meaning of microeconomics. ***Jan 2011***

- The term **'mikros'** in Greek means **small**.
- Micro economics refers to the study of small units. In other words, micro economics studies the individual parts or components of the whole economy.
- Micro- economics is the study of particular firms, particular households, individualprices, wages, income, individual industries and so on.
- Micro economics as the name implies is concerned with parts of the economy rather than with the economy as a whole

5. **State the fundamental economic problems.**

What to produce?How
to produce?
To whom to produce?

6. **Explain the Economic efficiency** ***Jan 2012***
Economically efficient production is organized to minimize the ratio of inputs to outputs.A situation where each good is produced at the minimum cost
The extent to which a given set of resources is being allocated

7. Define Productive efficiency

Productive efficiency (also known as "technical efficiency") occurs when the economy is utilizing all of its resources, and operating at its production possibility frontier (PPF).

8.What is efficiency?

This takes place when production of one good is achieved at the lowest cost possible Productive efficiency requires that all firms operate using best-practice technological and managerial processes.

By improving these processes, an economy or business can extend its production possibilit

9.What do you mean by efficiency?

- Efficiency is one of the most important concepts to use in Economics course.
- There are several meanings of the term - but they generally relate to how well an economy allocates scarce resources to meets the needs and wants of consumers.

10. What is economic efficiency?

- Economic efficiency is a term typically used in microeconomics when discussingproduct.
- Production of a unit of good is considered to be economically efficient when that unit of good is produced at the lowest possible cost.

11. What are the factors effecting efficiency?

- Economic efficiency is used to refer to a number of related concepts. It is the using of resources in such a way as to maximize the production of ...
- The extent to which a given set of resources is being allocated across uses or activities ina manner that maximizes whatever value they are
- Economically efficient production is organized to minimize the ratio of inputs to outputs.

12. What do you mean by economic growth?

- A positive change in the level of production of goods and services by a country over a certain period of time. Economic growth is usually brought about by technological innovation and positive external forces.

13. Define economic

- **Economic growth** is an increase in activity in an economy. It is often measured as the rate of change of gross domestic product (GDP).
- Economic growth refers only to the quantity of goods and services produced; it says nothing about the way in which they are produced

14. whar are the limitations of micro economics

- It may not give an idea about the functioning of the whole economy.
- The results of micro economics studies may not be applicable to aggregates (total or whole).

- It fails to give correct guidance to government to formulate economic policies.
- It fails to give practical explanation.

15.Define macro economic policy?

Macro economic policy can be defined as "a programme of action undertaken to control, regulate and manipulate **macro economic variables** to achieve the macro economic goals of the society"

16. What are the factors of macro economic policy?

- Macro economics is, thus, a policy oriented subject. It deals with a number of policies of macro nature to solve many issues & problems.
- A macroeconomic policy is, in fact an instrument of policing the economy to achieve certain economic goal.
- Macroeconomic policies have macroeconomic goals to fulfill.

17. What are number of macro – economic policies?

1. Monetary policy
2. Fiscal policy
3. Income policy
4. Trade police
5. Industrial policy
6. Import- Export policy
7. Banking policy
8. Planning policy.

18. What are the Importance of macro economics

- It is very helpful in studying the vast *(huge)* and complex *(hard to understand)* nature of economic.
- It deals with many economic problems such as unemployment, inflation, depression *(make very unhappy, push down or make less active)* & recession *(a temporary decline or loss in economic activity)*.

19. Define Macro economic policy.

Macro economic policy can be defined as "a programme of action undertaken to control, regulate and manipulate **macro economic variables** to achieve the macro economic goals of the society"

- Macro economics is, thus, a policy oriented subject. It deals with a number of policies of macro nature to solve many issues & problems.

20. How can economic growth and stability are balanced.

- A positive change in the level of production of goods and services by a country over a certain period of time. Economic growth is usually brought about by technological innovation and positive external forces.
- **Economic growth** is an increase in activity in an economy. It is often measured as the rate of change of gross domestic product (GDP).

21. Define production possibility curve

Production Possibility Curve ***(PPC)*** is a curve that shows the possible combinations of any two economic goods an economy can produce by using the available scarce resources.
It is sometimes called Production Possibility Frontier, Production Possibility Boundary and Transformation Curve as the concept illustrates the potential productive capacity of the economy.

22. Define National expenditure

(the total spending or outlay of the firm or community (a group ofpeople living together in a place) on good and services produced during a given year).

Concept of employment

Consumption *(it refers to total consumption of the household sector and firms)*

Savings (it refers to savings of the community or firms as a whole)

Savings = Total income – total consumption

23. An important aspect of economic growth

economic growth is that it is never uniform or same across all sectors in an economy or all states of a country.

For example in Australia, mining sector has done well along with services sector. In comparison to these two sectors, manufacturing sector has not been that good a performer as far as contribution to economic development of Australia is concerned.

24. Economic efficiency and its importance .

- Economically efficient production is organized to minimize the ratio of inputs to outputs.
- A situation where each good is produced at the minimum cost
- The extent to which a given set of resources is being allocated

25. Define PPC CURVE

He was also an economics adviser to the American President, John F. Kennedy for many years.

Every country's aim would be to produce commodities that can be sold in the domestic and in the international markets with a favorable price. In other words, right goods shouldbe produced with right factor inputs at right times

Part B

1. **Discuss the three fundamental economic problems and suggest suitable measures toovercome these problems**

Meaning of economics.

- Economics deals with a wide range of human activities to satisfy human wants.
- It deals with the society problems such as unemployment, poverty, productivity and government policies.
- It studies man in the ordinary business of life and how he earns his income and how he satisfies his wants.
- It is concerned *(involves)* not with individuals actions but with social actions.
- It studies about problems arising out of multiplicity *(large number)*.
- It studies how wealth *(money)* is produced with limited resources in order to satisfy human wants.

Importance of the study of economics.

- The knowledge of economics helps in solving many problems.
- The knowledge of economics is essential to conquer (overcome a problem) poverty of the millions of people and to raise their standard of living.
- It explains the relationship between the producer and consumer, the labour and the management.
- It gives the businessmen and industrialists the knowledge of modern methods.
- By studying economics we can discover new factors that may lead to increase the national wealth. Without the knowledge of economics, this is absolutely impossible.
- The knowledge of economics is very essential for **the finance minister**.

1) How do different forces interact to determine over all micro economic activity? Illustrate. May? Jun 2012

Micro Economics

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- Micro- economics is the study of particular firms, particular households, individual prices, wages, income, individual industries and so on.
- Micro economics as the name implies is concerned with parts of the economy rather than with the economy as a whole.

Importance of micro economics

- It explains how the market economy operates.
- It explains the method or manner in which scarce resources are allocated for different uses.
- It explains how goods and services are produced and distributed to the people.

Areas covered by micro economics are

a) Theory of product pricing

b) Theory of factor pricing *(rent, wages, interest and profits)*

c) Theory of economic welfare *(happiness and safety).*

Limitations of micro economics

- It may not give an idea about the functioning of the whole economy.
- The results of micro economics studies may not be applicable to aggregates (total or whole).
- It fails to give correct guidance to government to formulate economic policies.
- It fails to give practical explanation.
- Certain economic problems cannot be analysed.

2) How do different forces interact to determine over all micro economic activity? Illustrate. May/Jun 2012/ Jan 2010

Macro economics

- The term **'macros'** in Greek means **large**. Macro economics is the study of aggregates (total or whole).
- It studies about aggregate (total) demand, aggregate consumption, aggregate production, aggregate income and aggregate investment, etc.
- It studies all parts or components of the whole economy and it is not concerned with individual aspects of the economy.
- Macro economics examines the **forest** and not the **trees**.

Macro economics deals

b) not with individual quantities but with aggregate of these quantities,

c) not with individual income but with national income,

d) not with individual outputs but with total outputs.

Importance of macro economics

- It is very helpful in studying the vast *(huge)* and complex *(hard to understand)* nature of economic.
- It deals with many economic problems such as unemployment, inflation, depression *(make very unhappy, push down or make less active)* & recession *(a temporary decline or loss in economic activity)*.
- It is used as a tool to analyse the level of employment, level of prices, etc.

- It is useful for the government in formulating suitable economic policies regarding general price level, wages, etc.
- It is only through macro economic approach the problems of economic growth could be solved.
- All nations, particularly developing nations are eager to increase their national income within the concern of macro economics.

Areas covered by macro economics are

a) Theory of income, output and employment.

b) Theory of prices

c) Theory of economic growth

d) Theory of distribution.

Importance of macro economics *in points*

1. Functioning of whole economy
2. Formulation of economic policies
3. Understanding & controlling economic fluctuations
4. Understanding macro economics
5. Inflation & deflation
6. Study of national income
7. Study of economic development
8. Performance of an economy
9. Nature of material welfare *(nature & size of the nations)*

Limitations of macro economics

- Macro analysis cannot be precise because it deals with aggregates (total) which are divergent *(avoiding common assumptions in making deductions)* in nature.
- In aggregative (total) thinking the elements have to be chosen carefully.

(For e.g.) adding all fruits together is a meaningful aggregate. Adding fruits with other machinery is an absurd *(unreasonable)* aggregate. *(i.e.)* apple+ bike

- Macro analysis may reveal *(make known)* that the national income of the country has increased by 50%, but the real fact will be that a good majority of people will be living in poverty.
- Composition of aggregates may be imperfect in macro analysis.

(e.g.) Prices of many commodities would have fallen in the economy, but the prices of very essential *(necessary)* commodities might have risen many times.

- The limitations of macro analysis are in the nature of practical difficulties rather than inherent weakness.

Limitations of macro economics ***in points***

1. Excessive thinking in terms of aggregates
2. Heterogeneous elements
3. Differences within aggregates
4. Aggregates must be functionally related
5. Limited applications

Macro economic policy

Macro economic policy can be defined as "a programme of action undertaken to control, regulate and manipulate **macro economic variables** to achieve the macro economic goals of the society"

- Macro economics is, thus, a policy oriented subject. It deals with a number of policies of macro nature to solve many issues & problems.
- A macroeconomic policy is, in fact an instrument of policing the economy to achieve certain economic goal.
- Macroeconomic policies have macroeconomic goals to fulfill.

The macro economic goals include

2. Price stability
3. Economic stability
4. Exchange rate stability
5. Maintenance of full employment

6. Economic growth

7. Economic justice *(law)*
8. Improvement of standard of living
9. Eradication of poverty
10. Equilibrium in the balance of payments
11. Equitable distribution of national income *(or)* economic equity

There are number of macro – economic policies

1. Monetary policy
2. Fiscal policy
3. Income policy
4. Trade police
5. Industrial policy
6. Import- Export policy
7. Banking policy
8. Planning policy.

Objective of macro economic policy in India

1. Achieving a growth rate of 5- 6 % per annum.
2. Creating job opportunities for unemployed & underemployed *(not having sufficient demanding paid work)*
3. Removing economic disparity *(differences)*
4. Eradication of poverty
5. Controlling inflation & price stabilization
6. Preventing balance of payments imbalances.

Macro economic theories

Macro – economic theories provide explanation to inter – relationship among different macro – economic variables & issues relating to the problems.

There are number of macro – economic theories

1. Theory of income & employment
2. Theory of general price level
3. Theory of distribution
4. Theory of consumption function
5. Theory of investment
6. Theories of trade cycles
7. Theories of economic growth
8. Theories of inflation
9. Theories of monetary policy
10. Theories of fiscal policy

<u>Macro economic variables</u>

Variables- *(often changing)*

a) **National product** *(it consists of all goods and services produced by the community (a group of people living together in a place) or firm and exchanged for money during a year).*

b) **National dividend / income** *(a sum of money paid to a shareholder out of its profit, it consists of all the incomes, in cash and kind)*

c) **National expenditure** *(the total spending or outlay of the firm or community (a group of people living together in a place) on good and services produced during a given year).*

3. Concept of employment

4. Consumption *(it refers to total consumption of the household sector and firms)*

5. Savings (it refers to savings of the community or firms as a whole)

Savings = Total income – total consumption

6. Investment *(total investment of the firms)*

7. Government expenditure *(government sector spends on consumption and investment)*

8. Households *(household sector includes all consuming)*

9. Firms *(firm sector includes all producing)*

3) How can economic growth and stability are balanced. Nov /Dec 2009/ Jan 2012

Economic growth

- A positive change in the level of production of goods and services by a country over a certain period of time. Economic growth is usually brought about by technological innovation and positive external forces.
- **Economic growth** is an increase in activity in an economy. It is often measured as the rate of change of gross domestic product (GDP).
- Economic growth refers only to the quantity of goods and services produced; it says nothing about the way in which they are produced
- Economic development, a related term, refers to change in the way goods and services are produced; positive economic development involves the introduction of more efficient or "productive" technologies or forms of social organisation.
- Economic growth can either be positive or negative. Negative growth can also be referred to by saying that the economy is ***shrinking*** *(reduction)*.
- Negative growth is associated with economic recession and economic depression.
- An important aspect of **economic growth** is that it is never uniform or same across all sectors in an economy or all states of a country.

4) What is productivity efficiency? How productivity efficiency works in PPC curve.

Productive efficiency (also known as "technical efficiency") occurs when the economyis utilizing all of its resources, and operating at its production possibility frontier (PPF).

- This takes place when production of one good is achieved at the lowest cost possible
- Productive efficiency requires that all firms operate using best-practice technological and managerial processes.
- By improving these processes, an economy or business can extend its production possibility

Economic efficiency

- Economically efficient production is organized to minimize the ratio of inputs to outputs.
- A situation where each good is produced at the minimum cost
- The extent to which a given set of resources is being allocated

PPC CURVE

- This concept is founded by a great Professor called ***Paul A. Samuelson,*** who was the first American to receive a Nobel Prize in Economics in 1970.
- He was also an economics adviser to the American President, John F. Kennedy for many years.

Every country's aim would be to produce commodities that can be sold in the domestic and in the international markets with a favorable price. In other words, right goods should be produced with right factor inputs at right times.

Definition

Production Possibility Curve ***(PPC)*** is a curve that shows the possible combinations of any two economic goods an economy can produce by using the available scarce resources.
It is sometimes called Production Possibility Frontier, Production Possibility Boundary and Transformation Curve as the concept illustrates the potential productive capacity of the economy.

Assumptions of the concept – PPC

Economists criticize the concept of PPC on the different grounds since it is based on the certain assumptions like;

1. Human wants are unlimited.

2. The resources are limited but which has alternative uses

3. It takes into consideration the production of **only two** goods. However, in reality the economy will produce many goods. The life on the earth is not possible only with two goods.

4. It also assumes that the economy has utilized scarce resources efficiently and fully. In other words, the economy is in full employment.

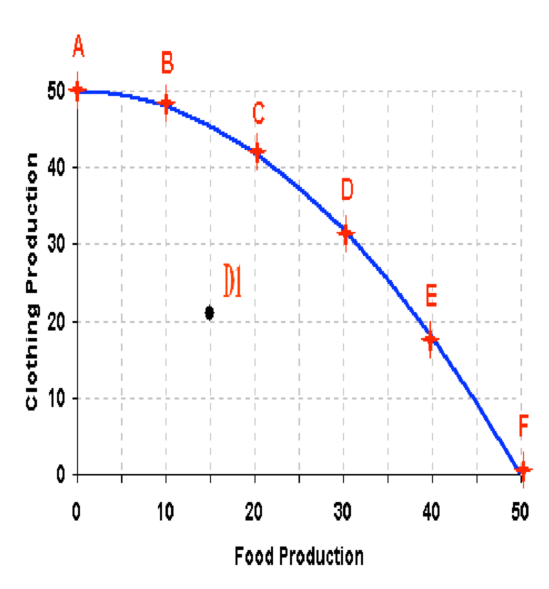
5. PPC is drawn provided that the state of technology is given and it remains constant over the period.

6. Resources available in the economy *(which are called factors of production such as land, labour, capital and organizer)* are fixed and constant. However, resources can be shifted from one commodity to another.

7. The economy is not able to change the quality of the factors of production. They are also given and constant.

8. It is also assumed that the production only related to short-period rather than long

period.



Production Possibility Curve

- ✓ The economy has to decide what to produce with their limited resources.
- ✓ The concept of production possibility curve helps to decide how to allocate resources & choose the possible combination of goods.
- ✓ The production possibility curve gives the possibilities of producing grains or wines with the available resources
- ✓ Point A in the diagram points out that it can produce OA amount of CLOTHS with the available scarce resources.
- ✓ If it wants to produce wine alone OB amount of FOOD can be produced
- ✓ If it wants to produce a combination of CLOTH & FOOD it has to choose a point between A & F for *e.g. D*
- ✓ The line *connecting points A & F is called production possibility curve*
- ✓ A production possibility curve implies that it can produce either OA of cloths or OF of food
- ✓ If it chooses a combination of the two, it has to prefer less than OA of cloths & less than OF of food
- ✓ As the resources are scarce if it wants to have food the nation has to sacrifice certain amount of cloths for the sake of food

- ✓ This sacrifice involved is known as opportunity cost.
- ✓ Any point on the PPC implies full employment, it means maximum use of the available scarce resources
- ✓ If the country choose to produce the combination of the two goods at point D1 the country faces unemployment *(i.e.)* the economy is not producing a full capacity
- ✓ To achieve full employment the economy has to move away from point D to a point on the curve ACF.
- ✓ Countries plan & formulate the policies to produce at any point on the PPC only.

