UNIT 1

Nature of Indian Economy
Learning Objectives
At the end of this unit, you will be able to:

- know about the criteria of classifying an economy as underdeveloped, developing or developed.
- understand the factors which make Indian economy as underdeveloped.
- understand the factors which make Indian economy as developing.
- understand how Indian economy can be classified as mixed economy.

1.0 INDIA - AN UNDERDEVELOPED ECONOMY

1.0.0. Features of an Underdeveloped Economy: Generally an economy is said to be underdeveloped, if it has the following characteristics:

- Agriculture is the main occupation of the people. Nearly 60 to 80 per cent of the population is engaged in agriculture and its related activities.
- Poverty is wide-spread. The ability to save of people is very low. Due to the low rate of saving, the rate of capital formation/investment is very low.
- Population grows at a high rate (about 2 per cent per annum) and the burden of dependent population is also high.
- The standard of living of people is generally low and the productivity of labour is also considerably low.
- The production techniques are backward. Investment in research and development is quite low.
- The incidence of unemployment and underemployment is quite high.
- The level of human well-being measured in terms of real income, health and education is generally low.
- Income inequalities are widespread.
- Apart from the above features, such economies have low participation in foreign trade, their social life is traditional; people are generally orthodox in their outlook and they seldom make any changes in their socio-economic relations.

1.0.1 India's case: If we analyze Indian economy we may say that it is an underdeveloped economy. This is because it has most of the characteristics mentioned above.

i) Agriculture is the main occupation of people in India. At the time of Independence nearly 72 per cent of population was dependent on agriculture. Even today, about 49 percent of the total employment is in agriculture and allied sector (Economic survey 2013-14). Although there has been an increase in the absolute number of people engaged in agriculture and allied activities since Independence, but of late, as per Census 2011, there has been a decline in the absolute number of cultivators, which is unprecedented from around 127 million in 2001 to around 119 million in 2011. This is indicative of a shift from farm to non-farm employment.
ii) In India, the incidence of poverty is very high. Every third poor person in the world is an Indian. That means one third of the world’s poor live in India. According to the Planning Commission, 21.9 per cent of the population was below poverty line in 2011-12. The corresponding ratio was 45.3 per cent in 1993-94 and 37.2 per cent in 2004-05.

iii) Over the years, Indian population has grown at a fast rate of more than 2 per cent. The country is facing the problem of population explosion as the death rate is falling but there is no corresponding fall in the birth rate. The dependency ratio i.e. percentage of people in non-working age group (below 15 and above 64 years of age) to people in working age group is nearly 57.5 per cent in India as compared to developed countries where it is much less.

iv) India’s per capita income was $1499 in 2013. It is low not only compared to developed countries like USA, UK, Germany but also developing countries like China, Sri Lanka, Indonesia etc. Because of low level of per capita income the standard of living of people is quite low.

v) In India, because of low per capita income and low saving rates, the gross capital formation rates have remained considerably low. Gross domestic savings were generally below 20 per cent of GDP (at current prices) between 1950-1990. As a result, gross domestic capital formation has also remained below 20 per cent during these years. Consequently, the rate of economic growth has remained stuck at a relatively low level. Since 1990-91, there have been improvements in saving and investment rates. Beginning with around 23 per cent in 1990-91 the gross domestic savings rate reached historic high at 36.8 per cent in 2007-08 falling to 30.1 per cent in 2012-13; similarly gross domestic capital formation became 36.5 per cent in 2010-11 (falling to 34.8 per cent in 2012-13) starting from 26 per cent in 1990-91.

vi) Techniques of production, especially in the agriculture sector are still backward. Productivity in agriculture as well as in industrial sector is low in India as compared to advanced countries.

vii) The incidence of unemployment in India is quite high. As per 66th Round of Survey (2009-10) by National Sample Survey Office (NSSO), unemployment rate was as high as 6.6 per cent of the labour force (based on Current Daily Status) in 2009-10. This became 5.6 percent in 2011-12. (68th Round, NSSO) In other words, out of 1000 persons in the labour force, as many as 56 are unemployed. The comparative data in 1999-2000 was 7.31 per cent and for 2004-05 it was 8.2 per cent.

Not only there is high rate of open unemployment the rate of disguised unemployment is also very high. Disguised unemployment means apparently people are employed but their contribution to the production is very-very low. In other words, their productivity is nil or negative. Such type of unemployment is more common in the agricultural sector. Here, many people work in a small farm land but their contribution is almost nil. So they are disguisedly unemployed. The actual extent of disguised unemployment is difficult to measure.

viii) In India, the level of human well-being is also quite low. For measuring human well-being, generally Human Development Index (HDI) constructed by the United Nations Development Programme (UNDP) is used. The HDI is a composite of three basic indicators of human development - longevity, knowledge and standard of living. Longevity is
measured in terms of life expectancy at birth, knowledge in terms of education and standard of living in terms of real GDP per capita. The HDI is a simple average of the above indices. The UNDP finds this index for all countries and ranks them. According to the latest UNDP Report 2013, India’s relative global ranking on this index has remained at a low of 136 among 187 countries. The comparative ranking in 2010 was 119 (out of 169 countries). Its HDI was 0.463 in 2000 which improved to 0.547 in 2010 and further marginally improved to 0.554 in 2012.

Although over a period of time, there has been improvement in India’s overall HDI rating, other countries like China, Sri Lanka, Thailand, Philippines, etc. in the same category have performed better than India in terms of human development.

ix) The distribution of income and wealth in India is not equitable. In order to measure the inequality of income and wealth, generally Gini index is used. The Gini index measures the extent to which distribution of income/consumption among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of zero represents perfect equality while an index of one represents perfect inequality. The Gini coefficient lies between 0 and 1. According to the Human Development Report - 2013, the Gini index for India for 2011-12 was 0.334. The corresponding figure was 0.297 in 1994 and 0.368 in 2010-11. Thus there has been an increase in inequalities of income and wealth (1994-2011) although now (2012) they show a marginal fall. The inequalities of income and wealth in India is lower compared to countries like South Africa(0.631), Brazil (0.547), Thailand (0.40), China (0.425) and even U.S.A. (0.408).

1.1 INDIA - A DEVELOPING ECONOMY

If we go through the above facts, we may rush to the conclusion that Indian economy is an underdeveloped economy. But that is not completely true. Indian economy has over the decades shown marked improvements. It is in fact moving fast on the path of development. The following facts are important here:

(i) Rise in National income: India’s national income i.e. Net National Product (NNP) at factor cost (National Income) was around ₹ 2,55,000 crore in 1950-51 which rose to nearly ₹ 50,00,000 crore (at constant prices) in 2013-14. Thus, over a period of 63 years the NNP has increased by about 18 times.

The economic growth in India has accelerated steadily since 1970s. However, noticeable growth has taken place since the reforms of 1990s. Over, the period 1991-2011, the economy grew at an average rate of 6.8 per cent per annum. This was significantly higher than the growth rate of 3.5 per cent per annum achieved during 1950-51 to 1990-91. Although there has been a slow down in the growth rate to less than 5 per cent per annum since 2012-13, this seems to be a transitory and cyclical phenomenon and it is expected that with improvement in the performance of the global economy and onset of domestic institutional reforms, the economy would come back to high growth trajectory in coming years.

(ii) Rise in Per Capita Income: Per capita income in India was ₹ 7,114 in 1950-51 (at constant prices). It rose ₹ 39,904 in 2013-14. Thus, over a period of 63 years the per capita income has increased by more than four and a half times. If we consider the period 1950-51 to 1990-91, the rate of increase in per capita NNP was roughly 1.6 per cent per annum. Since
1990-91, the per capita income shows an uptrend. It has increased roughly at a rate of about 5.5 per cent per annum. Considering the fact that the economy nearly stagnated during colonial rule and many years after, this is a good achievement.

(iii) Significant changes in occupational distribution of population: By occupational structure of a country we mean the distribution of work force in different occupations of the country. All occupations are broadly divided into three groups.

(i) Primary Sector: Primary sector includes agriculture and other activities related with agriculture such as animal husbandry, forestry, poultry farming etc.

(ii) Secondary sector: This includes all types of manufacturing activities including construction etc.

(iii) Tertiary sector: This sector includes trade, transport, communication, banking and other such services.

In general, it has been found that as an economy grows, there is a shift of labour force from primary sector to secondary and tertiary sectors. The proportion of working population in agriculture and allied activities falls and the proportion of working population in secondary sector and tertiary sector rises. This happens basically because of two reasons. Firstly, as economic development takes place income increases but demand for agricultural goods does not increase proportionately. On the other hand, rise in incomes brings about a large increase in demand for goods and services produced by secondary and tertiary sectors. Secondly, as an economy develops, better techniques of production become available to the agricultural sector which improve productivity of land and labour in this sector. The result is that there is a less need for labour in agriculture. On the other hand, although productivity also improves in the industrial sector, the increase in demand for industrial goods is far greater than the rise in productivity in this sector. This necessitates engagement of more labour in this sector, hence the shift takes place.

Occupational structure in India: The following table shows the occupational structure in India.

Table 1: Occupational Distribution of Working Population in India

<table>
<thead>
<tr>
<th>Occupation</th>
<th>1951</th>
<th>1991</th>
<th>2001</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary sector</td>
<td>72.1</td>
<td>66.9</td>
<td>56.7</td>
<td>48.9</td>
</tr>
<tr>
<td>Secondary sector</td>
<td>10.6</td>
<td>12.7</td>
<td>18.2</td>
<td>24.3</td>
</tr>
<tr>
<td>Tertiary sector</td>
<td>17.3</td>
<td>20.4</td>
<td>25.2</td>
<td>26.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(Draft 12th Plan, Economics Survey 2013-14)

Primary Sector includes, agriculture, forestry, logging and fishing. Secondary sector includes, mining and quarrying, manufacturing, electricity, gas and water supply and construction. Tertiary sector includes, trade, hotels and restaurants, transport, storage and communication, financial, insurance, real estate, business, community, social and personal services.

During 1951, Primary sector offered work to about 72 percent of the working population,
secondary sector to 10.6 percent and tertiary sector to 17.3 percent of the working population. In 2001 there was some change in the occupational distribution. The primary, secondary and tertiary sectors respectively occupied 56.7 percent, 18.2 percent and 25.2 percent of the working population.

In 2011-12, around 49 per cent of the working population was engaged in primary sector, 24 per cent in secondary sector and 27 per cent in tertiary sector.

Thus, over a period of six decades there has been shift of work force from primary to secondary and tertiary sectors signifying development in the economy.

(iv) **Important changes in sectoral distribution of domestic product:** An important indicator which shows that India is growing is decline in the share of agricultural sector in the overall gross domestic product. The following table shows how over a period of 63 years, structural changes have taken place in India - the share of agricultural and allied activities has fallen and shares of industrial sector and (services) sectors have improved in the GDP.

<table>
<thead>
<tr>
<th>Table 2 : Composition of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Agriculture (including allied activities)</td>
</tr>
<tr>
<td>Industry</td>
</tr>
<tr>
<td>Service (excluding construction)</td>
</tr>
</tbody>
</table>

Economy Survey 2013-14

(v) **Growing capital base of the economy:** Another characteristic which hints that the economy is growing is the development of strong industrial base in the country. At the time of Independence, we had very few basic and capital goods industries. But after Independence, especially in the Second Plan a high priority was given to establishing basic industries. As a result, a large number of industries have been established during the planning period. These include, iron and steel, heavy chemicals, nitrogenous fertilizers, heavy engineering, machine tools, locomotives, heavy chemicals, heavy electrical equipment, petroleum products and many more.

