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for

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CENGAGE

Economics

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PREFACE

If you ever happen to be walking down the streets of places where preparation for Civil Services is done, it will not be uncommon for you to come across or make the acquaintance of 'several' starry eyed yet completely committed IAS aspirants. Yet, 'several' would be an understatement given the number that runs into lakhs! But when we say committed, we mean it; these young men and women are ready to sacrifice almost all their youthful follows including sleep, comfort and even a semblance of a normal life to achieve one goal—IAS!

Sadly, this dream remains a distant one for a large majority of these aspirants in spite of the endless hours of study and sleep forsaken nights. When we tried to unravel WHY, the responses were almost synchronous:

"The subject was so vast that there was too much to cover and I could never complete it."

"I read so much but could not retain it."

"I studied something but was quizzed on something else in the exam."

"I kept reading but did not attempt to solve the past year papers or give a mock exam."

"Subscribing to several sources of information/preparation such as a coaching class, the internet and books was futile; after all there are only 24 hours in a day."

"My almirah was full of too many books, but I could barely complete a few."

And while the candid answers stated above clearly gave us a challenging problem—we did not attempt to solve it. We instead focused on a holistic solution—the synchronizing of effort i.e. Learning and Positive Results!

It is with this aim that we—PrepMate collaborated with Cengage India—are continuously striving to develop a comprehensive learning model that is a combination of online and offline so as to effectively address the issues that most aspirants grapple with.

About the Online–Offline Learning Model

The learning model initiates the process with a series of books targeted at cracking the UPSC exam. The books stand apart from others available because of the following unique features:

- We use a conceptual approach, simple language, explain concepts with diagrams, cite sufficient examples, pose pertinent questions in a reader friendly format—to ensure that the contents of these books can be read and assimilated in a time-bound manner.
- The content is specially designed taking into account the trend in UPSC exams in recent years. We have also included the previous years' questions (with solutions) after every chapter.

- The Practice Questions at the end of each chapter are exhaustive to provide sufficient preparation to crack the exams.
- The book series also contains additional information on 'how to write answers' along with what your approach should be for the mains—here too we have explained by solving questions and showing you the 'preferred answering style'.
- We have tried to encapsulate all that is required to be learnt for a particular subject into a single book.

Usually, an aspirant purchases a book, but never gets a chance to contact the authors. We believe that the contact among aspirants and authors is important for learning and motivation of the aspirants. That is precisely why we have developed an application and a web portal to answer your queries and provide you with continuous support during your preparation.

It is through this online system that we provide the following services:

1. Videos covering important and difficult topics
2. Answer writing practice sessions
3. Daily prelims quiz
4. Assistance in interview preparation
5. Regular updates
6. Daily current affairs
7. Monthly current affairs magazine
8. Radio news analysis
9. Educational videos
10. Previous years' papers and solutions
11. Free study materials

Looking forward to being your partner in the journey towards achieving your dream!

In case you have any specific queries or constructive feedback you can always share the same with us via e-mail at info@prepmate.in .

PrepMate

Acknowledgements

"We cannot accomplish all that we want to do without working together"

The complete UPSC learning module by Prepmate has been the culmination of more than a year of ideation and brain storming by a lot of people. It is only natural that we should gratefully acknowledge their valuable contribution sincerely. I, Shubham Singla, founder of PrepMate Edutech, thank you all for being with me in this whole project. Rajinder Paul Singla, Nirmal Singla, Ramnik Jindal, Sharat Gupta, Subhash Singla and Vijay Singla—thank you for your continuous support and motivation.

We would also like to thank Maninder Mann and Sundeep Singh Garha who helped us in first conceiving and later developing the synergistic print–digital model of the project— without you we would be missing our competitive edge.

Implementation of strategy can more often than not prove challenging and the development of the online module did prove to be tougher than we had envisaged. But our technical team was focused on enabling our dream and delivering the best, and they surely did. With a specific mention to the testing of both the website and the application, we would like to thank Surabhi Misra, Parth and Tanvir who did their job patiently and effectively in spite of the road blocks.

Our videos and books could not have been possible without the help of our graphics design team—Sandeep, Sukhjinder and Roshni toiled endlessly to ensure the best designed audio-visuals.

It is an understatement to state that the sourcing and reviewing of existing content and the generation of content was the most crucial part of this project and the backbone of our Learning Module. This would just not have been possible without our team of content contributors: Isha Gupta, Shelly Jindal, Gurdeep Kaur, Surabhi Misra, Shaffy Garg, Dipika Arora, Sunil, Bhupinderjit Singh, Shantnu, Tanvir, Anmol, Kriti, Tanya, Sahil, Suraj and Dilshad, who left no stone unturned in their pursuit of excellence—your pivotal contributions are gratefully acknowledged.

We would like to extend a special thanks to our staff members Geeta, Jitender, Manoj and Pinki, who helped us in the most laborious job i.e. typing through the several manuscripts of our books—your contribution is sincerely appreciated.

It is imperative that we thank Isha Gupta, Shelly Jindal, Anjum Diwan, Rajesh Goel, Shikha Sharma and Ravinder Indoura, for their critical yet constructive feedback that identified and subsequently rectified the errors that crept in during the development process. We will never be able to thank them enough for this—you fortified the very foundation of our model.

We sincerely acknowledge the initiatives and support from the entire editorial team of Cengage India in the process of publishing this book.

PrepMate

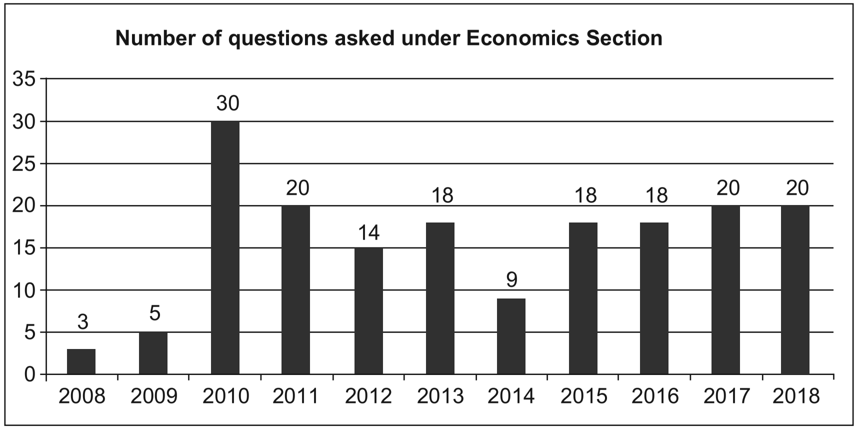
List of Videos

1.	How to Prepare Economics for UPSC Prelims and Mains
2.	Indicators of Economic Activity (GDP and Others)
3.	Taxation System
4.	GST
5.	Monetary Policy
6.	Fiscal Policy
7.	Inflation
8.	Foreign Exchange Rate System of India
9.	Balance of Payments
10.	World Trade Organization

Chapter-wise Break Up of Previous Year's Questions (Prelims)

Chapter names	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Total
1. Economic growth and development	4			1		3	1	1	2			12
2. Taxation system	1	1		2	1		2	1	1	1		10
3. Monetary policy	1	1	1	2	2	6	2	2	4	1		22
4. Fiscal policy	1	1	2		1	1		1	4			11
5. Inflation				2	1	3		2	2			10
6. Classification of Indian economy				2			2					4
7. Subsidies	2	1		1					1			5
8. Aadhar	2											2
9. Financial Market	1		1		1				3			6
10. Population						1	1	1				3
11. Indian Agriculture I: Markets, Irrigation and Finance		1		1		1		1			1	5
12. Indian Agriculture II: Land Reforms												
13. Planning				1	1				2	2		6
14. Industrial Policy	1	1	1				1	3	1			8
15. Infrastructure												
16. Non Performing Assets	2			1				1				4
17. Financial Inclusion	2	1	4		1			2	3			13
18. Parallel Economy			1									1
19. Regional Trade Agreement												

Chapter names	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Total
20. Trade Barriers in International												
21. Foreign Exchange rate system of India			1	1		1	1					4
22. Convertibility				1								1
23. Balance of Payments					1	2		1				4
24. Foreign Investment			1				1	1	1			4
25. International Economic Organizations			2						2			4
26. World Trade Organization	1	2	1	1				1	2	1		9
27. India's Trade Policy			1						1			2
Appendix-I Government Schemes	2	11	3	2			3	2	1		2	26
Total	**20**	**20**	**19**	**18**	**9**	**18**	**14**	**20**	**30**	**5**	**3**	**176**



Chapter 1 ECONOMIC GROWTH AND DEVELOPMENT

1 GROSS DOMESTIC PRODUCT

Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period. Though GDP is usually calculated on an annual basis, it can be calculated with reference to any time frame.

What Does GDP Indicate?

GDP is commonly used as an indicator of the economic health of a country, as well as a measure of country's standard of living.

The higher the production of goods and services in an economy, the higher the consumption level of people. A higher consumption level indicates a higher standard of living of the people.

Criticism of GDP

1. Critics of GDP argue that it does not take into account the transactions that are illegal and not reported to the government in order to evade taxes.
2. Others criticize the tendency of GDP to be interpreted as an indicator of well-being, whereas in reality, it serves as a measure of a nation's productivity. For example, people may not enjoy well-being on account of high pollution in their vicinity.

Calculation of GDP

There are three primary methods by which GDP can be determined. All, when correctly calculated, should yield the same figure. These three approaches are the expenditure approach, the output (or production) approach, and the income approach.

The expenditure approach measures the total value of all the products used in developing a finished product for sale to final consumers. For instance, a finished car's contribution to a nation's GDP would be measured by the total cost of materials and services that went into the car's construction.

The production approach is something like the reverse of the expenditure approach. Instead of exclusively measuring the input costs that feed the economic activity, the production approach estimates the total value of final economic output to be consumed by ultimate consumers.

The third approach, the income approach, is an intermediary between the two above-mentioned approaches. It measures GDP by totalling all the domestic income earned by the private as well as government sectors.