Importance and Application of the Concept

The concept has got the following importance:

1. Since PPC shows the productive capacity of the economy, it gives reliable answers for the fundamental economic problems of what to produce?, How to produce?, and To whom to produce?.

2. Secondly, it illustrates the concept of opportunity cost. Here the country is trying to produce any two goods. So the production of the one commodity can be increased by reducing the production of other good. This is due to the fact that economic resources are scarce. Also opportunity cost ratios can be calculated.

3. Thirdly, it leads to the efficient allocation of scarce economic resources.

4. The growth of the economy can be judged from the shifts in the PPC. Economics growth in both quantitative and qualitative terms can be known from PPC.

5. It is very useful in order to achieve the social welfare of the community.

6. Last but not least, PPC can be used by the producers to make their decisions regarding the use of factors of production and it assist in the determination of the costs of the production.

PPC, therefore, shows unemployment of resources, Technological Progress, economic growth and economic efficiency.

According to Professor Dorfman, PPC explains three efficiencies. They are:

1. Efficient selection of goods to be produced,

2. Efficient allocation of resources in the production of these goods with efficient choice of method of production, and

3. Efficient allotment of the goods produced among consumers.

Usually this concept is applied for individual countries. Also this concept can be applied to the individual companies, farms etc to find out the production possibilities.

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UNIT 2

1) Define the term market.

- The word market is not easy to define because it is used in many sense.
- A market need not be situated in a particular place or locality
- Buyers & sellers need not come into personal contact. The transactions can even be carried through telephones, agents etc.
- A market may refer to a commodity or services like fish market, vegetables market, money market, or share market.

2.) What is monopoly?

- **Monopoly-** It is a market where the entire supply is controlled by one supplier in the particular market area.
- In such a situation the monopolist will have power to fix the price as large.

3.) What is demand?

"The various quantities of a given commodity or services which consumers would buy in one market in a given period of time at various prices or at various incomes or at various prices of related goods"

"A desire for a commodity backed by willingness & ability to pay a price"

The amount of a particular economic good or service that a consumer or group of consumers will want to purchase at a given price. The demand curve is usually downward sloping, since consumers will want to buy more as price decreases.

4) State law of demand?

- The law of demand indicates the relationship between the price of a commodity & the quantity demanded in the market
- Consumers & merchants know that if you lower the price of a goods or services without altering its quantity or quality people will beat a path to your doorway. This is referred to as law of demand.

5.) What is elasticity of demand?

Elasticity means the capacity of demand to shrink or stretch in response to change in price

1. The elasticity of demand in a market is great or small according to the amount demanded

increase much or little for a given rise in price

2. The elasticity of demand is a measure of the relative change in the amount purchased in response to a relative change in price on a given demanded curve

6.) What is supply?

- Supply means the commodity offered for sale.
- Supply always relates to price
- **The quantity supplied of a commodity increases when the price increases & the quantity supplied of a commodity decreases when the price decreases**

7.) State law of supply?

1. The law of supply states that there is a direct relationship between price & quantity supplied. When the price rises the quantity supplied increases, & when the price falls the quantity supplied also falls.
2. In other words the law of supply states that the producers are willing to produce & offer for sale more of their product at a higher price than at a lower price.

8.) What is elasticity of supply?

Elasticity of supply is measured as the ratio of proportionate change in the quantity supplied to the proportionate change in price. High elasticity indicates the supply is sensitive to changes in prices, low elasticity indicates little sensitivity to price changes, and no elasticity means no relationship with price. Also called price elasticity of supply.

9) **What is marginal utility?**

The addition made to the total utility by the addition of consumption of one more unit ofa commodity.

10) **What is consumer equilibrium**?

Point of maximum consumer satisfaction: the point at which a consumer is deriving maximum satisfaction from his or her purchases

- When consumers make choices about the quantity of goods and services to consume, it is presumed that their objective is to **maximize total utility. (Satisfying power of a commodity or a services which determines the demand for commodity is called utility)**

11) **What is consumer surplus?**

- The concept of consumer surplus was introduced by **Proff. Alferd Marshall**
- What a consumer is willing to pay for one unit of commodity & what he actually pays, measures the monetary cost the expected utility
- **If a person is willing to pay Rs 50 . For a toy but he buys for Rs 30. It is said Rs 20 is consumer surplus.**
- He gets higher satisfaction than the price he actually pays for him
- **Consumer surplus = Potential price – Actual price**

- The difference between the potential price & actual price is consumer surplus
- The sum total of surplus in enjoyed by the consumer.

12) **What is fixed cost?**

- Fixed cost are those which are fixed in production
- These cost do not vary with every change in output
- Fixed cost includes depreciation of machinery, building, maintenance of land

13) **What is sunk cost?**

- Cost which remain **unaltered** even after a change in the level or nature of business activity
- These are known as specific cost
- The best example for sunk cost is depreciation

14. What are Importance of the study of economics.

- The knowledge of economics helps in solving many problems.
- The knowledge of economics is essential to conquer (overcome a problem) poverty of the millions of people and to raise their standard of living.
- It explains the relationship between the producer and consumer, the labour and the management.

15. Define Micro Economics

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- Micro economics refers to the study of small units. In other words, micro economics studies the individual parts or components of the whole economy.
- Micro- economics is the study of particular firms, particular households, individual prices, wages, income, individual industries and so on.

16. Define *Shut down cost*

- Shut down cost is one which would be incurred in the event of suspension ***(delay)***of the plant operation & which would be saved if the operations are continued
- ***(For e.g.)*** Cost of constructing sheds for sheltering plants & equipments & for storing exposed property. Further additional expenses may be incurred when business operations

are started in re employment of workers & giving them training

17 what is perfect completion?

In perfectly competitive market there is no competition among the suppliers. In other wordsin this type of market there is absence of direct competition among agents. *(e.g.)* two wheelers market in India is highly competitive *but the competition is completely different from quality, strength, price & stuff.*

18 what is Monopolistic competition?

Monopolistic competition- There will be a large number of firms producing the commodity. Many will be competing the market. *Prices will differ slightly. (e.g.)soaps. Buyers are attached to their favorite brands.*

19. Demand can be defined.

"The various quantities of a given commodity or services which consumers would buy in one market in a given period of time at various prices or at various incomes or at various prices of related goods"

"A desire for a commodity backed by willingness & ability to pay a price"

20. Define law of demand.

The law of demand indicates the relationship between the price of a commodity & the quantity demanded in the market

Consumers & merchants know that if you *lower the price of a goods or services without altering its quantity or quality* people will beat a path to your doorway. This is referred to as law of demand.

21. Why demand curve shift upwards?

- ✓ *Income* - an increase in income shifts the demand curve of normal goods to the right.
- ✓ *Number of potential buyers* - an increase in population or market size shifts the demand curve to the right.
- ✓ *Expectations of a price change* - a news report predicting higher prices in the future can increase the current demand as customers increase the quantity they purchase in anticipation of the price change.

22.What the determinants of demand ?

factors that determine demand

The quantity of demand for any commodity is determined by several factors

$$D = f(t,y,Ps,N,Fp,Dy,C,B)$$

D- Quantity of demand

T- Taste & preference of consumers

Y- Income of consumers

Ps- Price of substitute *(alternate or other related goods)*

N- Number of customers
Fp- Future price rise expectation
Dy-Distribution of income
C- Climate & weather
B- State of business

23, define law of supply.

1. The law of supply states that there is a direct relationship between price & quantity supplied. *When the price rises the quantity supplied increases, & when the price falls the quantity supplied also falls.*
2. In other words *the law of supply states that the producers are willing to produce & offer for sale more of their product at a higher price than at a lower price.*

*24.***Define Elasticity of supply**

- The concept of elasticity of supply tells the responsiveness of supply to change in price
- Supply is elastic when the given percentage change in price brings about an *even greater percentage change in quantity supplied*

25. Define Law of constant returns

a. The law of constant returns represents the shift from the increasing to decreasing returns

b. The law of constant returns is said to operate when the total output increases exactly inproportion to increase in the factors of production

c. If the actions of the law of increasing & diminishing returns are balanced, we have thelaw of constant returns

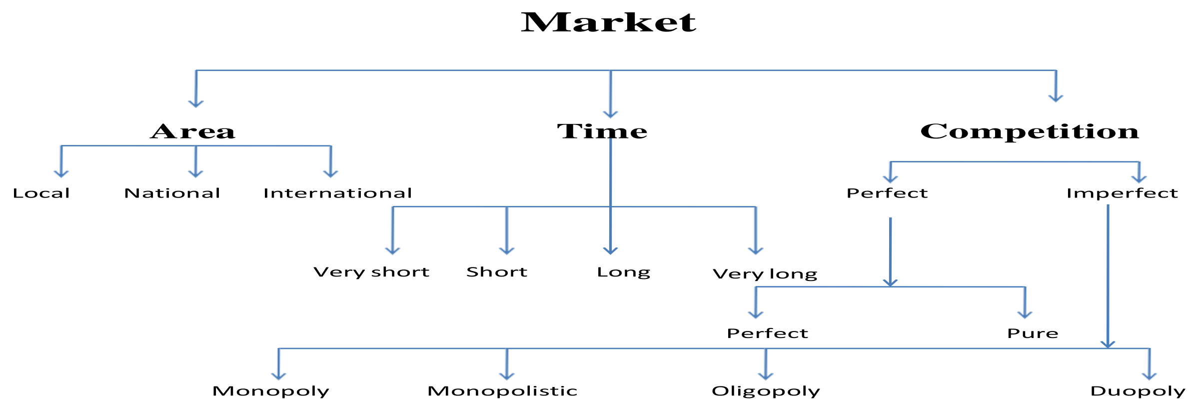
Part B

1.Elucidate the different types of market structure.

- A market need not be situated in a particular place or locality
- Buyers & sellers need not come into personal contact. The transactions can even be carried through telephones, agents etc.
- A market may refer to a commodity or services like fish market, vegetables market, money market, or share market.

In the language of economics the term market should imply certain things

1. There should be *buyers or sellers (producers)* of the commodity.
2. *Contact* between the buyers & sellers is essential for the market
3. The buyers & sellers deal with the same commodity or variety since the market in economics is identified on the basis of the commodity
4. There should be a price for the commodity bought or sold in the market



<u>AREA</u>

1. *<u>Local</u>* - A local market for a product exists when buyers & sellers of commodity carry on business in particular locality or village or area where the demand & supply conditions are influenced by local conditions only

(e.g.) Perishable goods like butter, milk, gee, eggs, vegetables etc,

2. <u>National-</u> Commodities that are demanded & supplied over the region or country are known as national markets.

(e.g.) Markets for wheat, rice or cotton exists throughout the country & they have national markets

***3.* <u>International</u>** – *When demand & supply conditions are influenced at global level we have international markets*

(e.g.) gold, silver etc

<u>TIME</u>

1. **<u>Very short period –</u>** Refers to which commodities are perishable & the supply of commodities are fixed *(e.g.) Vegetables, fish, fruits,* where the supply cannot be changed within a short period of time, the rates differ in timings

2. **Short period –** In a short period market the commodity is not perishable & reproduce able. *(e.g.) cloth, crackers (season sales)*

3. **Long period-** The supply of commodity can be increased or decreased. The price of product may vary from time to time, day to day, *(e.g.) cloth, pulses, grains, cars etc.*

4. **Very long period (or) secular period**- Factors of production like land, labor, capital & organization technique. The prices are fixed in secular period.

Competition

a) **Perfect –** This type of market situation arises when there are large number of buyers & sellers in the market dealing in *homogeneous product.*

In perfectly competitive market there is no competition among the suppliers. In other words in this type of market there is absence of direct competition among agents. *(e.g.)* two wheelers market in India is highly competitive *but the competition is completely different from quality, strength, price & stuff.*

a) **Pure-** It is a part of perfect competition. Pure competition is pure in sense that there is *no element of monopoly*

b) IMPERFECT

1. **Monopoly-** It is a market where the entire supply is controlled by *one supplier* in the particular market area.

   In such a situation the monopolist will *have power to fix the price as large.*

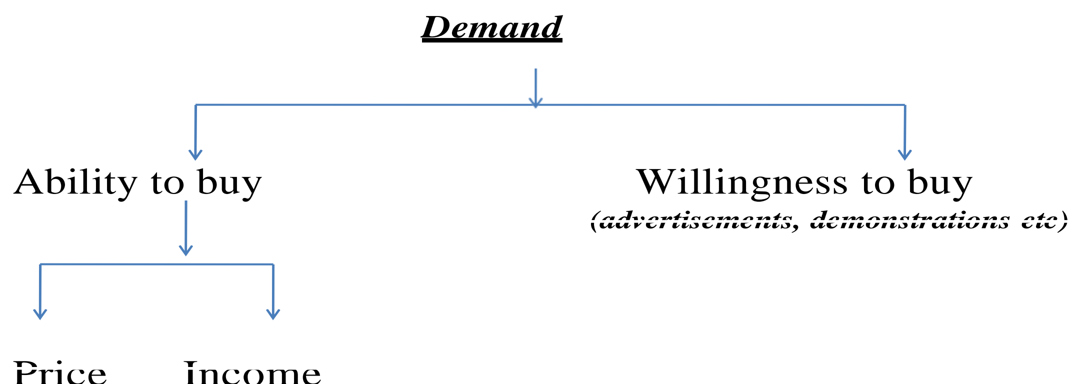
2. **Monopolistic competition-** There will be a large number of firms producing the commodity. Many will be competing the market. *Prices will differ slightly. (e.g.)soaps. Buyers are attached to their favorite brands.*

3. **Oligopoly –** There are few sellers the product may be homogeneous or heterogeneous in the *case of petrol, fertilizers or drugs. Prices may be through agreement*

4. **Duopoly-** There are only two sellers who control the entire supply. The output & price policy of one is dependent on the other.

2.Discuss law of demand. Explain the determinants of demand.

- Demand means a desire or wish to buy & consume a commodity or services.



Demand can be defined as

1. "The various quantities of a given commodity or services which consumers would buy in one market in a given period of time at various prices or at various incomes or at various prices of related goods"
2. "A desire for a commodity backed by willingness & ability to pay a price"
3. The amount of a particular economic good or service that a consumer or group of consumers will want to purchase at a given price. The demand curve is usually downward sloping, since consumers will want to buy more as price decreases.

Economists distinguish between the terms demand & quantity of demand

Quantity of demand

•The amount of product that people are willing & able to purchase at a specific price.

•The amount that people would be willing & able to purchase at every possible price.

Law of demand

- The law of demand indicates the relationship between the price of a commodity & the quantity demanded in the market
- Consumers & merchants know that if you *lower the price of a goods or services without altering its quantity or quality* people will beat a path to your doorway. This is referred to as law of demand.

According to law of demand

- People purchase more of something when the price of that item fall
- The law of demand states that the quantity of some item that people are willing & able to purchase during a particular period of time decreases as the price rises.

Assumptions of law of demand

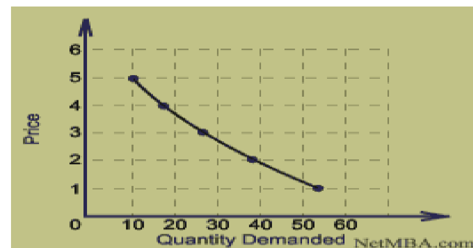
The law of demand is based on following assumptions

- The consumer tastes & preference do not change with changes in fashions & seasons
- The income of consumers remain same
- The prices of substitutes & other related goods remain same
- Perfect competition exists *(There are large number of sellers where the buyer should be aware of the various prices offered & their perfect conditions so that they have no reasons to prefer one seller to another)*
- Absence of close substitutes
- The existence of continuous demand for goods

Demand Schedule

The demand schedule is a statement which explains the relationship between the price of a commodity & the quantity demanded of it.

Price	Quantity Demanded d
5	10
4	17
3	26
2	38
1	53



- In this diagram Quantity demand is measured along the OX & the price is represented along the OY axis.
- By plotting the various combinations the demand curve DD is drawn

- The demand curve indicates that more quantities are demanded or brought at lower prices & lesser quantities are demanded or brought at higher prices.

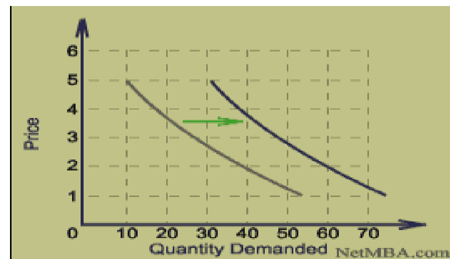
Demand curve

- A demand curve is a graph of demand schedule
- The demand curve *slopes downwards because as prices fall quantity demand increases.*
- The demand curve may be of any type. It may be straight line or concave curve, or

convex curve. Most of the curves are wavy line rather than straight line.

Shifts in the Demand Curve

- When there is a change in an influencing factor ***other than price,*** there may be a shift in the demand curve to the left or to the right, as the quantity demanded increases or decreases at a given price. ***For example,*** if there is a positive news report about the product, the quantity demanded at each price may increase, as demonstrated by the demand curve shifting to the right



Shifts in the Demand Curve

- A number of factors may influence the demand for a product, and changes in one or more of those factors may cause a shift in the demand curve.

