Chapter 3

Inflation

Inflation

Meaning	It is a **sustained** (i.e. persistent/continuos) **increase** in the general price level of goods and services.
Reduction in Purchasing power	It reflects a reduction in the purchasing power of money. For example, XYZ Ltd. buy 10 litre of Petrol @ 75 from Indian oil. After one month petrol price is increased to Rs. 80 per litre. XYZ Ltd can purchase only 9.38 litre petrol from Rs. 750/- but one month before he could buy 10 litre petrol. Hence purchasing power of money (Rs. 750) reduced due to inflation. **Inflation will always reduce the value of money unless interest rates are higher than inflation.**
Benefit/Loss	Inflation provide benefits to debtors and loss to creditors/Debentures/bond-holders. For example, XYZ Ltd. buy 10 litre of Petrol @ 75 from Indian oil for **one month credit**. Now XYZ Ltd is a debtor in the books of indian oil for Rs. 750/- and Indian oil is creditor in the books of XYZ Ltd for Rs. 750/-. After one month petrol price is increased to Rs. 80 per litre hence value of purchase made by XYZ Ltd is Rs. 800 but XYZ Ltd need to pay only 750/- hence benefit to XYZ Ltd (Debtor) is Rs. 50 and loss to Indian oil (Creditor) is Rs. 50.
Measured by	in India Inflation is measured by CPI & WPI
Retail/General/ Headline inflation	measured in term of Consumer Price Index (CPI)
Wholesale inflation	measured in term of Wholesale Price Index (WPI)
Core inflation	Core inflation= Headline inflation minus **food and energy (fuel) items** which are frequently subject to volatile prices

Q.1 IAS Prelims 2013
Consider the following statements:
1.Inflation benefits the debtors.
2.Inflation benefits the bond-holders.
Which of the statements given above is/are correct?
a. 1 only
b. 2 only
c. Both 1 and 2
d. Neither 1 nor 2

Q.2 IAS Prelims 2013
A rise in general level of prices may be caused by
1. an increase in the money supply
2. a decrease in the aggregate level of output
3. an increase in the effective demand
Select the correct answer using the codes given below.
a. 1 only
b. 1 and 2 only
c. 2 and 3 only
d. 1, 2 and 3

Q.3 CDS 2019
Indexation is a method whose use can be associated with which one of the following ?
(a) Controlling inflation (b) Nominal GDP estimation (c) Measurement of savings rate (d) Fixing of wage compensation

All India Inflation rates

National Statistical Office (NSO), Ministry of Statistics and Programme Implementation publishes All India Inflation rates (on ***point to point basis*** i.e. current month over same month of last year, e.g- , July 2023 over July 2022).

Inflation rates are provided based on **Consumer Price Index (General)**-for Rural, Urban and Combined and **Consumer Food Price Index (CFPI)**- Rural, Urban and Combined (called Food Inflation).

Consumer Price Index (General)– for Rural, Urban and Combined (Base year 2012= 100)

About CPI	Consumer Price Indices (CPI) measure changes over time in general level of prices of goods and services that households acquire for the purpose of consumption. CPI is widely used as a **macroeconomic indicator of inflation**, and also as a tool by governments and central banks (RBI) for **inflation targeting** and for monitoring price stability. CPI is also used as deflators in the National accounts (i.e. GDP).			
Issued	Monthly			
Release date	Released every month at 5.30 p.m. on **12th day** of the following month. If it is a holiday, then it is released on the next working day			
Issued by	National Statistical Office (NSO), Ministry of Statistics and Programme implementation			
Collection of Data	Monthly Price data are collected from 1114 markets in 310 selected towns by the Field Operations Division of National Sample Survey Organisation (NSSO) and from 1181 selected villages by the Department of Posts. Price data are received through web portals, maintained by the National Informatics Centre (NIC)			
No of items	No of Priced items all india basis in CPI basket are <u>448 in rural basket</u> and <u>460 in urban basket</u>.			
Group & Weights	**Group**	**Weights**		
		Rural	**Urban**	**Combined**
	1) Food and beverages	54.18	36.29	45.86
	2) Pan, tobacco and intoxicants	3.26	1.36	2.38
	3) Clothing and footwear	7.36	5.57	6.53
	4) Housing *****	**0**	21.67	10.07
	5) Fuel and light	7.94	5.58	6.84
	6) Miscellaneous (**Services etc.**)	27.26	29.53	28.32
		100	**100**	**100**
Consumer Food Price Index Weights	1) Food and beverages	**54.18**	**36.29**	**45.86**
	Less:			
	Non-alcoholic beverages	1.37	1.13	1.26
	Prepared meals, snacks, sweets etc	5.56	5.54	5.55
		47.25	**29.62**	**39.06**

***** *House rent is compiled only for CPI (Urban). It is not compiled for rural sector because there is negligible number of rented houses in the rural areas.*

Q.4 SCRA-2013
Consumer price index is designed to measure the degree to which
(a) Incomes are distributed among the poor and rich over time
(b) The cost of purchasing a bundle of consumer goods has changed with time
(c) Consumption patterns have changed with time because of higher prices
(d) Consumer prices have risen relative to wages

Q.5 CDS 2017
Which one of the following indices is now used by the Reserve Bank of India to measure the rate of inflation in India?
(a) NASDAQ Index (b) BSE Index (c) Consumer Price Index (d) Wholesale Price Index

Q.6 CAPF-2013
The rate of inflation In India is measured generally in respect of movement of
(a) consumer price index (b) wholesale price index (c) cost of living index for agricultural labour (d) money supply

Q.7 CAPF 2020
Which of the following goods are included to estimate food inflation in India?
1. Wheat
2. Paddy
3. Tobacco
4. Sugar
Select the correct answer using the code given below:
(a) 1, 2 and 3
(b) 2, 3 and 4
(c) 1, 3 and 4
(d) 1, 2 and 4

Seasonal Movements in CPI and its Food components

Food basket which has a large weight in the price indices (particularly in Consumer Price Index) in India is affected by seasonality.

