COURSE CODE: AEM 102

COURSE TITLE: PRINCIPLES OF ECONOMICS

TOPIC: INFLATION

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INTRODUCTION TO INFLATION

- **Inflation is a sustained rise in the general level of prices—the price level.**
- The inflation rate is the rate at which the price level increases.
- Inflation is a general and ongoing rise in the level of prices in an entire economy. Inflation does not refer to a change in relative prices.
- A relative price change occurs when you see that the price of tuition has risen, but the price of laptops has fallen.
- Inflation, on the other hand, means that there is pressure for prices to rise in most markets in the economy.
- In addition, price increases in the supply-and-demand model were one-time events, representing a shift from a previous equilibrium to a new one.
- Inflation implies an ongoing rise in prices. If inflation happened for one year and then stopped, then it would not be inflation any more.

NOMINAL GDP

- Economists call the value of goods and services measured at current prices **nominal GDP.**

But note that nominal GDP can increase either because prices rise or because quantities rise.

- It is easy to see that GDP computed this way is not a good gauge of economic well-being. That is, this measure does not accurately reflect how well the economy can satisfy the demands of households, firms, and the government.

- If all prices doubled without any change in quantities, nominal GDP would double. Yet it would be misleading to say that the economy's ability to satisfy demands has doubled, because the quantity of every good produced remains the same.

REAL GDP

- A better measure of economic well-being would tally the economy's output of goods and services without being influenced by changes in prices.

- For this purpose, economists use **real GDP, which is the value of goods and services** measured using a constant set of prices.

- That is, real GDP shows what would have happened to expenditure on output if quantities had changed but prices had not.

- Because the prices are held constant, real GDP varies from year to year only if the quantities produced vary.

- Likewise because a society's ability to provide economic satisfaction for its members ultimately depends on the quantities of goods and services produced, real GDP provides a better measure of economic well-being than nominal GDP.

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GDP DEFLATOR

- **Macroeconomists** typically look at two measures of the price level to measure the inflation rate these are: ***(1) the GDP deflator (2) the Consumer Price Index.***
- The **GDP deflator, also called the *implicit price deflator for GDP, which is the*** ratio of nominal GDP to real GDP.
- The GDP deflator reflects what's happening to the overall level of prices in the economy.

- The **GDP deflator in year** *t, Pt, is defined as the ratio of nominal GDP to real GDP in year t :*

- GDP Deflator = $\frac{\text{Nominal GDP}}{\text{Real GDP}}$. = $P_t = \frac{\text{Nominal GDP}_t}{\text{Real GDP}_t} = \frac{\$Y_t}{Y_t}$

- ***Nominal GDP measures the current dollar value of the output of the economy.***

CONSUMER PRICE INDEX

•To measure the average price of consumption, or, equivalently, the cost of living, macroeconomists look at another index, **the Consumer Price Index, or CPI.**

•The CPI has been in existence in the United States since 1917 and is published monthly.

•The most commonly used measure of the level of prices is the consumer price index (CPI).

•Just as GDP turns the quantities of many goods and services into a single number measuring the value of production, the CPI turns the prices of many goods and services into a single index measuring the overall level of prices.

•The CPI is an index. It is set equal to 100 in the period chosen as the base period.

•The CPI is the price of this basket of goods and services relative to the price of the same basket in some base year.

•*The CPI gives the cost in dollars of a specific list of goods and services over time.*

CPI (Cont'd)

- For example, suppose that the typical consumer buys 5 apples and 2 oranges every month. Then the basket of goods consists of 5 apples and 2 oranges, and the CPI is:

$$\text{CPI} = \frac{(5 \times \text{Current Price of Apples}) + (2 \times \text{Current Price of Oranges})}{(5 \times 2009 \text{ Price of Apples}) + (2 \times 2009 \text{ Price of Oranges})}.$$

- In this CPI, 2009 is the base year. The index tells us how much it costs now(2021) to buy 5 apples and 2 oranges relative to how much it cost to buy the same basket of fruit in 2009.