(vi) **Improvements in social overhead capital:** Social overhead capital mainly includes transport facilities, irrigation facilities, energy, education system, health and medical facilities. When there is an expansion in these facilities, we say that the economy is growing. In India, since Independence, these facilities have improved a lot as can be seen from the following points.

- Indian railways covers more than 65,000 kilometres. Indian railways is world’s fourth largest rail network.
- Diesel and electrical locomotives have replaced steam engines.
- The Indian road network has become one of the largest networks in the world aggregating 4.86 million kilometers.
Although the country is still facing energy crisis, there has been an impressive increase in the installed capacity. In 2011-12, the installed electricity generating capacity was about more than 2,43,000 MW (Mega Watt) against 2,300 MW in 1950-51.

Similarly, irrigation facilities have increased raising the land under irrigation from 22.6 million hectares in 1950-51 to 63 million-hectares in 2012-13. Currently, 45 percent of the net cropped area is irrigated.

In the field of education, during the planning period, the number of primary educational institutions has nearly quadrupled; the numbers of middle/senior basic schools and higher secondary educational institutions have increased by around 23 times. At the time of Independence, there were first 20 universities and 500 colleges. There are now around 35,000 colleges and 642 universities. The literacy rate has increased from 18.33 per cent in 1951 to 73 per cent in 2011 (Economic Survey 2013-14).

In the field of medicine and health also, some development has taken place. The number of doctors has increased by about 14 times increasing from 61,800 in 1951 to about 9 lakh in 2012. The bed-population ratio is now 1.03 per 1,000 population increasing from .32 per 1,000 in 1950-51.

(vii) Development in the banking and financial sector: Since Independence, important developments have taken place in the banking and financial sector. Initially banks were under private ownership. But after Independence, the process of nationalization was started. In 1949 Reserve Bank of India was nationalised and later in 1969 and 1980 many big banks were nationalised. As a result, banks which earlier catered to very small population have now reached at every nook and corner. Agricultural sector, small scale industries and other sectors have been getting bank's funds on a priority basis and at concessional rates of interest.

Thus, we can say, that although India is economically not so strong economy, but it is on the road of development. If its present pace of development continues, in the near future it will become an economic force to reckon with.

1.2 INDIA - A MIXED ECONOMY

In chapter one, we studied different types of economies on the basis of ownership of means of production. In India, we observe that the following characteristics exist:

- Private ownership of means of production - Agriculture and most of the industrial and services sectors are in the private hands.

- Important role of market mechanism - Market forces of demand and supply have free role in determining prices in various markets. Government regulations and control over period of time have reduced a lot.

- Growth of monopoly houses - Over a period of time, many big business houses have come into being and have been growing such as Tatas, Birlas, Reliance, Infosys etc.

- Presence of a large public sector along with free enterprise - After Independence, the government recognised the need to provide infrastructure for the growth of the private sector. Also, it
could not hand over strategic sectors like arms and ammunition, atomic energy, air transport etc. to the private sector. So public sector was developed on a large scale.

- **Economic planning as a means of realizing overall national economic goals** - Economic planning has been an integrated part of the Indian Economy. The Planning Commission lays down overall targets for the economy as a whole, for public sector and even for the sectors which are in the private hands like agriculture. The government tries to achieve the laid down targets by providing incentives to these sectors. Thus, here planning is only indicative in nature and not compulsive.

Observing the above characteristics we conclude that Indian economy is a mixed economy.

**SUMMARY**

- The main features of under-developed economy are pre-dominance of agriculture, over-population, poor income and poor savings, outdated technology, incidence of unemployment and poverty, wide-spread of inequalities of income etc.

- In case of Indian economy, we may say that it is underdeveloped because it has most of the features mentioned above.

- Since Independence there has been, a tremendous growth and development in national income and per-capita income, significant changes in occupational distribution of population, improvement in sectoral distribution of domestic product, remarkable growth in the capital base of economy, improvement in social over head capital and development of financial sector etc. These show India is not an under-developed economy but it is a developing economy.

- India is a mixed economy where the means of production are owned partly by private sector and partly by public sector.
CHAPTER – 5

INDIAN ECONOMY – A PROFILE

Unit 2

Role of Different Sectors in India
Learning Objectives
At the end of this unit, you will be able to:

♦ understand the role played by agriculture, industry and services in the growth of Indian economy.
♦ understand what qualitative and quantitative changes have taken place in the various productive sectors of the economy.
♦ understand the various problems faced by these sectors in India.

Agriculture, industry and services are the major producing sectors of an economy. In this unit, we will study about these sectors in some detail.

2.0 AGRICULTURE

2.0.0 Role of Agriculture in India: Agriculture is a very important sector of the Indian economy. It plays a major role in the overall development of the country as it contributes 14% of GDP and engages around 49% of the working population of the country. Its role is discussed in the following points:

(i) Providing employment: Agriculture provides employment to a large number of people in India. At the time of Independence around 72% of the population was engaged in agriculture and allied activities. As economy developed, its other sectors (industry and services) also developed and the percentage of people working in agriculture sector came down to around 58% in 2001-02. Even today, around 49% of working population is engaged in agriculture and allied activities. It must however, be noted that in absolute terms there has been a big increase in the number of people engaged in agricultural activities. Besides, a large number of people earn their living by working in occupations dependent on agriculture like storage, procuring, trade and transport, marketing and export of agricultural products.

(ii) Share in national income: Agriculture contributes a large share in the country’s gross domestic product. Its share in total GDP in 1950-51 was around 55% which has come down to 14% per cent in 2013-14 (constant prices). This reduced share indicates that the economy and its non-agricultural sectors are growing, nevertheless share of 14% per cent is an indicator of the fact that in India, the growth of agriculture is still a critical factor in the overall performance of the Indian economy.

(iii) Supporting industries: Agriculture has a big role in the development of industries specially the agro-based industries such as textiles, sugar, tea, paper. There are several other industries like handloom, weaving and other cottage industries which also depend upon inputs from agriculture. The prosperity of these agro-based industries is directly dependent upon the availability of inputs from the agricultural sector. The prosperity of industries depends on agricultural prosperity from another angle also. The demand for industrial products depends upon the income of the farmers which in turn depends upon agricultural production.

(iv) Share in foreign trade: At the time of Independence and a number of years thereafter our export basket mainly consisted of three agro-production-cotton textiles, jute and tea. These
three accounted for more than 50 percent of our export earnings. If we consider other agricultural commodities like cashew, kernels, tobacco, coffee, sugar, vegetable oil etc., the total share of agriculture in total exports was about 70 per cent. As economy developed, the share of agricultural exports in total exports fell down. In 2013-14 agricultural exports formed about 12 per cent of the national exports. In recent years, special schemes (like Special Agricultural Product Scheme) have been started to promote exports of fruits, vegetables, flowers, dairy products and forest products.

As far as the agro-imports are concerned they constituted about 3 per cent of national imports in 2013-14. This is very meager, considering the fact that nearly one-fourth of our total import expenditure at the time of Independence and many years thereafter was on agro-imports (food grains, pulses, edible oil etc.). India, over a period of time has become self-sufficient in the production of agro-products and need to import them only when there are severe shortages resulting from unfriendly weather conditions like droughts and floods.

(v) **Supplier of food and fodder:** Agriculture meets almost the entire food-needs of the people. In India, people spend a very large proportion of their incomes on food and food products. Thus, the cost of living of people also gets affected by agricultural prosperity. If food is costly; the cost of living of the people also gets affected to a great deal.

Agriculture also provides fodder to sustain livestock comprising of cattle, buffaloes, sheep and poultry etc.

(vi) **Savings of capital:** Agriculture has a low capital output ratio; in other words it requires lesser capital per unit of output produced compared with industries. A capital poor economy like India can make efforts to develop this sector which along with increase in production could increase employment opportunity in the rural areas and could help in solving problems of urban congestion and pollution in the cities.

(vii) **Contributions to Government’s revenue:** The government revenues also depend a great deal on agricultural prosperity. The direct contribution of agricultural taxes to the revenues of the centre and the states is not significant but indirectly agriculture has a considerable influence on the revenues of the central and state governments. Particularly, when due to agricultural droughts, the revenue suffers a set-back, government expenditure on relief, etc., goes up a great deal leading to heavy deficit in government budgets.

(viii) **Solving problems of urban congestion and brain drain:** Migration from rural areas to urban areas and metropolitan cities has created a dual problem: on the one hand, it has deprived rural areas of skilled and educated persons and, on the other hand, it has created the problem of urban congestion. If agriculture is on the road to prosperity and is in a position to absorb fruitfully the growing talent in rural areas, the dual problem of urban congestion and rural brain drain will be solved.

**2.0.1 Growth of agriculture during planning period:** In the following points we will learn how agriculture sector has developed in India over the years:

I  **Increase in production and productivity:** The following table shows how agricultural production has progressed over the years.
We can see from the table that over the last 6 decades, agriculture production has increased by more than four times. In 1950-51, food grains production was 51 million tonnes which increased to about 265 million tonnes in 2013-14.

Significant breakthrough in the production of food grains (often termed as Green Revolution) had been made possible due to the adoption of the new agricultural strategy since 1966. This strategy stressed upon the use of high-yielding varieties of seeds, proper irrigation facilities, extensive use of fertilizers, pesticides and insecticides often termed as High Yielding Varieties Programmes (HYVP). Due to adoption of this Programme, the production and productivity of food grains especially of wheat have increased sharply. The food grains production increased from 81 million tonnes in the Third Plan (i.e. before HYVP) to 265 million tonnes in 2013-14.

The country has not witnessed any significant technological breakthrough in agriculture since then. The yield levels in wheat and rice (which were the major crops of Green Revolution) have plateaued. Since the scope of bringing more land under cultivation is very less, the food safety net for all on a continuous basis requires increased production and productivity of food crops. Thus, there is an urgent need for technological breakthrough in the form of a Second Green Revolution.

Similarly, we find the production of pulses increased from 8.4 million tonnes to 19.6 million tonnes, of sugarcane from 69 million tonnes to 348 million tonnes in 2013-14, of oilseeds from 5.1 million tonnes to 32.4 million tonnes in 2013-14, of cotton from 2.1 million bales to 36.5 million bales.

HYVP was restricted to five crops - wheat, rice, bajra, jawar and maize. But among these, wheat made wide strides with production increased by about 8 times from 11 million tonnes (annual average) in the third plan to 96 million tonnes in 2011-12. The productivity of wheat during the same period has increased from 827 kilograms per hectare in 1965-67 to 3059 kilograms per hectare in 2013-14. On account of this, it is often said that the green revolution is largely wheat revolution.

Since pulses, oilseeds, fruits and vegetables are essential for nutritional security of people; there is a need for improving their production and productivity. Hence, technological breakthrough in these products is also necessary.

The long-term annual growth of food grains output has been around 2 per cent during 1960-61 to 2010-11. According to Economic Survey 2011-12, the compound growth rate of food grains production has deteriorated from 2.85 per cent during 1980-81 to 1989-90 to 2.32 during 2000-
01 to 2011-12. The per capita availability of foodgrains has improved from about 395 gm in 1951 to 511 gm in 2013.

Agricultural productivity is measured in terms of yield per hectare of land. The productivity of food grains has improved from 1380 kilogram per hectare in 1990-1991 to 2095 kilogram per hectare in 2013-14. It is to be noted that in two major crops – wheat and rice, the yield levels have plateaued. It is important and necessary that productivity of land improves as there is hardly any scope for bringing more land under cultivation.