Some of these demand-shifting factors are:

- ✓ *Customer preference*
- ✓ *Prices of related goods*
  - *Complements* - an increase in the price of a complement reduces demand, shifting the demand curve to the left.
  - *Substitutes* - an increase in the price of a substitute product increases demand, shifting the demand curve to the right.
- ✓ *Income* - an increase in income shifts the demand curve of normal goods to the right.
- ✓ *Number of potential buyers* - an increase in population or market size shifts the demand curve to the right.
- ✓ *Expectations of a price change* - a news report predicting higher prices in the future can increase the current demand as customers increase the quantity they purchase in anticipation of the price change.

3.Why does demand curve slopes downwards?

1.Income effect (When the price of a commodity falls, the consumer can buy more quantity of the commodity with his given income, as a result of a fall in the price of the commodity, consumer's

real income or purchasing power increases. This increase induces the consumer to buy more of that commodity. This is called income effect.)

2. Taste

3. Price related to goods & services

4. Substitutes effect (When the price of a commodity falls, it becomes relatively cheaper than other substitute commodities. This induces the consumer to substitute the commodity whose price has fallen for other commodities, which have now become relatively expensive. As a result of this substitution effect, the quantity demanded of the commodity, whose price has fallen, rises.)

5. Expectations

6. Entry of new consumers or number of buyers

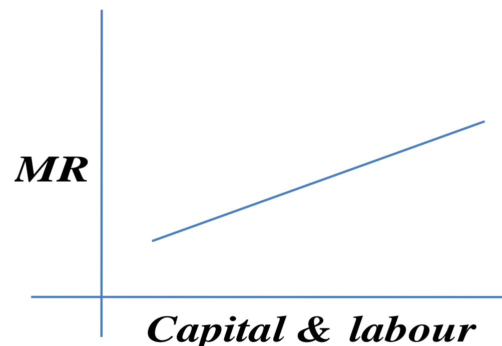
7. Law of diminishing marginal utility

- **When the consumer buys more & more quantities of commodity the *law of Diminishing Marginal Utility operates.***
- ***MU = P (Marginal utility is equal to price)***
- A fall in price leads to a fall in marginal utility also.
- **Every customer spends his limited income in such a way as to get the same marginal utility from all the commodities.**
- Hence a consumer is encourage to buy additional or more units of a commodity inorder to maximize his satisfaction or utility

24. Law of increasing returns

- The law of increasing returns is closely related to the law of diminishing returns
- This law operates because the efforts are made by the producer to increase outputs
- An increase of labour & capital leads to improve organisation.

Labour & capital	MR (Meters)	TP (Meters)
First	1000	1000
Second	1500	2500
Third	2000	4500
Fourth	2500	7000
Fifth	3000	10000



Law of constant returns

a. The law of constant returns represents the shift from the increasing to decreasing returns

b. The law of constant returns is said to operate when the total output increases exactly inproportion to increase in the factors of production

c. If the actions of the law of increasing & diminishing returns are balanced, we have thelaw of constant returns

d. The law of constant returns operate both in agriculture & industry, if the factor prices areconstant

Labour & capital	MR (units)	TP (units)
First	50	50
Second	100	50
Third	150	50
Fourth	200	50
Fifth	250	50

Law of returns to scale

- The law of returns to scale describes the *relationships between inputs & output* in the long run when all the inputs are increased
- Returns to scale studies the behavior of output when all factors are increased in the same percentage
- When the scale is increased the firm may experience either increasing returns, constant returns & decreasing returns.

Three phases to scale

- Increasing returns
- **Constant returns**
- Decreasing returns.
- **Increasing returns to scale**
- Decreasing returns to scale

If increase in all factors leads to less than proportionate increase in output, *returns to scale are said to be decreasing*

4.What is elasticity of demand? Explain its types

***Elasticity means* the capacity of demand to shrink or stretch in response to change in** price

Meaning

- The law of demand generally states that *demand expands for a fall or raise in price*
- How much is the change in demand for a given fall or raise in price
- In other words elasticity of demand refers to the effect upon the quantity demand for a given change in price
- The relationship between small change in price & consequent changes in the amount demanded is known as elasticity of demand. *This tells the rate of change*.
- The elasticity of demand shows the extent of response in demand to the change in price.

Definition

1. The elasticity of demand in a market is great or small according to the amount demanded increase much or little for a given rise in price
2. The elasticity of demand is a measure of the relative change in the amount purchased in response to a relative change in price on a given demanded curve

Elasticity of demand can be classified into different kinds they are

1. ***Price elasticity of demand***
2. ***Cross elasticity of demand***
3. ***Income elasticity of demand***

1. Price elasticity of demand

- Price elasticity of demand is the percentage change in quantity demanded of a commodity divided by the percentage change in price of that commodity.
- *This can be expressed through formula*

$$\textbf{Price } E_D = \frac{\text{Percentage changes in quantity demanded of commodity X}}{\text{Percentage change in price of commodity X}}$$

Percentage change in quantity demanded of commodity X =

$$\frac{\text{Change in quantity demanded of a commodity}}{\text{Original demand}}$$

Percentage change in price of a commodity =

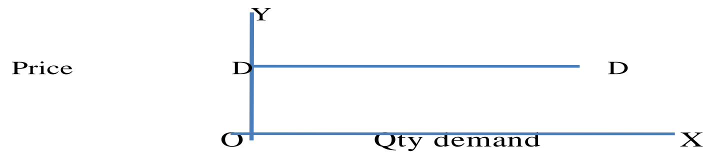
$$\frac{\text{Change in the price of commodity}}{\text{Original price}}$$

Price elasticity of demand is of **five** types

1. ***Perfectly elastic demand***
2. ***Perfectly inelastic demand***
3. ***Unit elasticity of demand***
4. ***Elastic demand***
5. ***Inelastic demand***

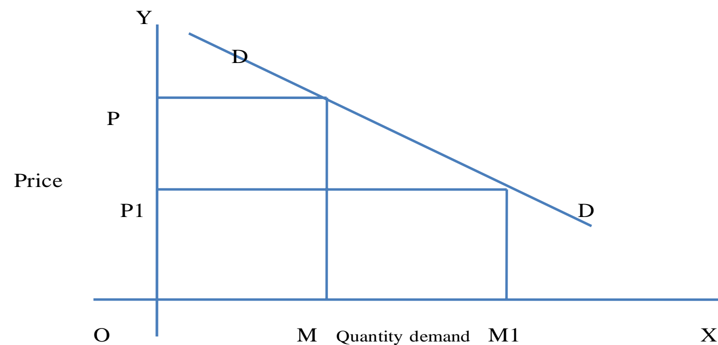
1. Perfectly elastic demand

It refers to change in demand for a small change in price



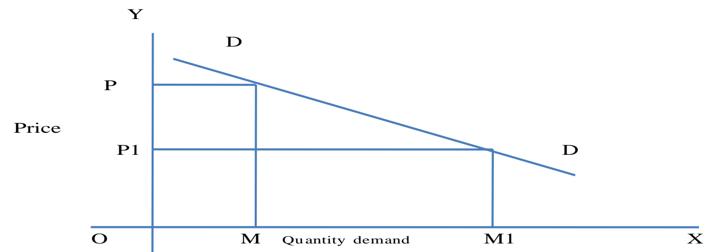
3. Unit elasticity of demand

It refers to an equal change in demand for a change in price



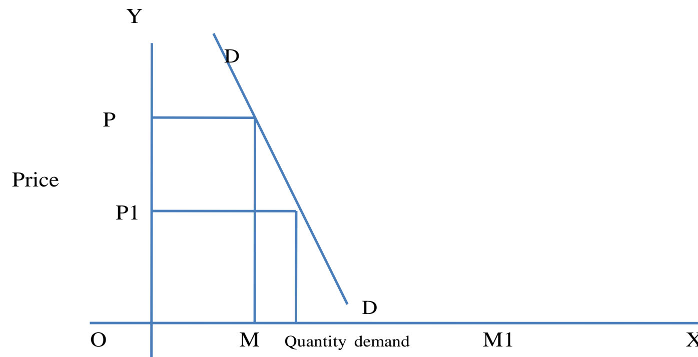
4. Elastic demand

It refers to a higher change in the quantity demanded for a small change ***(i.e.) rise or fall in price***



. Inelastic demand or Elasticity less than demand

It refers to a small change in the quantity demanded for a big change ***(i.e.) rise or fall in price***



Cross elasticity of demand

- The cross elasticity of demand is the percentage change in the quantity demanded of commodity x divided by the percentage change in the price of some related commodity Y
- **The two commodity X & Y may be substitutes or** *compliments*
- **This can be expressed through formula**

Cross elasticity of demand =

$$\frac{\text{Percentage change in quantity demanded of commodity X}}{\text{Percentage change in quantity demanded of commodity Y}}$$

2. Income elasticity of demand

- The income elasticity of demand is the percentage change in quantity demanded of a commodity divided by the percentage change in income of the consumer

- *This can be expressed through the formula*

Income elasticity of demand =

$$\frac{\text{Percentage change in quantity demanded of commodity}}{\text{Percentage change in income of the consumer}}$$

factors determining elasticity of demand

1. Availability of substitutes
2. Extent of uses of commodity
3. Nature of the commodity
4. Habits & customs
5. Level of prices
6. Percentage of income spent on the product
7. Time factor
8. Postponement of commodity *(if the umbrella is torn we get it repaired & postponed the purchase of a new umbrella)*

5.Discuss law of supply. Explain the determinants of supply.

- Supply means the commodity offered for sale.
- Supply always relates to price
- ***The quantity supplied of a commodity increases when the price increases & the quantity supplied of a commodity decreases when the price decreases***

Law of supply

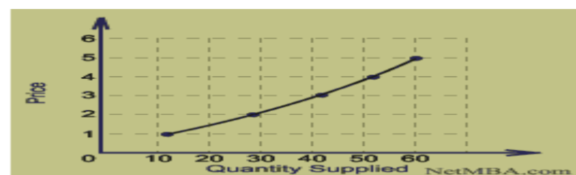
The law of supply states that there is a direct relationship between price & quantity supplied. *When the price rises the quantity supplied increases, & when the price falls thequantity supplied also falls.*

In other words *the law of supply states that the producers are willing to produce & offer forsale more of their product at a higher price than at a lower price.*

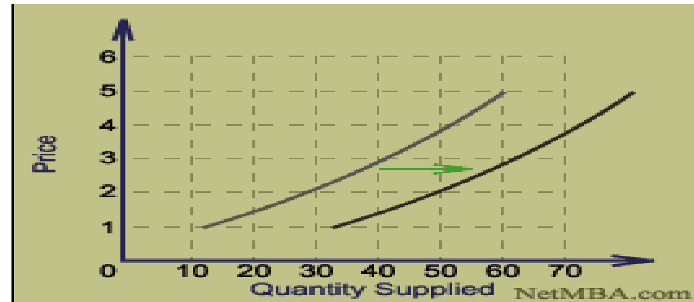
Supply schedule

a. Price usually is a major determinant in the quantity supplied.
b. For a particular good with all other factors held constant, a table can be constructed of price and quantity supplied based on observed data. Such a table is called a supply schedule, as shown in the following example:

Price	Quantity supplied
1	12
2	28
3	42
4	52
5	60



- As with the demand curve, the convention of the supply curve is to display quantity supplied on thex-axis, and price on the y-axis.The supply curve SS slopes upwards from left to right, the supply curve maps the relationship between price &quantity supplied.
- The upward movement of supply curve show not only the sellers desire to make profit, but also the rise in the cost of production.



c. ***There are several factors that may cause a shift in a good's supply curve. Some supply-shifting factors include:***
d. ***Prices of other goods - the supply of one good may decrease if the price of another good increases, causing producers to reallocate resources to produce larger quantities of the more profitable good.***
e. ***Number of sellers - more sellers result in more supply, shifting the supply curve to the right.***
f. ***Prices of relevant inputs - if the cost of resources used to produce a good increases, sellers will be less inclined to supply the same quantity at a given price, and the supply curve will shift to the left.***
g. ***Technology - technological advances that increase production efficiency shift the supply curve to the right.***
h. ***Expectations - if sellers expect prices to increase, they may decrease the quantity currently supplied at a given price in order to be able to supply more when the price increases, resulting in a supply curve shift to the left.***

Factors that determine supply

i. Production technology
j. Prices of factors of production
k. Prices of other products
l. Number of producers
m. Future price expectations

n. Taxes
o. Substitutes
p. Factors outside the economic
q. Change in government policy

25. Law of increasing returns

- The law of increasing returns is closely related to the law of diminishing returns
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- An increase of labour & capital leads to improve organisation.

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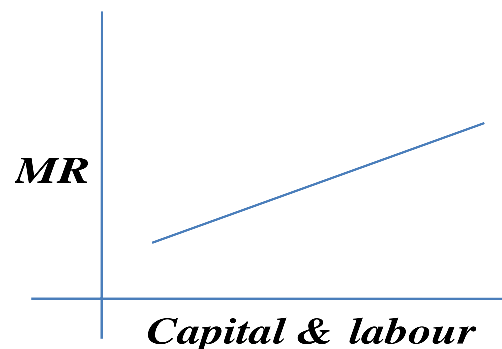

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MR

Capital & labour

UNIT - 3

1.) Define labour ***Jan 2011***

- Labor signifies the contribution of human elements in production.
- Labour refers to any exertion physical or mental undertaken in expectation of a reward, the reward usually begins the payment of money *(the payment of wages)*

2.) What is division of labour? ***May/ June 2012***

Division of labour refers to dividing & sub dividing labour into a number of groups each performing only one complete process of production, if the making of an article is split up intoseveral processes & each process is entrusted to a separate set of workers is called division of labour

3.) What is business cycle? ***Jan 2010***

- Business cycle or trade is a part of the capitalist system. ***It refers to boom & depression.***
- In business cycle there are wave like fluctuations in aggregate income, employment, output & price level.
- Fluctuations in economic activity have been occurring periodically in a more or less regular fashion. ***These fluctuations have been called business cycle.*** It may be noted that ***calling there fluctuations as cycle*** means they are periodic & occur regularly.
- The duration of a business cycle has not been of the same length, it has varied from a minimum of two years to a maximum of 10 to 12 years.
- Some business cycle have been very short lasting for only 2 to 3 years, while others have lasted for several years.

4.) What is capital? ***May/ June 2012***

- Capital refers to produced means of production
- Capital includes all finished goods which are useful for the production of consumer goods
- The reward paid to capital as a factor of production is called interest

5.) What are the four phases of business cycles? ***Nov/Dec 2009***

The following phases of business cycle have been distinguished

1. Expansion ***(Boom, upswing or prosperity)***
2. Peak ***(upper turning point)***
3. Contraction (***downswing, recession or depression)***
4. Trough ***(lower turning point)***

5. **Define Law of returns to scale**

- The law of returns to scale describes the *relationships between inputs & output* in the long run when all the inputs are increased
- Returns to scale studies the behavior of output when all factors are increased in the same percentage
- When the scale is increased the firm may experience either increasing returns, constant returns & decreasing returns.

6, What are the three phases to scale

- Increasing returns
- **Constant returns**
- Decreasing returns.
- **Increasing returns to scale**

7.When the increased in inputs leads to a more than proportionate increase in output?
The returns toscale are said to be increasing.

- Constant returns to scale

When the firm increases in all factors, inputs is equal to increase in output in same proportion, *returns to scale are said to be constant.*

8. when does decreasing returns to scale occur?

If increase in all factors leads to less than proportionate increase in output, *returns to scale are said to be decreasing*

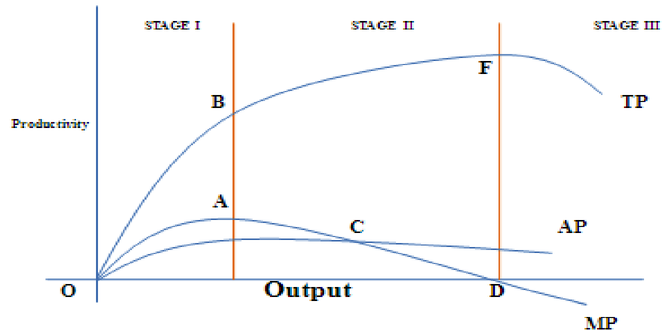
Assumptions of returns to scale

- Existence of perfect competition
- Output is measured in terms of physical quantities
- Fixed state of technology

- All factor inputs except organization are variable

9. What are the stages of life cycle?

No of workers	TP	MP	AP	STAGE
1	20	20	20	
2	50	30	25	
3	90	40	30	
4	140	50	35	
5	185	45	37	I
6	220	35	37	I
7	245	25	35	II
8	245	0	30	II
9	235	-10	26	III



- Workers work with given tools & implements

10. explains the following stages of life cycle?

Stage I

- Capital remain fixed the increase in total productivity can be traced to increase in the MP of labour
- TP is increasing at an increasing rate so long as the MP is increasing

STAGE II

- In the next stage MP falls down implying the total productivity increases but at a decreasing rate
- In the second stage both average product & marginal product are declining but both are positive

STAGE III

- In the third stage MP is negative, the TP declines
- The decline in MP can be traced to limited availability of fixed factor

Thus the TP, MP & AP pass through three phases, increasing, diminishing & constant returns

11.Explain the economics of scale.