The consumer price index is the most closely watched index of prices, but it is not the only such index.

PRODUCER PRICE INDEX

- Another is the producer price index (PPI), which measures the price of a typical basket of goods bought by firms rather than consumers.

- The PPI measures the price for finished goods, intermediate materials and crude materials at the wholesale level.

- Because wholesale prices are eventually translated into retail prices, changes in the PPI for consumer goods are usually a good predictor of changes in the CPI.

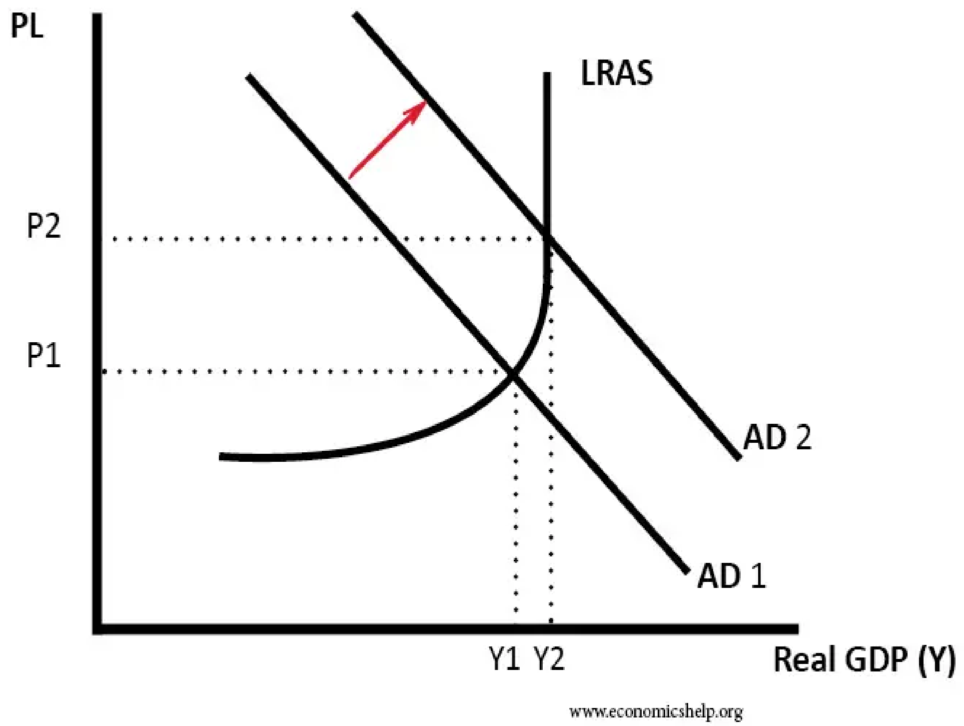
Note: Do not confuse the CPI with the PPI, or *producer price index,* which is an index of prices of domestically produced goods in manufacturing, mining, agriculture, fishing, forestry, and electric utility industries.

THE MAIN CAUSES OF INFLATION

The two main causes of inflation are which are:

1. **Demand-pull inflation** – this occurs when the economy grows quickly and starts to 'overheat' – Aggregate demand (AD) will be increasing faster than aggregate supply (LRAS).

This occurs when AD increases at a faster rate than AS. Demand-pull inflation will typically occur when the economy is growing faster than the long-run trend rate of growth. If demand exceeds supply, firms will respond by pushing up prices.