India's Position (February, 2018)

In India, GDP is estimated by the Central Statistics Office (CSO). The economy of India is the seventh largest (the United States, China, Japan, Germany, the United Kingdom, France, and India, in the order) economy in the world, measured by nominal GDP ($2.5 trillion) and the third largest (China, the United States, and India, in the order) by purchasing power parity (PPP) ($9.447 trillion).

What Is Purchasing Power Parity?

Purchasing power parity (PPP) is defined as the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the US.

PPP is an attempt to work out how much currency will be needed to buy the same quantity of goods and services in different countries. It reflects the underlying exchange rate between the two different countries for buying goods and services, and a more accurate reflection of actual living standards in countries.

Often exchange rates do not actually reflect different living costs because some goods are not easily traded. For example, if you live in the United States, it is irrelevant if there is cheaper accommodation elsewhere in the world. What is relevant to you is the price of goods and services at which they are available to you locally.

For example, let us suppose that the market exchange rate between Dollar and Rupee is 66. One Dollar in the US buys 1 liter of milk. One dollar in terms of rupee, i.e., ₹66 can buy 3 liters of milk in India.

Suppose that India's GDP is ₹660. If we consider the market exchange rate, then this amount is equal to $10. If milk is the only commodity produced in the world, one will think that India is producing 10 liters of milk considering India's exchange rate ₹66 and GDP value of ₹660.

However, India produces 30 liters of milk. To overcome this defect, we use the purchasing power parity exchange rate. Under PPP, we measure the GDP of India by comparing the money required to purchase commodities in both the countries. One dollar in the US can purchase one liter of milk, whereas `21 can purchase one liter of milk in India.

$1 = ₹21

Thus, in our example, PPP exchange rate is ₹21/$. Using this exchange rate, India's GDP of ₹660 is equal to $30. Thus, India's GDP in terms of PPP is $30. On the other hand, India's GDP in terms of market exchange rate is $10.

The World Bank (WB) calculates the PPP exchange rate. As per the WB estimate in the year 2014, ₹17.12 is equal to US$ 1.

Difference Between Nominal GDP and Real GDP

When the GDP is estimated at current prices, it exhibits Nominal GDP, whereas Real GDP is when the estimation is made at constant prices.

Definition of nominal GDP

It is the monetary value of the economic output produced during the current year at current year prices. The point to be noted is that the prices of the current year are taken into consideration without adjusting for inflation.

Current production of goods and services × Current prices = Nominal GDP

Definition of real GDP

GDP measurement is done at fixed prices, i.e. at the prices which were prevalent at some point of time in the past, known as base year price or reference price. It reflects the economic output at constant prices. Real GDP is considered as a true indicator of country's economic growth because it exclusively considers the rise in production of goods and services as the reason for increase in GDP.

Current Production of goods and services × Base Year Prices = Real GDP

Economists while calculating growth in GDP consider figures of real GDP.

GDP Growth

What is "economic growth rate"?

An economic growth rate is a measure of economic growth from one period to another in terms of percentage. In practice, it is a measure of the rate of change in a nation's GDP from one year to another.

The economic growth rate provides insight into the general direction and magnitude of growth for the overall economy. It demonstrates the change in a nation's or economy's income over a specified period of time. Most commonly, this is examined on a quarterly basis, but economic growth rates can be observed across larger spans of time, such as year over year (YOY) or decade over decade.

Economic growth refers to positive change in economic output, but changes in economic output can be either positive or negative. If an economy experiences two consecutive quarters with falling growth rates, it can be said that the associated economy is falling into a recession. If the economy begins to shrink, the percentage rate can be expressed in negative to demonstrate the income lost over the time period being examined.

Real economic growth rate

The real economic growth rate measures the economic growth in relation to GDP, from one period to another, adjusted for inflation, in other words, expressed in real as opposed to nominal terms.

The real economic growth rate is expressed as a percentage that shows the rate of change of a country's GDP from one period to another, typically from one year to the next.

The real economic growth rate, also referred to as the growth rate of real GDP, is a more useful measure than the nominal GDP growth rate due to the fact that it takes into account the growth only due to increase in output (and ignores the contribution of price rise to increase in value of output).

Calculating the real GDP growth rate

For instance, using expenditure method GDP is calculated as the sum of consumer spending, business spending, government spending, and the total of exports minus imports. In order to factor in inflation and arrive at the real GDP figure, the calculation is as follows:

$$\text{Real GDP} = \frac{\text{GDP}}{(1 + \text{Inflation since base year})}$$

Once real GDP is calculated, the real GDP growth rate is calculated as follows:

$$\text{Real GDP growth rate} = \frac{(\text{Most recent year's real GDP} - \text{Previous year's real GDP})}{\text{Previous year's real GDP}} \times 100$$

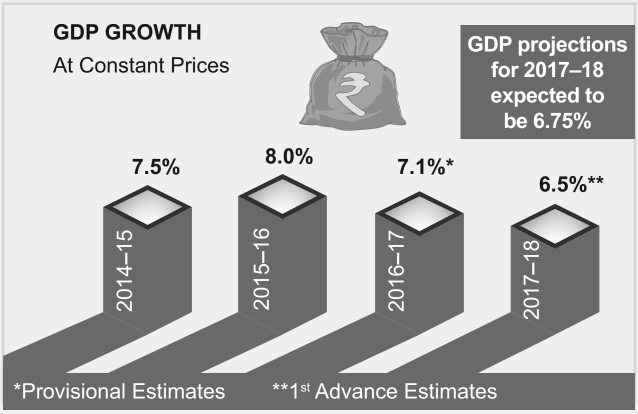
Base Year

The base year, updated periodically by the government, is a designated year used as a comparison point for economic data such as the GDP. Presently, 2011–12 is used as the base year for calculating GDP in India. Recently, the government has proposed to change the base year to 2017–18.

GDP is calculated by taking into account the quantity of the present year and prices of the base year. Thus, when we talk about GDP growth, we talk about real GDP growth rate.

GDP Growth Level

The real GDP growth is expected to reach 6.75 percent in 2017–18 and will rise to 7.0 to 7.5 percent in 2018–19, thereby re-instating India as the world's fastest growing major economy. The GDP growth has averaged 7.3 percent for the period from 2014–15 to 2017–18.



Source: Economic Survey 2017–18

2 MARKET PRICE AND FACTOR COST

What Is Factor Cost?

A number of inputs are required in the production process. These inputs are commonly known as factors of production and include things such as land, labour, capital, and entrepreneurship. Producers of goods and services incur a cost for using these factors of production. Factor cost refers to the cost of factors of production that is incurred by a firm when producing goods and services. Examples of such production costs include the cost of renting machines, salaries and wages, cost of obtaining capital, and the profit margins that are added by the entrepreneur (profits are the cost of entrepreneur).

The factor cost does not include the taxes that are paid to the government since taxes are not directly involved in the production process and, therefore, are not a part of the direct production cost. However, subsidies received are included in the factor cost as subsidies are given on inputs used in production.

What Is Market Price?

Once goods and services are produced, they are sold at a market price. The market price is the price that consumers will pay for the product when they purchase it from the sellers. Taxes charged by the government will be added onto the factor price while subsidies provided will be reduced from the factor price to arrive at the market price.

Taxes are added because taxes are the costs that increase the price, and subsidies are reduced because subsidies compensate the factor cost or reduce the factor cost. For instance, money is required to run a business. Thus, money is a factor of production. The cost of money is interest. Interest here is a factor cost. If government gives subsidy on interest, then actual cost of money (interest cost) will reduce.

Relationship between GDP at Market Price and GDP at Factor Cost

GDP (MP) – Indirect Taxes + Subsidies = GDP (FC)

Note: In common parlance, when we use the term GDP, we refer to GDP at market prices.

3 GROSS VALUE ADDED OR GDP (FC)

Gross value added (GVA) is the measure of the value of goods and services produced in an area, industry, or sector of economy.

Relationship to GDP

GVA is linked to GDP, as both are measures of output. The relationship is defined as follows:

GVA + Taxes on products – Subsidies on products = GDP

Why GVA Is Calculated?

1. GVA and GDP give a picture of economic activity from producers' (supply side) and consumers' (demand side) perspective, respectively, because GVA is the net receipt of the producers and GDP is the expenditure incurred by the consumers.
2. Both these measures need not match and there could be a sharp divergence due to net indirect taxes (NIT = indirect taxes – subsidies), which are counted in GDP calculations (GDP is the sum of GVA and NIT).
3. GVA provides a better measure of economic activity because GDP can record a sharp increase just on account of increased tax collections due to better compliance/coverage and not necessarily due to increase in output.
4. GVA is a better reflection of the productivity of the producers as it excludes the indirect taxes, which could distort the production value.
5. A sector-wise breakdown provided by the GVA measure can better help policymakers to decide which sectors need incentives/stimulus or vice versa.

Use of GVA As Primary Measure of Economic Activity?

In the revision of the National Accounts Statistics in 2015 by the CSO, it was decided that GVA should be adopted as primary measure of economic activity. In 2018, Reserve Bank switched back to the gross domestic product (GDP)-based measure to offer its growth estimates, citing global best practices.

What Is the Global Trend?

Globally, the performance of most economies is gauged in terms of gross domestic product (GDP). This is also the approach followed by multilateral institutions, international analysts and investors, and primarily they all stick to GDP because it facilitates easy cross-country comparisons.

4 GROSS NATIONAL PRODUCT

Gross national product (GNP) refers to goods and services produced by Indians whether in India or abroad.

How Is GNP Calculated?

GNP = GDP − Production by foreigners in India + Production by Indians outside India

or

GNP = GDP − Factor income paid to foreigners in India + Factor income paid to Indians abroad

i.e., GNP = GDP − Net factor income from abroad

GNP refers to the monetary value of all the finished goods and services produced by nationals (citizens) anywhere in the world in a specific time period.

Comparison with GDP

GDP is the monetary value of all the finished goods and services produced in a territory such as India, whereas GNP is the monetary value of all the finished goods and services produced by nationals such as Indians.

In India, the value of GDP is higher than that of GNP because India has received more investment from abroad compared to the investment made by Indians in abroad.

5 NET DOMESTIC PRODUCT (AT MARKET PRICE)

Whenever there is production of goods and services, there is consumption or reduction in value of assets used to produce goods and services; this consumption or reduction in value of assets is called depreciation.