II  *Diversified agriculture:* Indian agriculture has become diversified as will be clear from the following facts:
- The share of non-crop sectors (fishery, horticulture and livestock) in total agricultural output has increased.
- Area under commercial crop like sugar, cotton, oilseeds, etc. has increased.
- Within food grains, area under superior cereals (rice and wheat) has increased and area under the inferior cereals has declined.

III  *Modern agriculture:* Some qualitative changes have taken place in agricultural sector especially in India since 1966 when Green Revolution was started. These are:
- The use of high-yielding varieties of seeds, chemical fertilizers, pesticides, threshing machine is rising.
- Farmers are increasingly resorting to intensive cultivation, multiple cropping, scientific water management in some states.
- There have been noticeable changes in the attitudes of farmers. They are ready to accept new and scientific techniques of production.
- Agricultural capacity has improved a lot. This has been made possible due to use of modern techniques such as irrigation facilities, high-yielding varieties of seeds, tractors and other modern machines.
- The Indian Council of Agricultural Research (ICAR) is the apex body for co-ordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country. The ICAR has played a pioneering role in ushering Green Revolution and subsequent developments in agriculture in India through its research and technology development that has enabled the country to increase the production of food grains by 4 times, horticultural crops by 6 times, fish by 9 times, milk 6 times and eggs 27 times since 1950-51, thus making a visible impact on the national food and nutritional security.
- A number of institutions have come up for marketing agricultural products for providing agricultural credit, for purchasing and distributing of agricultural inputs and storage etc. They have facilitated growth of agriculture.

IV  *Improved agrarian system:* At the time of Independence, there were three types of land tenure systems prevailing in the country - the zamindari system, the ryotwari system and the mahalwari system. In all these systems, the land was cultivated by tenants and they paid rent for the use of land. Only the system of collecting rent or land revenue was different in these land tenure systems. Whatever the system of collecting land revenue, the tenant or the actual tiller of the land was exploited by the land owners. More than 25 per cent of
the produce was taken away by these intermediaries (zamindar etc.) in the form of rent. These intermediaries did not work at all on the land but took away whatever surplus above the minimum subsistence the cultivators produced. The cultivators did not show any interest nor did they have any surplus left for modernisation of agriculture. Hence, there was virtual stagnation in the agricultural sector.

In order to stop the exploitation of the actual tillers of the soil and to pass on the ownership of land to them land reforms were introduced after Independence. Three measures were contemplated to achieve these objectives:

(i) Abolition of Intermediaries
(ii) Tenancy reforms
(iii) Reorganisation of agriculture

Legislations were passed in all states to abolish zamindari system and bring tenants into direct contact with the state.

Under the tenancy reforms, three measures were taken (a) Regulation of rent (b) Security of tenure and (c) Conferment of ownership rights on tenants.

Before Independence, the rent changed by the zamindars from the tenants was very high. It ranged between 30 to 75 per cent of the produce. So after Independence, legislations were passed to fix rents between 25-50 percent for different states. Security of tenure has also been provided by these states by passing legislations which disallow ejectments of the tenants except in accordance with the provisions of the law. Many States have also conferred ownership rights on the tenants. It has been estimated that as result of laws conferring ownership rights on tenants in various states, approximately 12.42 million tenants have acquired ownership rights over 6.32 million hectare of land. Ceilings were also imposed on agricultural holdings. That means limits were imposed on the amount of land which a family could hold. Accordingly, a family could hold 18 acres of wet land or 54 acres of unirrigated land. It has been estimated that 2.98 million hectares of land had been declared surplus of which 2.18 million hectares has been distributed to 5.58 million beneficiaries.

In order to solve the problem of fragmentation of holdings, the land was reorganized. Accordingly it was decided to consolidate holdings by giving to the farmer one consolidated holding equal to the total of the land in different scattered plots under his possession. Cooperative farming was also started but it did not succeed much.

Census 2005–06 reported the average size of an operational holding at only 1.23 hectare, with farms less than 2 hectares comprising 83 per cent of all holdings and 41 per cent of area.

Thus, we see that since Independence, we have a much improved agrarian system which has resulted due to the land reforms undertaken by the government. But still there is a long way to go.

V Other developments: Apart from the above, the following developments have also taken place:

- Farmers have been getting material inputs at subsidised rates.
- They are getting credit at low rates of interest.
- Government is helping them in procuring their products at predetermined rates and
marketing them.

- Minimum wage levels have been fixed for agricultural labourers.
- Special programmes such as Swarnjayanti Gram Swarojgar Yojana and Mahatma Gandhi National Rural Employment Scheme (MGNREGS) etc., are in place in rural areas to provide employment to the rural people.
- The National Food Security Mission (NFSM) was launched in 2007-08 in identified districts of different states. The aim is to have self sufficiency in different food crops like rice, wheat and pulses. In order to give special attention to pulses production, an Accelerated Pulses Production Programme (A3P) has been launched as a part of NFSM Pulses.
- The Rashtriya Krishi Vikas Yojana (RKVY) (now converged with MGNREGS) is being implemented for integrated development of food crops. The scheme focuses on agricultural mechanisation, improvement of soil health and productivity, development of rain fed farming systems, improvement of agricultural marketing and pest management.
- In order to give boost to oilseeds, pulses, oil palm and maize, an Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize was started in Eleventh Plan. The Technology Mission on Oil Seeds and Oil Palm (TMO & OP), has been introduced in XIIth plan to increase domestic production of edible oilseeds/oil.
- Projects like Forecasting Agricultural Output using Space, Agro-meteorology and Land-based Observations (FASAL) and Extended Range Forecasting System (ERFS) have been started to establish a more scientific and reliable basis for forecasting.
- Special schemes have been started to improve the production of rubber, coffee, bamboo, poultry, horticulture, etc.
- There are various crop insurance schemes which provide financial support to farmers in the event of failure of crops as a result of natural calamities.
- To enhance food security and to make Indian agriculture more resilient to climate change, National Mission for Sustainable Agriculture (NMSA) was launched in 2011-12.

2.0.2 Problems of agricultural sector in India: The agricultural sector in India faces the following problems:

(1) **Slow and uneven growth:**

(a) The growth of agricultural sector is not sufficient to meet the rising demands of fast growing population. While the population is growing at a rate of around 2 per cent per annum, food grain production has increased at an annual rate of around 2 per cent. (1960-2011) **Growth in the agricultural sector has quite often fallen short of the Plan targets. The Ninth and Tenth Plans witnessed agricultural sectoral growth rate of 2.44 per cent and 2.3 per cent respectively compared to 4.72 per cent growth rate during Eighth Plan. During Eleventh Plan, however, agricultural growth is estimated at a 4.1 per cent against the target of 4 per cent. The low performance of agricultural sector resulting mainly from deficient and uneven rainfall in the recent years has led to creating inflationary pressure in some primary products and reduction in the potential growth of other sectors by dampening growth. This rate is just sufficient to maintain the existing standard of
consumption of people. If we desire better standards of consumption and nutrition, then agriculture will have to grow at a higher rate.

The Approach Paper to Twelfth Plan emphasizes the need to enhance our efforts to ensure 4 per cent average growth of agriculture in the 12th plan.

(b) Certain crops (like wheat) are growing at a higher rate than other crops (like maize, jawar etc.).

(c) Low yield per unit area across almost all crops has become a regular feature of Indian agriculture. Though India is one of the largest producers of most of the agricultural crops but ranks very low in terms of yield. For example, it has the largest area under rice and wheat in the world and is the second largest producer of these crops, but in terms of productivity its world rank is 52nd in rice and 38th in wheat. There is a need for a renewed focus on improving productivity.

(d) There are regional imbalances in the spread of growth. The growth has remained confined to certain areas like Punjab, Haryana and Western Uttar Pradesh.

(e) Till very recently, the attention and resources were devoted to the development of agricultural crops and animal husbandry, fisheries and forestry were not given much attention.

(2) Not so modern agriculture:

(a) The HYVP was initiated on a small area of 1.89 million hectares in 1966-67 and even in 2003-04 only 80 million hectare of land was covered by this program which is just 44 per cent of the gross cropped area. Naturally, the benefits of the new technology have remained confined to this area only.

(b) In many areas and in a number of crops old methods of ploughing, sowing and harvesting etc. are still used. As a result, productivity in such areas and crops is very low.

(c) About 55 per cent net cropped area is rain fed and there are no appropriate dry-farming techniques. (In order to address the problems faced by farmers of rain fed areas especially small and marginal farmers, Rainfed Area Development Programme was launched.)

(d) Only 45 per cent of the net cropped area has irrigation facilities. The irrigation sector requires a renewed thrust both in terms of investment as also modern management.

(e) The current level of farm mechanization at 25 percent is very low as compared to about 90 percent in developed countrieis.

(3) Flaws in Land reforms:

(a) The legislation measures have not been completed in all the states.

(b) There are snags in legislation like definitions of ‘personal cultivation’ and ‘tenants’ were inadequate, substantial area were given to zamindars for their personal cultivation, landlords often forced their tenants to surrender the lands voluntarily, ceiling laws were inadequate and zamindars indulged in large scale transfer of land to their family members in order to escape these laws.

(4) Problems relating to finance:

Since agriculture is an unorganized profession dependent mainly on rains, banks and other
financial institutions are reluctant to provide finance to this sector. In fact, till a very long period after Independence the main source of agricultural credit was the moneylender as organized institutions insisted on collateral securities. In 1951, moneylenders accounted for as much as 71.6 percent of rural credit. Moneylenders used to charge exorbitant rates of interest ranging from 18 to 50 percent. They often manipulated accounts and cheated the poor uneducated farmers. Therefore, after Independence steps were taken to free farmers from the clutches of money lenders, the most important being the expansion of institutional credit to agriculture. Fourteen banks were nationalised in 1969 and six banks were nationalised in 1980 with an important objective of providing credit to the rural and other priority sectors. In 1975, the government established Regional Rural Banks (RRBs) to specifically meet the requirements of the farmers and villages. This was followed by the setting of an apex bank called National Bank for Agriculture and Rural Development (NABARD) (based on the recommendation of Shivaraman committee) in 1982. Cooperative credit societies were also established to finance rural projects at lower rates of interest. As a result of all these efforts the share of moneylenders has reduced to about 27 per cent now and that of institutional credit has increased.

Of late a number of steps have been taken to enhance credit support to farmers. These include:

- Introduction of the “Farm Credit Package” in 2004. As a result of this package the flow of credit to the farm sector has consistently exceeded the target.
- There has been a massive increase in the institutional sources of credit to agricultural sector in India.
- Farmers are given crop loans at concessional rate of interest and on easy terms.
- Kisan Credit Card scheme was started in 1998 to provide adequate and timely support for the banking system to the farmers for their cultivation needs. A revised and improved Kisan Credit Card Scheme was introduced in 2012.
- NABARD provides refinance to State Cooperative and Agriculture and Rural development banks, (earlier known as Land Development Bank) State Cooperative Banks, Regional Rural Banks, commercial banks and other financial institutions so that they can meet the credit requirements of rural people.
- From time to time, the government announces agricultural debt waiver and debt relief schemes so as to mitigate the distress amongst farmers.