Causes of Demand-pull inflation

This is characterized by:

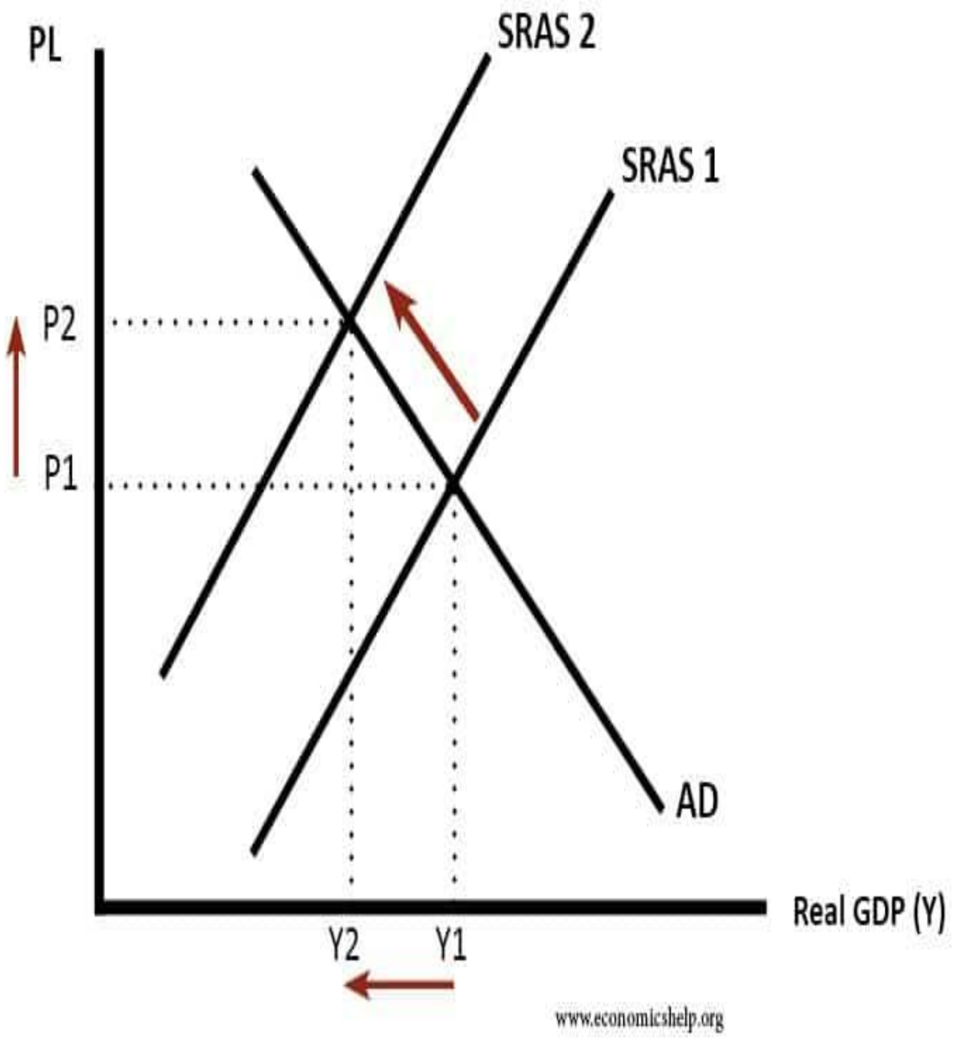
1. a sharp increase in demand that is not matched with increase in supply
2. Increase in price level,
3. Increase in aggregate output
4. arises from increase in population,
5. increase in income(demand) or a combination of both.

➢ A case was the Udoji award of 1975 and the 1981 Minimum Wage Acts in Nigeria which led to rapid increase in demand without corresponding increase in supply

THE MAIN TYPES OF INFLATION (Cont'd)

2. Cost-push inflation

- This occurs when there is an increase in the cost of production for firms causing aggregate supply to shift to the left.
- Cost-push inflation could be caused by rising energy and commodity prices.
- In early 2008, the UK economy entered a deep recession (GDP fell 6%). However, at the same time, we experienced a rise in inflation. This inflation was definitely not due to demand-side factors; it was due to cost push factors, such as rising oil prices, rising taxes and rising import prices (as a result of depreciation in the Pound) By 2013, cost-push factors had mostly disappeared and inflation had fallen back to its target of 2%. After the June 2016 Brexit referendum, Sterling fell another 13% causing another period of cost-push inflation in 2017.