Within food basket of the price indices, pulses, fruits and vegetables groups, in particular, have witnessed large changes in prices mainly due to their seasonal nature.

General (Headline) inflation is more volatile than core; it fluctuates more due to large changes in the relative prices of certain food items vulnerable to supply shocks.

Inflation target

Moderate inflation is good for growth in developing country. Slowly increasing price level keeps businesses profitable and attract investment. It also prevents consumer from holding off their purchases in anticipation of price fall. A little inflation encourages to buy sooner and that boosts economic growth.

Inflation target in India is set by the Govt. in consultation with RBI, once in every five years.

Inflation target is measured by the Consumer Price Index (CPI). **Inflation target is 4% (+/-) 2%** for the period from 1st April , 2021 to March 31, 2026.

if the average inflation is more than the upper tolerance level of 4% + 2%, that is, 6%, or less than the lower tolerance level of 4%- 2%, that is 2%, for any 3 consecutive quarters, it would mean a failure to achieve the inflation target.

Where RBI fails to meet the inflation target, it shall set out a report to the Central Government stating the reasons for failure to achieve the inflation target; remedial actions proposed to be taken by RBI; and an estimate of the time-period within which the inflation target shall be achieved pursuant to timely implementation of proposed remedial actions.

Q.8 IAS Prelims 2011
Economic growth is usually coupled with ?
(a) Deflation. (b) Inflation. (c) Stagflation. (d) Hyperinflation.

Q.9 CDS-2012
Which of the following statements is / are correct?
l. High growth will lead to inflation.
2. High growth will lead to deflation.
Select the correct answer using the code given below :
(a) 1 only (b) 2 only (c) Both 1 and 2 (d) Neither 1 nor 2

Wholesale Price Index (Base year 2011-12=100)

About WPI	Wholesale Price Index (WPI) measures the average change in the prices of commodities for bulk sale at the first stage of transactions. (i.e.wholesale price) This helps in timely intervention by the Government to check inflation, particularly in essential commodities, before the price increase spills over to retail prices. The **prices tracked are ex- factory price** for manufactured products, agri-market (mandi) price for agricultural commodities and ex-mines prices for minerals. **Prices do not include indirect taxes** in order to remove impact of fiscal policy.

	The Wholesale Price Index covers prices of products/commodities only pertaining to **four sectors** comprising agriculture, mining, manufacturing and electricity. The other sectors of GDP, in particular, **services sector are not covered under WPI.**
Uses	WPI is used as deflator for many sectors of the economy for estimating GDP. It is also used to deflate nominal (current) values of production in Index of Industrial Production (IIP). WPI is also used for indexation/escalation in business contracts.
Issued	Monthly, on **14th day** of the following month. If it is a holiday, then it is released on the next working day
Issued by	Office of economic adviser, DPIIT, Ministry of commerce & Industry
Commodities & Weight (total items 697)	1) PRIMARY ARTICLES (Weight 22.62%) (Items 117) (in Primary articles, Food articles weight is highest 15.26%) 2) FUEL & POWER (Weight 13.15%) (Items 16) 3) MANUFACTURED PRODUCTS (Weight 64.23%) (Items 564) (in Manufactured Products, Manufacture of Food Products weight is 9.12% second highest and Highest weight is of Basic metals 9.65%) Weights given to each commodity covered in the WPI basket is based on the value of production adjusted for net imports in the base year 2011-12.
WPI Food Index (Weight 24.38%)	It consists of "Food Articles" from Primary Articles group and "Manufacture of Food Products" from Manufactured Products group.

Q.10 CAPF-2010
Consider the following items of wholesale price index:
1. Primary articles 2. Fuel, power, lights and lubricants 3. Manufacturing products
Arrange the above items in descending order in terms of their weightage in calculating wholesale price index:
(a) 1, 2, 3
(b) 1, 3, 2
(c) 3, 1, 2
(d) 3, 2, 1

Q.11 CAPF-2013
Which one among the following items has maximum weight in wholesale price index in India?
a. Primary article
b. Fuel and power
c. Manufactured product
d. Food item

Q.12 CISF-LDC-2009
In calculation of wholesale price index, which item has been assigned the maximum weightage?
(a) Food articles (b) Non-food articles (c) Fuel, power, light and lubricants (d) Manufactured products

Q.13 IAS Prelims 2010
With reference to India, consider the following statements:
1. The Wholesale Price Index (WPI) in India is available on a monthly basis only.
2. As compared to Consumer Price Index-CPI, the WPI gives less weight to food articles.
Which of the statements given above is/are correct?
(a.) 1 only (b.) 2 only (c.) Both 1 and 2 (d.) Neither, 1 nor 2

Q.14 CDS-2011
At present the Wholesale Price Index (WPI) for all commodities including manufactured products is released on a
(a) weekly basis (b) monthly basis (c) bi-weekly basis (d) quarterly basis

Q.15 Prelims 2020
Consider the following statements :
1. The weightage of food in Consumer Price Index (CPI) is higher than that in Wholesale Price Index (WPI).
2. The WPI does not capture changes in the prices of services, which CPI does.
3. Reserve Bank of India has now adopted WPI as its key measure of inflation and to decide on changing the key policy rates.
Which of the statements given above is/are correct?
(a) 1 and 2 only (b) 2 only (c) 3 only (d) 1, 2 and 3

Experimental Service Price Index (BSPI)