Economies of scale (Large scale production)

- Large scale production enjoys both internal & external economies
- Internal economies are those economies which appear from within the firm

12.External economies are those economies which arises from outside the firm.

External economies may be classified into five kinds they are

1. Economies of concentration
2. **Economies of information**
3. Economies of disintegration

13.What is Miscellaneous economies

If a firm continuous to grow & expand beyond a certain limit, the economies of scaledisappear & will give rise to diseconomies.

The diseconomies are nothing but the disadvantages or loss of advantage which the firm had been hitherto *(up till now) enjoying.*

14.How Diseconomies can be classified

Internal diseconomies

11. Refers to the increased problems & complexities of large scale management
12. When the size of the firm increases the administrative difficulties of coordinating all activities delay decision making arises

External diseconomies

13. Too much of concentration & localization of industries beyond a certain limit may create diseconomies in production which will be common to all firms in locality
14. Delay in transportation raw materials & finished goods there may be rise in the price ofraw materials due to their increased demand
15. There may be high cost of labour as their demand may increase there may be difficultiesin banking & financing

15.Explain the short and long run cost functions.

- The supply of commodity in a market depends on various factors like the number of firms in the industry, state of technology, price, non pricing factors like floods, wars.
- The relationship between cost & output is called cost function
- It is assumed that the firm chooses a combination of factors which minimizes its cost of production for a given level of output

16What is Cost of production

- The term cost of production means the expenses incurred in the production of commodity
- This refers to the total amount of money spent on the production of the commodity

17 What are the various cost?

- Money cost
- Real cost
- Opportunity cost *or* alternative cost
- Implicit cost *or* book cost
- Explicit cost *or* cash cost *or* out of pocket cost
- Private cost
- Social cost

18 . What do mean by Money cost

- When an entrepreneur undertakes production he has to take money expenditure on various items
- Payment of wages & salaries, cost of raw materials, interest on capital, other expenses

19. What do you understand by Real cost

- The real cost is expressed in terms of efforts & pains
- The production of a commodity requires different kinds of labour & capital
- The real cost represents pain involved in producing a commodity besides the mioney incurred

20. Define Opportunity cost or Alternative cost

- It arises because of scarcity & alternative use of sources
- The opportunity cost is the income which the people have to make choices between the alternatives
- ***(For e.g.)*** Suppose a boy has got Rs 10 With this he can get 5 cups of ice creams. Each ice creams costs Rs 2 with that Rs 10 he can get 10 chocolates each cost Re 1 The boy realizes that he can either have 5 ice creams or 10 chocolates. If he wants both he has to give up the consumption of one for the other. By scarifying 1 ice creams he can have 2

chocolates.

21. Implicit cost Define

- Implicit cost differ from other cost
- This is also called imputed cost
- Implicit cost may be defines as the earnings of owners resources employed in their best alternative uses.
- ***(for e.g.)*** An entrepreneur does not utilizes services in his own business & works as a manager in some firm on salary basis. If he starts own business, he foregoes his salary as manger. The loss of salary is an implicit cost of own business

22. Define Social cost

- Social cost implies the cost which a society bears on account of production of a commodity
- ***(for e.g.)*** Mills & factories located in a city causes ai pollution by emitting smoke, leather factories cause water pollution, cars & buses cause both air & noise pollution
- The money spent towards medical expenses connected with treatment or disease arising out of the pollution is social cost

23. what do you understand by Incremental cost

- Incremental cost refers to the ***additional cost*** incurred due to change in the level or nature of activity
- Incremental cost are also known as differential costs Incremental cost measures the difference between old & new cost

a

24. What is Shut down cost

- Shut down cost is one which would be incurred in the event of suspension ***(delay)*** of the plant operation & which would be saved if the operations are continued
- ***(For e.g.)*** Cost of constructing sheds for sheltering plants & equipments & for storing exposed property. Further additional expenses may be incurred when business operations are started in re employment of workers & giving them training

25 What is marginal cost ?

Marginal cost

- Marginal cost is the change in the total cost resulting from the change in the total output
- It means that addition made to the total cost caused by

producing one more unit of output

$$MC = \frac{\Delta TC}{q} \qquad \frac{\text{change in total cost}}{\text{change in the quantity}}$$

$$\Delta TC = \Delta TFC + \Delta TVC$$

$$MC = \frac{\Delta TVC}{q}$$

Part B

1.“Demand for labor reflects marginal productivity”-

Labour

- Labor signifies the contribution of human elements in production.
- Labour refers to any exertion physical or mental undertaken in expectation of a reward, the reward usually begins the payment of money *(the payment of wages)*

Characteristics of labour

- Labour is inseparable from labourer *(skill is used but not himself)*
- Labour has poor bargaining power
- Labour is perishable
- Labour is less mobile *(sentimental attachments)*

Division of labour

Division of labour refers to dividing & sub dividing labour into a number of groups each performing only one complete process of production, if the making of an article is split up into several processes & each process is entrusted to a separate set of workers is called division of labour

Advantages of division of labour

- Increase in productivity
- Increases in skill
- Inventions are possible
- Saving timings

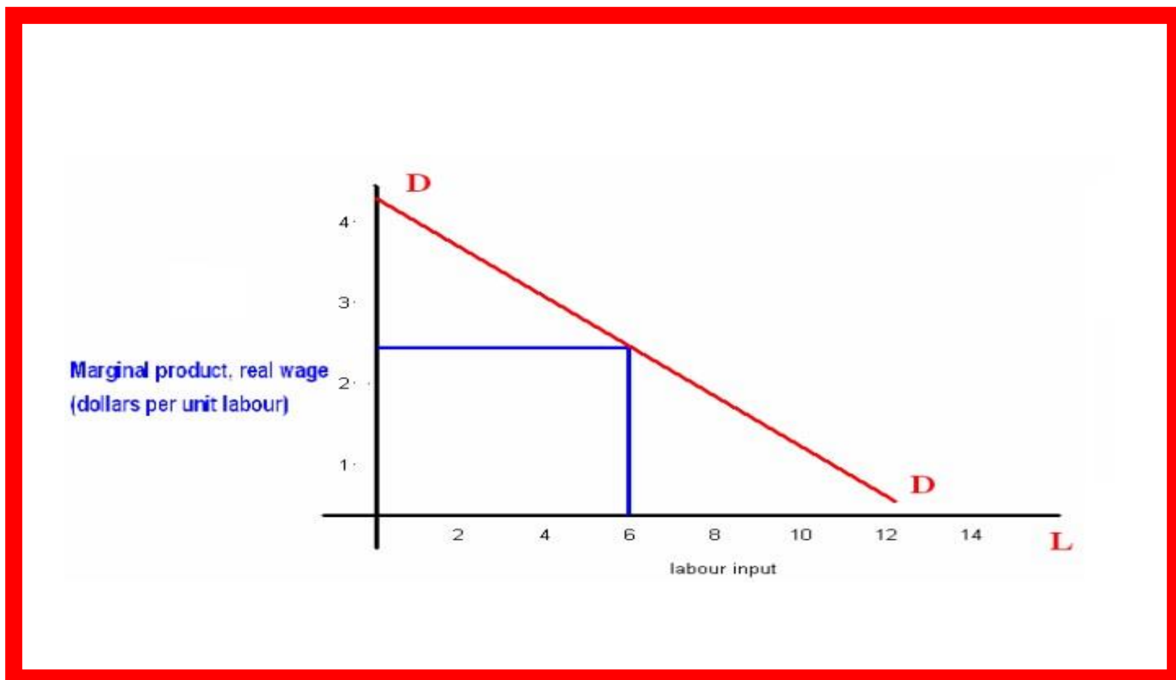
- Improvements in quality of products
- Large scale production
- Reduction in cost of production
- Right man in right place
- Diversification of employment opportunities

Disadvantages of division of labour

- Monotony (same job over & over again)
- No sense of responsibility
- Loss of skill
- Worker is reduced in application of mind
- peacefulness of labour

2. Explain the Demand for labour

- The demand for labour is determined by its output.
- The labour demand curve shifts up & out over time with capital, technological & improvements in labour quality.
- At a given time with a given state of technology there exists relationship between the quantity of labour inputs & the amount of output.
- By law of diminishing returns each additional unit of labour input will add a smaller & smaller slab of output.



Factors determining wages

- Price level

- Regularity of work
- Nature of work
- Trade expenses
- Conditions of work
- Social prestige
- Future prospects

3.Discuss the business cycle in detail

- Business cycle or trade is a part of the capitalist system. ***It refers to boom & depression.***
- In business cycle there are wave like fluctuations in aggregate income, employment, output & price level.
- Fluctuations in economic activity have been occurring periodically in a more or less regular fashion. ***These fluctuations have been called business cycle.*** It may be noted that ***calling there fluctuations as cycle*** means they are periodic & occur regularly.
- The duration of a business cycle has not been of the same length, it has varied from a minimum of two years to a maximum of 10 to 12 years.
- Some business cycle have been very short lasting for only 2 to 3 years, while others have lasted for several years.

Definition

- The business cycle in the general sense may be defined as "alternation of periods of prosperity & depression of good and bad trade".
- "A trade cycle is composed of periods of good trade characterised by rising prices & low unemployment percentages altering with periods of bad trade characterised by falling prices & high unemployment percentages".

Phases of business cycle

- Capitalist countries such as USA & Great Britain have rapid economic growth during the last two years. But economic growth in there countries has not followed steady & smooth upward trend.

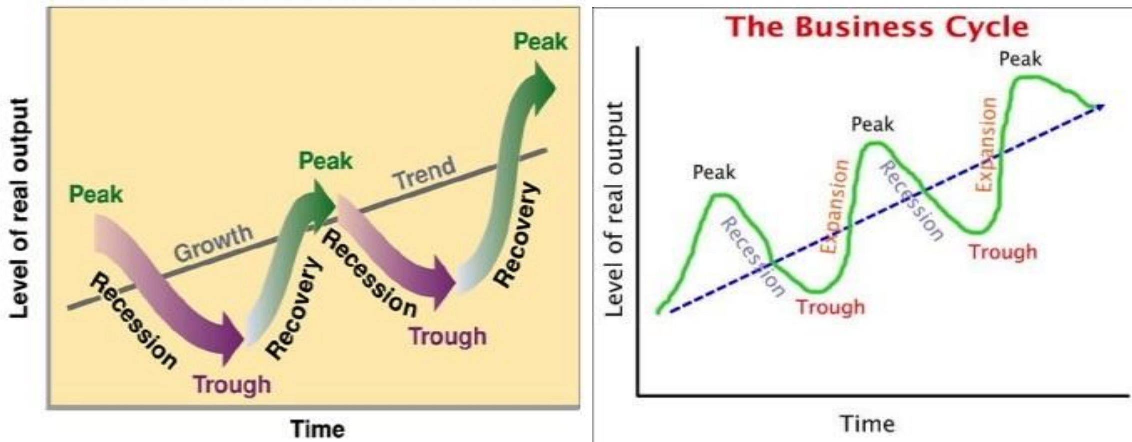
- Periodically there have been large fluctuation in economic activity ***(i.e.)*** change in output, income, employment & prices.
- The period of high income, output & employment has been called the period of expansion, upswing or prosperity & *the period of low income, output and employment has been described as contraction, recession, downswing or depression.*
- The period of expansion alternates ***(occur repeatedly)*** with the period of contraction.
- These alternating period of expansion & contraction in economic activity has been called business cycle. **They are also known as trade cycle.**

The four phases of business cycles have been shown

- We start from depression or through when the level of economic activity ***(i.e.)*** level of production and employment is at the lowest level.
- With the revial of economic activity the economic moves into the expansion phases.
- The expansion cannot continue, where contraction *(or)* downswing starts.
- When the contraction gathers we have depression.
- The downswing continues till the lowest turning point which is also called trough is reached.

The following phases of business cycle have been distinguished

1. Expansion ***(Boom, upswing or prosperity)***
2. Peak ***(upper turning point)***
3. Contraction (***downswing, recession or depression)***
4. Trough ***(lower turning point)***



4. Explain the important features of upswing of business life cycle?

1. **Expansion or boom (1st 2 points are same)**

- In its expansion phase *(the expansion of business activity takes place),* both output & employment increases till we have full employment & production at the highest level.
- The level of production is at maximum level.
- A good amount of net investment is occurring & demands for durable goods are also high.
- Prices also generally rise during the expansion phase but to high level of economic activity people enjoy a high standard of living.

Money wage raise, rising prices, high level of employment, Job opportunities, expansion of credit and borrowing, rise in profits and income. **(e.g.) IT Industries**

3. Recession

- The ***turning point from boom condition is called recession.***
- The failure of a company or a bank bursts the boom & brings a phase of recession.
- Investment are reduced, production comedown, & income & profits decline, business activity shows sign of dullness.

- During recession, not only there is a fall in GNP but also level of employment reduces. The agricultural class and wage earners would be worst hit.
- At times of depression prices also generally fall due to fall in aggregate demand.
- **Depression occur** when banks start reducing credit ***(i.e.)*** contraction in bank credit may cause downswing. ***(e.g.)*** like low rate of interest for banks, other investment reduces injection of money.
- There is a limit to which level of economic activity can fall. ***(i.e.)*** it may last for sometime.
- After a period of depression, recovery sets in. This is the turning point from depression to revival towards upswing.
- Expansion of money and credit is injected in the economy and the income of the people goes up. ***(i.e.)*** if the banking system starts expanding credit and because of new technology coming into existence.

5.What are the Theories of business cycle?

Trade cycle is a highly complex phenomenon and it can't be explained by a single factor.

- However several theories have been put forward to explain the causes of trade cycle.

a) Sun spot theory or Climate theory

b) Psychological theory

c) Hawtrey's theory or monetary theory

d) Keyen's theory or trade cycle

e) Von Hayek's theory (or) over investment theory

f) Over savings (or) under- consumption theory

g) Schumpeter's innovation theory

a) Sun spot theory

- This is oldest theory of business cycle.

- Sun spot theory was developed in 1975 by Stanley Jevons.
- Sun spots are storms on the surface of the sun caused by violent nuclear explosion there.
- Since economies are the **older world were heavily dependent on agriculture,** changes in climate condition due to sun spots produced fluctuations in agricultural output.
- The climate variations are due to spots in the sun. Hence the theory is called sun spot theory.
- Whenever there is good harvest, the economies enjoy prosperous boom period. There goods periods are intercepted bad period due to bad harvest and we call them depression.

b) Psychological theory

- The psychological feeling of **optimism *(success)*** *(good must always happen)* and **pessimism *(no confident, thinking everything in wrong)*** in business are responsible for boom and depression.
- This theory is ***only partially true***. The psychological factors may help in gathering momentum in the upswing or bring the downswing suddenly.
- This theory does not explain how the booms or slump is initiated.
- The theory fails to explain as to how a depression starts and how a recovery begins.

c) **Monetary theory** *(Talks about money supply)*

- According to Hawtrey "Trade cycle is purely a monetary phenomenon" and he strongly advocated that **changes in the flow of money** are exclusively responsible for the changes in economic activity which in turn creates boom or depression.
- ***The basic cause of boom or depression to Hawtrey is***

a) Increasing in the quantity of money raises the availability of bank credit for investment.

b) Thus, by increasing the supply of credit expansion in money supply causes rate of interest to fail.

- Lower rate of interest induces businessmen to borrow more for investment in capital goods and also for investment in keeping more inventories of goods.
- If the rate of interest is increased, borrowing gets reduced and as such the business activities gets reduced.

In short, Hawtrey's theory is nothing but inflation and deflation created by the rate of interest.

d) Keyen's theory:

- According to Keyen, the primary cause of ***cyclical fluctuations is marginal efficiency of capital (i.e.)*** changes in rate of profits on current investment outlay and also due to changes in the rate of interest.
- According to him MEC forms the vital factor in guiding investment ***(more or less)*** decisions of businessmen.
- But this factor depends on ***business men psychology.***
- This theory approaches very near to psychological theory.
- The rate of interest is a function of quality of money while the MEC depends upon

a) The supply price of capital assets

b) The expected profits *(i.e.)* from such capital assets.

- Investment outlay will generate multiple amounts of income and employment.

e) Von Hayek's theory (or) over investment theory

- According to Hayek business cycle, it is the result of ***over issue of credit at an artificially low rate of interest***. The market rates begin lower than the natural rate.
- A fall in the market rate of interest below the natural rate will lead to more investment and therefore an upward swing takes place.
- A rise in the market rate of interest over the natural rate will lead to fall in investment and downswing takes place.
- Change in money supply which causes a change in market failure of the banking system to keep the supply of money is constant is responsible for the business cycle.

f) Over savings (or) under- consumption theory:

According to this theory the business cycle is the result of over saving by which the richer class and under consumption by the poor classes.