Although much improvement has taken place in agricultural finance, the following problems have emerged:

- Agricultural loans are concentrated in certain regions and states. For example, nearly half of the agricultural bank credit is concentrated in Southern States.
- The proportion of overdue to demand has been increasing. Nearly 40 per cent of the amount financed does not come back to the society.
- The major beneficiaries of the agricultural credit have been the large and medium farmers.
- There is a lack of experienced and skilled staff in these institutions.

(5) Problems relating to warehousing and marketing:

(a) The storage facilities with the individual farmers are normally very primitive types in
the form of dug-holes and pits. As a result 10 - 15 percent of agriculture produce gets spoiled or eaten by rats. Government agencies like Food Corporation of India provide storage facilities but these are inadequate.

(b) There is a lack of organization among farmers so they do not get a fair price from the purchasers who are generally well-organized.

(c) There are a number of agents between the producers (farmers) and the consumers (buyers). They charge a heavy amount as their fees or as commission. As a result, the farmers do not get a fair share in the total product price charged. To protect farmers from exploitation of intermediaries, the Agricultural Produce Market Committee (APMC) Act was passed. Under the Act, agricultural markets in most of the states are regulated under the State APMC Acts.

(d) Because of heavy indebtedness, the farmers are many times forced to sell their produces at low prices and sometimes due to lack of proper transport facilities in the nearest market at not so great prices.

(e) A great number of farmers live just for subsistence. Their marketable surplus is very low or almost nil.

(f) Several malpractices exist in unorganized agricultural markets such as under weighing, levying of a number of unauthorised fees and taxes etc.

(g) The farmers are many a times not well informed about the prevailing market conditions including prices prevailing in the markets.

(h) Grading and standardisation are at a very low level. So often inferior quality gets mixed up with superior one, killing the motivation of farmers to produce superior quality products.

(i) In order to meet the needs of poor people in the country, the government runs a network of ration shops and fair price shops which provide food grains and other essential commodities at very low prices to consumers. Despite the massive coverage of these shops, the total requirements of food grains of all vulnerable sectors are not met.

There is a need to develop marketing infrastructure, storage, warehousing, cold chains and spot markets that are driven by modern technology. In this direction some steps have been recently taken. These include:

- If has been felt that by and large, the APMC have emerged as some sort of government sponsored monopolies with draw back associated with a monopoly. To address the problem and to bring about reforms in agricultural marketing, Agricultural Produce Market Committee (APMC) Act is being amended by various states.

- To transfer agricultural technologies and information to the farming sector a number of initiatives have been taken by the Department of Agriculture & Cooperation. These include, setting up of Agri Clinics and Agri Business Centres (ACABC), setting up of Kisan Call Centres and developing of Kisan Knowledge Management System (KKMS) etc.

- The National Policy for Farmers, 2007 is being adopted by the government. Major policy provisions include provisions for assets reforms, water use efficiency, use of technology, inputs and services, good quality seeds, disease free planting material, credit insurance etc.

- Modified National Agricultural Insurance Scheme and Weather Based Crop Insurance
Schemes are being run for insuring the farmers against crop loss and loss arising out of bad weather. The agriculture Insurance Company of India Ltd. is the implementing agency for these.

- Food Corporation of India (FCI) is the nodal agency for procurement, distribution and storage of food grains. It is taking many steps for improving food management in the country.

2.1 INDUSTRY

2.1.0 Role of Industry in India: In any economy, industries have an important role to play. In fact, it has been noticed that countries which are industrially well developed (example USA) have higher per capita income than those countries where industries are not well developed (example: India, Pakistan). The only exception to this could be the petroleum exporting countries (like UAE) which have a higher per capita income due to abundance of petroleum products and virtual monopoly in export of petroleum products.

In India, industrial sector plays the following roles:

i) Modernising agriculture: It modernises agriculture and improves productivity in it. It provides agriculture with the latest tools and equipments which enhance efficiency in this sector.

ii) Providing employment: Indian economy being labour surplus economy needs sectors which absorb ever increasing labour-force. Industries can play an important role here. It is the establishment of industries alone that can generate employment opportunities on an accelerated rate. In 2011-12, industries engaged only about 24.3 per cent of the working population of India and there is a need to industrialise country and that too quickly.

iii) Share in the GDP: Over the years, the value-added by industrial sector in the GDP has improved from 16.6 percent in 1950-51 to about 26 per cent in 2013-14 (constant prices).

iv) Contribution to exports: Indian industries contribute tremendously to the export earnings of India. In fact, manufactured goods alone contribute nearly two third of the export earnings of India.

v) Raising incomes of the people: Industries generally help in raising the incomes of the people of a country. This is possible because industries are not dependent on vagaries of nature. By putting in more efforts, capital and improved technology industrial output and production can be raised. In fact, in this sector, the benefits of large scale production can be reaped. Higher industrial output results in higher income per head. In fact, in the industrially developed countries, the GDP per capita is very high as compared to the GDP per capita in industrially developing countries. For example, in USA GDP per capita was $ 53,143 and in India it was just $1499 in 2013.

vi) Enhancing further the economic growth: As industrialisation grows, the role of capital goods vis-à-vis consumer goods gains strength. This helps in enhancing further the economic growth. It helps an economy to attain self-sustaining growth.

vii) Meeting high-income demands: Beyond certain limits, the demand of the people for agricultural products falls and for industrial products rises. Industries help in meeting these ever-increasing demands.
viii) **Strengthening the economy:** Industries help strengthen the economy in a number of ways:
   (a) The growth of industries producing capital goods i.e. machines, equipments etc. lets a country to produce a number of goods in large quantities and at low cost. This gives industrial character to the economy and strengthens its infrastructure 
   (b) It makes possible the production of economic infrastructure goods like railways, dams etc. which in any case are non-importable. 
   (c) Agriculture gets improved farm-implements, chemical fertilizers and transport and storage facilities due to industries. 
   (d) Dependence on foreign sources for defense materials is a risky matter. Industrialisation helps a country to become self-reliant in defense materials.

2.1.1 **Growth of industrial sector in India:** All the industries of a country can be grouped in two major ways (i) on the basis of the size of industries and (ii) on the basis of end-use.

(i) **On the basis of size of industries:** On the basis of size of the industries, they can be divided into large industries, medium industries and small industries. Large industries which largely form the basis of the country’s index of industrial production include the following industries: (a) mining and quarrying (often referred as mining); (b) manufacturing; and (c) electricity, gas and water supply (often referred as electricity).

(ii) **On the basis of end-use:** On the basis of end-use of output, industries are divided into:
   (a) Basic goods industries (like minerals, fertilizers, cement, iron and steel, non-ferrous basic metals, electricity etc.)
   (b) Capital goods industries (like machinery, machine tools, rail-road equipments etc.)
   (c) Intermediate goods (like chemicals, rubber, plastic, coal and petroleum products)
   (d) Consumer goods - consumer durables and non durables (like man-made fibers, beverages, watches, cosmetics, perfumes etc.).

The growth rate of industrial output over the planning period has been nearly satisfactory. The industrial production has grown at an annual average rate of 6.2 per cent per annum over the planning period. Industrial growth in the country has in terms of long run trend, remained aligned with the growth of GDP. The long-term average annual growth rate of industries comprising mining, manufacturing, electricity and construction, during the post reform period between 1991-92 and 2011-12, averaged 7 per cent as against GDP growth rate of 6.9 per cent.

2.1.2 **Pattern of Industrial Development since Independence:** Now in the following points we will make a comprehensive review of the pattern of industrial development during the planning era since 1951. The industrial development pattern on the eve of Independence was characterized by the following elements:

(a) Lop-sided pattern of development dominated by too large and too small industrial units, with very few medium size units. There was a high concentration of employment in small industries and household industries (31%) and in large industries (43%).

(b) Capital employed per worker in industry was very low because of low priority given to industry, low level of domestic demand and low per capita income.

(c) Consumer goods industries were well-established to the utter neglect of capital goods industries like steel, machinery, heavy electrical and chemicals. The country had to largely depend on imports for capital goods.
The progress of industrialisation during the last six decades has been striking. There has been a remarkable development of capital goods industries, substantial diversification and broad-basing of manufactured products, phenomenal development of small scale industries. An impressive base has been created in sophisticated and high technology industrial sectors like electronics, machine tools, telecommunication equipment and the like.

(1) Industrial growth experienced ups and downs during the period 1951 to 2010-11. There was steady growth of about 8 per cent during the first three plan period viz., 1951-65. Thereafter, a significant decline was experienced for 15 years 1965-80 when the annual rate of industry fell down to 4.1 per cent per annum. In the period 1965-80 not only there was a deceleration in the industrial growth but the industrial structure also witnessed the phenomenon of retrogression. In other word, the growth of elite-oriented consumption goods such as man-made fibers, beverages, perfumes, cosmetics, watches, clocks, etc. was considerably higher than the goods which satisfied the needs of mass of the people such as coal, cotton, railways, etc. The situation improved during 1980-91 when the annual rate of industrial growth became 7.8 per cent. In the year 1991 major economic reforms were carried out in the country. Wide scale reduction in the scope of industrial licensing, simplification of rules and procedures, limiting the domain of public sector, increasing the limits of foreign investments in India, liberalization of trade and rationalization of taxes etc. were some of the measures taken. However, it has been noticed that the performance of industrial sector post reform period has not been very good. The average annual growth rate of industrial production fell to 5.7 per cent during 1990-91 to 1999-2000. The next two years saw deterioration in the industrial growth because of slow down in domestic demand for industrial goods, high prices of oil and infrastructural bottlenecks. The Tenth Plan (2002-2007) aimed at achieving a growth rate of 10 per cent in the industrial sector. But the overall industrial growth at an average of around 8.7 per cent per annum during this plan has remained well short of the target.

The Eleventh Plan aimed at 10 per cent per annum growth in the industrial sector. Performance of the industrial sector during the Eleventh Plan was not very good. The industry grew at an annual average rate of about 7.4 per cent as against the target of 10 per cent during this Plan. A number of factors were responsible for this. The important ones are the global financial shock, persistent rise in crude oil prices, decline in foreign direct investment, shrinkage in demand for exports and decline in domestic demand.

A target of 9.6 percent per annual growth in the industrial sector has been kept for the XII plan. The performance of the industrial sector in 2012-13 and 2013-14 has not been very encouraging. It could grow at 1 percent and 0.4 percent respectively in these years.

(2) The structure of industry has shifted in favour of basic and capital goods and intermediate goods sector during the period of planning since 1951. The programme of industrialisation was started on a massive scale in the Second Plan (1956-61). Based on the Mahalanobis model, this Plan emphasized on building basic and capital goods industries so that a strong base for development in future could be made. Three Steel Plants were set up in the public sector at Bhilai, Rourkela and Durgapur. Public Sector made advances in machine building, machine tools, railway locomotives, heavy electrical, ship building, fertilizers etc. In subsequent plans and for almost four decades (1951-90), the strategy to favour basic and capital goods and to give public sector the responsibility to develop these industries was followed. As a result, we now have a strong industrial base in the country.
Table 4: Annual Average Growth Rate of Industrial Production

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Goods</td>
<td>7.4</td>
<td>6.8</td>
<td>4.1</td>
<td>6.6</td>
<td>6.1</td>
</tr>
<tr>
<td>Capital Goods</td>
<td>9.4</td>
<td>8.9</td>
<td>4.7</td>
<td>14.4</td>
<td>18.0</td>
</tr>
<tr>
<td>Intermediate Goods</td>
<td>4.9</td>
<td>8.5</td>
<td>5.8</td>
<td>6.2</td>
<td>5.6</td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>6.0</td>
<td>6.6</td>
<td>5.5</td>
<td>9.6</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Sources: Economic Surveys, Handbook of Statistics on Indian Economy, RBI

(3) There has been a remarkable growth of consumer goods industries especially those manufacturing elite-oriented consumer goods such as man made fibers, finer varieties of textiles, beverages, cigarettes, motor cars, motor cycles and scooters, refrigerators, TVs, air-conditioners, electrical goods like fans, watches and clocks, cosmetics and so on. In first four decades after Independence, the stress was on the establishment of basic and capital goods. Since 1991, important changes have occurred in the industrial structure. Intermediate and consumer goods have got more importance than basic and capital goods. As a result, the output of consumer durables goods has expanded at rapid pace especially since 1991.