Issued by	Office of economic adviser, DPIIT, Ministry of commerce & Industry
Sectors for which issued	1. Experimental **Railway** Service Price Index (Monthly issued) (Base Year: 2011-12) 2. Experimental **Banking** Service Price Index (Monthly issued) (Base Year: 2011-12) 3. Experimental **Air** Service Price Index (Monthly issued) (Base Year: 2015-16) 4. Experimental **Postal** Service Price Index (Monthly issued) (Base Year: 2004-05) 5. Experimental **Insurance** Service Price Index (**Quarterly** issued) (Base Year: 2011-12) 6. Experimental **Telecom** Service Price Index (**Quarterly** issued) (Base Year: 2015-16) 7. Experimental **Port** Service Price Index (**Quarterly** issued) (Base Year: 2011-12) 8. Experimental Business Service Price Index - Securities (**Quarterly** issued) (Base 2017-18)
Why experimental	Due to non-availability of accurate data on services inflation and conceptual complexities in service sector.
Need for service index	While the WPI measures price movement of goods in wholesale markets, the CPI tracks inflation at retail level and also includes certain services. Considering that the services sector contributes around 60% of the country GDP, there is a long-felt need for such an index to measure the inflationary pressure caused by cost of services.

Consumer Price Index for industrial workers (Base year 2016=100)

Issued	Monthly
Issued by	Labour bureau under Ministry of Labour and Employment
When issued	on the **last working day** of the succeeding month. For example, for July 2021 release date on 31st August 2021
Uses	• Computation of Dearness allowance of Govt employees. • Fixation and revision of minimum wages in respect of employment in industrial sector under the Minimum Wages Act, 1948. • It is also used for price variation/escalation clause in business contract in respect of increase in labour cost due to extention of contract period.

Q.16 IAS Prelims 2015
Which of the following brings out the 'Consumer Price Index Number for the Industrial Workers'?
a) The Reserve Bank of India b) The Department of Economic Affairs
c) The Labour Bureau d) The department of Personnel and Training

Consumer Price Index for Agricultural Labour & Rural Labour (Base year 1986-87 =100)

About CPI(AL/RL)	CPI for Agricultural Labour cover the households of agricultural labours and CPI for Rural Labour cover the households of rural labours (including agricultural labours). Agricultural labour households constituted about three-fourth of the rural labour households.
Issued	Monthly on 20th of the succeeding month
Issued by	Labour bureau
Uses	Fixation and revision of minimum wages in respect of employment in Agriculture and in Rural areas under the Minimum Wages Act, 1948. Wage rates for workers under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005 are notified and revised annually based on Consumer Price Index-Agricultural Labourers (CPI-AL) by the Central Government in accordance with the provisions of Section 6(1) of the Mahatma Gandhi NREGA. The revised wage rates are made applicable from 1st April of the year. A Committee under the chairpersonship of former Additional Secretary, Ministry of Rural Development was constituted to study among other things the appropriate index for revising

	MGNREGA wages. The Committee recommended using Consumer Price Index-Rural instead of the existing CPI-AL for revising MGNREGA wages every year. The Committee also recommended use of annual average instead of the existing practice of using December month index only. The recommendations of the Committee are **under consideration** in consultation with the Ministry of Finance.

Producer Price Index

Working group for PPI	The Government had set up a Working Group under the Chairmanship of Professor B. N. Goldar on 21st August, 2014 to suggest the methodology for introducing Producer Price Index (PPI) in India and eventually migrating from WPI in keeping with international best practices. The Working Group submitted its report on 31.08.2017. PPIs are part of the International Monetary Funds (IMF) recommended set of economic indicators.
About PPI	The **Producer Price Index** (PPI) measures the average change in the prices of goods and **services**, either as they leave the place of production called **Output PPI** or as they enter the production process called **Input PPI**. Thus, the **output indices measure** the average change in prices that producers receive for their outputs while the **input indices measure** the average change in prices that producers pay for their inputs.
Producers' price	The output PPI reflects prices of goods and services received by the producers **exclusive** of any tax on product, transport and trade margin, i.e., the prices are measured at basic price captured at the level of ex-factory, ex-mine, ex-firm, ex-service provider etc. The basic price would however include any taxes/ subsidies on production, if any. GST charged by Producer, profit margin, insurance and transport charges will not be added.
Purchasers' price	For input PPI, valuations are done at purchaser"s price which is defined as the amount paid by the purchaser inclusive of any non-deductible taxes on product, and transport and trade margins. Purchasers' price = Producer's price + GST (if not deductible by the purchaser i.e. input credit not available) + transport charges + Wholesaler's and retailer's margin
Major recommendations of Working Group	(i) PPI in India may be compiled using weights based on Total Final Use values given in **Supply and Use Table 2011-12** (published by the Central Statistics Office). (ii) The PPIs may be initially compiled on an experimental basis and switching over from WPI to PPI should be undertaken after the PPI series stabilizes and due consultation with the stakeholders is done. (iii) For compilation of experimental PPI, price quotations collected for current series of WPI may be used. (iv) The experimental PPI will be released on **monthly basis**. Initially, the **base year** of the experimental PPI would be **2011-12**. (v) Currently there is limited coverage of service sectors due to non-availability of data and conceptual complexities. Given the limitations, the Working Group has identified **15 services** to be included in the experimental PPI and their prices would be taken from CPI / BSPI. The coverage of service sector may be extended to all key sectors on an urgent basis during the experimental phases of PPI.
Supply and Use Table	CSO has for the first time compiled and published The Supply and Use tables (SUT) with 140 products & Services and 66 industries of the Indian economy for the years 2011-12 and 2012-13. Supply Table shows, the value of the product by kind of supplier/producer, distinguishing the domestic supply from foreign supply (imports). Use Table shows, the value of use of the product (good or service) by type of use, i.e. as intermediate consumption by industries, final consumption, gross capital formation and exports. The supply-use equation for any given product in an economy can be mathematically expressed as: Output + Imports = Intermediate consumption + Final consumption + Gross Capital formation (including changes in stocks and valuables) + Exports.