Causes of Cost-push inflation

1. **Rural-urban drift / migration** leading to the neglect of agricultural sector
2. **War effect-** Efforts are diverted from production of goods to production of war equipment/ armament
3. **Bad weather/ drought** such as the 1973 Nigerian drought
4. **Imported inflation** i.e importing large quantities of goods and services from countries which have inflation.

A case is if the Nigeria Labour Congress (NLC) is able to get significant increase in wages without corresponding increase in production which result in higher cost

OTHER CONCEPTS OF INFLATION on the basis of speed and intensity:

1. **Creeping Inflation:** Creeping or mild inflation is when prices rise 3% a year or less. According to the Federal Reserve, when prices increase 2% or less, it benefits economic growth. This kind of mild inflation makes consumers expect that prices will keep going up. That boosts demand. Consumers buy now to beat higher future prices. That's how mild inflation drives economic expansion. For that reason, the Fed sets 2% as its target inflation rate.

2. **Walking Inflation:** This strong, or destructive, inflation is between 3-10% a year. It is harmful to the economy because it heats-up economic growth too fast. People start to buy more than they need to avoid tomorrow's much higher prices. This increased buying drives demand even further so that suppliers can't keep up. More important, neither can wages. As a result, common goods and services are priced out of the reach of most people.

3. **Galloping Inflation:** When inflation rises to 10% or more, it wreaks absolute havoc on the economy. Money loses value so fast that business and employee income can't keep up with costs and prices. Foreign investors avoid the country, depriving it of needed capital. The economy becomes unstable, and government leaders lose credibility. Galloping inflation must be prevented at all costs.

4. **Hyperinflation:** Hyperinflation is when prices skyrocket more than 50% a month. It is very rare. In fact, most examples of hyperinflation occur when governments print money to pay for wars. Examples of hyperinflation include Germany in the 1920s, Zimbabwe in the 2000s, and Venezuela in the 2010s.

OTHER CONCEPTS OF INFLATION(cont'd)