- In a free capitalist society, rich have larger incomes. They save the income and automatically invest them as the richer class is unable to spend all income. This leads to **over- production of goods**.
- In the free capitalistic economy, majority of people are poor with low income and low prosperity to consume. Hence, there is a glut *(excess supply)* in the market leading to depression. ***(i.e.)*** supply will be there but low consumption.
- It assumes that all savings are automatically invested. But practically it is not.
- Mere saving will not lead to investment.
- This theory is inadequate to explain business cycles.

g) Schumpeter's innovation theory

- The theory stresses the role of aggressive businessmen who come along with new ideas, investment and innovation.
- Innovation should not be confused with inventions.
- It is only the application of new techniques of production, new materials or new methods of doing business.
- Innovation may consist of:

a) Introduction of new product

b) Introduction of some new method.

c) Opening of a new market for the product.

UNIT - 4

1. State the meaning of national income?

National income has been defined by various writers from different angles.

1. Generally it refers to the money value of the flow of goods and services available annually inan economy.
2. National income is the total money value of goods & services produced in a country (i.e.) 1 Year.
3. National income is, the money value of all final outcome of all economic activities of
4. countedwithout duplication.

5. Total income of the country is called 'national income'.

2. **What are the methods of computation of national income**?

There are 3 methods of computation of national income

1. **Product method (or) Census method (or) Value added method (or) Production method (or) Output method**
2. **Income method**
3. **Expenditure method**

3. **What do you mean by income method**?

- Income is calculated by adding up the rent of land, wages, salaries of employees, intereston capital, profits of entrepreneurs & income of the self employed people.
- Income is obtained by summing up of the income of all individuals of a country.
- While estimating national income through income method certain precautions should be taken (i.e.) which should be included & not included.

4. **What is circular flow of income?** ***Jan 2011***

The modern economy is a monetary economy. In the modern economy, money is used in the process of exchange. money has removed the difficulties of barer system. thus money acts as a medium of exchange.

1. Circular flow of income TWO- Sector economy (income & expenditure)
2. Circular flow of income THREE- Sector economy (income & expenditure with government)
3. Circular flow of income Four- Sector open economy (income & expenditure with government & foreign sector)

5. **State aggregate demand.**

- It is the total expenditure which all households & business firms want to make on goods& services.
- In a two sector model the aggregate demand consists of 2 components

➢ There is consumption demand

➢ There is a demand for capital goods which is called investment demand.

- Thus by aggregate demand we mean how much expenditure the households & the entrepreneurs are undertaking on consumption & investment.

Aggregate demand = Consumption demand + investment demand

6. **State aggregate supply**

The aggregate supply means the total money value of goods & services produced in an economyin a year. ***The supply or output of final goods & services in a year.***

- It is important to note that aggregate supply is the same thing as ***national product*** as both

represents the value of output of final goods & services produced.

- The ***aggregate supply of goods of an economy depends upon the stock of capital, the amount of labour used & the state of technology.***

7. **What is transfer payments?**

- We have explained about the determination of national income in the three sector economy when government expenditure is financed by imposition of lump sum tax.
- We now extend our model to include transfer payments & see how they affect determination of national income.
- ***Transfer payments*** are payments to the people by the government for which it receives no services or goods in return from them.
- Transfer payments are made by the government to promote social welfare. Unemployment allowances, poverty relief grants, social security contributions, old age pensions are some important examples of transfer payments.
- ***(Transfer payments are opposite of tax)*** Where as tax reduces disposable income of people, transfer payments increases their disposable income.
- Transfer payments are financed through tax, then transfer payments become a part of government expenditure which reduces disposable income.
- Since transfer payments increases the disposable income of the people, they will increase their consumption expenditure depending on their propensity *(tendency)* to consume.

8. **Define multiplier Jan *2012***

Multiplier is a kind of ratio, which expresses the relationship between ***the increase in national income & the increase in investment*** *which induces the raise in Income*

- *A large change in income for a small change in investment is called as multiplier.*

- The total effect of an increase in investment, on income is called the ***multiplier.***

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9. **What is closed economy? *Jan 2011***

Working of the multiplier depends upon the fact whether economy is closed or open. A closed economy implies absence of international trade. ***More imports over exports act as a leakage*** on the income.

10. **State accelerator principle *Jan 2010***

Multiplier & Accelerator are parallel concepts. The multiplier shows the effect of change in invesment on consumption & income, whereas the accelerator shows the effect of change in income & consumption of investment.

11. Where has tax reduces disposable income of people,?

Transfer payments increases their disposable income.

- Transfer payments are financed through tax, then transfer payments become a part of government expenditure which reduces disposable income.
- Since transfer payments increases the disposable income of the people, they will increase their consumption expenditure depending on their propensity *(tendency)* to consume.

12. Define National expenditure.

This represents the total spending or outlay of the community on the goods & services of all types (capital as well as consumption) produced during a given year.***(e.g.)*** one's man expenditure becomes other man's income in the economy.

13. Define GDP,.

In other words GDP is the income generated (created) by the factors of production during ayear within the country by its own resources. ***It does not include the income earned from abroad.*** (money earned by citizens in foreign country)

GDP *= Market value of goods & services produced by the residents in the*

countryPlus (+) income earned in the country by foreigners

Minus (-) income received by residents of a country from abroad.

14. What do you understand by deprecation?

Refers to all those expenditure undertaken by the producers to replace the worn out *(damaged)* parts of the capital goods like machinery, tools, equipments & buildings used up in the production of goods & services.

NDP = GDP – depreciation

15. Define Division of labour

Division of labour refers to dividing & sub dividing labour into a number of groups each performing only one complete process of production, if the making of an article is split up into several processes & each process is entrusted to a separate set of workers is called division of labour

16. What do you understand by productive order?

- Under this method, the economy is divided into different individual sectors such as agriculture, fishing, mining, construction, manufacturing, trade & commerce, transport, communication & other services.
- The net value by each ***productive*** enterprise as well as by each industry or sector is estimated.
- In order to arrive net cost by an enterprise we have to subtract the following from the value of output of an enterprise.

17. What do you meant by government expenditure?

The government levies indirect taxes on goods sold on market. These taxes are collected from firms. At the same time, the government also provides subsidies to the firms which sell the goodsfixed by the government. **Selling the goods at a price fixed by the government will cause loss tothe firms** when the firms are not selling the goods at market prices. **Such a loss is compensatedby subsidies given by the government**

18. Define national expenditure?

It consists of all the goods & services produced by the community & exchanged for money during a year. It does not include goods & services which are not paid for such as hobbies, house wives services charitable work etc.***(e.g.)*** value of all goods & services produced by the firms in the economy.

19. What is national product?

It consists of all the income in cash & kind accruing to the factors of production. It represents the total income flow by the economy during the year.***(e.g.)*** value of all incomes earned in making these goods & services,

20. What is national income?

The government levies indirect taxes on goods sold on market. These taxes are collected from firms. At the same time, the government also provides subsidies to the firms which sell the goodsfixed by the government. Selling the goods at a price fixed by the government will cause loss tothe firms when the firms are not selling the goods at market prices. Such a loss is compensatedby subsidies given by the government

21.C**ircular flow of income TWO- Sector economy with saving & investment- reason**

- In the above analysis of the circular flow of income we have assumed that all income which the house hold receive, they spend it on consumer goods & services.
- If house holds save a part of their income, their saving will affect money flow in the economy.
- When house holds save in ***financial markets*** their expenditure on goods & services will decline.

21. What is NNP?

It is the sum total of money value of final goods & services produced in the country in a year ***excluding*** depreciation cost.Refers to all those expenditure undertaken by the producers to replace the worn out *(damaged)*parts of the capital goods like machinery, tools, equipments & buildings used up in the production of goods & services.

22. The state of technical known determine. How?

- This is another important determinants operating in our country.

- A country with a poor technical knowledge cannot have a large size national income, as itwill be incapable of exploiting its resources efficiently.The extent of technical known how & technology of production determine the capitalformation in the country

23. What is hyper inflation?

- When the price level rises about 100% per year it is called hyper inflation. ***(for e.g.***) if the price of commodity is Rs. 100 today it will become Rs. 200 in the next year
- In hyper inflation prices rise every month, every day & even every hour & there is

virtually no limit of the height to which prices might rise.

24. Von Hayek's theory (or) over investment theory.

According to Hayek business cycle, it is the result of ***over issue of credit at an artificiallylow rate of interest***. The market rates begin lower than the natural rate.
A fall in the market rate of interest below the natural rate will lead to more investmentand therefore an upward swing takes place.

25. What is Transfer payments are opposite of tax

Where as tax reduces disposable income ofpeople, transfer payments increases their disposable income.Transfer payments are financed through tax, then transfer payments become a part ofgovernment expenditure which reduces disposable income.

Part B

1.What is national income? How is national income measured by income method? Discuss

National income has been defined by various writers from different angles.

1. Generally it refers to the money value of the flow of goods and services available annually in an economy.

2. National income is the total money value of goods & services produced in a country (i.e.) 1 Year.

3. National income is, the money value of all final outcome of all economic activities of the people of a country.

4. National income estimate which measures the volume of commodities and services turned out during a given period, counted without duplication.

5. National income is the value of goods and services produced during a given period counted without duplication.

6. Total income of the country is called 'national income'.

Concepts of national income

1. Gross Domestic Product- GDP
2. Gross National Product- GNP
3. Net Domestic Product- NDP

4. Net National Product- NNP
5. National Income- NI
6. Personal Income-PI
7. Disposable Personal Income- DPI
8. Personal savings

1. Gross Domestic Product- GDP

It is the money value of final goods & services produced in the domestic country during a year.

In other words GDP is the income generated (created) by the factors of production during a year within the country by its own resources. ***It does not include the income earned from abroad.*** (money earned by citizens in foreign country)

GDP *= Market value of goods & services produced by the residents in the country*

Plus (+) income earned in the country by foreigners

Minus (-) income received by residents of a country from abroad.

2. Gross National Product- GNP

Only our country income is calculated

Note *-when calculating total GNP* ***income earned in the country by the foreigners is reduced.***

GNP = GDP + Net income from abroad *(money earned by residents in foreign country)*

GNP = Market value of domestically produced goods & services

Plus (+) income earned by the residents of a country in foreign countries

Minus (-) income earned in the country by the foreigners. ***(foreign people will take their money).***

3. Net Domestic Product- NDP

It is the sum total of money value of final goods & services produced in the country in a year ***excluding*** depreciation cost.

Depreciation

Refers to all those expenditure undertaken by the producers to replace the worn out *(damaged)* parts of the capital goods like machinery, tools, equipments & buildings used up in the production of goods & services.

NDP = GDP - depreciation

4. Net National Product- NNP

NNP = GNP – depreciation.

The sum total of money value of final goods & services produced in an economy in a year excluding deprecation cost. It includes income from abroad.

5. National Income- NI

NI = NNP – indirect taxes + subsidies

The firm have to pay indirect taxes on goods & services to the government. These taxes have to be deducted from the NNP to find out total national income.

Direct taxes- people pay

Indirect taxes - firms pay

Subsidies - a some of money given to keep the price of some thing low ***(government expenditure)***

The government levies indirect taxes on goods sold on market. These taxes are collected from firms. At the same time, the government also provides subsidies to the firms which sell the goods fixed by the government. ***Selling the goods at a price fixed by the government will cause loss to the firms*** *when the firms are not selling the goods at market prices.* ***Such a loss is compensated by subsidies given by the government.***

6. Personal Income-PI

PI = NI - (corporate profits + social security contributions + Corporate income tax) + transfer payments

PI = The actual income received by the individuals or households in the country during the year.

Transfer payments = (unemployment allowances, old age & widow pensions, relief payments, interest payment on public debts, etc)

7. Disposable Personal Income - DPIDPI

= PI – direct taxes

The whole of PI is not available to individuals for consumption as they have to pay direct taxes. The part of PI which is left after payment of personal direct taxes is called DPI

8. Personal savings

PS = DPI - personal consumption expenditure

What we save from personal income without adding consumption is known as personal savings.

2.Explain the various methods used to calculate National Income.

There are 3 methods of computation of national income

1. Product method (or) Census method (or) Value added method (or) Production method (or) Output method
2. **Income method**
3. Expenditure method

2. Product method (or) Census method (or) Value added method (or) Production method (or) Output method

- The total products produced in the economy are calculated for a year.
- Under this method, the economy is divided into different individual sectors such as agriculture, fishing, mining, construction, manufacturing, trade & commerce, transport, communication & other services.
- The net value by each ***productive*** enterprise as well as by each industry or sector is estimated.
- In order to arrive net cost by an enterprise we have to subtract the following from the value of output of an enterprise.

a) Deprecation *(Capital consumption)*

b) Indirect taxes

c) Intermediate consumption *(such as raw materials, fuels purchased from other firms)*

- Here care must be taken to avoid double counting
- While estimating national income through product method certain precautions should be taken *(i.e.)* should be added or deducted.

3. Income method

- Income is calculated by adding up the rent of land, wages, salaries of employees, interest on capital, profits of entrepreneurs & income of the self employed people.
- Income is obtained by summing up of the income of all individuals of a country.
- While estimating national income through income method certain precautions should be

taken (i.e.) which should be included & not included.

4. Expenditure method

- Expenditure method arrives income by adding up all expenditure made on goods & services during the year.

a) Expenditure by consumers on goods & services

b) Expenditure by private manufacturer on capital or investment goods.

c) Expenditure by government on consumption as well as capital goods.

d) Money received from export of goods & services.

- While estimating national income through expenditure method certain precautions should be taken (i.e.) which should be included & not included.

National product, National income, National expenditure

1. National product
2. National income
3. National expenditure

NP = NI = NE

National product

It consists of all the goods & services produced by the community & exchanged for money during a year. It does not include goods & services which are not paid for such as hobbies, house wives services charitable work etc.***(e.g.)*** value of all goods & services produced by the firms in the economy.
It consists of all the income in cash & kind accruing to the factors of production. It represents the total income flow by the economy during the year.***(e.g.)*** value of all incomes earned in making these goods & services
National expenditure

This represents the total spending or outlay of the community on the goods & services of all types (capital as well as consumption) produced during a given year.***(e.g.)*** one's man expenditure becomes other man's income in the economy.

3) How income flows in economy? Explain the circular flow of income.

The modern economy is a monetary economy. In the modern economy, money is used in the process of exchange. Money has removed the difficulties of barer system. Thus money acts as a medium of exchange.

1. Circular flow of income TWO- Sector economy (income & expenditure)

2. Circular flow of income THREE- Sector economy (income & expenditure with government)

3. Circular flow of income Four- Sector open economy (income & expenditure with government & foreign sector)

1. Circular flow of income TWO- Sector economy (income & expenditure)

Two basic principles on which circular flow of income are explained

1. In any exchange activity, the income received by the producer ***is equal*** to the amount spent by the consumer.

2. Goods & services produced, ***flow in clock wise direction*** & money payments to purchase these goods ***flow in antic clock wise direction***. These activities causes circular flow.

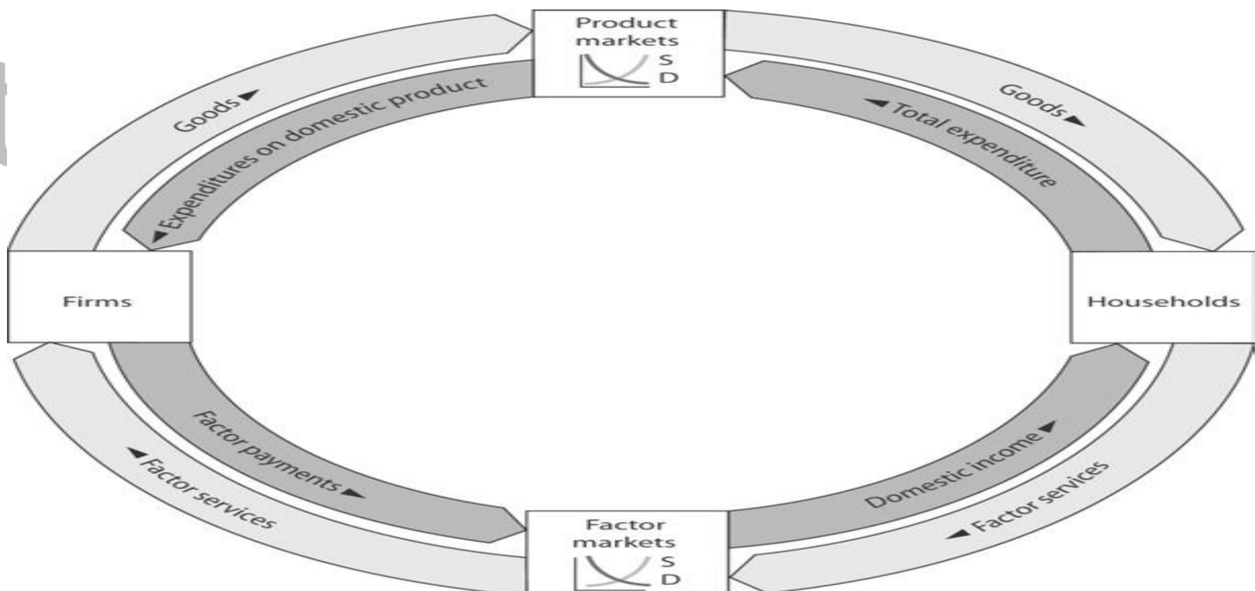
- In any economy both production & consumption are considered to be the basic economic activity.

- We shall explain the flow of income in an economy by taking a model of a simplified economy in which only two sector operates *(i.e.) household* sector & producer's sector or firm.