Difference between PPI and WPI	• Producer Price Indices (PPI) capture price transmission across stages of production and final demand and thus provide a more useful economic indicator for analyzing the buildup of inflationary pressures in an economy, more effectively than the WPI which tracks prices of bulk transactions at first stage of all intermediate and final products. • Inherent drawback of the aggregate basket of WPI without appropriate segregation of intermediate and final products involves **multiple counting** which can lead to bias in measures of inflation. PPI removes the multiple counting biases inherent in WPI. PPIs can be compiled separately for Out PPIs, Input PPIs and Export and Import PPIs. • WPI **does not cover services** and whereas PPI includes services. • Weights of items in WPI are based on net traded value whereas in PPI weights are derived from Supply and Use Table (SUT).
Difference between PPI and CPI	• PPI estimates the change in average prices that a producer receives while CPI measures the change in average prices that a consumer pays. The prices received by the producers differ from the prices paid by the consumers on account of various factors such as taxes, trade and transport margin, distribution cost etc.. • Weights of items in CPI are derived from Consumer Expenditure Surveys whereas for PPI it is calculated on the basis of Supply Use Table.
Use of PPI	PPI estimates are used as deflators in national accounts i.e.GDP and for indexation/escalation of business contracts etc. For a majority of industries, Gross Value Added (GVA) at constant prices is derived by dividing GVA at current prices with WPI (**Single Deflation Approach**). Best approach to calculate estimates of GVA is a "**Double Deflation Approach**" which derives GVA at constant prices as the difference between deflated gross output and intermediate consumption by, respectively, output and input price index. Compilation of PPI would make it possible to apply the double deflation method and thus provide a more accurate reflection of the price changes of the relevant economic activities.

GDP Deflator

Gross Domestic Product (GDP)	GDP is **Market value of all final** goods and services produced **within the domestic economy** during a year.		
GDP deflator or Implicit Price Deflator	GDP at Current Prices (i.e. Nominal GDP) x 100 GDP at Constant/Base Price (i.e. Real GDP or say, Nominal GDP adjusted for inflation)		
Example Suppose base year is 2012	Year	Qty Produced in Economy	Price
	2012	100	20
	2018	150	25
	Nominal and Real GDP in 2012	100 x 20	2000
	GDP at Current Prices or Nominal GDP in 2018	150 x 25	3750
	GDP at Constant/Base Price or Real GDP in 2018	150 x 20	3000
	GDP Deflator in 2018	(3750/3000)x100	125
Result or conclusion	It shows to what extent an increase in GDP has happened on account of higher prices, rather than increased output. GDP deflator 125 indicates the rate of inflation being 25% in last six years and Real GDP is only 3750/125% = Rs. 3000. Hence Real GDP growth in camparison to 2012 is 50% (3000-2000)/2000x100		

More comprehensive indicator of **inflation**	Because it covers the entire range of goods and services produced in the economy as against the limited commodity baskets for the wholesale or consumer price index. Changes in consumption patterns or the introduction of new goods and services are automatically reflected in the deflator.
Why Limited use	It is available only on a quarterly basis along with GDP estimates, whereas CPI and WPI data are released every month
Differences with CPI and WPI	1. The goods purchased by consumers do not represent all the goods which are produced in a country. GDP deflator takes into account all such goods and services. 2. CPI includes prices of goods consumed by the representative consumer, hence it includes prices of imported goods. GDP deflator does not include prices of imported goods. 3. The weights are constant in CPI – but they differ according to production level of each good in GDP deflator.

Q.17 IAS Prelims 1992
A deflator is a technique of
(a) Adjusting for changes in price level (b) Adjusting for change in commodity
(c) Accounting for decline of GNP (d) Accounting for higher increase of GNP

Selection of Base Year

The well-known criteria for the selection of a new base year are:
(i) a normal year, i.e., a year in which there are no abnormalities in the level of production, trade and in the price level and price variations,
(ii) a year for which reliable production, price and other required data are available, and
(iii) a year as recent as possible and comparable with other data series.

Year 2011-12 was assessed to be a normal year from the point of view of agriculture production and commodity prices. Central Statistics Office (CSO) shifted its National Account Statistics (i.e.GDP) base to the new base year of 2011-12.

Need for a periodic revision in the base year

Over time economies undergo structural changes. Product and their specifications, both in terms of content, quality and packaging, are changing even faster. It has, therefore, become increasingly difficult to obtain the price information of selected products over a longer period of time.

Also, a number of products, which were very important in terms of the market share during the base year of the ongoing series, loose relative importance or completely phase out and get replaced by new substitutes in the market. Moreover, New products also emerged in the market.

National Statistical Commission had recommended to revise the base year of all economic indices every five years.

Now Govt has started exercise to revise base year of GDP, IIP and WPI to 2017-18 and for CPI to 2018 to accommodate the changes taken place in the economy since the existing base year.

National Statistical Commission

Government of India through a resolution dated 1st June, 2005 set up the National Statistical Commission (NSC) under Ministry of Statistics and Programme implementation. The setting up of the NSC followed the decision of the Cabinet to accept the recommendations of the Rangarajan Commission, which reviewed the Indian Statistical System in 2001.

The NSC was constituted with effect from 12th July 2006 with a mandate to evolve policies, priorities and standards in statistical matters. NSC has four Members besides a Chairperson, each having specialization and experience in specified statistical fields.