How Do We Calculate NDP?

Whenever we calculate the net value from gross value, we subtract depreciation out of gross value.

Net Domestic Product (NDP) = GDP − Depreciation

6 NATIONAL INCOME OR NET NATIONAL PRODUCT AT FACTOR COST

Net national product at factor cost (NNPfc) or national income is the income earned by nationals (such as Indians) in a given time period.

In other words, it is the collective income of nationals in a given time period. It is calculated as follows:

NNPfc = GNPmp – Depreciation – Indirect taxes + Subsidies

or

NNPfc = GDPmp – Net factor income abroad – Depreciation – Indirect taxes + Subsidies

7 PER CAPITA INCOME

Per capita income or average income measures the average income earned per person in a given area (city, region, country, etc.) in a specified year. It is calculated by dividing the area's total income by its total population.

In other words, per capita income refers to national income divided by the population of a country.

$$\text{Per capita income} = \frac{\text{National income}}{\text{Population}}$$

India's per capita income in 2015–16 at the current prices was ₹93,293, compared to ₹86,879 in the preceding year.

In real terms, the per capita income (at 2011–12 prices) during 2015–16 is estimated to have attained a level of ₹77,435, up 6.2% from ₹72,889 for 2014–15.

Real per capita income is obtained after adjusting nominal per capita income for inflation.

Real per capita income = Nominal per capita income / (1 + Inflation rate)

Let us understand the above concepts with actual figures given in the following table:

(₹1000 crore)

Year	Consumption of fixed cap. (depreciation)	Indirect taxes less subsides	GDP at market prices	NDP at market prices	Net factor income from abroad	NNP at factor cost or net national income	Per capita income (₹)
2015–16	1278	923	11,350	10,072	–137	9012	77,435
2014–15	1193	825	10,552	9359	–124	8410	72,889
2013–14	1102	755	9839	8737	–122	7860	68,867

NDP at market prices = GDP at market prices – Depreciation

NNP at factor cost = NDP at market prices – Indirect taxes less subsidies – Net factor income abroad

$$\text{Per capita income} = \frac{\text{Net national product at factor cost}}{\text{Population}}$$

8 WHICH IS A BETTER MEASURE OF ECONOMIC GROWTH: GDP OR PER CAPITA INCOME?

Economic growth is measured on the basis of expansion of GDP. However, there are instances when the rate of population growth is higher than the rate of increase in GDP. In such instances, GDP increases while per capita income decreases. Therefore, per capita income is considered a better indicator of economic growth.

Can Indian Economy Grow at 8-9% per annum?

The Indian economy is currently passing through a phase of relatively slow growth. However, over the 9-year period beginning 2005–06, the average annual growth rate was 7.7%. Against this background, the relevant question is whether India has the capability to grow at 8–9% in a sustained way.

Past Performance

India achieved a growth rate of 9.5% in 2005–06, followed by 9.6% and 9.3% in the subsequent 2 years. After declining a bit in the wake of international financial crisis, the growth rate went back to 8.9% in 2010–11. The domestic savings rate during this period averaged 34.9% of GDP. Similarly, the gross capital formation rate averaged 36.2%.

Reasons for Reduction in Growth Rate: Low Investment and High ICOR

An analysis of the data of the period since 2012–13 reveals two trends. First, there has been a decline in investment rate. Second, the decline in growth rate is greater than the decline in investment rate, indicating a rise in the incremental capital–output ratio (ICOR). In 2007–08, India's investment rate was 38% of GDP. It declined steadily to touch 34.8% in 2012–13. The declining trend continued in 2015–16.

With an ICOR of 4, only a return to higher level of savings and investments can take us back to 8–9% growth seen earlier. Thus, what is needed to achieve the "higher growth rate" is to raise the investment rate and improve the productivity (or use) of capital.

Incremental Capital–Output Ratio

ICOR refers to addition in capital required to raise output by ₹1. The higher the ICOR, the lower the productivity of capital. Thus, a high ICOR can be thought of as a measure of the inefficiency with which capital is used. In most countries, the ICOR is near 3. ICOR, thus, determines efficiency in use of capital. In India, ICOR is slightly high at 4. ICOR is low in service industry than in the manufacturing sector.

It is influenced by a number of factors such as technology, skill of the labour force, which in turn depends on the quality of the education system and ease of doing business, etc. Bureaucratic hurdles, which impede speedy execution of projects, need to be removed. Thus, improving the productivity of capital requires steps at several fronts.

What is "Savings Rate"?

A savings rate is the amount of money, expressed as a percentage or ratio, that a person deducts from his or her income to set aside as savings. The accumulated savings are invested in various forms.

Global Trends in "Savings Rate"

For years, the savings rate in the United States has declined. In the 1970s and 1980s, personal savings rates were in the range of 5–7% but decreased to the range of 1–3% in the 21st century. In sharp contrast, the Chinese and Indian savings rate is about 30%.

The ratio of domestic saving to GDP reached from a peak of 38.3 percent in 2007 to 29.2 percent in 2013, before falling back to 29 percent in 2016.

The fall from 2007 to 2016 has been milder for investment than saving. In India, the investment slowdown started in 2012, subsequently intensified and was apparently still continuing as shown by 2016 figures.

What Affects the Savings Rate?

The national average savings rate is often determined by how a particular culture views debt (loan), values possessions, etc. Economies oriented towards consumption have lower savings rates; in the United States, consumption constitutes around 75% of the economy. Economies such as India, which is oriented more towards investment, have higher savings rates. Savings rate tends to fall as the average age of the population increases. Savings rates are also affected by rise in income levels.

Calculating Savings Rate

The savings rate is the ratio of personal savings to income and can be calculated for an economy as a whole or at the personal level.

$$\text{Saving rate} = \frac{\text{Savings}}{\text{Income}} \times 100$$

Investment Rate

The investment rate refers to the proportion of GDP invested into economy. High savings rate leads to high investment rate in the economy. Economic growth depends on investment rate and ICOR. In other words, Economic growth = Investment rate × (1/ ICOR).

Let us presume that investment rate is 32% and ICOR is 4. Economic growth = 32% × (1/4) = 8%

9 DEFINITION OF ECONOMIC DEVELOPMENT

This approach emerged because overemphasis on quantitative goals such as increase in GDP levels often made nations ignore the equally essential non-economic parameters such as health, education, life expectancy, and quality of life.

Economic development is defined as the process of increase in volume of production along with the improvement in technology, a rise in the standards of living, health, education, overall quality of life, etc.

To understand the two terms "economic growth" and "economic development", we will take an example of a human being. The term "growth of human beings" simply means increase in their height and weight, which is purely physical. But if you talk about "human development", it will take into account both the physical and abstract aspects such as maturity level, attitudes, habits, behaviour, feelings, intelligence, and so on.

Similarly, the growth of an economy can be measured through the increase in its size in the current year in comparison to previous years, but economic development includes not only physical but also non-physical aspects that can only be experienced, such as improvement in the lifestyle of inhabitants, increase in individual income, improvement in technology and infrastructure, etc.

Therefore, we can say that economic development is a much bigger concept than economic growth. In other words, economic development includes economic growth. In context of India, we can say that India is witnessing a period of fast economic growth but slow economic development.

Key Differences between Economic Growth and Economic Development

The fundamental differences between economic growth and development are explained in the following points:

1. Economic growth is the positive change in the real output of the country in a particular span of time. Economic development involves a rise in the level of production in an economy along with the advancement of technology, improvement in living standards, and so on.
2. Economic growth is one of the essential prerequisites of economic development. However, it is not the only requirement for economic development.
3. Economic growth enables an increase in the indicators such as GDP, per capita income, etc. On the other hand, economic development enables improvement in the life expectancy rate, infant mortality rate, literacy rate, and poverty rates.
4. Economic growth results in quantitative changes, but economic development brings both quantitative and qualitative changes.
5. Economic growth can be measured in a particular period. On the other hand, economic development is a continuous process, which can be seen in the long run.

10 INCLUSIVE GROWTH

Inclusive growth is that economic growth which benefits all the sections of society.

Inclusive growth basically means making sure everyone is included in growth, regardless of their economic class, gender, sex, disability, and religion.

The inclusive growth approach takes on long-term perspective, and the focus is on productive employment rather than a mere income redistribution among poor people.

With liberalization, the benefits of economic growth have been cornered by a few sections such as rich and middle class. The impact of economic growth on poor has been little. As a result, the emphasis on inclusive growth is necessary.

Approaches to Attain Inclusive Growth

Trickle down approach

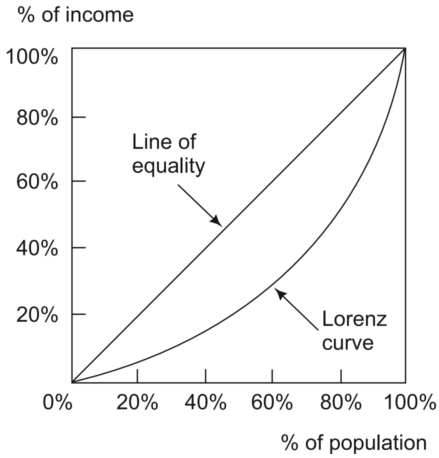
The trickle down approach is a term used to describe the belief that if high income earners gain an increase in their income, their increased income and wealth benefits various sections of the society. For instance, if a person earns more, then he spends more. His expenses are income of other persons.

Direct attack on poverty through government schemes

Trickle down approach has not been completely successful in attainment of inclusive growth. Benefits of economic growth have overlooked poor sections of the society. The government has launched various schemes for the welfare of particularly the poor section of the society. This approach is more effective to bring inclusive growth because it is specifically targeted towards poor people.

11 LORENZ CURVE

The Lorenz curve is a graphical representation of wealth distribution developed by American economist Max Lorenz in 1905. On the graph, the straight diagonal line represents perfect equality of wealth distribution; the Lorenz curve lies beneath it, showing the reality of wealth distribution. The difference between the straight line and the curved line is the amount of inequality of wealth distribution.