(4) Industrial sector has become broad-based and modernised. The role of traditional industries like textiles has reduced and role of non-traditional industries like engineering goods, chemical goods and electrical goods has improved tremendously. Manufacturing capabilities over a period of time have strengthened. We now manufacture a wide array of goods like food products, leather products, chemicals products, rubber and plastic products, metal products, machinery, transport and equipments, paper products, wood products and so on. Manufacturing sector which was targeted to grow at 12 per cent could grow at only 7.7 per cent during the Eleventh Plan. The manufacturing sector’s performance even in the preceding plans was not very encouraging. The share of manufacturing sector in India’s GDP is only 15 per cent, compared with 34 per cent in China. The slow pace of growth of manufacturing sector is a cause of concern. Unless the manufacturing sector becomes engine of growth, it will be difficult to generate more jobs and make growth inclusive. Concerned with this, the government released a National Manufacturing Policy (NMP) in November, 2011. The Objectives of the Policy are:

- Increase manufacturing sector growth to 12-14 per cent over the medium term.
- Enable manufacturing to contribute at least 25 per cent of GDP by 2022.
- Create appropriate skill sets among the rural and poor urban for their easy absorption in manufacturing.
- Increase value addition and technological depth in manufacturing.
- Enhance global competitiveness of Indian manufacturing.
The Policy has identified sectors that will create large employment (e.g. textiles, leather, gems and jewellery, handlooms, etc.), sectors that will deepen technological capabilities in manufacturing (e.g. IT hardware and electronics), sectors that will provide strategic security (e.g. defence equipment), and sectors in which India has competitive advantage (automotive and pharmaceuticals and medical equipment). The NMP also emphasized the role of Medium and Small enterprises in manufacturing and in their contribution to the generation of employment.

Apart from this, the other measures being taken to boost manufacturing sector in India are implementing Delhi- Mumbai Industrial Corridor (DMIC) project (developing eight industrial cities along the railway corridor), allowing Foreign Direct Investment in more industries under the automatic route and setting up the e-biz project to promote the ease of doing business. Till 2013-14, 16 National Investment and Manufacturing zones (NIMZ) had been announced. Of these, 8 are along the DMIC.

(5) India is a mixed economy where public and private sectors co exist. After Independence, sustained efforts were made to strengthen the public sector in India. Since the country was in initial stages of development and massive investments were required which private enterprises could not afford, the public sector was given dominant position. Besides strong industrial and infrastructural base, removal of regional disparities, check over concentration of income and wealth, export promotion and import substitution were other benefits which emanated from existence of public sector in India. Public sector domain ranged from core industries like iron and steel, heavy engineering, heavy electrical, petroleum and natural gas, chemicals, fertilizers to non-infrastructure or non core areas like bread. Since Independence there has been a massive increase in the size and diversification of public sector. The number of central public sector units was just 5 with a total capital of about Rs. 30 crore. In March 2013, the number of central public sector enterprises (CPSEs) increased to 277 with a cumulative investment of about ₹ 8,50,000 crore. Several public sector giants like Oil and Natural Gas Corporation, Indian Oil Corporation, Steel Authority of India, Bharat Heavy Electricals, Hindustan Aeronautics Limited, Bharat Electronics Limited, Cement Corporation, Coal India, etc dominate the Indian industrial scene. Out of 277 CPSEs, 229 were in operation. Out of 229, 149 earned profits and 79 earned losses in 2012-2013.

Public sector faced certain criticism in the form of low profitability, high under utilization of capacity, low efficiency, over staffing, political interference, etc.

With the introduction of economic reforms in 1991, a number of steps were taken to dilute the role of public sector in India. Public sector was exposed to competition from domestic as well as foreign companies. Only 8 industries group where security and strategic concerns dominate were reserved for public sector. Rest of the sectors were opened to the private sector. At present only 3 industries are reserved for the public sector. These are atomic energy, minerals specified in the schedule to the atomic energy 1953 and rail transport.

(6) So far as the private sector is concerned, the dominance of large and monopoly business houses has increased several times. There were hardly two large business houses - Tata and Birla in 1951 but now not only the number of big business houses has increased enormously to about 80 (which include Reliance Group, Bajaj, Thapars, Mafatlals, Kirloskars, Goenka, Chhabria, Shriram, Walchand, Singhania and so on) their assets have also increased enormously during the last 50 years.
(7) A remarkable expansion and sophistication took place in infrastructural facilities since 1951, in such respects as power generation, development of energy sources, railway transport, telecommunication, roads and road transport and the like, which are basic prerequisites for industrial development. Large scale railway electrification and dieselisation, extensive discovery of petroleum and gas reserves and their extraction, nationalisation of coal mining and its development, petroleum refineries, pipelines, storage and distribution arrangements, hydro, thermal and atomic power generation, together with manufacture of heavy electrical equipment, electricity grids, electronic telephone exchange and microwave long distance telephone facilities, cellular mobile telephone services, electronic mail services and so on were taken up; significant strides made in these and other infrastructural facilities have catalyzed industrial development in several ways. Industrial finance was supported heavily by financial institutions (LIC, IDBI, ICICI for example) and commercial banks. Port facilities for imports and exports have been substantially expanded.

(8) The country could be proud of achieving remarkable progress in the science and technology front. Several Research laboratories were set up under the leadership of Council of Scientific and Industrial Research. R & D facilities were installed in public and private sector units. Technological know-how was extensively imported through foreign technical collaboration arrangements. Science, Engineering, Management and other professional educational institutions have been established on a large scale. An elite cadre of scientific, technical and professional manpower has been built; India ranks high in the world in respect of technological talent and manpower and in development of information and communication technology, space research, nuclear technology, electronics and so on.

(9) One of the notable features of the planning era since 1951 has been the mammoth growth of small-scale industrial units. Small-scale industrial units are those who operate with a modest investment in fixed capital, relatively small-scale work force and which produce a relatively small volume of output of goods/services. They differ from large-scale industries with respect to size of capital, employment, production and management, flow of input and outputs and so on.

The present Act - Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 has broadly classified the enterprises in those engaged in (i) manufacturing and (ii) providing of services. Both categories have been further classified in Micro, small and medium based on their investment. In manufacturing sector units with investment upto 25 lakh are called micro enterprises, units with investment between ₹ 25 lakh and ₹ 5 crore are called small enterprises and units with investment between ₹ 5 crore and ₹ 10 crore are called medium enterprises. In the service sector, units with investment upto ₹ 10 lakh are called micro units and units between 10 lakh and ₹ 2 crore are called small enterprises and units with investment between ₹ 2 crore and ₹ 5 crore are called medium enterprises.

Since Independence, there has been an all-round development of small-scale and cottage industries in India. Their performance and contribution to the growth of the industrial economy of India has been quite remarkable. This will be clear from the following points:

(a) The growth rate of small-scale sector at a rate of more than 10% per annum in terms of production has been far faster than that of large scale sector since 1973. It is estimated that MSMEs contribute about 45% of the gross value of output in the manufacturing sector.
(b) The number of registered and unregistered small-scale units which stood at 16,000 units in 1950 increased to 7 million in 1991-92 and to nearly 45 million MSMEs in 2011-12.

(c) The MSME sector employed more than 100 million persons in 2011-12 compared to 7.5 million and about 17 million persons in 1981-82 and 1991-92 respectively.

(d) It is estimated that this sector contributes over 40 per cent of the total exports.

(e) Small-scale industrial units produce a very wide range of producer goods and consumer goods items needed by the economy. They include both simple and sophisticated engineering products, electrical, electronics, chemicals, plastics, steel, cement, textiles, paper, matches, ready made garments and so on.

(f) Ancillary units contribute greatly and cater to the requirements of medium and large industrial units for materials, components, consumables and so on.

(g) The traditional village and cottage industries which are generally clubbed with modern small-scale industries provide means of living to artisans, sustain viability of countless number of villages and towns, enrich the quality of life in society by providing fine handicrafts and pieces of art and project the heritage of India.

(h) A large number of MSMEs are engaged in the manufacture of consumer goods of mass consumption, thereby making them available in plenty which serves as a non-inflationary force.

(i) The encouragement of MSMEs with their favourable employment-capital ratio has become a stabilizing force in the Indian economy. According to All India Census of Small Scale Industries, 2001-02, employment generated by the small scale sector per ₹ 1 lakh investment was 1.39 as against only 0.20 in respect of the large manufacturing units. In other words, an investment of ₹ 10 lakh generated employment for 21 persons in small scale sector and for 2 persons in large scale sector.

As far as the investment-output ratio is concerned, the small scale industries sector is almost at par with the large scale industries. It is estimated that they need slightly higher amount of investment (₹ 48,000) for producing the same output (worth ₹ 1 Lakh) than their larger counterparts (₹ 43,000).

2.1.3 Problems of Industrial Development in India

(1) Failure to achieve targets: Except a few years, when targets of overall growth in the industrial sector were achieved, in the entire period of planning, achievements have been below targets. The average industrial growth rate during 1951 to 2011-12 has been around 6.2 per cent relative to the target of 8 per cent per annum. The following table shows how far our targets on the industrial front have been met:
### Table 5: Growth Rate of Industrial Production

<table>
<thead>
<tr>
<th>Five year Plan/Annual Plan</th>
<th>Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (1951-56)</td>
<td>7.0</td>
<td>7.3</td>
</tr>
<tr>
<td>II (1956-61)</td>
<td>10.5</td>
<td>6.6</td>
</tr>
<tr>
<td>III (1961-66)</td>
<td>11.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Annual Plans (1966-69)</td>
<td>-</td>
<td>2.0</td>
</tr>
<tr>
<td>IV (1969-74)</td>
<td>12.0</td>
<td>4.7</td>
</tr>
<tr>
<td>V (1974-79)</td>
<td>8.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Annual Plan (1979-80)</td>
<td>-</td>
<td>1.4</td>
</tr>
<tr>
<td>VI (1980-85)</td>
<td>8.0</td>
<td>5.9</td>
</tr>
<tr>
<td>VII (1985-90)</td>
<td>8.7</td>
<td>8.5</td>
</tr>
<tr>
<td>Annual Plan (1990-92)</td>
<td>-</td>
<td>8.0</td>
</tr>
<tr>
<td>VIII (1992-97)</td>
<td>7.4</td>
<td>7.3</td>
</tr>
<tr>
<td>IX (1997-02)</td>
<td>8.2</td>
<td>5.2</td>
</tr>
<tr>
<td>X (2002-07)</td>
<td>10.0</td>
<td>8.7</td>
</tr>
<tr>
<td>XI (2007-12)</td>
<td>10.0</td>
<td>7.4</td>
</tr>
</tbody>
</table>

(2) **Under-utilization of capacity:** A large number of industries experience endemic under-utilization of production capacity. The average under-utilisation is in the region of 40% to 50%.