- The upper loop shows flow of goods & services in the economy.

- Household supply services to the firm.

- Business firms by utilising the services produce goods & services.



- The firms supply goods to household as a reward to their services. (i.e.) goods flow from

firms to households. *(when money was not introduced).*

- Such flow of goods & services is described as real flow in the economy.
- In the modern economics*(when money has been introduced),* factor payment are not made in kind but in terms of money.
- *Factor payment (i.e.) house holds receive their reward in the form of money as shown in the lower loop.*
- House holds utilise this money to purchase goods & services produced by the firms (thus money flows from firms to house hold & back to firms.
- Since the income flow in a circular way between firms & households, this flow is also known as circular flow of income.
- In this model only consumption expenditure of the house hold & investment expenditure of firms are included as shown in the following equation.

$Y = C + I$

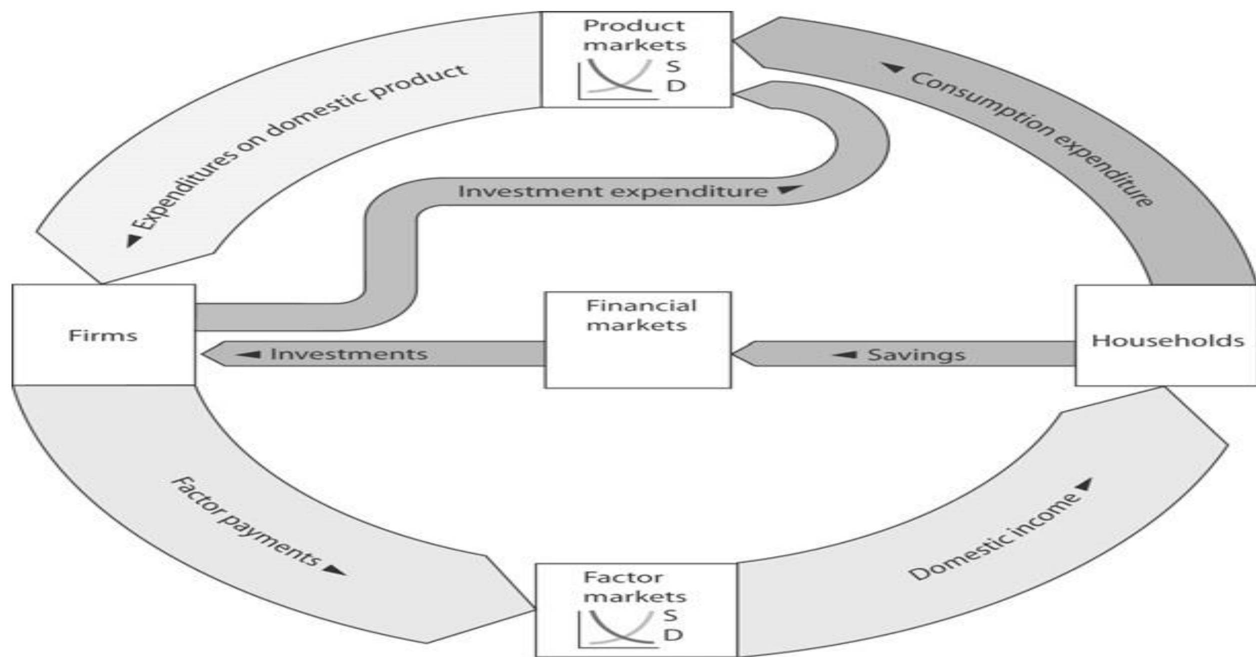
Y = National income

C = Consumption expenditure

I = Investment expenditure.

Circular flow of income TWO- Sector economy with saving & investment

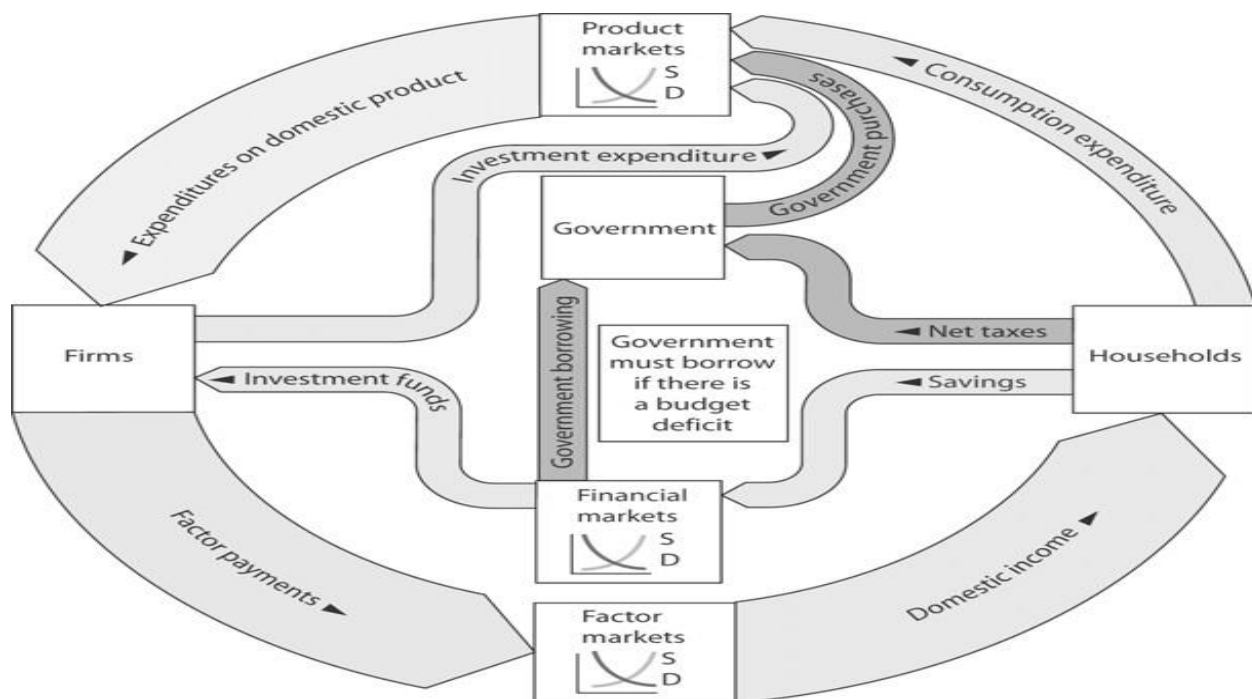
- In the above analysis of the circular flow of income we have assumed that all income which the house hold receive, they spend it on consumer goods & services.
- If house holds save a part of their income, their saving will affect money flow in the economy.
- When house holds save in ***financial markets*** their expenditure on goods & services will decline.
- Savings reduce the flow of money ***(profits)*** to the business firms & will cause a fall in income for them.
- It is business man who borrow from the financial markets for investment in goods such as machines, factories, tools etc. Firm spend on investment in order to expand their productive capacity in future.



2. **Circular flow of income THREE- Sector economy** ***(income & expenditure with government)***

The three sector model including government sector is explained

- Government plays a significant role in the economic life of any country. Government acts both as a consumer & producer in the modern economics.
- It has its own source of income & also it has to incur expenditure in a number of ways.
- Government collects taxes both from the firms & the house holds.
- Tax is the major source of income for the modern government. Withdrawing some amount from the households & the firms.
- A government spends the income on a number of activities which are so designed to benefit both the households & the firms. *(for e.g.)* ***like old age pensions, sickness benefit, housing, unemployment***. This type of activity will satisfy the needs of the society.
- Likewise it is also possible that the government may incur expenditure to render some services to the firm sector. *(e.g.)* the government may decide to subsidies *(pay part of the cost for producing something)* the production of few important commodities. Similarly government ***may purchase*** goods & services from the firms for the use of society.



- Another method of financing government expenditure is borrowing from the financial market.
- After including the government spending, the equation will be

$$Y = C + I + G$$

Y = National income

C = Consumption expenditure

I = Investment expenditure.

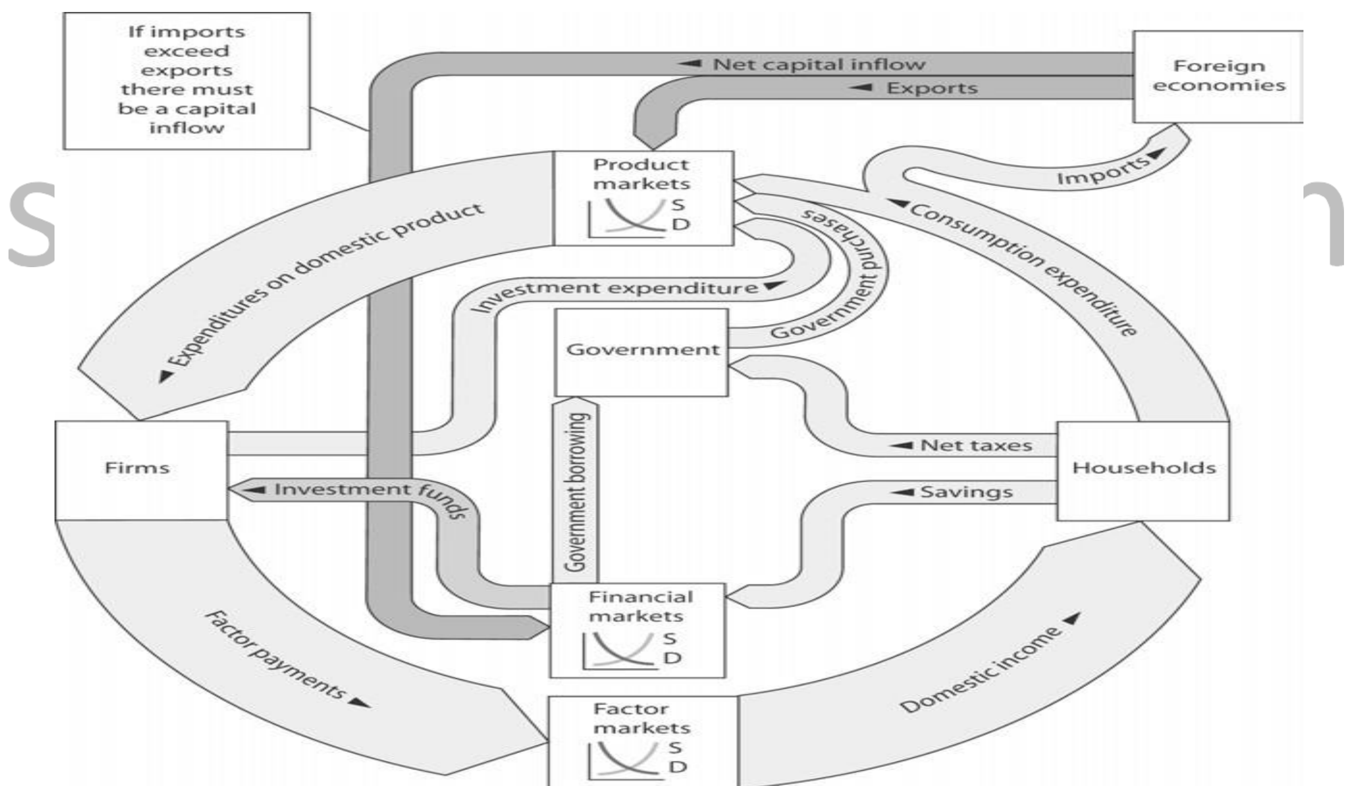
G = Government expenditure

3. Circular flow of income Four- Sector open economy ***(income & expenditure with government & foreign sector)***

- The four sector model includes foreign sector in addition to household, business enterprises & government sector in circular flow of income.
- Export causes an injection of money into the circular flow of money. When foreigners buy goods & services produced by domestic firms they are ***exports*** in circular flow of money.

- ***Imports*** are considered as leakages from the circular flow. They are expenditure incurred by the household sector to purchase goods from foreign countries.
- Take an *(e.g.)* household sector that buys goods imported from abroad & makes payment to the foreign firms thus is considered leakage from the circular flow of money.
- The household may receive transfer payments from the foreign sector for the ***service rendered*** by them in foreign.

The business firm export goods to foreign countries & get receipts from them. Such activities bring fresh injection of money in the circular flow. When firms purchase goods from the foreign firms & make payment to them, it causes leakage in the flow of money.



- Apart from this domestic firms also receive royalties*, (a sum of money)* interest, dividends, profits for investment made in foreign countries.

- Domestic firms also make payments for imports of machineries, capital goods, raw materials, consumer goods & services from abroad. Such import causes leakages for the circular flow.
- Like business firms, the government sector also makes payment for the goods imported & receive payment for the goods exports to foreign countries.
- Inclusion of foreign sector in the income equation will be shown as

$$Y = C + I + G + (X - M)$$

Y = National income

C = Consumption expenditure

I = Investment expenditure.

G = Government expenditure

X = Denotes income through exports

Y = Payments for imports

(X-M) = Difference between export & import gives net income earned from abroad.

- Net income earned from abroad may be minus or plus depending upon the size of export & import.
- If the export is greater than the import, net income would be *(positive),* on the other hand if the export is lower than the import then net income earned would be *(negative).*

4.What are the Factors determining national income?

There are number of factors which determines the size of the national income in a

country.

1. Quality & quantity of factors of production
2. The state of technical known how
3. Political stability.

2. Quality & quantity of factors of production

- Quality & quantity of ***factors of production*** is one of the most important determinants in national income.
- The quality & quantity of **land** determines the quality & quantity of agricultural production & the national income.
- The quality & quantity of **labour** determining upon intelligence, education, training, etc. determines the volume of industrial production.
- The quality & quantity of **capital** is one of the greatest determinants on total output.
- The quality & quantity of **organisation** ability is also an important element determining the size of national income of a country.

3. The state of technical known how

- This is another important determinants operating in our country.
- A country with a poor technical knowledge cannot have a large size national income, as it will be incapable of exploiting its resources efficiently.
- The extent of technical known how & technology of production determine the capital formation in the country.
- Advanced technology will go in a long way in increasing the size of national income or economic development.

4. Political stability

- The economic development of several countries, have been hindered *(delayed)* in the past by political stability.

The key to develop & increase in national income rest ***(stopped)*** on important factors like ***capital formation, technical, political stability etc***. In backward economies, all these factors will be deplorably *(shockingly bad)* lacking & the size

of the national income will be small.

5."Demand for labor reflects marginal productivity"- Discuss

- Labor signifies the contribution of human elements in production.
- Labour refers to any exertion physical or mental undertaken in expectation of a reward, the reward usually begins the payment of money *(the payment of wages)*

Characteristics of labour

- Labour is inseparable from labourer *(skill is used but not himself)*
- Labour has poor bargaining power
- Labour is perishable
- Labour is less mobile *(sentimental attachments)*

Division of labour

Division of labour refers to dividing & sub dividing labour into a number of groups each performing only one complete process of production, if the making of an article is split up into several processes & each process is entrusted to a separate set of workers is called division of labour

Advantages of division of labour

- Increase in productivity
- Increases in skill
- Inventions are possible
- Saving timings
- Improvements in quality of products
- Large scale production
- Reduction in cost of production
- Right man in right place
- Diversification of employment opportunities

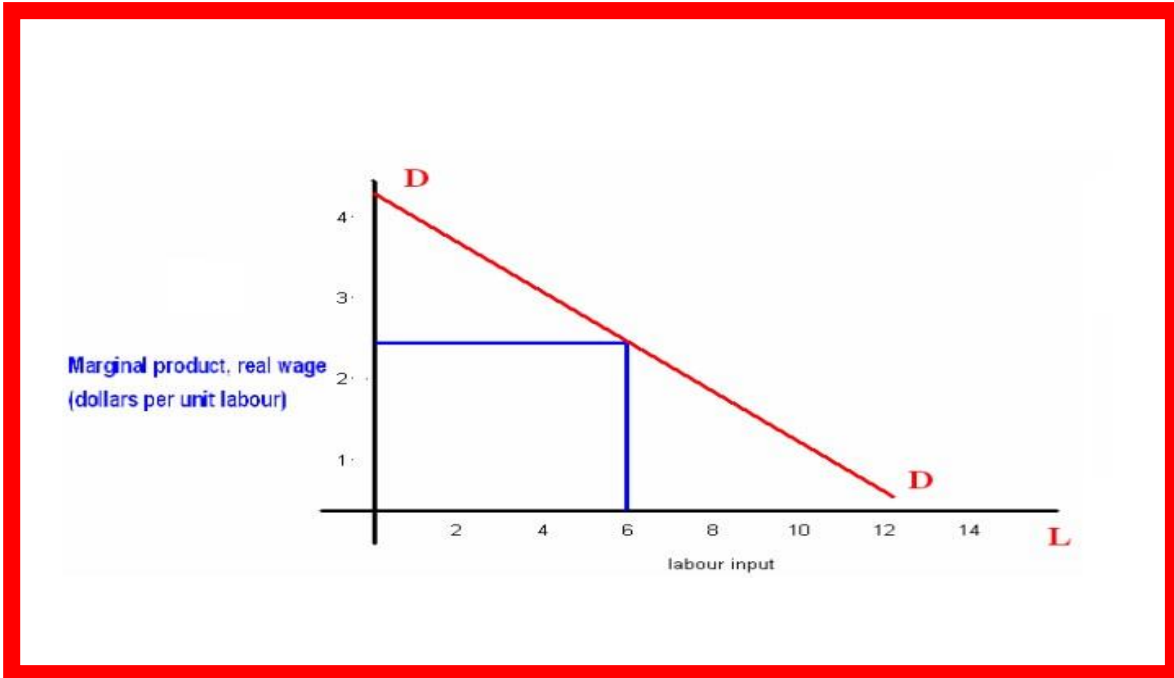
Disadvantages of division of labour

- Monotony (same job over & over again)
- No sense of responsibility
- Loss of skill
- Worker is reduced in application of mind
- peacefulness of labour

Demand for labour

- The demand for labour is determined by its output.