Gini Coefficient

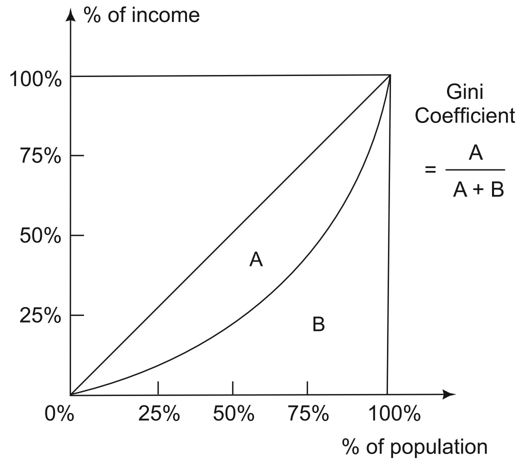
The Gini coefficient is calculated as follows:

$$\text{Gini coefficient} = \frac{\text{Area between Line of Equality and Lorenz Curve}}{\text{Area under Line of Equality}}$$

The value of Gini coefficient ranges from 0 to 1. Tracking the Gini coefficient can demonstrate wealth trends in particular nations over time.

Lorenz Curve, Gini Coefficient, and Measuring Inequality

In an economy with perfect equality, 20% of the population would hold 20% of the wealth. As the percentage of the population in consideration rises, so does their cumulative wealth.



In a perfect inequality curve, the Gini coefficient is 1, and the curve represents 100% of a nation's wealth being held by one single person or entity.

The greater the disparity within a nation, the closer the Gini coefficient will be towards 1. The Gini coefficient of India for 2011 was 0.35.

12 TERMS DENOTING LEVEL OF ECONOMIC ACTIVITY

1. **Slow down:** Refers to reduction in the growth rate of the economy. For instance, let us suppose that the growth rate of the economy has reduced from 8% to 5%. In the case of slowdown, economy continues to grow but at a low rate.
2. **Recession:** Refers that the economy is reducing in size. Economists all over the world agree that recession means negative growth rate for a minimum of two consecutive quarters.
3. **Expansion of the economy:** Refers to increase in the size of the economy. In other words, expansion refers to a positive growth rate of economy. Expansion of economy and slowdown may occur at the same time.
4. **Boom:** Refers to increase in the growth rate of the economy. For instance, let us suppose that the growth rate of the economy has increased from 5% to 8%. In the case of boom, economy grows at a faster rate than the rate at which it grew previously.
5. **Meltdown:** A situation in which the economy of a country experiences a sudden downturn. An economy facing meltdown will most likely experience a falling GDP, drying up of liquidity, and rising/falling prices.

13 POVERTY ESTIMATES IN INDIA

In 1993, the Planning Commission constituted a task force for the calculation of poverty estimates in India, chaired by Lakdawala. The committee made the following suggestions:

1. Consumption expenditure to be calculated based on calorie consumption, i.e. 2400 in rural areas and 2100 in urban areas.

2. State-specific poverty lines should be constructed and updated using the Consumer Price Index of industrial workers in urban areas and Consumer Price Index of agricultural labourers in rural areas.

Tendulkar Committee, 2005 (Headed by Suresh Tendulkar)

The Tendulkar Committee was constituted by the Planning Commission to address three shortcomings in the previous methods of calculating poverty:

1. Consumption expenditure was linked to the consumption patterns of 1973–74. However, there have been significant changes in consumption patterns since 1973–74. Therefore, the Tendulkar Committee used the recent patterns of consumption to determine consumption expenditure.
2. Earlier, the expenditure on health and education was ignored. The Tendulkar Committee considers expenditure on education as incurred by the state, but it considers health expenditure of ₹30 per annum to seek health cover of ₹30,000.
3. Earlier, poverty estimates were based on uniform reference period, i.e. respondents were asked to detail the consumption made by them over the past 30 days. Whereas under the mixed reference period method, five low-frequency items such as clothing, footwear, durables, education expenditure, and health expenditure are surveyed over 365 days and all other items for previous 30 days.

The below poverty line population on the basis of the Tendulkar Committee report for 2011–12 was 25.7% rural population, 13.7% urban population, and 21.9% overall population.

Rangarajan Committee

In 2012, the Rangarajan Committee was established by the Planning Commission to review the Tendulkar Committee report. The new committee suggested further improvements in the poverty estimation methodology.

Tendulkar	Rangarajan
Only counts expenditure on food, health, education, clothing	Food + non-food items such as education, healthcare, clothing, transport (conveyance), rent
—	• Urban poverty increased at a faster rate (40%) than rural poverty (19%). • This is obvious, because Rangarajan included non-food items like rent, education, etc. • These items/services are more expensive in cities than in villages.
—	Rangarajan recommended that at any given point of time, the bottom 35% rural people and the bottom 25% urban people would always be considered poor.
—	• Poverty ratios should be disengaged from entitlements under government schemes. • For example, cheap foodgrain quota under the Food Security Act should not be based on BPL-criteria, but social–caste census.

14 UNEMPLOYMENT

Unemployment is a phenomenon that occurs when a person who is actively searching for employment is unable to find work. Unemployment is often used as a measure of the health of the economy. The most frequently used measure of unemployment is the unemployment rate, which is the number of unemployed people divided by the number of people in the labour force.

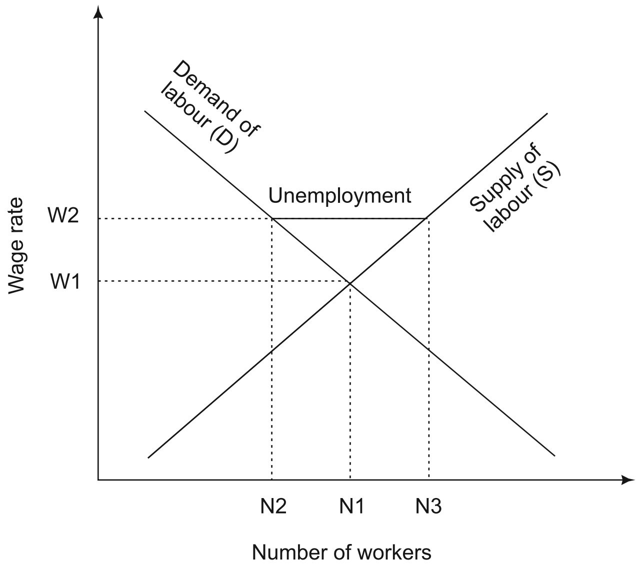
While the definition of unemployment is clear, economists divide unemployment into many different categories.

Types of Unemployment

Disequilibrium unemployment: At the equilibrium level, the wage rate is such that the demand for labour matches with the supply of labour.

When the wage rates are pushed above the equilibrium levels due to the government-imposed minimum wage requirements or interference of trade unions, the demand for labour reduces and the supply for labour increases. This leads to a state of disequilibrium or mismatch between the demand and supply of labour.

This type of unemployment is also called classical or real wage unemployment.



Frictional unemployment or search unemployment: Frictional unemployment is the unemployment that results from the time spent between jobs when a worker is searching for or transitioning from one job to another. It is also called search unemployment.

Structural unemployment: Structural unemployment is a long-lasting form of unemployment caused by fundamental shifts in an economy and exacerbated by extraneous factors such as technology, competition, and government policy. Reasons why structural unemployment occurs include workers' lack of requisite job skills or that workers live too far from regions where jobs are available and cannot move closer. Jobs are available, but there is a serious mismatch between what employers need and what workers can offer.

Cyclical unemployment: Cyclical unemployment comes around due to the business cycle itself. Cyclical unemployment rises during recessionary periods and declines during periods of economic growth.

Seasonal unemployment: It is a type of unemployment that is expected to occur at certain parts of the year. For instance, amusement parks may experience seasonal unemployment because during months of summer less people visit these parks.

Disguised unemployment: Disguised unemployment exists where part of the labour force is either left without work or is working in a redundant manner, where marginal worker productivity is essentially zero. In other words, disguised unemployment is a kind of unemployment in which some people look like being employed but are actually not employed fully. Disguised unemployment is high in Indian agriculture.

Underemployment: A situation in which a worker is employed but not in the desired capacity, whether in terms of compensation, hours, or level of skill and experience. The underemployed are often unsatisfied and continue to look for suitable jobs.

Calculation of Unemployment

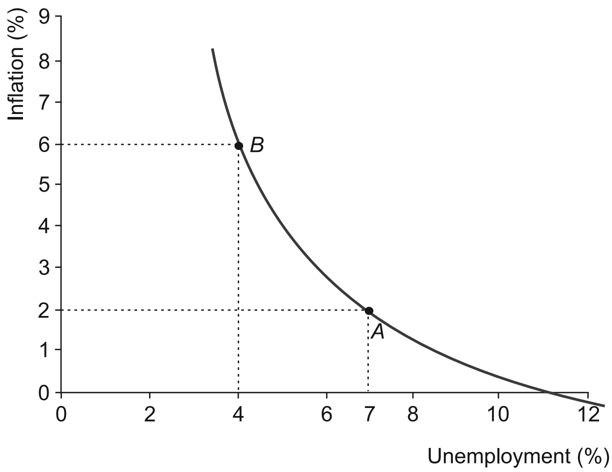
The unemployment rate is calculated by the following formula:

$$\text{Unemployment rate} = \frac{\text{Number of unemployed}}{\text{Total workforce}} \times 100$$

In 2017, the unemployment rate in India was around 3.5%. The total workforce in India is above 30 crores and the number of unemployed are around 45 lakhs.

15 PHILLIPS CURVE

The Phillips curve is an economic concept developed by A. W. Phillips. This curve shows that inflation and unemployment have a stable and inverse relationship. The theory states that inflation comes with economic growth, which in turn should lead to more jobs and less unemployment.



However, the original concept has been somewhat disproven empirically due to the occurrence of stagflation, when there is high levels of both inflation and unemployment.

16 HUMAN RESOURCE DEVELOPMENT

Human resource development refers to improvement in the quality of life, increase in the number of opportunities, and in the freedom people enjoy.

The concept of human development, as understood today, was introduced by Dr. Mahbub ul Haq, a Pakistani economist. According to him, human development refers to an enlargement of people's choices. Indian economist Prof. Amartya Sen has also adopted this view of human development.