The factors responsible for under-utilization of capacity are said to be: (a) indiscriminate grabbing and creation of capacities by private enterprise (b) demand short-falls (c) over-optimistic demand projections (d) supply bottle-necks, (e) labour problems and (f) deliberate under-utilisation to create shortages and thereby to corner more profits.

(3) **Absence of world class infrastructure**: The most critical barrier to growth of the industrial sector is the absence of world class infrastructure. The short supply of transport facilities, frequent power failures and poor condition of roads have hampered the growth of industry in general.

(4) **Increasing capital-output ratio:** Another very disturbing future of industrial development of India is the ever-rising average and incremental capital output ratio (ICOR). The latter which was 2.95 during the first plan increased to 3.9 during the Seventh Plan and further to around 4 during Eighth, Ninth, Tenth and Eleventh Plans. The increasing trend of capital output ratios could be explained in terms of increasing capital costs of new industrial units, highly capital intensive nature of basic and heavy units, under-utilisation of capacity, unremunerative administered prices in respect of basic goods and services and so on.

(5) **High cost industrial economy:** The costs and prices of manufactured goods and services in India are generally much higher than international costs and prices. The high cost economy is attributed to import substitution, government protection to indigenous
industries, monopolistic tendencies in several industrial areas, high wage rates, increasing capital intensity in industrial units, outdated technology low productivity of labour, uneconomic size of industrial units, lack of cost consciousness among industrial magnates and managers and so on.

(6) **Inadequate employment generation:** One of the most serious deficiencies of industrial development over the decades since Independence has been its inadequate employment generation in relation to investment made. The process of industrialisation has failed to make a marked dent on the unemployment problem in India. Even today less than one fourth of the working population is engaged in the industrial sector. *According to the Annual Survey of industries, there was a decline in the absolute number of persons engaged in the industrial sector between 1995-96 and 2004-05. Even labour intensive manufacturing sub-sectors like leather, food products, jute and leather products failed to generate adequate employment in these years.* However, as per the Annual Survey of Industries, 2010-11, the situation has improved now as the absolute number of persons employed in factories has been increasing every year since 2004-05.

(7) **Poor performance of public sector:** Though public sector has grown by leaps and bounds over the planning period backed by massive public investment, its performance on production and profit fronts has been generally disappointing. Though profit may not always be the appropriate criterion for evaluating the performance of public sector industrial units, its relevance cannot be ignored altogether. Commercial and economic efficiency is to a large extent reflected in profit. A loss making undertaking becomes weakened in course of time. It loses dynamism and survival capability. A large number of public sector units are 'loss leaders' in the industrial sphere while the rate of profitability of others is low. *The net loss of the loss making enterprises (79 in number) stood at more than about ₹28,000 crore in 2012-13 compared with ₹14,600 crore in 2008-09.*

(8) **Sectoral imbalances:** In India, industrial development on an over-all basis suffered several set-backs because of inadequate support from agriculture and infrastructure. Even within the industrial sector the input-output relations between individual industries like steel and machine building, petro-chemicals and fertilizers, are such that they have to be developed in harmony. But in real practice, several sectoral imbalances plague the industrial economy of India.

(9) **Regional imbalances:** Industrial development continues to be lopsided, region-wise. Large scale industries are concentrated in a very few states like Tamil Nadu, Maharashtra, Andhra Pradesh and Gujarat. These four States account for 50% of total factories and 50% of productive capital. It is true that a large number of new industrial growth centers have emerged since Independence in several States like U.P., Punjab, Karnataka, M.P., and Rajasthan. But these States continue to be industrially backward. The industrial units established in these States have somehow failed to generate further industrialisation.

(10) **Industrial sickness:** Industrial sickness has become a serious problem affecting small, medium and large units. It is a major area of concern due to its implications for the entire economy and health of the industrial sector in particular. In March 2013, there were almost 2.5 lakh small and medium sick units. According to Reserve Bank of India (RBI) an enterprise is considered as sick if a) any of the borrowal account of the enterprise remains NPA for three months or more, or, b) there is erosion due to accumulated losses to the
extent of 50% of its net worth during the previous accounting year. It is estimated that more than 90 per cent of the sick units are small and medium enterprises.

Industrial sickness has been spreading over the years. The causes of sickness are identified as financial mismanagement, demand recession, labour unrest, working capital shortage, cost escalations, shortage of raw materials, uneconomic size, out-dated machinery and equipment and so on.

2.2 SERVICES

The service sector or tertiary sector of an economy involves provision of services to other business enterprises as well as to final consumers. Service sector includes:

- Business services and professional services - Accounting, Advertising, Architectural and Engineering, Computer and related services and Legal services.
- Communication services - Audio-visual services, Postal and Courier services, Telecommunications.
- Real estate and related services.
- Distributive services.
- Education services.
- Energy services.
- Environmental services.
- Financial services.
- Health and social services.
- Tourism services.
- Transport services - Air transport services, Maritime services, services auxiliary to all modes of transport.

2.2.0. Role of service sector in India: The service sector in India is its largest sector and accounts for increasingly significant share of GDP. This sector is growing very fast. It is playing an important role in the development of the economy as would be clear from the following points:

1. Increasing share in the GDP: Over the planning period, the share of tertiary or services (at current prices) sector has increased from about one third of GDP in 1950-51 to around 60 per cent in 2013-14. Although compared to high income industrialised economies (where value added by services generally exceeds 70 per cent of the total output) it is not very high but considering the fact that India is still a developing economy, this figure is appreciable.

2. Providing employment: Service sector occupied about 17.3 per cent of working population in 1951. In 2011-12, around 27 per cent of working population was dependent on service sector for occupation.

3. Providing support to other sectors: Service sector provides support to agriculture and industries by providing a number of services in the form of financial services, transport services, storage services, distributive services, software and communication services and so on. No sector can perform and prosper in the absence of network of various financial and other services.
(4) **Contribution to Exports:** Services exports from India comprise services such as travel, transportation, insurance, communication, construction, financial services, software, agency services, royalties, copyright and licence fees and management services. India’s share of services exports in the world exports of services increased from about 1 percent in 2000 to 3.3 percent in 2011. Services account for around one third of total exports of India (2012-13). The potential for growth, however, continues to be large. Software and other services such as business, technical and professional services have emerged as the major categories in India’s export of services. Indian services exports recorded a growth of more than 20 per cent per annum during 2001-13. However, due to uncertainty in the global economy and weak growth in advanced economies, services export showed a lower growth of less than 5 percent in 2012-13.

2.2.1 **Growth of service sector during planning period:** The service sector now accounts for around 60 per cent of India’s GDP (2013-14). It has gained at the expense of both the agricultural and industrial sectors through the 1990s.

Generally as an economy grows, the share of primary sector in GDP falls and shares of secondary and tertiary sectors increase. The occupational distribution of the working force also undergoes changes. The percentage of people engaged in primary activities particularly agriculture falls and percentage of people engaged in secondary sector and tertiary sector rises. Except a few cases, this has been the experience of almost all developed countries. There, the growth of industries was accompanied by the development of tertiary activities on one hand, and the relative decline of primary activities on the other. If we consider Indian economy we find that though India has followed the above route, its secondary sector has failed to grow substantially. The tertiary sector has by passed the secondary sector. The rise in the service sector’s share in GDP marks a structural shift in the Indian economy and takes it closer to the fundamentals of a developed economy (in the developed economies, the industrial and service sectors contribute a major share in GDP while agricultural accounts for a relatively lower share).

Some economists fear that if the service sector bypasses the industrial sector, economic growth can be distorted. They say that service sector growth must be supported by proportionate growth of the industrial sector, otherwise service sector growth will not be sustainable. It is true that service sector’s contribution to GDP has sharply risen and that of industry has not grown that fast, but it is equally true that the industrial sector has grown and grown quite impressively through the 1990s (except in 1998-99) and in the Tenth Plan.

If we analyze growth rate in the service sector, we find that it grew by 7.54 per cent per annum in the Eighth Plan and around 8.1 per cent per annum in the Ninth Plan. The Government of India gave a special status to the service sector in the Export and Import Policy (2002-07). The average growth rate of service sector during the Tenth Plan turned out to be around 9 per cent per annum. The Eleventh Plan aimed at an annual average growth rate of 9.4 per cent for the service sector.

In the Eleventh Plan, the actual average growth rate of the service sector has been a little less than 10 per cent per annum. For the Twelfth plan, a target of 9 per cent per annum growth rate has been kept in the Draft plan. Actual growth of the service sector during 2012-13 and 2013-14 has been around 7 percent per annum.

The growth in the services sector has been broad based. Among the sub sectors of services, “transport, storage and communication” has been the fastest growing with growth averaging 15.3 per cent per annum during the Tenth plan. In Eleventh plan they grew at an rate of about
12 per cent per annum.
India being a sub-continent with varied geographical, climatic, ethnic, cultural, religious and social conditions attracts tourists worldwide. The tourism industry is growing very fast and has the potential for growing still faster. Trade, hotels and restaurants after recording an average growth rate of 8 per cent in 2000-07, recorded a still higher growth of 10 per cent in 2007-08. However after that, their growth decelerated as there was global recession which affected trade and hotels. The average growth rate of this sub-sector turns out to be around 8.5 per cent during the 11th plan
The other notable segment of India’s service sector is fast growing financial services segment. This statement is growing very fast and is in the process of transition. Until recently, this sector was under the government control. Now, this sector is undergoing liberal reform process including introduction of an element of competition cutting off the barriers and allowing entry to foreign companies.
Financing, insurance, real estate and business services recorded an average growth of about 8 per cent during 2000-07. During Eleventh Plan their average growth rate was around 11 per cent.
Community, social and personal services which grew at an average rate of 6 per cent per annum in 2000-07, recorded an average growth rate of about 8.3 per cent in the Eleventh Plan.
India has the third largest scientific and technical manpower in the world. India’s consultancy professionals possess capability to provide expertise in sophisticated areas like information and technology, advanced financial and banking services etc. to developed countries like USA, UK, France, West Germany and Australia. Other areas of consultancy include infrastructure, economic and social sectors, water resource management, environment, transfer technology etc.
India’s health services, super-speciality hospitals specialising in both modern and traditional Indian medicine systems (like Ayurveda, Unani, and Nature care) supported by state of the art equipment, are attracting patients from across the world.
Education is another field which is not only a big segment of the services sector with the country but also a foreign exchange earner by way of NRIs, and foreign students enrolled in India. We also export manpower even to the western world.
Entertainment industry (including films, music, broadcast, television and live entertainment) is another service industry which has grown very fast after Independence.
Thus services sector has maintained a steady growth pattern since last two decades. But if we consider its share in the employment, we find that there has been a relatively slow growth of jobs in this sector. This is primarily because of rise in labour productivity in services sectors such as information technology that is dependent on the skilled labour. Growth in tourism and tourism-related services such as hotels holds a large potential for employment generation.
IT enabled services, such as Business Process Outsourcing (BPO) have been growing rapidly in the recent past and will continue to grow. Outsourcing has changed the image of India. Western companies are seeing India as their top destination for outsourcing work.
Factors underlying the Services Sector Growth

The Services sector has grown at a fast rate in India due to the following reasons:

- It has been noticed that income elasticity of demand for services is greater than one. Hence, the final demand for services grows faster than the demand for goods and commodities as income rises.

- Technical and structural changes in the economy have made it more efficient to outsource certain services that were once produced within the industry.