Q.18 IAS Prelims 2011
A rapid increase in the rate of inflation is sometimes attributed to the " base effect". What is "base effect" ?
(a) It is the impact of drastic deficiency in supply due to failure of crops.
(b) It is the impact of the surge in demand due to rapid economic growth.
(c) It is the impact of the price levels of previous year on the calculation of inflation rate.
(d) None of the statements (a), (b) and (c) given above is correct in this context.

Types of Inflation

Demand-pull inflation	Demand-pull inflation is when aggregate demand for a good or service overtakes aggregate supply. Typically, sellers meet such an increase with more supply. But when additional supply is unavailable, sellers raise their prices. That results in demand-pull inflation.
Cost-push inflation	Caused by an increase in prices of inputs like labour, raw material etc. E.g. Increase in oli price resulted high transportation cost, Implementation of 7^{th} Pay commission
Creeping inflation	When the rise in prices is very slow like that of a snail or creeper. Like 3% or less per year Such an increase in prices is regarded safe and essential for economic growth.
Walking inflation	When inflation is between 3% and 10% per year
Galloping inflation	When inflation rises to 10% or more
Hyperinflation	Hyperinflation is when prices are skyrocketed by more than 50% per month.
Stagflation	• Stagflation is a combination of stagnant economic growth, high unemployment, and high inflation. • It's an unnatural situation because inflation is not supposed to occur in a weak economy. • When economic stagnation and inflation occur simultaneously, tools that ease one problem make the other worse. For example, • To combat recession, RBI reduces interest rates to stimulate growth but it can increase inflation as Borrowings from banks will be higher consequently consumers will have more money to spend. • To fight inflation, RBI raises interest rates but it can reduce growth as Borrowings from banks will be less consequently consumers will have less money to spend. • Stagflation happened in the United States during the 1970s, when the country underwent a recession.
Structural inflation in India	Inflation in the Indian economy is due to supply side issues and the inefficiencies inherent in production and distribution. For example, • Lack of efficient supply and distribution network for agricultural commodities. • Lack of post harvest infrastructure and facilities like cold storage, cold chain, refrigerated van etc which help in reducing post harvest wastage. • Price differential between farm gate and consumer due to unorganized retail sector This means that policy should not be focused on aggregate demand, but rather on overcoming capacity constraints and productivity deficiencies.
Benign inflation	It means inflation is moderate not harmful i.e. under control. It gives room to RBI to cut key policy rates for economic growth.
Disinflation	Disinflation is a decrease in the rate of inflation. Cost of Disinflation is high unemployment and loss in GDP. To reduce inflation, RBI raises interest rates but it can reduce growth rate as Borrowings from banks will be less consequently consumers will have less money to spend.

Q.19 SCRA-2010
Inflation accompanied by increase in unemployment is called
(a) recession (b) depression (c) deflation (d) stagflation

Q.20 CDS 2021
The situation in an economy which is growing slowly along with rapid inflation (rising price level) is called
(a) Stagnation (b) Deflation (c) Stagflation (d) Recession

Q.20A CDS (1) 2023
Which one of the following situations can lead to inflation?
(a) Rapid growth of aggregate demand outweighing supply (b) Sluggish growth of aggregate demand
(c) Reduction in the money supply (d) Higher levels of unemployment

Deflation and Reflation

Deflation	It is a persistent fall in the general price level of goods and services. Deflation occurs when the inflation rate falls below 0% (a negative inflation rate).
Reflation	Reflation is a monetary or fiscal policy by the central bank and government to boost demand and thus increase the level of economic activity and combat deflation.

Q.21 SCRA-2010
Deflation means
(a) negative inflation rate (b) decline in inflation rate (c) depreciation of local currency (d) decline in money supply

Q.22 IAS Prelims 2010 & CDS-2012
Which of the following statements is an appropriate description of deflation?
(a) It is a sudden fall in the value of a currency against other currencies
(b) It is a persistent recession in both the financial and real sectors of economy
(c.) It is a persistent fall in the general price level of goods and services
(d) It is a fall in the rate of inflation over a period of time

Q.22A CDS (1) 2023
The sustained decrease in the general price level is called as
(a) deflation (b) stagflation (c) devaluation (d) recession

Measures to control Inflation and Deflation

Both inflation and deflation are bad for the society. Poor and middle income group are worst affected by rise in the price level. Similarly, producers are worst affected by fall in prices or deflation. Their profit level falls due to fall in prices forcing them to reduce investment. This further causes employment level to fall. So the whole society gets badly affected by deflation.
Hence it is necessary to control inflation and deflation both. The measures or policies to tackle these problems include:
(i) Fiscal policy- implemented by the Govt
(ii) Monetary policy- implemented by the RBI (Increase/Decrease of policy interest rates)

Fiscal policy

Fiscal policy has two broad components: **discretionary policy** from explicit government actions, and **automatic stabilizers**, which refer to built-in elements in the tax-and-benefit system that tend to mitigate economic fluctuations without explicit government action.

Deliberate action by Govt to stabilise the economy against upward and downward movements is referred to as discretionary fiscal policy.

Discretionary fiscal policy is a demand-side policy that uses government spending and taxation policy to influence aggregate demand. It has two type

Contractionary fiscal policy - If the government faces a situation of high inflation characterized by excess demand in the market, it can engage in contractionary fiscal policy. For example, the government can either cut public spending or raise tax rates or both. It reduces the amount of money available for businesses and consumers to spend, which will cause consumption and investment to fall, thereby correcting the situation of excess demand.

Contractionary fiscal policy is **rarely used in democracy as politicians** campaign on the promise of government spending and lowering the tax rates in order to get elected.