The choices of people can be increased either by skill development of people (by granting vocational education), improving their health, or increasing their income level.

Education enhances choices with people as it confers them freedom to think and choose out of various career options. Health enlarges choices of people as a healthy person can undertake various types of activities in comparison to an unhealthy person. Increase in income level enlarges the options as it enables the people to buy various kinds of goods and services.

17 HUMAN DEVELOPMENT INDEX

Based on the above view, Human Development Index (HDI) was developed by Mahbub ul Haq along with Amartya Sen and was launched by the United Nations Development Programme (UNDP).

New Method for Calculating HDI

In its 2010 Human Development Report, the UNDP began using a new method for calculating the HDI. The following three indices are used:

1. **A long and healthy life:** Life expectancy at birth
2. **Education index:** Mean years of schooling and expected years of schooling
3. **A decent standard of living:** per capita income (PPP in US$)

Life Expectancy Index

Life Expectancy Index (LEI) is 1 when life expectancy at birth is 85 and 0 when life expectancy at birth is 20.

$$\text{LEI} = \frac{\text{LE} - 20}{85 - 20}$$

LE: Life expectancy at birth in a given country

Education Index

$$\text{Education Index (EI)} = \frac{\text{MYSI} + \text{EYSI}}{2}$$

- Mean Years of Schooling Index (MYSI) = $\frac{\text{MYS}}{15}$

  Fifteen is the maximum years of schooling.

MYS: Mean years of schooling (i.e., years that a person aged 25 or older has spent in formal education)

- Expected Years of Schooling Index (EYSI) = $\frac{\text{EYS}}{18}$

Eighteen is equivalent to achieving a master's degree in most countries.

EYS: Expected years of schooling (i.e., total expected years of schooling for children under 18 years of age)

Income Index

Income Index (II) is 1 when GNI per capita is \$75,000 per year and 0 when GNI per capita is \$100 per year.

$$\text{II} = \frac{\text{GNI per capita} - 100}{75000 - 100}$$

Value of HDI

The maximum value of HDI can be 1. Finally, the HDI is the geometric mean of Life Expectancy Index, Education Index, and Income Index.

$$\text{HDI} = \sqrt[3]{\text{LEI} \times \text{EI} \times \text{II}}$$

Characteristics of nations with different levels of human development

Level of human development	High (0.7 and above)	Medium (0.55 to 0.699)	Low (0 to 0.549)
Nations	North America, Northern and Western Europe	South America and Asia	Africa
State of economic development	Developed	Developing	Underdeveloped
Political condition	Political stability	History of past instability but presently stable nations	Going through civil wars

18 MULTIDIMENSIONAL POVERTY INDEX

The global Multidimensional Poverty Index (MPI) was developed in 2010 by the Oxford Poverty and Human Development Initiative (OPHI) and the UNDP. It replaced the previous Human Poverty Index.

The global MPI is an international measure of acute poverty covering over 100 developing countries. It complements traditional income-based poverty measures by capturing the severe deprivations that each person faces at the same time with respect to education, health, and living standards.

The index uses the same three dimensions as the HDI: health, education, and standard of living. These are measured using 10 indicators.

Dimension	Indicators
Health	• Child mortality • Nutrition
Education	• Years of schooling • School attendance
Living standards	• Cooking fuel • Toilet • Water • Electricity • Floor • Assets

Indicators

The following 10 indicators are used to calculate the MPI:

Education (each indicator is weighted equally at 1/6)

1. **Years of schooling:** deprived if no household member has completed 6 years of schooling
2. **Child school attendance:** deprived if any school-aged child is not attending school up to class 8

Health (each indicator is weighted equally at 1/6)

3. **Child mortality:** deprived if any child has died in the family in the past 5 years
4. **Nutrition**: deprived if any adult or child for whom there is nutritional information is stunted

Standard of living (each indicator is weighted equally at 1/18)

5. **Electricity:** deprived if the household has no electricity
6. **Sanitation:** deprived if the household's sanitation facility is not improved (according to Millennium Development Goals (MDG) guidelines), or it is improved but shared with other households
7. **Drinking water**: deprived if the household does not have access to safe drinking water (according to MDG guidelines) or safe drinking water is more than a 30-minute walk (roundtrip) from home
8. **Floor:** deprived if the household has a dirt, sand, or dung floor
9. **Cooking fuel:** deprived if the household cooks with dung, wood, or charcoal
10. **Assets ownership:** deprived if the household does not own more than one out of radio, TV, telephone, bike, motorbike, or refrigerator and does not own a car or truck

A person is considered poor if they are deprived in at least a third of the weighted indicators. The intensity of poverty denotes the proportion of indicators in which they are deprived.

Calculation of the Index

The MPI is calculated as follows:

$$MPI = H \times A$$

H: Percentage of people who are MPI poor (incidence of poverty)

A: Average intensity of MPI

Practice Questions

1. An increase in national income because of an increase in prices only is called an
   (a) Increase in real national income
   (b) Increase in national income at constant prices
   (c) Increase in nominal national income
   (d) Increase in national income at base year prices

2. The national income of a country for a given period is equal to the
   (a) Consumption and investment expenditure incurred by the government
   (b) Consumption and investment expenditure incurred by Indians abroad
   (c) Consumption and investment expenditure incurred by private sector
   (d) Consumption and investment expenditure incurred by all the above

3. In an open economy, the national income (Y) of the economy is (C, I, G, X, M stand for consumption, investment, government expenditure, total exports, and total imports, respectively.)
   (a) $Y = C + I + G + X$
   (b) $Y = C + I + G - X + M$
   (c) $Y = C + I + G + (X - M)$
   (d) $Y = C + I - G + X - M$

4. The growth rate in per capita income at current prices is higher than that of per capita income at constant prices, because the former takes into account the rate of
   (a) Growth of population
   (b) Increase in price level
   (c) Growth of money supply
   (d) Increase in the wage rate

5. The value of all final goods and services produced by the normal residents of a country and their property, whether operating within the domestic territory of the country or outside, in a year is termed
   (a) Gross national income
   (b) Net national income
   (c) Gross domestic product
   (d) Net domestic product

6. National income in context of India is the collective income of all the Indians. Which of the following is equivalent to national income?
   (a) Gross domestic product at market prices
   (b) Net domestic product at factor prices
   (c) Net national product at market prices
   (d) Net national product at factor cost

7. Gross domestic product is more than the net domestic product. Gross domestic product (GDP) is called "gross" because its computation does **not** exclude
   (a) Consumption of capital in production process
   (b) Subsidies on consumption of goods

(c) Earnings of foreign exchange in domestic country
(d) Informal economy

8. Which one of the following is responsible for bringing out the report on national and per capita income in India?
(a) Ministry of Planning
(b) Ministry of Human Resource Development
(c) Ministry of Home Affairs
(d) Ministry of Statistics and Programme Implementation

9. The main reason for the low growth rate in India in spite of high rates of savings and capital formation is
(a) Low rate of investment
(b) Low level of foreign investment
(c) Low capital/output ratio
(d) High capital/output ratio

10. In India, National Income Statistics are computed by which of the following?
(a) Planning Commission
(b) Ministry of Finance
(c) Central Statistical Office
(d) RBI

11. Inclusive growth is the agenda of economic development in the future. The strategy of inclusive growth does **not** focus on
(a) Enhancement of education opportunities
(b) Reduction of poverty among backward castes
(c) Diversifying livelihood for tribal population
(d) Promotion of ancillary industry in industrial regions

12. Disguised unemployment typically leads to low level of income levels despite creating perception of high levels of employment. Disguised unemployment generally exists in
(a) Manufacturing sector
(b) Agriculture
(c) Small-scale industries
(d) Urban societies

13. When large number of workers loose employment due to automation of industrial processes, it is called
(a) Seasonal unemployment
(b) Structural unemployment
(c) Disguised unemployment
(d) Cyclical unemployment

14. The mechanization and automation of economy is leading to high unemployment rate in the economy. Which one of the following is the unemployment rate?
(a) Percentage of unemployed to total population
(b) Percentage of employed to total labour force
(c) Percentage of unemployed to total workforce
(d) Percentage of unemployed to total persons not in labour force

15. If the net national product at market price is higher than the net national product at factor cost, then which of the following is the correct description of relationship between indirect taxes and government subsidies:
(a) Government subsidies > Indirect taxes

(b) Government subsidies < Indirect taxes
(c) Government subsidies = Indirect taxes
(d) Government subsides ≥ Indirect taxes

16. Disguised unemployment generally means
(a) Total productivity of labour is zero
(b) Average productivity of labour is zero
(c) Marginal productivity of labour is zero
(d) None of the above

17. Human Development Index comprises literacy rates, life expectancy at birth, and
(a) Gross domestic product per head in US dollars
(b) Gross domestic product per head at real purchasing power
(c) Gross national product in US dollars
(d) National income per head in US dollars

18. Which one of the following is the difference between value at market prices and value at factor cost for a national income aggregate?
(a) Value of consumption of fixed capital
(b) Value of indirect taxes net of subsidies
(c) Value of net factor income earned abroad
(d) Value of subsidies net of indirect taxes

19. Which one of the following is shown by the Phillips curve?
(a) Inverse relationship between real and nominal wages
(b) Inverse relationship between the rate of inflation and rate of unemployment
(c) Positive relationship between nominal wages and rate of employment
(d) Positive relationship between rate of inflation and nominal wages

20. The Lorenz curve is used to measure the level of inequality in an economy. It shows the relationship between
(a) Asset creation and income generation
(b) Population groups and their respective income shares
(c) Unemployment and inflation
(d) Wage, labour hours, and leisure

21. The costs of factors of production, supplied by the entrepreneur himself, are known as
(a) Implicit costs
(b) Explicit costs
(c) Fixed costs
(d) Variable costs

Note: Implicit cost, also called an imputed cost, implied cost, or notional cost, is the opportunity cost equal to what a firm must give up in order to use a factor of production which it already owns and thus, for which it does not require to make any external payment. It is the opposite of an explicit cost, which is the payment made to outsiders.