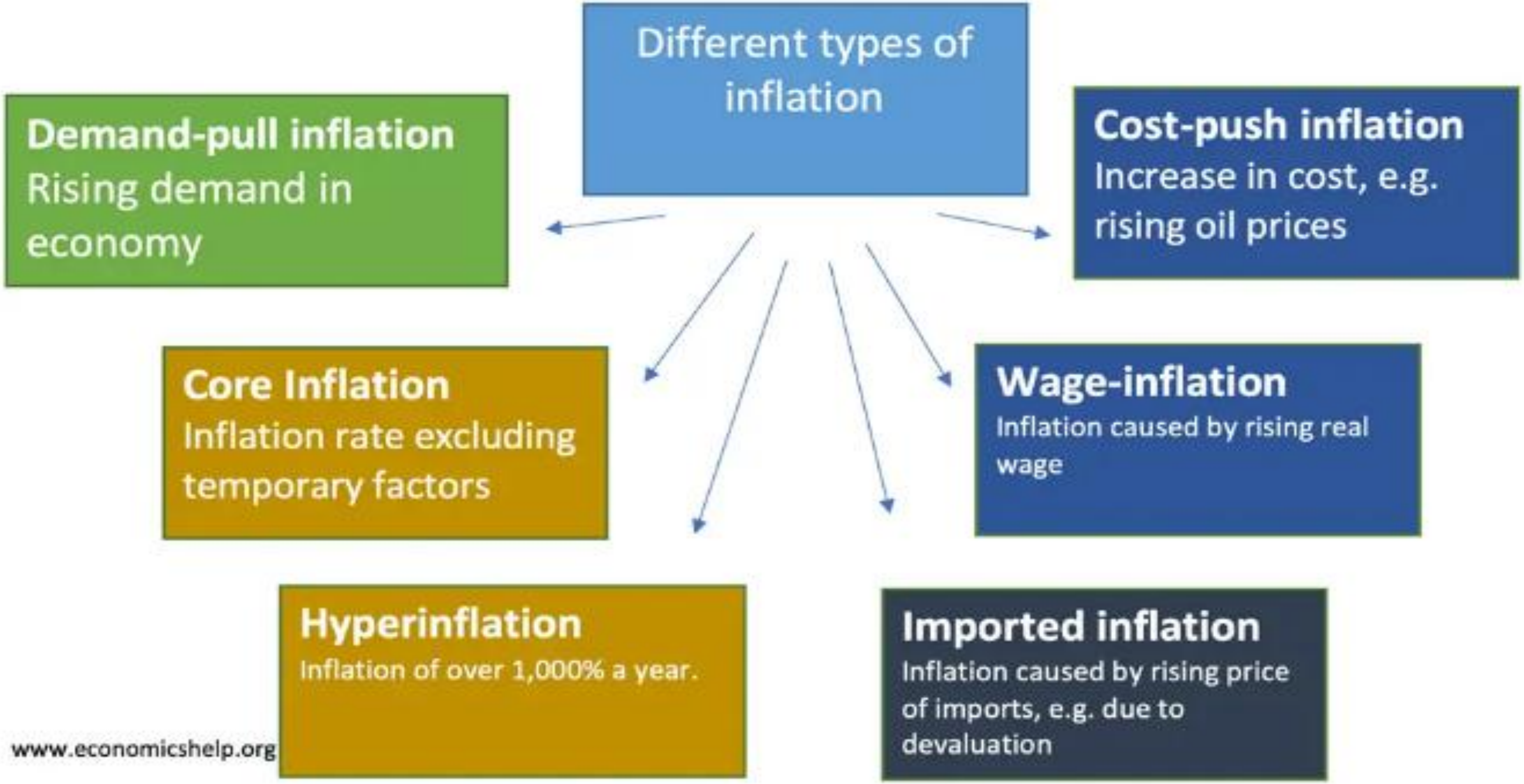
5. **Stagflation:** Stagflation is when economic growth is stagnant, but there still is price inflation. This combination seems contradictory, if not impossible. Why would prices go up when there isn't enough demand to stoke economic growth?

6. **Core Inflation:** The core inflation rate measures rising prices in everything *except* food and energy. That's because gas prices tend to escalate every summer. Families use more gas to go on vacation. Higher gas costs increase the price of food and anything else that has high transportation costs. The Federal Reserve uses the core inflation rate to guide it in setting monetary policy.

7. **Deflation:** Deflation is the opposite of inflation. It's when prices fall. It's caused when an asset bubble bursts. That's what happened in housing in 2006. Deflation in housing prices trapped those who bought their homes in 2005.7 In fact, the Fed was worried about the overall deflation during the recession. That's because deflation can turn a recession into a depression. During the Great Depression of 1929, prices dropped 10% a year.8 Once deflation starts, it is harder to stop than inflation.

8. **Wage Inflation:** Wage inflation is when workers' pay rises faster than the cost of living. This kind of inflation occurs in three situations. First is when there is a shortage of workers. Secondly, is when labor unions negotiate ever-higher wages. Thirdly is when workers effectively control their pay. A worker shortage occurs whenever unemployment is below 4%.

Types include of inflation include



EFFECTS OF INFLATION

A. Effect on income and standard of living:

1. Value of money falls
2. Fixed income earners such as recipients of transfer payments (pensions, unemployment insurance, social security, recipients of interest & rent, **lose**
3. Those of flexible income group like businessmen, shareholders, industrialists, traders real estate holders, speculators, **gain**

B. Effect on income distribution:

1. the rich tends to be richer & the poor, poorer during inflation.
2. During inflation, usually people experience rise in incomes. But some people gain during inflation at the ex-pense of others. Some individuals gain because their money incomes rise more rapidly than the prices and some lose because prices rise more rapidly than their incomes during inflation