Expansionary fiscal policy- It is typically used during a recession. It involves decreasing taxes, increasing government expenditures or both in order to fight **recessionary** pressures (also called **Financial motivators**). A decrease in taxes means that households have more disposal income to spend thereby correcting the situation of deficiency in demand. However, it can also lead to inflation because of the higher demand within the economy.

The drawback of expansionary fiscal policy is that it can lead to budget deficits.

Democracy tends to lead to expansionary fiscal policy.

Cyclicality of fiscal policy

Cyclicality of fiscal policy refers to the direction of change in government expenditure and taxes relative to economic/output conditions.

Fiscal policy is considered pro-cyclical, if it is expansionary during economic booms and contractionary during recessions.

If fiscal policy is expansionary during recessions and contractionary during booms, it is considered to be counter-cyclical.

Counter-cyclical fiscal measures are policy measures which counteract the effects of the economic cycle. For example, counter-cyclical fiscal policy actions when the economy is slowing would include increasing government spending or cutting taxes to help stimulate economic recovery.

Fiscal policy is said to be counter-cyclical if the government deficit increases during economic downturns.

Automatic stabiliser

Automatic stabilisers mean **expenditures** that automatically increase or **taxes** that automatically decrease when economic conditions worsen, therefore, stabilising the economy automatically. For example- Proportional taxes, unemployment benefits help to stabilise the economy against upward and downward movements.

Proportional income tax acts as an automatic stabiliser – a shock absorber because it makes disposable income, and thus consumer spending, less sensitive to fluctuations in GDP.

When GDP rises, disposable income also rises but by less than the rise in GDP because a part of it is siphoned off as taxes. This helps limit the upward fluctuation in consumption spending.

During a recession when GDP falls, disposable income falls less sharply, and consumption does not drop as much as it otherwise would have fallen had the tax liability been fixed. This reduces the fall in aggregate demand and stabilises the economy.

Welfare transfers also help to stabilise income. During boom years, when employment is high, tax receipts collected to finance such expenditure increase exerting a stabilising pressure on high consumption spending; conversely, during a slump, these welfare payments help sustain consumption.

Further, **even the private sector has built-in stabilisers**. Corporations maintain their dividends in the face of a change in income in the short run and households try to maintain their previous living standards. All these work as shock absorbers without the need for any decision-maker to take action. That is, they work automatically. The built-in stabilisers, however, reduce only part of the fluctuation in the economy, the rest must be taken care of by deliberate policy initiative.

Q.23 IAS Prelims 2015
Which reference to inflation in India, which of the following statements is correct?
a) Controlling the inflation in India is the responsibility of the Government of India only
b) The Reserve Bank of India has no role in controlling the inflation
c) Decreased money circulation helps in controlling the inflation
d) Increased money circulation helps in controlling the inflation

Q.24 CDS-2012
Which of the following measures should be taken when an economy is going through inflationary pressures?
1. The direct taxes should be increased. 2. The interest rate should be reduced. 3. The public spending should be increased.
Select the correct answer using the code given below:
(a) 1 only (b) 2 only (c) 2 and 3 (d) 1 and 2

Q.25 IAS Prelims 1994
Which one of the following governmental steps has proved relatively effective in controlling the double digit rate of inflation in the Indian economy during recent years ?
(a) Enhanced rate of production of all consumer goods (b) Streamlined public distribution system
(c) Pursuing an export oriented strategy (d) Containing budgetary deficits and unproductive expenditure

Q.26 ES-2013
During the time of economic recession :
(a) interest rate should be increased (b) taxes should be increased
(c) expenditure on public projects should be increased (d) interest rate and taxes should be increased

Q.27 SCRA-2010
During the time of recession
(a) interest rate should be increased (b) taxes should be increased
(c) Cash Reserve Ratio should be increased (d) expenditure on public projects should be increased

Q.28 Prelims 2021
Which among the following steps is most likely to be taken at the time of an economic recession?
a) Cut in tax rates accompanied by increase in interest rate b) Increase in expenditure on public projects
c) Increase in tax rates accompanied by reduction of interest rate d) Reduction of expenditure on public projects

Q.29 IAS Prelims 2010
Consider the following actions by the Government:
1 Cutting the tax rates 2. Increasing the government spending 3. Abolishing the subsidies
In the context of economic recession, which of the above actions can be considered a part of the "fiscal stimulus" package?
(a.) 1 and 2 only (b.) 2 only (c.) 1 and 3 only (d.) 1, 2 and 3