22. The growth process that is sustainable and yields broad-based benefits and ensures equality of opportunity for all is termed
    (a) Faster growth
    (b) Inclusive growth
    (c) Balanced growth
    (d) Sustained growth

23. In national income accounting, which one of the following is the difference between gross aggregates and net aggregates?
    (a) The value of net indirect taxes
    (b) The value of consumption of fixed capital
    (c) The value of intermediate consumption
    (d) The value of final consumption expenditure

24. The average rate of domestic savings (gross) for the Indian economy is currently estimated to be in the range of
    (a) 15 to 20% (b) 20 to 25%
    (c) 25 to 30% (d) 30 to 35%

25. Which one among the following is the most appropriate definition of a country low on human development?
    (a) A country with a small agricultural sector, low rate of population growth, and low per capita GNP
    (b) A country with a high population growth rate, a high per capita GNP growth rate, and an unequal distribution of income
    (c) A country with inadequate health care, poor educational facilities, and low per capita GNP
    (d) A country with low per capita GNP, a large population, and a small agricultural sector

26. Consider the following statements:
    1. The GDP of India (in nominal terms) has crossed $2 trillion.
    2. The per capita income (in nominal terms) in India is more than ₹100,000.
    3. India has the third largest GDP in the world in PPP terms.
    4. The ICOR in India is lower than that in the United States.

    Which of the above statements are correct?
    (a) 1 and 2 only
    (b) 2 and 3 only
    (c) 2, 3, and 4 only
    (d) 1, 2, and 3

27. Consider the following statements regarding seasonal unemployment:
    1. It results in large-scale migration of agricultural labourers from agriculturally backward regions to that of urban developed regions.
    2. Many agricultural workers especially landless labourers and marginal farmers remain unemployed after employment season.

    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

28. Consider the following statements about the Multidimensional Poverty Index:
    1. It indicates the share of the population that is multidimensionally poor adjusted by the intensity of deprivation in terms of living standards, health, and education.

2. In South Asia, only Afghanistan has higher levels of poverty than India.

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

Note: The MPI placed Afghanistan as the poorest country in South Asia preceded by India, Bangladesh, Pakistan, Nepal, Bhutan, Sri Lanka, and Maldives, respectively.

29. Which among the following is added to the gross domestic product to arrive at national income of a nation?
   1. Depreciation
   2. Subsidies
   3. Indirect taxes
   4. Net factor income abroad

   Select the correct answer using the codes given below:

   (a) 2 only (b) 1 and 2
   (c) 1 and 3 (d) 3 and 4

30. Consider the following statements:
   1. The net domestic product can be greater than the gross domestic product for the same year.
   2. The gross national product of an economy is always less than its gross domestic product for the same year.

   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

31. Consider the following statements:
   1. The income method of GDP calculation considers income received by factors of production only.
   2. The GDP calculated through income method is less than the GDP calculated through the expenditure method for the same year.

   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

32. With reference to national income accounting, consider the following statements:
   1. The value of GVA is lower than GDP because the taxes levied are higher than the subsidies granted.
   2. GVA gives measure from the consumer's point of view and GDP gives measure from producer's point of view.

   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

33. Consider the following pairs:

Type of unemployment	Example
1. Structural unemployment	An unemployed worker from cycle industry because people are buying more cars
2. Cyclical	This kind of unemployment occurs when all those who want to work cannot be employed because there is not enough demand in the market for their work.
3. Frictional unemployment	A person leaving his/her job to prepare for civil services.

Which of the pairs given above is/are correctly matched?
(a) 1 and 2 only (b) 2 and 3 only
(c) 3 only (d) 1, 2, and 3

34. Consider the following statements:
1. The nominal gross domestic product (GDP) reflects the changes in both prices and quantities of the goods and services produced in an economy.
2. Real GDP reflects only the changes in the quantities of the goods and services produced in an economy.
3. GDP deflator reflects the changes in prices of the goods and services produced in an economy.

Which of the statements given above is/are correct?
(a) 1 and 2 only (b) 1 and 3 only
(c) 2 and 3 only (d) 1, 2, and 3

Note: In economics, the GDP deflator is a measure of the level of prices in an economy. It is calculated by dividing nominal GDP by real GDP and then multiplying by 100. Nominal GDP is the market value of goods and services produced in an economy, unadjusted for inflation.

35. GDP is defined as the output of economic activities carried out within the economic boundaries of a country. Which of the following constitutes the economic territory of a country with respect to GDP calculation?
1. Fishing vessels, oil and natural gas rigs operated by the residents of a country in the international waters.
2. Embassies, consulates, and military establishment of the country located abroad.
3. Ships and aircraft owned by residents of the country operating between two different countries.
4. Industrial establishment owned by residents located abroad.

Select the correct answer using the codes given below:
(a) 2 and 3 only (b) 1 and 3 only
(c) 1, 2, and 3 (d) 1, 2, 3, and 4

36. With reference to assessment of labour market condition, consider the following statements:
1. The labour force participation rate is the ratio of the number of persons in the labour force to the total population.
2. The unemployment rate is the ratio of the number of unemployed persons to the total population.

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

37. Which of the following affect the accuracy of national income estimation in India?
1. Output of non-monetized sector
2. Non-availability of data about income of small producers or household enterprises
3. Unreported legal income
4. Inflation

Select the correct answer using the codes given below:
(a) 1, 2, 3, and 4 (b) 1, 2, and 3 only
(c) 2 and 3 only (d) 1 and 4 only

38. Which of the following statements is/are correct?
A rise in per capita income does not automatically imply an increase in economic welfare because
1. Distribution of income is not known
2. Rate of economic growth is not known
3. Per capita income suffers from the limitation of averages

Select the correct answer using the codes given below:
(a) 1 only
(b) 2 only
(c) 1 and 3 only
(d) 1, 2, and 3

PERFECTING PAST PRELIMS

1. In the context of Indian economy, consider the following pairs: **(2010)**

Term	Most Appropriate description
1. Meltdown	Fall in stock prices
2. Recession	Fall in growth rate
3. Slow down	Fall in GDP

Which of the pairs given above is/are correctly matched?
(a) 1 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2, and 3

2. With reference to Indian economy, consider the following statements: **(2010)**
1. The gross domestic product (GDP) has increased by four times in the last 10 years.
2. The percentage share of public sector in GDP has declined in the last 10 years.

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

3. In the context of Indian economy, consider the following statements: **(2011)**
1. The growth rate of GDP has steadily increased in the last 5 years.
2. The growth rate in per capita income has steadily increased in the last 5 years.

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

4. The Multidimensional Poverty Index developed by the Oxford Poverty and Human Development Initiative with UNDP support covers which of the following? **(2012)**
1. Deprivation of education, health, assets, and services at household level
2. Purchasing power parity at national level
3. Extent of budget deficit and GDP growth rate at national level

Select the correct answer using the codes given below:
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2, and 3

5. Economic growth in country X will necessarily have to occur if **(2013)**
(a) There is technical progress in the world economy
(b) There is population growth in X
(c) There is capital formation in X
(d) The volume of trade grows in the world economy

6. The national income of a country for a given period is equal to the **(2013)**
(a) Total value of goods and services produced by the nationals
(b) Sum of total consumption and investment expenditure
(c) Sum of personal income of all individuals
(d) Money value of final goods and services produced

7. Disguised unemployment generally means **(2013)**
(a) Large number of people remain unemployed
(b) Alternative employment is not available
(c) Marginal productivity of labour is zero
(d) Productivity of workers is low

8. With reference to Indian economy, consider the following statements: **(2015)**
1. The rate of growth of real gross domestic product has steadily increased in the last decade.
2. The gross domestic product at market prices (in rupees) has steadily increased in the last decade.

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

9. Increase in absolute and per capita real GNP do not connote a higher level of economic development, if **(2018)**
(a) Industrial output failed to keep pace with agricultural output.
(b) Agricultural output fails to keep pace with industrial output.
(c) Poverty and unemployment increase.
(d) Imports grow faster than exports.

10. Consider the following statements: **(2018)**

Human capital formation as a concept is better explained in terms of a process which enables
1. Individuals of a country to accumulate more capital.
2. Increasing the knowledge, skill levels and capacities of the people of the country.
3. Accumulation of tangible wealth.
4. Accumulation of intangible wealth.

Which of the statements given above is/are correct?

(a) 1 and 2 (b) 2 only
(c) 2 and 4 (d) 1, 3 and 4

11. Despite being a high saving economy, capital formation may **not** result in significant increase in output due to **(2018)**
(a) Weak administrative machinery
(b) Illiteracy
(c High population density
(d) High capital-output ratio

12. If a commodity is provided free to the public by the government, Then **(2018)**
(a) The opportunity cost is zero.
(b) The opportunity cost is ignored.
(c) The opportunity cost is transferred from the consumer of the product to the tax-paying public.
(d) The opportunity cost is transferred from the consumers of the product to the Government.

ANSWER KEYS

Practice Questions

1. (c)	2. (d)	3. (c)	4. (b)	5. (a)
6. (d)	7. (a)	8. (d)	9. (d)	10. (c)
11. (d)	12. (b)	13. (b)	14. (c)	15. (b)
16. (c)	17. (d)	18. (b)	19. (b)	20. (b)
21. (a)	22. (b)	23. (b)	24. (d)	25. (c)
26. (d)	27. (c)	28. (c)	29. (a)	30. (d)
31. (a)	32. (a)	33. (d)	34. (d)	35. (c)
36. (d)	37. (a)	38. (c)		

Perfecting Past Prelims

1. (a)	2. (b)	3. (d)	4. (a)	5. (c)
6. (b)	7. (c)	8. (b)	9. (c)	10. (b)
11. (d)	12. (d)			

Solutions for

Practice Questions and Perfecting Past Prelims

CHAPTER 1 ECONOMIC GROWTH AND DEVELOPMENT

Practice Problems

1. **(c)** Nominal national income can increase on account of either increase in prices or increase in production or both. Thus, increase in national income due to increase in prices only is an example of increase in the nominal national income.

2. **(d)** Income is sum total of investment and consumption. The income belongs to private sector in India, Indians abroad and the government.