- With the advent of the information technology revolution, it has become possible to deliver services over long distances at a reasonable cost, thus trade in services has increased worldwide. India has been a particular beneficiary of this trend.

- Economic reforms initiated since 1991 also impacted on the performance of the services sector. Increased demand for manufacturing industry provided synergies to the services sector. Also, liberalisation of financial sector provided an environment for faster growth of the financial services. Moreover, reforms in certain segments of infrastructure services also contributed to the growth of services.

2.2.2 Problems of service sector in India: Although service sector is doing remarkably well, it is facing lots of problems, important ones are:

1. Achieving rapid growth of the economy and its counterparts requires a very high quality of infrastructure. Unfortunately, our infrastructure is inadequate not only in the rural areas but also in the urban areas. For example, power shortages and traffic congestions are very common in Bangalore, the silicon city of India. These affect the quality of services provided.

2. Though service sector has been the fastest growing sector in the last decade and contributes about 60 per cent of the GDP, its share in the employment is only about 27 per cent. This sector does not contribute adequately by way of employment. Services that have witnessed a very high growth rate e.g. business and communication services have a low share in GDP or employment.

3. Although economic reforms have been undertaken in all the sectors but they are inadequate. In financial sector many controls and bottlenecks are still there. These need to be removed if financial sector of India has to achieve the international standard.

4. India has great potential in the tourism sector. But there is a need to create proper set up for attracting tourists. Foreign tourists often get harassed and cheated in the hands of babus and officialdom, touts and conmen.

5. Etiquettes and good behaviour are the hallmark of the service sector. Indian service providers whether they are in banks, in hotels and restaurants, in hospitals or in public administration, they need to be trained thoroughly in public dealing, etiquettes, hospitality and manners.

6. The airports, railways etc. in India are not clean and well organized. They need to be revamped and reorganized.

7. Our consular division also is not proper. It takes many days to issue visas. This hampers the growth of tourism sector. For this, we need to have a system which entails single-window clearance.

8. Service trade also faces a number of problems. These include lack of set up like export promotion councils (other than for computer software), various visible and invisible barriers
to service trade for example, visa restrictions, sector specific restrictions and preferential market access.

(9) Service sector cannot grow in isolation. It needs strong backing of other sectors, primary and secondary. In India, such backing needs to be strengthened. In other words, other sectors especially industries need to grow up if they have to provide market to the service sector.

(10) Indian service providers (like BPOs and IT service providers) are facing stiff competition from other countries. They need to improve their quality and reduce their costs. There are certain political problems also like a backlash from European and North Americans countries especially in the case of BPOs.

**SUMMARY**

- Agriculture, industry and services sectors have grown hand-in hand for the development of Indian Economy. They are the major producing sectors of the economy.

  - **Agriculture sector**
    - In India, agriculture plays a major role in the overall development of the country as it contributes 14% of GDP and engages 49% of population of the country.
    - Its major role is that it supports industries, contributes to foreign trade, supplies food and fodder and has low capital output ratio etc.
    - After the introduction of green revolution there was increase in production and productivity of agricultural sector. The HYVP was restricted to five crops.
    - In order to improve the agrarian system land reforms were undertaken. The measures included abolition of intermediaries, tenancy reforms and reorganization of agriculture.
    - The growth of the agricultural sector is not sufficient to meet the rising demands of fast growing population. This is due to slow and uneven growth, outdated technology, flaws in land reforms, lack of finance and problem relating to warehousing and marketing.
    - The following measures like investment in irrigation, water shed development in rainfed areas, rural electrification and rail road connectivity, improving marketing etc are to be carried out to raise the growth rate of agricultural sector.

  - **Industrial Sector**
    - Industrial sector plays a vital role for the economic development of a country. The per capita income of a industrially well developed country is higher than those countries where the industries are not well developed.
    - In India, the industrial sector plays a major role in modernizing agriculture, providing employment, contributing GDP, raising incomes of the people, enhancing economic growth, meeting high-income demand and strengthening the economy.
    - The industries of a country can be grouped on the basis of size and on the basis of end-use.
    - The development of industrial sector is dependent upon the development of other sectors of the economy. The industrial sector has grown at an average rate of 6.2% per annum since Independence.
The performance and contribution of small scale and cottage industry has been quite remarkable in India since Independence. The growth rate of small-scale sector is at 10% per annum in terms of production.

Although the industrial sector is doing remarkably well, it is facing lots of problems like under-utilization of capacity, absence of world class infrastructure, increasing capital-output ratio, high cost of production, out-dated technology, poor performance of public sector and industrial sickness.

- **Services sector**
  - The service sector has emerged as an important sector of the Indian economy.
  - It contributes nearly 60% of India’s GDP and one-third of India’s export.
  - The services sector has grown at a fast rate in India due to technical and structural changes in the economy, beginning of information technology revolution and economic reforms.
  - The average growth rate of service sector during the tenth plan was 9% per annum. The Eleventh plan aimed at an annual average growth rate of 9.4% and actual growth rate is a little less than 10%.
  - The major components of services sector like trade, transport and communication services, financial services, educational and health services are growing at a rapid pace.
  - This sector also faces a number of problems in the form of inadequate infrastructure, inadequate employment generation, poor quality, lack of adequate institutional setup, lack of trained and hospitable service providers and stiff competition from other countries.
CHAPTER – 5

UNIT 3

NATIONAL INCOME IN INDIA

INDIAN ECONOMY – A PROFILE
Learning Objectives
At the end of this unit, you will be able to:

- know the meaning of National income.
- understand the various concepts related to National income.
- understand how National income can be approached from three different ways.
- know how National income and per capita income are growing in India.

INTRODUCTION
National income is the money value of all the final goods and services produced by a country during a period of one year. National income consists of a collection of different types of goods and services of different types. Since these goods are measured in different physical units it is not possible to add them together. Thus, we cannot state national income is so many millions of metres of cloth, so many million litres of milk, etc. Therefore, there is no way except to reduce them to a common measure. This common measure is money. The value of all goods and services produced is measured in money. For example, if the value of a metre of cloth is ₹20 and the total cloth produced is 100 metres, then the money value of cloth is ₹2000. In this way we can find out the value of other goods and services and the total value of all the goods and services produced during one year. This gives us a single measure of the final goods and services produced by the country in that year which is nothing but the value of national income or national product.

3.0 BASIC CONCEPTS IN NATIONAL INCOME AND OUTPUT

(1) Gross Domestic Product (GDP): Gross domestic product is the money value of all final goods and services produced in the domestic territory of a country during an accounting year. The concept of domestic territory has a special meaning in national income accounting. Domestic territory is defined to include the following:

(i) Territory lying within the political frontiers, including territorial waters of the country.
(ii) Ships and aircrafts operated by the residents of the country between two or more countries.
(iii) Fishing vessels, oil and natural gas rigs, and floating platforms operated by the residents of the country in the international waters or engaged in extraction in areas in which the country has exclusive rights of exploitation.
(iv) Embassies, consulates and military establishments of the country located abroad.

(2) GDP at Constant Prices and at Current Prices: GDP can be estimated at current prices and at constant prices. If the domestic product is estimated on the basis of the prevailing prices it is called gross domestic product at current prices. Thus, when we say that GDP of India at current prices in 2010-11 is ₹72,66,967 crores, we are measuring GDP on the basis of the prices prevailing in 2010-11. On the other hand, if GDP is measured on the basis of some fixed prices, that is prices prevailing at a point of time or in some base year it is known as GDP at constant prices or real gross domestic product. Thus when we say that GDP in 2010-11 is ₹49,37,006 crores at 2004-05 prices, we are measuring GDP on the basis of the prices prevailing in 2004-05.
GDP at Factor Cost and GDP at Market Price: The contribution of each producing unit to the current flow of goods and services is known as the net value added. GDP at factor cost is estimated as the sum of net value added by the different producing units and the consumption of fixed capital. Since the net value added gets distributed as income to the owners of factors of production, we can also estimate GDP as the sum of domestic factor incomes and consumption of fixed capital. Conceptually, the value of GDP whether estimated at market price or factor cost must be identical. This is because the final value of goods and services (i.e. market price) must be equal to the cost involved in their production (factor cost). However, the market value of goods and services is not the same as the earnings of the factors of production. GDP at market price includes indirect taxes and excludes the subsidies given by the government. Therefore, in order to arrive at GDP at factor income we must subtract indirect taxes from and add subsidies to GDP at market price.

\[
\text{GDP}_{\text{FC}} = \text{GDP}_{\text{MP}} - \text{IT} + \text{S}
\]

Where IT = Indirect Taxes
S = Subsidies

Net Domestic Product: While calculating GDP no provision is made for depreciation allowance (also called capital consumption allowance). In such a situation gross domestic product will not reveal complete flow of goods and services through various sectors.

It is a matter of common knowledge that capital goods like machines, equipment, tools, buildings, tractors etc., get depreciated during the process of production. After some time these capital goods need replacement. A part of capital is therefore, set aside in the form of depreciation allowance. When depreciation allowance is subtracted from gross domestic product we get net domestic product.

In brief

\[
\text{NDP} = \text{GDP} - \text{depreciation}
\]

Gross National Product (GNP): It has already been seen that whatever is produced within the domestic territory of a country in a year is its gross domestic product. It, however, includes, the contribution made by non-resident producers by way of wages, rent, interest and profits. The non-residents work in the domestic territory of some other country and earn factor incomes. For example, Indian residents go abroad to work. Indian banks are functioning abroad. Indians own property in foreign countries. The income of all these people is the factor income earned from abroad. In other words, it is factor income earned from abroad by the residents of India by rendering factor services abroad. Similarly, factor services are rendered by non-residents within the domestic territory of India. Net factor income from abroad is the difference between the income received from abroad for rendering factor services and the income paid for the factor services rendered by non-residents in the domestic territory of a country.

Gross national product is defined as the sum of the gross domestic product and net factor incomes from abroad. Thus in order to estimate the gross national product of India we have to add net factor income from abroad i.e., income earned by Indian residents abroad minus income earned by non-residents in India to form the gross domestic product of India.

In brief

\[
\text{GNP} = \text{GDP} + \text{NFIA} \quad \text{(where NFIA is the net factor income from abroad)}
\]
(6) **Net National Product (NNP)**: It can be derived by subtracting depreciation allowance from GNP. It can also be found out by adding the net factor income from abroad to the net domestic product. If the net factor income from abroad is positive i.e., the inflow of factor income from abroad is more than the outflow, NNP will be more than NDP; conversely, if net factor income from abroad is negative, NNP will be less than NDP and it would be equal to NDP in case the net factor income from abroad is zero. Symbolically,

\[ \text{NNP} = \text{NDP} + \text{NFIA} \]

(7) **NNP at factor cost or National Income**: NNP at factor cost is the volume of commodities and services turned out during an accounting year, counted without duplication. It can also be defined as the net value added at factor cost (by the residents) in an economy during an accounting year. In terms of income earned by the factors of production, NNP at factor cost or national income is defined as the sum of domestic factor incomes and net factor income from abroad. If NNP figure is available at market prices we will subtract indirect taxes and add subsidies to the figure to get NNP at factor cost or national income of the economy.

Symbolically, \( \text{NNP at FC} = \text{National Income} = \text{FID} + \text{NFIA} \)

where FID is factor income earned in the domestic territory of a country and NFIA is the net factor income from abroad.

There are two more concepts: Personal Income and Personal Disposal Income. Personal income is the sum of all incomes actually received by individuals during a given year. In order to estimate it we subtract from national income the sum total of social security contribution and corporate income taxes and undistributed corporate profits and add personal payments which are incomes received but not currently earned.