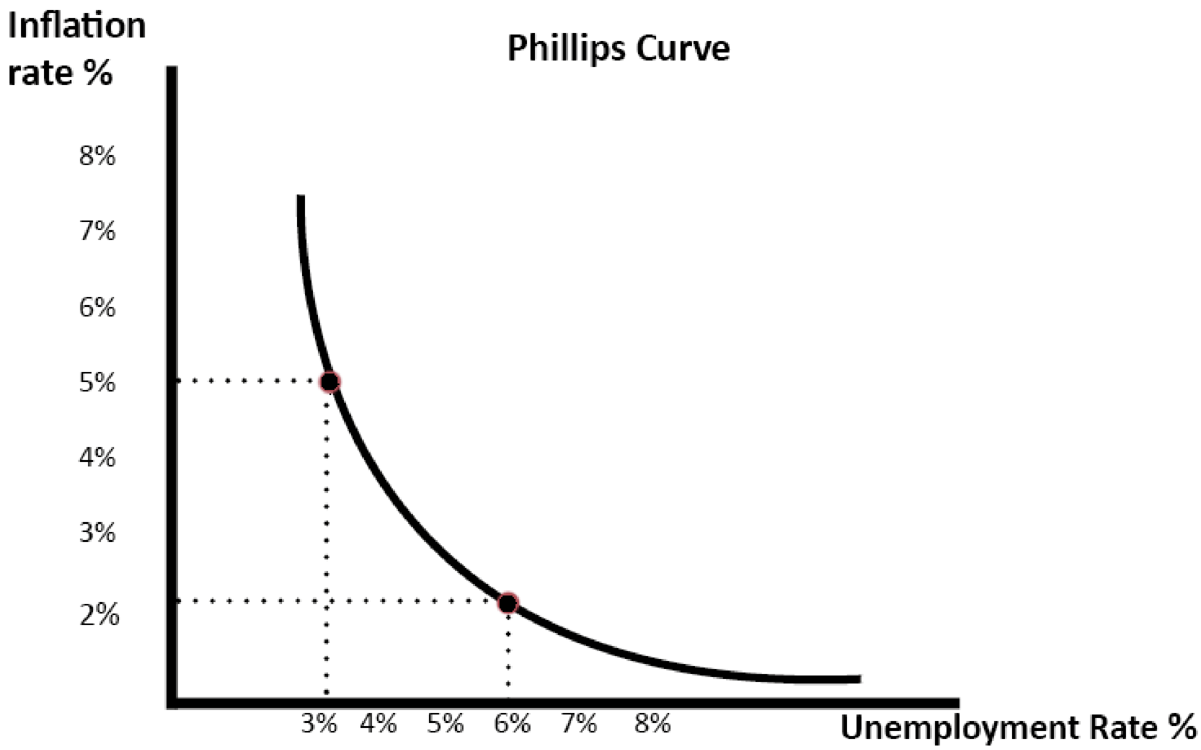
Q.30 ES 2019
'Fiscal policy' means
(a) Balancing the revenue collection and expenditure
(b) Establishing equilibrium between demand and supply of goods and services
(c) Use of taxation, public borrowing and public expenditure by Government for purposes of 'stablization' or 'development'
(d) Deficiency as an instrument of growth

Q.30A CDS (1) 2023
Which of the following policies help to raise interest rate unambiguously and thereby lead to appreciation of currency?
(a) Expansionary fiscal and monetary policy
(b) Contractionary fiscal and monetary policy
(c) Contractionary fiscal policy and expansionary monetary policy
(d) Contractionary monetary policy and expansionary fiscal policy

Ans-
An expansionary fiscal policy leads to an appreciation of the domestic currency as foreign investment increases due to lower tax rate. Further, Higher government spending or lower taxes increase aggregate demand and raise prices, inducing the central bank to use Contractionary monetary policy (i.e. increase the interest rate) to control the inflation and foreign investment increases due to higher interest rate leading to appreciation of currency.

Phillips curve

About it	It shows the inverse relationship between unemployment and inflation
inverse relationship means	It says that decrease in the rate of unemployment (i.e. increase in Jobs) will cause higher rate of inflation (because Employee will have money and demand for goods will increase) and vice versa.
Reason	When unemployment is high salary increases slowly (Because employee will find it difficult to get new job) and when unemployment is low salary increases rapidly (because Employer will try to retain the employee)



Q.31 SCRA-2013
The trade-off between inflation and unemployment is known as
(a) cost-push inflation (b) demand-pull inflation (c) Phillips curve approach to inflation (d) Stagflation

Q.32 CDS 2021
Match List I with List II and select the correct answer using the code given below the lists:

List I (Curve)	List II (Indication)
A. Lorenz curve	1. Inflation and employment
B. Phillips curve	2. Tax rates and tax revenue
C. Engel curve	3. Inequality in distribution of income or wealth
D. Laffer curve	4. Income and proportion of expenditure on food

Code:

	A	B	C	D
(a)	3	4	1	2
(b)	2	1	4	3
(c)	3	1	4	2
(d)	2	4	1	3

Sacrifice ratio

Sacrifice ratio measures the proportionate reduction in growth rate due to reduction in inflation. It indicate that if inflation comes down then growth rate will also fall.

If inflation is becoming a problem, central banks increases policy interest rate in a bid to reduce inflationary pressures but it can reduce growth rate

Suppose sacrifice ratio is 5 then to reduce 2% inflation you should be ready to sacrifice 10% of GDP.

Laspeyres price index method

It is used for measuring the price development of the basket of goods and services consumed in the base period. In this formula, Quantities in the base year is taken as weight.

Price index for CPI, WPI, PPI etc in India is calculated using Laspeyres formula.

Laspeyres formula for constructing price index = $\frac{\sum P_1 Q_0}{\sum P_0 Q_0} \times 100$

P1 is current year price, P0 is base year price and Q0 is base year quantity

For example

Commodity	P0	Q0	P1	P0Q0	P1Q0
1	20	10	22	200	220
2	40	15	45	600	675
3	60	20	68	1200	1360
			Total	**2000**	**2255**

Price index = (2255/2000) x100 = 112.75 i.e increase in price/inflation is 12.75%

Effect of Inflation on Exchange rates

Purchasing Power Parity (PPP) theory states that the exchange rate between the currencies of two countries equals the ratio between the prices of goods in these countries

As per PPP theory, When one country's inflation rate rises relative to that of another country, it experiences decreases in exports and increases imports, thereby depressing/reducing the value of the country's currency.

As Inflation can lead to **higher input costs** for export which makes a nation's exports **less competitive** in global markets. Demand for exports will fall, and therefore there will be less demand for INR.

Further Goods in India will be costly it will give signal to consumer to import the goods. There will be demand for foreign currency for payment of import. It will decreases the value of INR.

It will also **widen the trade deficit** and cause the currency to depreciate.