3. **(c)** In economics, aggregate expenditure (AE) is a measure of national income. The aggregate expenditure is thus the sum total of all the expenditures undertaken in the economy by the factors during a given time period. It refers to the expenditure incurred on consumer goods, investment and the expenditure made by the government in the economy. In an open economy scenario, the aggregate expenditure also includes the difference between the exports and the imports.

4. **(b)** Growth rate at constant prices is calculated on the basis of prices of goods at base year, so it can only increase when output of goods and services in particular year increases.

   Growth rate at current price is calculated on the basis of prices of goods and services in the same year in which they are produced. Even if there is no increase in physical output, the growth rate may increase due to rise in price levels.

5. **(a)** The value of all final goods and services produced by the normal residents of a country and their property, whether operating within the domestic territory of the country or outside in a year is termed as Gross National Income.

7. **(a)** Gross Domestic Product (GDP) is more than Net Domestic product (NDP) because GDP does not take into account the depreciation of assets.

   NDP = GDP – Depreciation

8. **(d)** The reports on per-capita income and National Income are brought out by Central Statistical Office (CSO) under the Ministry of Statistics and Program Implementation.

9. **(d)** High ICOR is responsible for low growth rate in India despite a high rate of saving and capital formation. The higher the ICOR, the lower the output generated from use of capital.

10. **(c)** The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation, releases National Income Statistics.

11. **(d)** Inclusive growth is a concept that advances equitable opportunities for economic participants during economic growth with benefits incurred by every section of society. Industrial regions are already receiving large benefits of economic growth and are particularly well of than other sections in the economy.

12. **(b)** There is a high level of disguised unemployment in Indian agriculture.

13. **(b)** Rise in unemployment levels due to change in technology is called Structural unemployment.

15. (b) If Net National Product at Market price is higher than Net National Product at Factor cost, it means that government subsidies are less than indirect taxes.

Market Price – Indirect Taxes + Subsidies = Factor Cost

17. (d) Human development index is calculated on the basis of:

(i) Life expectancy at birth

(ii) Literacy Rate

(iii) Per capita income (PPP US$)

18. (b) Indirect Taxes – Subsidies = NNP_{mp} – NNP_{fc}

19. (b) The Phillips Curve shows inverse relationship between the rate of inflation and rate of unemployment.

20. (b) The Lorenz Curve is used to measure the level of inequality in an economy. The Lorenz Curve shows the relationship between population groups and their respective income shares.

22. (b) The growth process that is sustainable and yields broad-based benefits and ensures equality of opportunity for all is termed as Inclusive growth.

25. (c) A country low on human development performs poorly on the indicators used for determining human development. Such poor performance is due to inadequate health care, poor educational facilities, and low per capita GNP.

26. (d) Statement 1 is correct: Nominal GDP of India is a $2.26 trillion.

Statement 2 is correct. India's per capita income grew by 9.7 percent to ₹1,03,219 in 2016-2017 from ₹94,130.

Statement 3 is correct. India has third largest GDP in purchasing power parity terms ($8.72 trillion as of 2016) after China and USA.

Statement 4 is incorrect. ICOR of USA is around 3 while India's ICOR is near 4.

29. (a) Gross domestic product + Subsidies – Indirect taxes – Net factor income abroad = National income of a nation.

30. (d) Statement 1 is incorrect. NDP = GDP – Depreciation.

Statement 2 is incorrect. GNP = GDP – Factor income paid to foreigners in India + Factor income paid to Indians abroad.

GNP depends on two factors. If the factor income paid to foreigners in India is greater than factor income paid to Indians abroad, then the GNP is less than GDP and vice versa. Thus, GNP is not always less than GDP.

31. (a) Statement 2 is incorrect. The value of GDP is same irrespective of the method used to calculate GDP.

33. (d) Structural unemployment is caused by fundamental shifts in economy and exacerbated by extraneous factor such as technology, competition, etc.

Cyclical unemployment rises during recessionary periods and declines during periods of economic growth.

Frictional unemployment rises when worker is searching for better job.

34. (d) Statement 1 is correct. Nominal GDP is calculated on the basis of current prices of particular year in which goods and services are produced.

Statement 2 is correct. Real gross domestic product is calculated on the basis of prices of the base year. It can increase when the quantity of goods and services produced in a particular year increases.

35. (c) The term economic territory includes

- The geographic territory administered by a government within which persons, goods, services, and capital move freely;
- Any free zones, including bonded warehouses and factories under customs control;
- The national air-space, territorial waters, and the continental shelf lying in international waters, over which the country enjoys exclusive rights;
- Territorial enclaves in the rest of the world under international treaties (embassies, consulates, military bases, scientific bases, etc.);
- Deposits of oil, natural gas, and other reserves in international waters owned by residents of a country.

The economic territory does not include extraterritorial enclaves (i.e., the parts of the country's own geographic territory used by governments of other countries. For instance, foreign embassies and consulates within India are not part of India's economic territory).

36. (d) Statement 1 is incorrect. Labour force participation rate is calculated by dividing the number of people actively participating in the labour force by the total number of people eligible to participate (not total population) in the labour force. People who are not looking for a job such as full-time students, homemakers, etc., will not be a part of the data set.

Statement 2 is incorrect. Unemployment rate is the ratio of the number of unemployed persons to the total workforce.

37. (a) The accuracy of national income estimation is affected by all the mentioned factors because it is difficult to determine the exact value of these factors.

38. (c) Statement 2 is incorrect. A rise in per capita income signals growth in the economy. Statement 2 does not justify why rise in per capita income does not automatically imply an increase in economic welfare.

Statements 1 and 3 are correct. Per capita income shows only the average income. A nation may have a significant GDP, but the distribution of income may be confined to a few rich people and the remaining population may be living under poverty.

Perfecting Past Prelims

1. (a) Recession is generally identified by a fall in GDP in two successive quarters.

An economic slowdown occurs when the rate of economic growth slows in an economy.

2. (b) Statement 1 is incorrect. The growth rate of GDP in 1990–2000 was 4.4% and that in 2000–2010 was 6.4%. For GDP to quadruple, country has to grow by 10% for almost more than 15 years.

Statement 2 is correct. The growth rate of private sector far exceeds that of public sector (government-owned enterprises). Thus, the percentage share of public sector in GDP has declined in the last 10 years.

3. (d) Statement 1 is incorrect. The question was asked in 2011. The statement was clearly incorrect because the growth rate had come down due to the financial crisis in 2008.

Statement 2 is incorrect. If the GDP growth rate is not steadily increasing, per capita income growth rate would also not be steadily increasing.

4. (a) Statements 2 and 3 are incorrect. Purchasing power parity at national level, extent of budget deficit, and GDP growth rate at national level are not covered by multidimensional poverty index.

5. (c) Economic growth depends upon two factors: capital formation and ICOR.

6. (b) Net national product at factor cost (NNPfc) or national income is the collective income earned by nationals of a country in a given time period. This income can be further bifurcated into consumption and investment expenditure.

7. (c) Disguised unemployment exists where extra work force is not contributing anything towards production. In other words, marginal productivity of extra labour is zero.

8. (b) Statement 1 is incorrect. The rate of growth of real gross domestic product (economic growth rate) has not increased steadily in the last decade.

Statement 2 is correct. GDP has been increasing year after year.

9. (c) Economic Development considers not just quantitative indicators such as GNP, GDP but also qualitative indictors such as standards of living, poverty, unemployment, etc.

10. (b) This question requires careful analysis. It talks about the process which explains Human Capital formation.

Statement 2 is correct. Human Capital formation is the process which enables increasing the knowledge, skill levels and capacities of the people of the country.

Many people tend to confuse Statement 4 as correct. However, accumulation of intangible wealth such as copyrights, patents, etc is outcome of Human capital formation and it is not the process. Thus, Statement 4 is incorrect.

Similarly, Statements 1 and 3 are also incorrect because they are also outcome of Human capital formation.

12. (d) Option (a) is incorrect. A free good is a good with zero opportunity cost. However, one important distinction is that just because a good is given away for 'free' it doesn't necessarily mean it is a free good. In this case, if the government wasn't giving away free commodity to the public, it might be using the same money elsewhere.

Option (b) is incorrect. Everything has a cost. Thus, Opportunity cost cannot be ignored.

Option (c) is incorrect. The tax receipts, once collected, belong to the government. Thus, their further use involves opportunity cost to the government.

Option (d) is the correct answer. Here, opportunity cost is what government gave up in order to provide free commodities. If the government would not have given free commodities, then it could have used the same funds in any other manner.

CHAPTER 2 TAXATION SYSTEM OF INDIA

Practice Questions

3. (b) The Laffer curve was developed by economist Arthur Laffer. The curve explains the relationship between different tax rates and the amount of tax revenue collected by government.

5. (b) The redistribution of income can be best brought through levying higher taxes on people with higher incomes (progressive taxation) and spending larger amount of money on people with lower incomes (regressive expenditure).

10. (d) Sales tax (VAT) is levied, collected, and appropriated by the State governments. It has been replaced with GST.

13. (b) Statement 1 is incorrect. The responsibility for the administration of GST is divided between state governments and union government.

14. (c) Input credit is not available for goods or services used for personal consumption.

17. (b) Statement 1 is incorrect. Profits arising from sale of flats kept as stock by a property dealer are gains from business.

Statements 2 and 3 are correct. A flat is a capital asset for a salaried employee. Similarly, business premises are a capital asset for a business man. Thus, profits arising from their sale is capital gain.

18. (a) Statement 2 is incorrect. Tax is levied on people in proportion to the benefit they earn themselves.

Statement 3 is incorrect. A progressive taxation system has lesser impact on the receipts of poor people than that of rich people.

19. (c) Statement 1 is correct. Increase in formal sector of the economy brings more people under the tax umbrella, leading to a rise in tax to GDP ratio.