- The labour demand curve shifts up & out over time with capital, technological & improvements in labour quality.
- At a given time with a given state of technology there exists relationship between the quantity of labour inputs & the amount of output.
- By law of diminishing returns each additional unit of labour input will add a smaller & smaller slab of output.



UNIT 5

1. What are the Factors determining wages

- Price level
- Regularity of work
- Nature of work
- Trade expenses
- Conditions of work
- Social prestige

- Future prospects

2. What is inflation? *Jan 2012*

- Inflation means ***rise in prices*** after full employment has been reached.
- Inflation refers to rise in prices or fall in the value of money *(i.e.)* prices are rising *(land present value & future value).*
- Inflation refers to too much money ***chasing too few goods*** *(out of 100 cars only 2 cars)*
- Inflation exists **when money income is expanding** more than in proportion to increase in earning activity.
- Inflation occurs when the general level of prices & costs is rising.
- A continuous rise in the general price level over a long period of time has been the most common feature of both developed & developing economies.

All these factors are very common in developing economies like India. The world in general hasgone through inflation since Second World War.

3. What is hyper inflation (or) Jumping (or) Galloping (or) Run away (or) Spiraling?

- Hyper inflation is **based on speed** with which prices rise.
- When prices begin to rise at more than three digit rate per annum, it is called hyper inflation.
- When the price level rises about 100% per year it is called hyper inflation. ***(for e.g.***) if the price of commodity is Rs. 100 today it will become Rs. 200 in the next year
- In hyper inflation prices rise every month, every day & even every hour & there is **virtually no limit** of the height to which prices might rise.
- It is dangerous to the economy as it cannot controlled easily.

4. What is unemployment?

- In economics, unemployment refers to the condition and extent of joblessness within an economy, and is measured in terms of the unemployment rate, which is the number of unemployed workers divided by the total civilian labor force.
- Hence, unemployment is the condition of not having a job, often referred to as being "outof work", or unemployed

5. State Okun's Law

- Arthur Okun (1929 – 1979) was one of the most creative American economic policy makers of the post ware era.
- He created the concept relation between output & unemployment that is now known as Okun's Law.

Factors determining wages

- Price level
- Regularity of work
- Nature of work
- Trade expenses

- Conditions of work
- Social prestige
- Future prospects

6. **How RBI measure of money supply?**

M1 = C + DD + OD

M2 = M1 + Savings with post office

M3 = M1 + Net time deposits with the commercial banks M4 =
M3 + Total deposits with post offices *(including NSC)Where*
C= Currency held by the public

DD = Net demand deposits with banksOD=
Other deposits with RBI
NSC =National savings certificates

7. **When inflation occurs in income factor?**
   - Inflation exists **when money income is expanding** more than in proportion to increase in earning activity.
   - Inflation occurs when the general level of prices & costs is rising.
   - A continuous rise in the general price level over a long period of time has been the most common feature of both developed & developing economies.

8. Define inflation?
   - Inflation means ***rise in prices*** after full employment has been reached.
   - Inflation refers to rise in prices or fall in the value of money *(i.e.)* prices are rising *(land present value & future value).*

9. Inflation may be classified into several types. How
   1. On the basis of speed with which prices rises
   2. On the basis of different processes through which inflation is induced (give rise to)(or) on the basis of inducement
   3. On the basis of the criterion of time
   4. Number of goods in which rise in price level takes place
   5. On the basis of price policy of the government.

10. **Define Creeping inflation**
    - The name itself suggests, creeping inflation is slow moving & very mild.
    - If the price level rises from 1 to 3% per annum, the inflation is called ***creeping inflation***
    - When the general level of prices rises at a moderate rate over a long period of time, it is called creeping inflation

11. **What are the causes of inflation?**
    - Consumer expenditure

- Foreign demand
- Rising imported raw materials cost
- Rising labor costs
- Higher indirect taxes imposed by the government
- A depreciation of the exchange rate
- The rapid growth of the money supply

12. Define Phillips curve

- An economic concept developed by A. W. Phillips *stating that inflation and unemployment have a stable and inverse relationship.*

- According to the Phillips curve, the lower an economy's rate of unemployment, the more rapidly wages paid to labor increase in that economy.

13.What is macro economic policy

Macroeconomic policies are implemented in order to achieve government's main objectives of full employment and stable economy through low inflation. We can use *Philips Curve* as atool to explain the trade-off between these two objectives

14. What is monetary policy?

a) Bank rate policy
b) Reserve ratio
c) Open market operation
d) Credit control
e) Issue of new currency

16. What is unemployment?

- In economics, unemployment refers to the condition and extent of joblessness within an economy, and is measured in terms of the unemployment rate, which is the number of unemployed workers divided by the total civilian labor force.

- Hence, unemployment is the condition of not having a job, often referred to as being "out of work", or unemployed

17.**What are the Remedial measures of unemployment?**

- Rapid economic development

- Scientific methods should be adopted

- Population should be effectively checked in all communities

- Public works should be started

***18*. Define hyper inflation.**

- Hyper inflation is **based on speed** with which prices rise.

- When prices begin to rise at more than three digit rate per annum, it is called hyper inflation.

- When the price level rises about 100% per year it is called hyper inflation. ***(for e.g.***) if the

price of commodity is Rs. 100 today it will become Rs. 200 in the next year

- In hyper inflation prices rise every month, every day & even every hour & there is **virtually no limit** of the height to which prices might rise.

19. Meaning of deficit inflation & wage induced inflation.

Deficit induced inflation

- This is caused by the adaption of unbalanced budgetary policies
- Which means government spending in excess of its revenues receipts

Wage induced inflation

- This denotes a rise in price due to an increase in money wages
- Increase in price level will make the labors demand more wages

20. write the Fiscal measures of inflation.

Reduction in unnecessary expenditure

Increases in taxes

Population should be effectively checked in all communities

Public works should be started

21. **List the Types of unemployment.**

- *Frictional unemployment (shortages of raw materials, break down of machinery)*
- *Cyclical unemployment (During recession or trade cycle or general business declines)*
- *Technological unemployment (changes in techniques)*
- *Seasonal unemployment (seasonal variations)*
- *Structural unemployment*
- *Open unemployment (large labor force does not get work opportunities)*
- *Underemployment (person does not get the type of work he is capable of doing)*
- *Disguised unemployment (transfer of men from the more productive to less productive jobs during depression)*

22. **List the Causes Of Unemployment.**

- Rapid changes in technology

- Recessions
- Inflation
- Disability
- Undulating business cycles
- Changes in tastes as well as alterations in the climatic conditions. This may in turn lead to decline in demand for certain services as well as products.
- Attitude towards employers
- Willingness to work
- Perception of employees
- Employee values
- Discriminating factors in the place of work (may include discrimination on the basis of age, class, ethnicity, color and race).

Ability to look for employment

23. Mention the Remedial measures for unemployment.

- ***a)Long term measures***
- Rapid economic development
- Scientific methods should be adopted
- Population should be effectively checked in all communities
- Public works should be started

b) Short term measures

- Establishment of small industries
- Transport to be developed
- Slum clearance & housing schemes
- Private activity to be encouraged
- Development of backward areas

24. State the OKUN's Law.

- Arthur Okun (1929 – 1979) was one of the most creative American economic policy makers of the post ware era.

- He created the concept relation between output & unemployment that is now known as Okun's Law.
- The most distressing consequence of any recession is a rise in the unemployment rate. As output falls, firms need fewer labour inputs, so workers are not hired & current workers are laid off.
- Okun's law states that for every 2 % that GDP falls relative to potential GDP, the unemployment rate rises about 1% point.
- Moreover if you want to bring the unemployment rate down, actual GDP must be growing faster than potential GDP.

25. Define monetary policy

Monetary policy is essentially a programme of action undertaken by the monetary authorities, generally the central bank*, to control & regulate the supply of money with the public & the flow of credit with a view to achieving predetermined macroeconomic goals*

Part B

1) Identify the causes of inflation and discuss its effects on multidimensional public.

Meaning

- Inflation means ***rise in prices*** after full employment has been reached.
- Inflation refers to rise in prices or fall in the value of money *(i.e.)* prices are rising *(land present value & future value).*
- Inflation refers to too much money ***chasing too few goods*** *(out of 100 cars only 2 cars)*
- Inflation exists **when money income is expanding** more than in proportion to increase in earning activity.
- Inflation occurs when the general level of prices & costs is rising.
- A continuous rise in the general price level over a long period of time has been the most common feature of both developed & developing economies.

All these factors are very common in developing economies like India. The world in general has gone through inflation since Second World War.

Types of inflation

Inflation may be classified into several types

1. On the basis of speed with which prices rises

On the basis of speed with which prices rises, inflation can be divided into the following types.

a) *Creeping inflation (or) mild inflation (or) moderate inflation*

b) *Walking inflation*

c) *Running inflation (or) Trotting*

d) *Hyper inflation (or) Jumping (or) Galloping (or) Run away (or) Spiraling*

b) Creeping inflation (or) mild inflation (or) moderate inflation

- The name itself suggests, creeping inflation is slow moving & very mild.
- If the price level rises from 1 to 3% per annum, the inflation is called ***creeping inflation***
- When the general level of prices rises at a moderate rate over a long period of time, it is called creeping inflation
- *It is mild form of inflation*. It occurs when prices are rising slowly.

- The rate of inflation ***may vary from country to country***
- When the rate of inflation is less than 10% annually or single digit annual inflation rate is called creeping inflation
- Creeping inflation is a mild form of inflation & according to some economists ***is not dangerous to the economy***
- Some economists have described upto 3% annual rate of inflation as creeping inflation
- Samuelson's opinion, Moderate inflation is not a serious problem.

c) Walking inflation

- If inflation rises from 3 to 4% per year it is called walking inflation.
- If it exceeds 10% it is called walking inflation
- Where the rise in prices, becomes more pronounced *(noticeable)* compared to creeping inflation, ***presents a danger signal for the occurrence of running & hyper inflation***
- Walking inflation takes place when creeping gets momentum *(the force caused by the development of something)*. In this case the rise in price becomes more marked.

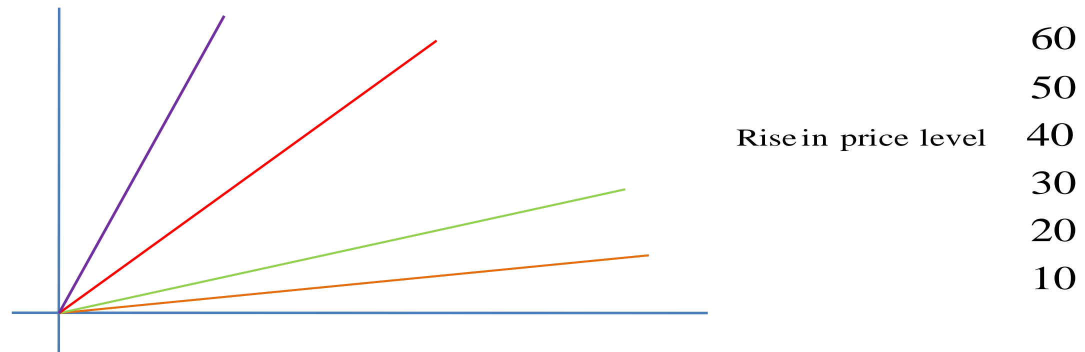
d) Running inflation (or) Trotting

- If the price level rises about 10% per year it is called running inflation
- Rise in prices will be very sharp & vigorous *(strong, forceful)*
- When the movement of prices accelerates rapidly, running inflation emerges
- Running inflation may record more than 100% rise in prices over a decade *(a period of 10 years)*
- Economists may say that a double digit inflation of 10 to 20% per annum is a running inflation. If it exceeds that figure, it may be called ***'galloping inflation'***

e) Hyper inflation (or) Jumping (or) Galloping (or) Run away (or) Spiraling

- hyper inflation is **based on speed** with which prices rise.
- When prices begin to rise at more than three digit rate per annum, it is called hyper inflation.
- When the price level rises about 100% per year it is called hyper inflation. (***for e.g***.) if the price of commodity is Rs. 100 today it will become Rs. 200 in the next year
- In hyper inflation prices rise every month, every day & even every hour & there is **virtually no limit** of the height to which prices might rise.

- It is dangerous to the economy as it cannot controlled easily.



1. Creeping inflation a rise of 10% in the general level of prices takes place in about 8 years
2. In the case of walking inflation in the shorter period of a decade, a rise of approximately 30% in price takes place
3. When the inflation is running type, it takes only 3 years to record an increase of approximately 60% in the price.
4. In the case of jumping there is no limit to the increase in prices, in less than year the increase in the price level being more than 100%.

2. On the basis of inducement

a) Deficit inflation

b) Wage inflation

c) Profit inflation

b) Deficit induced inflation

- This is caused by the adaption of unbalanced budgetary policies
- Which means government spending in excess of its revenues receipts

c) Wage induced inflation

- This denotes a rise in price due to an increase in money wages
- Increase in price level will make the labors demand more wages

d) Profit induced inflation

- Account of increase in the profits of manufactures will be the contributory factor t o another cause leading to an inflationary condition in the economy

3. On the basis of the criterion of time

- Sudden launching of war will strain the economy the government would option to deficit

financing & there will be massive expansion of money supply for producing materials

- This will generate inflation, as all commodities will become scarce due to their diversion to war purpose

4. ***Number of goods in which rise in price level takes place***
5. ***On the basis of price policy of the government.***

- ***On working class*** *(Labors suffer during inflation where the prices rise as their wages do not rise)*
- ***On fixed income group*** *(People of fixed income group are the losers during inflation where the income do not rise)*
- ***Borrowers & lenders*** *(Borrowers gain & the lenders lose during the periods of inflation when price rises the real value of money falls & the debtors have to pay money which has less purchasing power)*
- ***Government*** *(government is the net gainer during the period of inflation where inflation increases both the direct & indirect taxes)*
- ***On economic growth*** *(inflation affects economic growth positively or negatively depends on whether it affects savings & investments positively or negatively)*
- ***On employment*** (A very strong conflict arises between growth & employment at high rte of inflation.)

2. **Explain the Causes of inflation and its remedies measures of inflation.**

- Consumer expenditure
- Foreign demand
- Rising imported raw materials cost
- Rising labor costs
- Higher indirect taxes imposed by the government
- A depreciation of the exchange rate
- The rapid growth of the money supply
- Faster economic growth in other countries
- Full employment

Control of inflation

2. Monetary measures

a) Bank rate policy

b) Reserve ratio

c) Open market operation

d) Credit control

e) Issue of new currency

3. Fiscal measures

a) Reduction in unnecessary expenditure

b) Increases in taxes

c) Public debt

4. Other measure

a) Increase production

b) Direct control

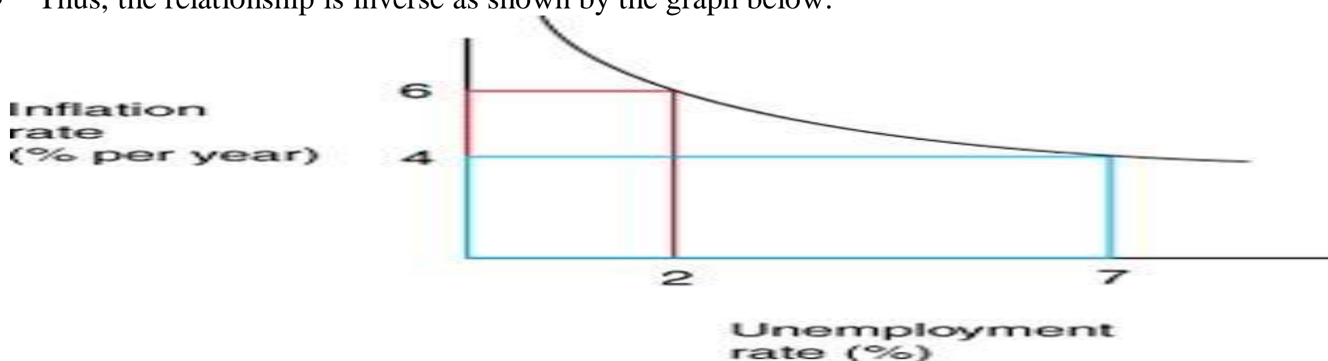
c) Miscellaneous measures

d) Price & wage control

3) Explain Phillips curve?