C. Effect on borrowers and lenders (creditors and debtors):

1. The creditors are generally worse off because the real value of their future claims is reduced to the extent of inflation
2. Debtors tend to pay less in real terms than they had borrowed. So inflation favours debtors

D. Effect on salaried or wage earners:-Anyone earning a fixed income is damaged by inflation. Sometimes, unionised worker succeeds in raising wage rates of white-collar workers as a compensation against price rise. But wage rate changes with a long time lag. In other words, wage rate increases always lag behind price increases. Naturally, inflation results in a reduction in real purchasing power of fixed income-earners.

CONTROL OF INFLATION

The various methods to use to control inflation are usually grouped under three heads: **(i) monetary measures, (ii) fiscal measures (iii) other measures.**

(I) MONETARY MEASURES: Monetary measures aim at reducing money incomes.

(a) Credit Control:

One of the important monetary measures is monetary policy. The central bank of the country adopts a number of methods to control the quantity and quality of credit. For this purpose, it raises the bank rates, sells securities in the open market, raises the reserve ratio, and adopts a number of selective credit control measures, such as raising margin requirements and regulating consumer credit.

(b) Demonetisation of Currency:

However, one of the monetary measures is to demonetise currency of higher denominations. Such a measures is usually adopted when there is abundance of black money in the country.

(c) Issue of New Currency:

The most extreme monetary measure is the issue of new currency in place of the old currency. Under this system, one new note is exchanged for a number of notes of the old currency. The value of bank deposits is also fixed accordingly. Such a measure is adopted when there is an excessive issue of notes and there is hyperinflation in the country. It is a very effective measure. But is inequitable for its hurts the small depositors the most.

2. FISCAL MEASURES:

(a) Reduction in Unnecessary Expenditure:

The government should reduce unnecessary expenditure on non-development activities in order to curb inflation. This will also put a check on private expenditure which is dependent upon government demand for goods and services. But it is not easy to cut government expenditure. Therefore, this measure should be supplemented by taxation.

(b) Increase in Taxes:

To cut personal consumption expenditure, the rates of personal, corporate and commodity taxes should be raised and even new taxes should be levied, but the rates of taxes should not be so high as to discourage saving, investment and production. Rather, the tax system should provide larger incentives to those who save, invest and produce more.

(c) Increase in Savings:

Another measure is to increase savings on the part of the people. This will tend to reduce disposable income with the people, and hence personal consumption expenditure. But due to the rising cost of living, people are not in a position to save much voluntarily.

(d) Surplus Budgets:

An important measure is to adopt anti-inflationary budgetary policy. For this purpose, the government should give up deficit financing and instead have surplus budgets. It means collecting more in revenues and spending less.

(e) Public Debt:

At the same time, it should stop repayment of public debt and postpone it to some future date till inflationary pressures are controlled within the economy. Instead, the government should borrow more to reduce money supply with the public.

3. OTHER MEASURES:

(a) To Increase Production:

One of the foremost measures to control inflation is to increase the production of essential consumer goods like food, clothing, kerosene oil, sugar, vegetable oils, etc.

(b) Rational Wage Policy:

Another important measure is to adopt a rational wage and income policy. Under hyperinflation, there is a wage-price spiral. To control this, the government should freeze wages, incomes, profits, dividends, bonus, etc.

(c) Price Control:

Price control and rationing is another measure of direct control to check inflation. Price control means fixing an upper limit for the prices of essential consumer goods. They are the maximum prices fixed by law and anybody charging more than these prices is punished by law.

(d) Rationing:

Rationing aims at distributing consumption of scarce goods so as to make them available to a large number of consumers. It is applied to essential consumer goods such as wheat, rice, sugar, kerosene oil, etc. It is meant to stabilise the prices of necessaries and assure distributive justice. But it is very inconvenient for consumers because it leads to queues, artificial shortages, corruption and black marketing.

THANK YOU FOR LISTENING.