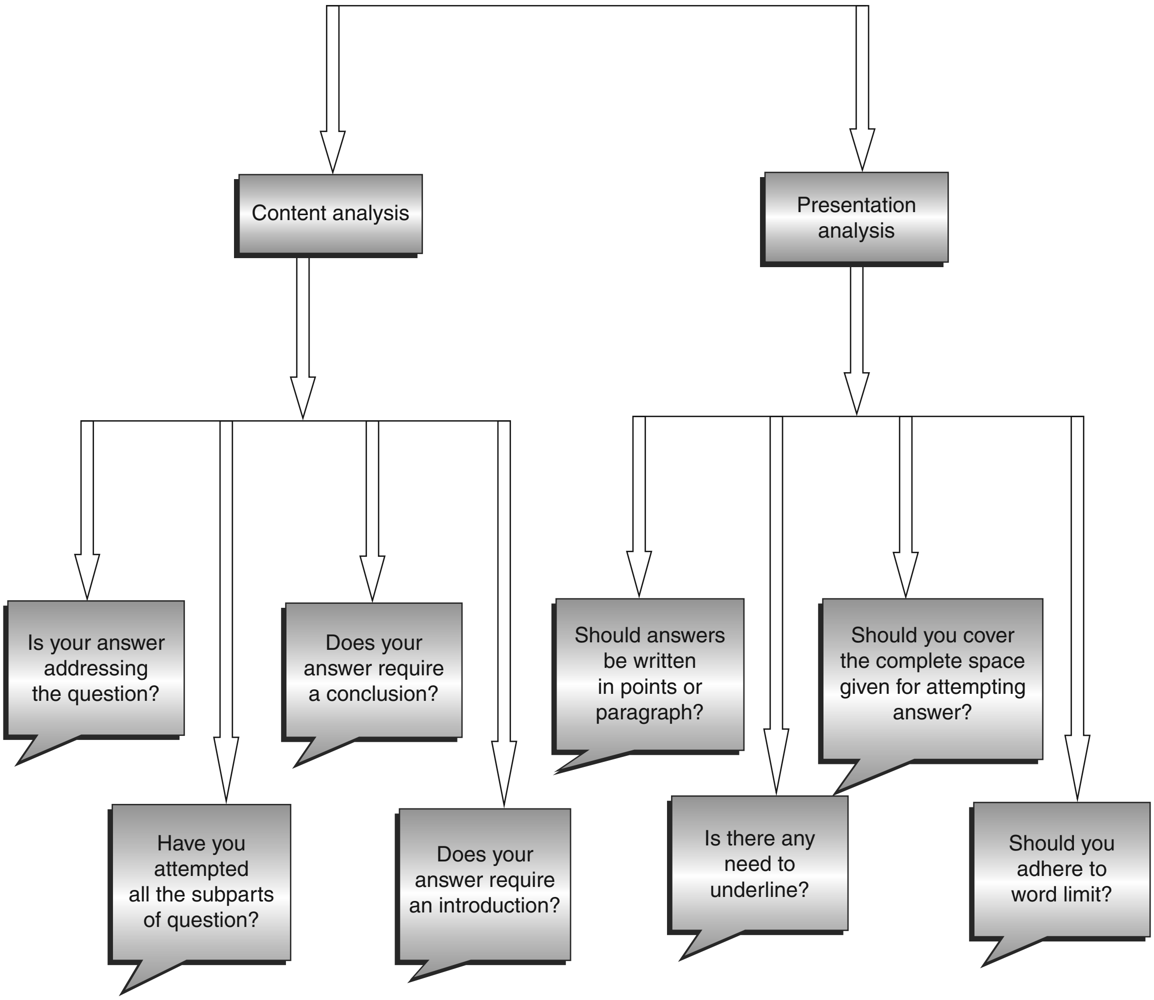
Statement 2 is correct. With rise in income level, people will be liable to pay more taxes due to progressive nature of taxation system. Rise in income levels will also lead to increase in expenditure levels, leading to enhanced indirect tax collection.

20. (a) Statement 1 is correct. The concept of MAT was introduced to tax companies making high profits and declaring dividends to their shareholders under Companies Act but have no significant taxable income under Income Tax Act because of exemptions, deductions, and incentives.

Remaining statements are not related to MAT.

Introduction to Writing Answers for Mains

A good answer is based on the following aspects



Let us consider the aspects mentioned in the diagram on one-by-one basis.

1. **Is Your Answer Addressing the Question?**

    The most common reason to blame for a low score is the lack of candidate's ability to address the question.

    Have you ever come across a candidate who attempted almost all (or all) the questions, yet could not clear the mains examination? If yes, you have probably met the candidate who wrote answers that did not address the questions.

    To understand how to address a question appropriately, we can classify each question into two parts: 'Statement' and 'Directive'.

    For example:

    > The National Urban Transport Policy emphasizes on moving people instead of moving vehicles. Discuss critically the success of various strategies of the government in this regard. **(UPSC Mains, 2014)**

    In this question, the Statement is "various strategies of the government in respect of National Urban Transport Policy, which emphasizes on moving people instead of moving vehicles" and the directive is "Discuss critically".

    Suppose a candidate "explains" the National Urban Transport Policy, which emphasizes on moving people instead of moving vehicles, or various strategies of the government in respect of the transport policy. The marks of such a candidate would be severely deducted.

    Critical discussion of the question requires pros and cons of the subject matter. Thus, the question demands the pros and cons of various strategies of the government in respect of the National Urban Transport Policy, which emphasizes on moving people instead of moving vehicles.

    It is to be noted that a particular directive may be attached to a sub-part of a question. In a single question, there can be as many directives as there are number of sub-parts.

So what all directives UPSC can use? What do these directives mean?

Here is a simple list for you. We will further learn about their application by attempting past year questions in the coming pages.

1. **Enumerate:** Mention a number of things one by one or give a list of things.
2. **Highlight:** Draw special attention to something.
3. **Outline:** Give a summary of something.
4. **Discuss:** Write about a topic in detail, taking into account different issues or ideas. For example,

    > Though India allowed foreign direct investment (FDI) in what is called multi-brand retail through joint venture route in September 2012, the FDI even after a year has not picked up. Discuss the reasons. **(UPSC Mains, 2013)**

5. **Explain:** What is meant by a word, text, concept, or action. For example,

    > "While we flaunt India's demographic dividend, we ignore the dropping rates of employability." What are we missing while doing so? Where will the jobs that India desperately needs come from? Explain. **(UPSC Mains, 2014)**

Previous Year's Questions (Mains) with Solutions

1. With a consideration towards the strategy of inclusive growth, the new company's bill, 2013, has indirectly made CSR a mandatory obligation. Discuss the challenges expected in its implementation in the right earnest. Also discuss other provisions in the bill and their implications. **(UPSC Mains, 2013)**

   Sol. The question is based on the current affairs of the year 2013.

2. What are the reasons for introduction of Fiscal Responsibility and Budget Management (FRBM) Act, 2003? Discuss critically its salient features and their effectiveness. **(UPSC Mains, 2013)**

   Sol.

Analysis of Question	
Discuss critically	The question requires break-up of the issue or situation into various parts and thorough analysis of these parts.
Number of parts	Three sub-parts Part I—Reasons for introduction of Fiscal Responsibility and Budget Management (FRBM) Act, 2003. Part II—Critical discussion on its salient features. Part III—Critical discussion on its effectiveness.
Mode of presentation	Point form
Importance of conclusion	Required

Reasons for the introduction of Fiscal Responsibility and Budget Management Act, 2003

The FRBM Act, 2003 was adopted to bring fiscal discipline at both the centre and state levels. Specifically, the following reasons were behind the adoption of FRBM Act, 2003:

1. Huge fiscal and revenue deficits were posing question over the long-term financial stability of India.
2. High level of deficit and debt levels raised the cost of fresh borrowing.
3. India is a federal country. There was a need that the central government should have the means to keep a check on the financial position of states.

Salient features of the act and rules under the act

1. Every year, the government will bring down the revenue deficit by 0.5% and eliminate it by 2007–08.
2. Every year, the government will bring down the fiscal deficit by 0.3% and bring it down to 3% by 2007–08.
3. Total liabilities of the union government should not rise by more than 9% a year.
4. The union government would not give guarantee for loans raised by PSUs and state governments exceeding 0.5% of the GDP in aggregate.
5. State governments were asked to formulate their own FRBM acts. Those states that have formulated their own FRBM acts have been given autonomy to borrow further without the permission of the central government.

Criticism of the FRBM Act

1. **Measures to enforce compliance:** It required the Finance Minister to place quarterly reports of finance and expenditure before the Parliament. Deviations from targets are required to be approved by the Parliament. No other measures for the failure of compliance have been specified.
2. The requirement to adhere financial discipline may force the government to cut back on the social expenditure.
3. **Off-budget items** such as oil bonds are not counted in government expenditure.
4. **Impact of global financial crisis:** Due to the 2008 global financial crisis, the deadlines under the act were postponed in 2009. After overcoming the 2008 global financial crisis, the FBRM Act was readopted in 2012–13 but not in a strict sense.
5. **Need for flexibility:** Recently our Finance Minister has asked for a range of targets under the FRBM Act rather than a specific pinpointed figure in order to provide flexibility in operations to the government.

Conclusion

The FRBM Act has brought the concerns of financial discipline to the forefront. However, the act lacks the teeth to enforce its compliance by union and the states.

3. What is meaning of the term tax expenditure? Taking the housing sector as an example, discuss how it influences budgetary policies of the government. **(UPSC Mains, 2013)**

Sol.

Analysis of Question	
Discuss	Write about a topic in detail, taking into account different issues or ideas.
Number of parts	Three sub-parts Part I—Meaning of the term tax expenditure. Part II—Example of housing sector. Part III—Tax expenditure influence on budgetary policies
Mode of presentation	Mix of paragraph and point form
Importance of conclusion	Not required

Tax expenditure is the amount of tax foregone by the government in order to support or meet its policy targets. In simple words, the government can give a lot of concessions, reliefs, exemptions, and deductions in the tax, and by doing this, the government can promote industries or businesses, investments, etc.

Examples of tax expenditure in the housing sector

For example, in the housing sector, the government has a lot of policies that come in the bracket of "tax expenditure". Some of the tax exemptions are as follows:

1. Capital gains tax is exempted if the amount is invested in a new house.
2. Exemptions from excise duty are often provided to the manufacturers of ready mix concrete (which is used for housing).
3. If one has taken a housing loan, one gets a deduction from income tax for repayment of the loan.