Q.33 CDS-2016
Which of the following will be the outcome if an economy is under the inflationary pressure?
1. Domestic currency heads for depreciation. 2. Exports become less competitive with imports getting costlier.
3. Cost of borrowing decreases. 4. Bondholders get benefitted.
Select the correct answer using the code given below.
a)1 and 2 (b) 2 and 3 (c) 1 and 3 only (d) I, 3 and 4

RBI Inflation Targeting Impact or Relationship between Inflation, Interest rates and Exchange Rate

Inflation is closely related to interest rates, which can influence exchange rates. **When inflation is high**, RBI will increase interest rates in order to bring inflation back into an acceptable range. Whenever interest rates go up, it **attracts foreign investments** into the country. To do so, foreign investors need to purchase Indian currency. It would then trigger an appreciation in the currency exchange rate. **However, if Inflation rate is higher than interest rate then foreign investor will not invest.**

Low inflation on the other hand will often induce RBI to reduce interest rates for economic growth. Foreign investors now view the country as **less attractive** to invest in and will move funds into other jurisdictions to get better returns. To do so, they will **sell the Indian currency** in order to buy another country currency, which will put downward pressure on the Indian currency and make it depreciate.

Interest Rates and the Exchange Rate

Rise in the interest rates at home often leads to an appreciation of the domestic currency.

Suppose government bonds yield in US is 2% and in India is 6%, then investors from US will be attracted by the high interest rates in India and will buy the Indian currency and sell Dollars for investments. Hence Demand for Indian Currency will increase and it will appreciate.

US Federal Reserve (US Central bank) interest rate- Impact on India

US Fed raises interest rates if inflation is too high, or it thinks it is heading that way. It cuts rates if it thinks there is a danger of economic growth slowing too much or inflation being too low.

Impact on India
When US Fed decreases the interest rates:
Cost of borrowing in US will be cheaper. Investors in US will be attracted to invest in India to earn high rate of interest. They will convert dollar into INR. This will push up the demand for the INR and INR will appreciate. Hence Cuts in interest rates in any country tend to make its currency lose value against others.

When US Fed increases the interest rates:
The hikes will lead to a rise in yields on US bond and a stronger dollar and a weaker rupee, which will lower investment returns for foreign investors and prompt them to sell assets in India.

For attracting the investors, RBI will be forced to increase the policy interest rates. RBI has built adequate foreign exchange reserves to take care of sudden FPI outflows. To save the INR from depreciation, RBI may sell foreign exchange reserve.

Q.34 Prelims 2021
Indian Government Bond yields are influenced by which of the following?
1. Actions of the United States Federal Reserve
2. Actions of the Reserve Bank of India
3. Inflation and short-term interest rates.
Select the correct answer using the code given below
a) 1 and 2 only b) 2 only c) 3 only d) 1, 2 and 3

Q.35 Prelims 2022
Consider the following statements :
1. Tight monetary policy of US Federal Reserve could lead to capital flight.
2. Capital flight may increase the interest cost of firms with existing External Commercial Borrowings (ECBs).
3. Devaluation of domestic currency decreases the currency risk associated with ECBs.
Which of the statements given above are correct ?
(a) 1 and 2 only (b) 2 and 3 only (c) 1 and 3 only (d) 1, 2 and 3

US Fed taper (03-11-2021)

Tapering refers to the policy of gradually withdrawing the monetary stimulus by the US Federal Reserve.

Central Bank of US, The U.S. Federal Reserve announced it will begin to reduce its monthly bond purchases, removing a first pillar of emergency monetary policy accommodation introduced in March 2020 to shield the economy from the COVID-19 pandemic.

The Fed has gobbled up trillions in Treasuries and mortgage-backed securities (MBS) since the onset of the pandemic in a process known as quantitative easing (QE) to lower long-term interest rates, keep financial conditions loose and help spur demand.

Impact on India
With rising yields in the U.S., foreign investors will reallocate their funds to U.S. debt markets; and Indian currency will depreciate against the dollar. Reserve Bank governor Shaktikanta Das said that India is in a much better position to handle taper tantrums.

RBI Announces USD/INR 2-year Sell/Buy Swap Auction of $5 billion (21-02-2022)

A bank shall buy US Dollars from the Reserve Bank and simultaneously agree to sell the same amount of US Dollars at the end of the swap period.

Impact
It will provide liquidity to the foreign exchange market. Dollar inflow into the market will strengthen the rupee. Further RBI will get INR from Swap hence liquidity in the banking system will be reduced and it will help to control the inflation.

Cost Inflation Index under Income Tax Act

Cost Inflation Index is used to calculate the indexed cost of acquisition and indexed cost of any improvement while computing **long-term capital gain** on transfer or sale of a long-term capital asset.

Cost inflation index increases purchase cost, resulting in lower profit and lower tax.

CBDT notified that Cost Inflation Index (CII) for the financial year 2023-24 is 348. Base Financial Year is 2001-02

Miscellaneous

1. Economy is set for a 'goldilocks' period means a timeframe of high growth and low inflation.
2. When income increases, consumer spending increases. Spending on imported goods is also likely to increase. Then there is a depreciation of the domestic currency.
3. **Imported Inflation:** When the general price level rises in a country due to the rise in prices of imported commodities, it is termed imported inflation. For example, increase in price of crude oil, Gold etc.
4. Real interest rate means interest rate adjusted for inflation.
5. **Shrinkflation**- Consumers are generally price-sensitive so companies, during the periods of high inflation, often reduce the size/weight of packaged food product rather than increase the price of product. Consumers often donot notice the smaller reduction in size/weight of packaged food product.

Answers of MCQs

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
a	d	a	b	c	a	d	b	a	c	c	d	c	b	a	c	a	c
19	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**20A**
d	c	a	c	c	a	d	c	d	b	a	c	c	c	a	d	a	A
22A	**30A**																
a	d																

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