- An economic concept developed by A. W. Phillips *stating that inflation and unemployment have a stable and inverse relationship.*
- According to the Phillips curve, the lower an economy's rate of unemployment, the more rapidly wages paid to labor increase in that economy.
- Macroeconomic policies are implemented in order to achieve government's main objectives of full employment and stable economy through low inflation. We can use *Philips Curve* as a tool to explain the trade-off between these two objectives.
- Philips Curve describes the relationship between inflation and unemployment in an economy.
- You already know that the Inflation is defined by increase in the average price level of goods and services over time.

- When there is inflation, value of money falls. A low inflation rate indicates that average price of goods would not rise as high.
- Unemployment exist when someone is actively seeking for job but unable to find any despite their willingness to accept the going market wage rate
- Demonstrates the inverse relationship between unemployment rates and inflation rates
- Assuming a constant short-run AS curve:
- Inflation rate ↑ → Unemployment ↓ (when AD increases, there is a upward pressure on prices and UE therefore decreases)
- Inflation rate ↓ → Unemployment ↑ (when AD decreases, there is a downward pressure on prices and UE therefore increases)
- Thus, the relationship is inverse as shown by the graph below:



- *For example,* after the economy has just been in recession, the unemployment level will be fairly high. This will mean that there is a labor surplus.
- As the economy has just started growing, the aggregate demand (AD) will increase and therefore leading to an increase in employment. In the beginning, there will be little pressure for a raise in wages. However, as the economy grows faster and more people are employed, wages will start rising slowly.
- This will increase the firm's cost of production and the high costs are usually passed on to the customers in the form of higher prices. Therefore a decrease in unemployment has led to an increase in inflation and vice versa.
- Not only that, unemployed might suffer from money illusion as they thought the increase in wages offered to them represented a real wage . They underestimate inflation by not realizing that higher wages will be eaten up by higher prices. Thus they will accept job more readily and this will reduce the *frictional unemployment* in the short run.
- The relationship we discussed above is a phenomenon in the short-run. But in the long run, since unemployment always returns to its *natural rate* *(unemployment rate at which*

GDP at its full-employment level that is, with no cyclical unemployment, there is no such trade-off).

Remember that

• ***When unemployment rate is below natural rate, GDP is greater than potential output***

– Economy's self-correcting mechanism will then create inflation

• ***When unemployment rate is above natural rate, GDP is below potential output***

– Self-correcting mechanism will then put downward pressure on price level]

4) **Critically evaluate the impact of unemployment.**
UNEMPLOYMENT

Meaning

- In economics, unemployment refers to the condition and extent of joblessness within an economy, and is measured in terms of the unemployment rate, which is the number of unemployed workers divided by the total civilian labor force.
- Hence, unemployment is the condition of not having a job, often referred to as being "out of work", or unemployed

Types of unemployment

- ***Frictional unemployment (shortages of raw materials, break down of machinery)***
- ***Cyclical unemployment (During recession or trade cycle or general business declines)***
- ***Technological unemployment (changes in techniques)***
- ***Seasonal unemployment (seasonal variations)***
- ***Structural unemployment (***
- ***Open unemployment (large labor force does not get work opportunities)***
- ***Underemployment (person does not get the type of work he is capable of doing)***
- ***Disguised unemployment (transfer of men from the more productive to less productive jobs during depression)***
- *Hidden unemployment* (people who have effectively given up active search for jobs perhaps because they have been out of work for a long time and have lost both the motivation to apply for jobs and also the skills required)

Causes Of Unemployment

- Rapid changes in technology
- Recessions
- Inflation
- Disability
- Undulating business cycles
- Changes in tastes as well as alterations in the climatic conditions. This may in turn lead to decline in demand for certain services as well as products.
- Attitude towards employers
- Willingness to work
- Perception of employees
- Employee values
- Discriminating factors in the place of work (may include discrimination on the basis of age, class, ethnicity, color and race).
- Ability to look for employment

Remedial measures for unemployment

a)Long term measures

- Rapid economic development
- Scientific methods should be adopted
- Population should be effectively checked in all communities
- Public works should be started

c) Short term measures

- Establishment of small industries
- Transport to be developed
- Slum clearance & housing schemes
- Private activity to be encouraged
- Development of backward areas

5. State Okuns law. Explain OKUN's Law

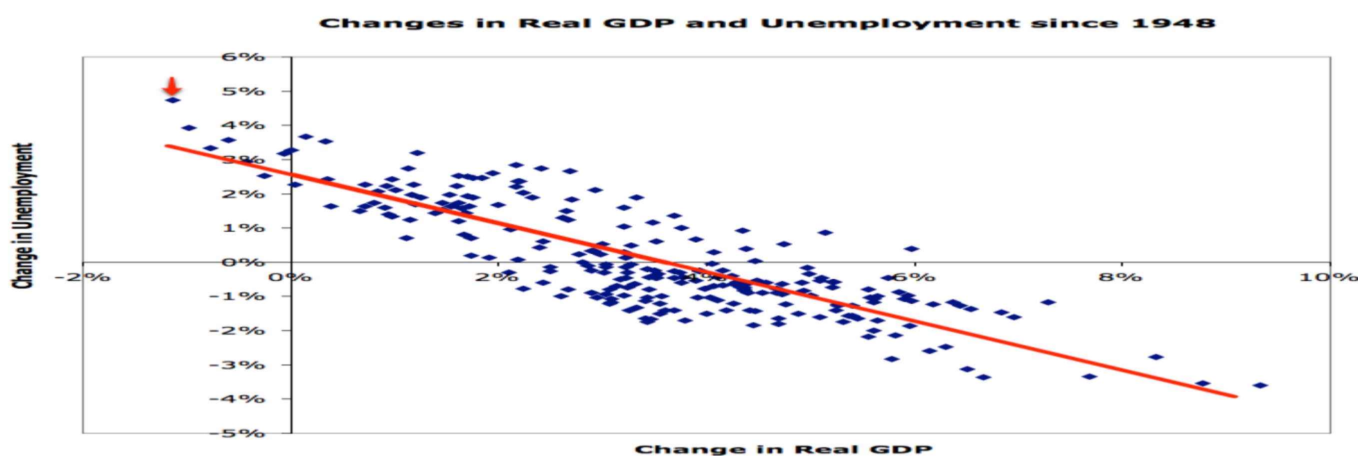
- Arthur Okun (1929 – 1979) was one of the most creative American economic policy makers of the post ware era.

- He created the concept relation between output & unemployment that is now known as Okun's Law.

- The most distressing consequence of any recession is a rise in the unemployment rate. As output falls, firms need fewer labour inputs, so workers are not hired & current workers are laid off.

- Okun's law states that for every 2 % that GDP falls relative to potential GDP, the unemployment rate rises about 1% point.

- Moreover if you want to bring the unemployment rate down, actual GDP must be growing faster than potential GDP.



- According to Okun's law, whenever output grows 2 % faster than potential GDP, the unemployment rate declines 1% point.

- This graph shows that unemployment changes are well predicted by the rate of GDP growth.

5) Enumerate and explain the impact of monetary policy on business.

Monetary policy is essentially a programme of action undertaken by the monetary authorities, generally the central bank, ***to control & regulate the supply of money with the public & the flow of credit with a view to achieving predetermined macroeconomic goals***

Scope of monetary policy

- Level of monetization of the economy
- Level of develop of the capital market
- Price stabilization
- Exchange stability
- Full employment
- Economic growth
- Equal balance in payments
- High rate of growth
- Equality in distribution of wealth

Instruments of monetary policy

1. ***Quantitative measure***

a) *Open market operations*

b) *Discount rate or bank rate*

c) *Cash reserve ratio*

2. ***Qualitative or selective credit controls***

a) *Credit rationing*

b) *Change in lending markets*

c) *Moral suasion of money & credit supply*

d) *Direct controls*

e) *Deficit financing*

Limitations of monetary policy

- Time lag

- Problems in forecasting
- Non banking financial activity
- Underdevelopment of money & capital markets
- Political Issues
- Lack of Coordination
- unplanned Consequences

	EASY MONETARY POLICY	TIGHT MONETARY POLICY
Problems →	**Recession & unemployment** •Central bank buys securities through open market operation •It reduces CRR •It lowers bank rate	**Inflation** •Central bank sells securities through open market operation •It raises CRR •It raise bank rate
↓	Money supply increases	Money supply decreases
↓	Interest rates fall	Interest rate rises
↓	Investment increases	Investment expenditure declines
↓	Aggregate demand increase	Aggregate demand declines
	Aggregate output increases by a multiple of the increases in investment	Price level falls

6) Give an account of Fiscal policy. Examine its impact on business. Jan 2010

Or

Explain the theories of fiscal policy. Jan 2011

Fiscal policy

- Fiscal policy refers to policy where the **government finances to achieve the macro economic goals**
- A policy under which government uses its **expenditure & revenue** programs to produce attractive effects & avoid unwanted effects on the national income, production & employment
- The process of shaping taxation & expenditure to **contribute the maintenance of growing**, high employment economy
- Fiscal policy is the government programme of making **changes in the pattern & level of its expenditure, taxation & borrowing in order to achieve economic growth,** employment, income equality & stabilization of the economy on a growth part

Objectives of fiscal policy

- **To mobilize resources for economic growth**, especially for the public sector
- To **promote economic growth in the private sector** by providing incentives to save & invest
- To restrain inflationary forces in the economy in order to **ensure price stability**
- To ensure equitable distribution of **income & wealth**

Fiscal policy & macro economic goals

1. Fiscal policy for economic growth

b) *To promote savings*

c) *Tax measures generally used for the purpose of resource mobilization*

d) *Economic growth through borrowings includes internal & external borrowings*

2. Fiscal policy for stabilization

a) *Changes in taxation & government spending*

b) *Increasing in spendin on goods & services in the private sector*

c) *Controlling business cycles*

3. Fiscal policy for economic equality

a) *Re-allocating capital expenditure*

b) *Make provision for self employment*

c) *Imposing of wealth & property tax*

4. Fiscal policy for external balances

a) *Reducing the gap between external payment & external earnings*

5. Fiscal policy for employment

Limitations of fiscal policy

- *Formulating appropriate fiscal policy requires reliable forecasting of the variables like GNP, consumption, investment, technology changes*
- *Changes in policy of government spending*

- *Decision & implementation lags*
- *Working in underdeveloped countries is limited by low levels of income, small proportion of population, inefficiency in administration,*
- *Excessive borrowings, deficit finance*

Kinds of fiscal policy

1. **Automatic stabilization fiscal policy**
2. Compensatory fiscal policy
3. **Discretionary fiscal policy**

7) Enunciate the factors involved in determining the demand and supply of money.May/ Jun 2012

Demand for money:

DEMAND - how much money would people like to have.

- There are several classical versions for the theory of money.
- *All the versions of quantity theory of money* demonstrate that there is strong relationship between money & price level.

1. ***Fisher's version of the quantity theory of money & price (or) the quantity theory of exchange.***
2. ***Cambridge version of quantity theory of money.***
3. ***Keynesian theory of demand for money.***

1. Fisher version of the quantity theory of money & price

- It is originally called the quantity theory of exchange.

$$MV = PT \quad (or) \quad P = MV / T$$

M – Represents the quantity of money in circulation

V -Velocity of money *(in a particular period how much time money is exchange)* ***(i.e.)*** 1 Year ***(e.g. Rs.100)***

P – General price

T – The total volume of transaction for which money payments are made. It includes goods & services.

- The product M & V gives the supply of money during the particular period of time.
- The product P & T represents the money volume of all goods & services brought during the given period of time.
- Fisher points out that in a country during any given period of time, the total quantity of money **(MV)** will be equal to the total value of all goods & services bought & sold **(PT)**

$$MV = PT$$

Supply of money = Demand for money

- This equation is referred as 'cash transaction equation'.
- It is expressed as **P = MV/T** which Implies that the quantity of money determine the price level.
- The Price level varies directly with the quantity of money.

2. The Cambridge version of quantity theory of money (or) cash balance approach

- The Cambridge version of quantity theory of money was first developed by a great ***"Cambridge economist" Alfred Marshall.***
- It was later modified by his followers.
- This is why Marshall's version is properly known as Cambridge version of quantity theory of money.
- It is also often referred to as ***"Neo classical theory of money" (or) cash balance approach.***
- In this approach money has been considered as a **store value.**
- ***The value of money depends upon the demand for & supply of money.***
- The value of money reaches equilibrium when the demand & supply of money become equal.
- The changes in the value of money are due to the changes either in the supply of money or demand for money or both.
- According to this approach the Cambridge economists considered the demand for & supply of money only at a particular point of time & not over a period.
- The supply of money is the stock at a particular point of time.

- The demand for money is to hold money. It is the total money held by private individuals, business houses & the government to meet the daily requirements.
- The demand for money is the function of people's desire to hold money. ***(i.e.)*** the demand for cash balance *(or)* liquid preference.
- This is a fundamental difference between Fisher and the Cambridge approach.
- The value of money is determined by the supply of money & demand of money,
- ***As increase in the demand for money denotes people's desire to hold more money, which means lesser demand for goods & services.***
- Where the price level will fall but the value of money will rise.
- On the other hand a fall in demand for money means lesser demand for money for holding.
- This will lead to higher expenditure.
- Where the price level increases the value of money will fall.

Thus according to their approach aggregate demand for money can be expressed as,

$$\mathbf{M}d = k\mathbf{PY}$$

Where

Y – Real national income

P – Average price level of currently produced goods & services

PY – National Income

k – Proportion of national income **(PY)** that people wants to hold as cash balances

M*d* – demand for money

3.<u>Keynesian theory of demand for money (or) motives for liquidity preference (or) 3 main motives of demand & supply for money</u>

- According to Keynes money is demanded for three motives.
    - ***a) Transaction motive or demand for money***
    - ***b) Precautionary motive or demand for money***
    - ***c) Speculative motive or demand for money***

a) Transaction motive

- People demand money to carry on transaction by selling and buying goods and services.
- Higher the income, higher will be the demand for money for transaction purpose.
- Lower the income, lower will be the demand.
- The need for holding money arises because there is a time gap between the receipt of income and expenditure.
- Income is received periodically, weekly, monthly or annually.
- Where as it is spent on goods and services over time as and when need arises.

(For e.g.) Individuals getting their salary on monthly basis do not spend the entire income on the first day of the month. They hold some money for telephone and electricity bills and house tax and so on…to be paid as and when the demand is received.

- The transaction demand for money is directly related to the level of income.
- People know by their experience the amount of money they need for transacting their planned expenditure.
- According to Keynes the aggregate transaction demand for money is a function of the national income.

$$M_t = f(Y)$$

Where

M_t = transaction demand for money

Y = income

- In the Keynesian system the proportion of income held for transaction motive is constant and fairly stable in the short run.
- It implies that given income and its distribution, the short run relationship between income and transaction for money can be satisfied as ,

$$M_t = Ky$$

Where

k = a constant proportion of income demanded for transaction purpose.

b) Precautionary motive

- Besides for spending people demand money as a precaution.

- People would like to have some excess money ***to face sickness or other unexpected expenses.***
- Precautionary motive for holding money refers to the desire of the people to hold cash balance for unforeseen contingencies.
- People hold a certain amount of money to provide for the danger of unemployment, sickness, accidents and the other uncertain perils.
- The amount of money demanded for this motive will depend on the psychology of the individual and the condition in which he lives.
- This relationship is expressed in functional form as,

$$\mathbf{M}\boldsymbol{p} = \boldsymbol{f}(\mathbf{Y})$$

M*p* = precautionary demand for money

Y = income

c) Speculative motive

- The speculative demand for money depends upon the rate of interest.
- ***Higher the rate of interest lower will be the demand for money***
- ***Lower the rate of interest higher will be the demand for money***
- According to Keynes, people hold a part of their income in the form of idle cash balance for speculative purpose.
- The desire ***to hold idle cash balance for speculative purpose arises from the desire to take advantage of the changes in money market.***

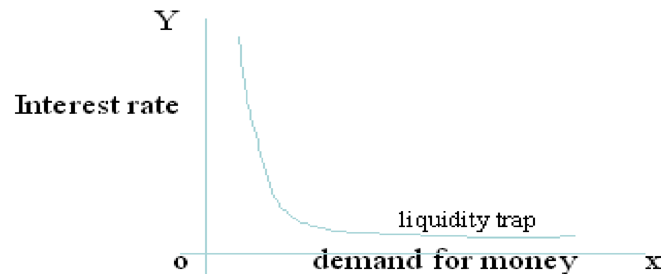
In Keynes view

- If the interest rate does increase in future the bond prices go down.
- The person who holds the idle cash can buy the bond at a lower price and make a capital gain.
- Besides he earns a higher rate of return on the bond.
- The higher rate of return arises because he earns a given income on a bond which has a price lower than its face value.
- If interest rate does not increase those holding idle cash balance lose interest on it.

- Thus if a person decides to hold idle cash balance in expectation of rise in the interest rateunder the ***condition of uncertainty*** the person is speculating.
- Speculation involves an element of risk.
- Keynes called this kind of cash balance to holding as ***speculative demand for money.***

Liquidity trap

- A situation when the market rate of interest falls to a minimum level
- When the rate of interest goes below a minimum level ***a level below*** which people prefer to hold idle cash balance & bank pulls down their shutters Keynes called this kind of a situation as "liquidity trap"



- If the monetary authorities ***increases money supply to lower the rate of interest*** the entire money supply gets trapped into liquidity as extra idle cash balance. This is what Keynes called "liquidity trap"