After the deduction of personal taxes from personal income of the individuals what is left is called personal disposable income which is equal to consumption plus saving.

The following statements mathematically summarise the various concepts discussed above and the relationship among them:

- \( \text{GNP at market price} - \text{depreciation} = \text{NNP at market price} \)
- \( \text{GNP at market price} - \text{net income from abroad} = \text{GDP at market price} \)
- \( \text{GNP at market price} - \text{net indirect taxes} = \text{GNP at factor cost} \)
- \( \text{NNP at market price} - \text{net income from abroad} = \text{NDP at market price} \)
- \( \text{NNP at market price} - \text{net indirect taxes} = \text{NNP at factor cost} \)
- \( \text{GDP at market price} - \text{net indirect taxes} = \text{GDP at factor cost} \)
- \( \text{GNP at factor cost} - \text{depreciation} = \text{NNP at factor cost} \)
- \( \text{NDP at market price} - \text{net indirect taxes} = \text{NDP at factor cost} \)
- \( \text{GDP at factor cost} - \text{depreciation} = \text{NDP at factor cost} \)

### 3.1 METHODS OF MEASURING NATIONAL INCOME

Production and sale of goods and services and the generation of income which accompanies these activities are processes that go on continuously. Production gives rise to income; income gives rise to demand for goods and services; and demand in turn gives rise to expenditure; again expenditure leads to further production. The circular flow of production, income and
expenditure represents three related phases, namely, production, distribution and disposition. These three phases enable us to look at national income in three ways - as a flow of goods and services, as a flow of incomes or as a flow of expenditure on goods and services. To measure it at each phase, we require different data and methods. If we want to measure it at the phase of production, we have to find out the sum of net values added by all the producing enterprises of the country. If we want to measure it at the phase of income distributed, we have to find out the total income generated in the production of goods and services. Finally, if we want to measure it at the phase of disposition, we have to know the sum of expenditures of the three spending units in the economy, namely, government, consumer households, and producing enterprises.

Corresponding to the three phases, there are three methods of measuring national income. They are:

(i) Value Added Method (alternatively known as Product Method);
(ii) Income Method; and
(iii) Expenditure Method.

(i) **Value Added Method:** Value added method measures the contribution of each producing enterprise in the domestic territory of the country. This method involves the following steps:

(a) Identifying the producing enterprise and classifying them into industrial sectors according to their activities.

(b) Estimating net value added by each producing enterprise as well as each industrial sector and adding up the net value added by all the sectors.

All the producing enterprises are broadly classified into three main sectors namely: (1) Primary sector which includes agriculture and allied activities; (2) Secondary sector which includes manufacturing units and (3) Tertiary sector which include services like banking, insurance, transport and communications, trade and professions. These sectors are further divided into sub-sectors and each sub-sector is further divided into commodity group or service-group.

For calculating the net product of the industrial sector we need to know about gross output of the sector, the raw materials and intermediate goods and services used by the sector and the amount of depreciation. For an individual unit, we subtract from the value of its gross output, the value of the raw material and intermediate goods and services used by it and, from this, we subtract the amount of depreciation to get net product or value added by each unit. Adding value-added by all the units in one sub-sector, we get value-added by the sub-sector. Again adding value-added or net products of all the sub-sectors of a sector we get value-added or net product of that sector. For the economy as a whole, we add net products contributed by each sector to get Net Domestic Product. If the information regarding the final output and intermediate goods is available in terms of market prices we can easily convert it in terms of factor costs by subtracting (or adding as the case may be) net indirect taxes to it. If we add or subtract net income from abroad we get Net National Product at factor cost which is nothing but National Income.

Care should be taken to include the value of the following items:

(a) Own account production of fixed assets by government, enterprises and households.

(b) Production for self-consumption.
(c) Imputed rent of owner occupied houses.
Care should also be taken not to include sale of second-hand machines because they were counted as a part of production in the year in which they were produced. However, brokerage and commission earned by the dealers of second-hand goods are a part of production and hence included while calculating total value-added. There is a difference of opinion among the national income accountants regarding raw materials, intermediate goods and depreciation. For example, a question arises whether government services are final (because they add to satisfaction) or intermediate (because they are essential for economic activity). In India, we treat them as final services but in Soviet Union (now called Commonwealth of Independent States) these are treated as intermediate services. Similarly, it is very difficult to ascertain the actual amount of depreciation because a fall in the value of capital stock depends upon many factors which are difficult to measure.

Moreover, large areas of production activities are excluded for varying reasons. Their net products cannot be valued either because there is no acceptable way of valuing them (which is true in the case of services of housewives or self-services in homes or services of friends) or because of the difficulty of securing data of the subsistence producing units particularly in underdeveloped countries.

The product method, thus, gives information about the industrial origins of national income. Additionally, net income from abroad should also be included or subtracted to get a true picture of national income.

(ii) **Income Method**: Different factors of production pool their services for carrying out production activities. These factors of production, in return, are paid for their services in the form of factor incomes. Thus labour gets wages, land gets rent, capital gets interest and entrepreneur gets profits. In other words, whatever is produced by a producing unit is distributed among the factors of production for their services and aggregate of factor incomes of all the factors of production of all the producing units form the subject matter of calculation of national income by income method.

Only incomes earned by owners of primary factors of production are included in national income. Transfer incomes are excluded from national income. Thus, while wages of labourers will be included, pensions of retired workers will be excluded from national income. Labour income includes, apart from wages and salaries, bonus, commission, employers’ contribution to provident fund and compensations in kind. Non-labour income includes dividends, undistributed profits of corporations before taxes, interest, rent, royalties and profits of unincorporated enterprises and of government enterprises.

However, normally, it is difficult to separate labour income from capital income because in many instances people provide both labour and capital services. Such is the case with self-employed people like lawyers, engineers, traders, proprietors etc. In economies where subsistence production and small commodity production is dominant most of the incomes of people would be of mixed type. In sectors such as agriculture, trade, transport etc. in underdeveloped countries (including India), it is difficult to differentiate between labour element and capital element of incomes of the people. In order to overcome this difficulty a new category of incomes, called mixed income is introduced which includes all those incomes which are difficult to separate. Care has to be taken to see that transfer incomes do not get included in national income. In this context it is worthwhile to note that personal income which is income of household sector
should not be confused with national income. While personal income includes transfer payments, national income does not. Similarly, illegal incomes, windfall gains, death duties, gift tax and sale proceeds of second-hand goods are not included while calculating national income.

Net income from abroad need not be added separately since the incomes received by people include net foreign incomes as well. But if national income is calculated not from incomes received by the people but from data regarding incomes paid out by producers then net income from abroad would have to be added separately because incomes paid by producers would total to domestic income. To arrive at national income, net income from abroad should be added to domestic income.

(iii) Expenditure Method: The various sectors - household sector, business sector and government sector either spend their incomes on consumer goods and services or save a part of their incomes or we can say that they spend a part of their incomes on non-consumption goods (or capital goods).

Total expenditure in an economy consists of expenditure on financial assets, on goods produced in preceding periods, on raw materials and intermediate goods and services and on final goods and services produced in the current period.

Expenditure on financial assets which are produced and owned within the country is excluded but expenditure on financial assets of foreign countries is included in national expenditure. However, only the net expenditure i.e., the difference between expenditure on foreign financial assets by residents and expenditure on the country’s financial assets by non-residents or foreigners is incorporated. This difference is also called net foreign investment. Goods produced in preceding years are also excluded from national income because they have been accounted for in the national incomes of the periods when they were produced. Similarly, expenditure on raw materials and intermediate goods and services are excluded because otherwise there would be double counting of some of the items included in the national income. Government expenditure on pensions, scholarships, unemployment allowance etc. should be excluded because these are transfer payments.

Thus, only expenditure on final goods and services produced in the period for which national income is to be measured and net foreign investment are included in the expenditure method of calculating national income.

Expenditure on final goods and services is broadly classified into expenditure on consumer goods and service (also called consumption expenditure) and expenditure on capital goods (also called investment expenditure). Consumption expenditure is classified into private consumption expenditure of the household sector and government consumption expenditure; and investment expenditure is classified into private investment expenditure by business sector and investment expenditure by government. To the total domestic investment we add net foreign investment in order to arrive at national investment. Thus, the aggregates resulting from the expenditure method measured at market prices are as follows:

Gross national expenditure = Consumption expenditure + net domestic investment + net foreign investment + replacement expenditure (i.e., expenditure on replacement investment).

Net national expenditure = Consumption expenditure + net domestic investment + net foreign investment.

Net domestic expenditure = Consumption expenditure + net domestic investment.
All the three methods mentioned above should ideally lead to the same figure of national income and therefore national income of a country should be measured by these methods separately to get a three dimensional view of the economy. This helps the government to analyse the level of production and economic welfare in the economy, to analyse stability and growth of the economy and to formulate appropriate economic policies of the government. Moreover, each method provides a check on the accuracy of the other methods. However, it is easier said than done. Because of lack of proper and reliable data it is very difficult to estimate national income by each method separately. This is especially so in underdeveloped economies.

As a matter of fact, countries like India are unable to estimate their national income wholly by one method. The contributions of different sectors to the total national income are estimated by different methods. Thus, in agricultural sector net value added is estimated by the production method, in small scale sector net value added is estimated by the income method and in construction sector net value added is estimated by the expenditure method.

Income method may be most suitable for developed economies where people properly file their income tax returns. With the growing facility in the use of the commodity flow method of estimating expenditures, an increasing proportion of the national income is being estimated by the expenditure method.

Estimation of the national income of a country is not an easy task. Appropriate and completely reliable data for accomplishing this work is not available even in developed countries. The following problems require particular mention:

1. Presence of a large non-monetized sector
2. Lack of appropriate and reliable data
3. Problem of double counting
4. Problem of transfer payments
5. Difficulties in classification of working population
6. Unreported illegal income

### 3.2 TRENDS IN INDIA'S NATIONAL INCOME GROWTH AND STRUCTURE

For finding out the impact of economic planning in India a study of trends in national income is necessary. It would be better, therefore, if the trend in national income and changes in the structure of national product are analysed over the 63 years of planning.

(i) **Trends in NNP**: The real national income of India has increased at an annual average rate of about 4.9 per cent based on 2004-05 prices during 1950-51 to 2009-10.

There are two distinctive phases of economic growth in India since Independence: 1950-51 to 1980-81 and 1980-81 to 2009-2010. During the period 1950-1951 to 1980-81, growth in GDP was 3.2 per cent and during 1980-81 to 2009-10, growth in GDP was 6.6 per cent per annum. If we consider the period between 1991-92 and 2009-10, GDP growth rate substantially increased to 7.3 per cent per annum.

Colonial past, restrictive trade policy, licensing system, inward looking foreign policies, too much stress on public sector and socialistic society, anti-market and anti-competition attitude of the State, and vagaries of nature are some of the reasons for very poor performance of the economy during 1950-51 to 1980-81.
Acceleration in economic growth since 1980 was attributable to several factors. Expansionary macro economic policies, economic reforms including trade liberalization and deregulation of industries especially since 1991, reasonably well established social and legal framework, well developed higher education system, improvement in infrastructural facilities, change in attitude of national leadership, adoption of pro-market policies, well fostered entrepreneurial skills and improvement in science and technology etc. all led to improving the rate of growth of Indian economy.

Restructuring measures by domestic industry, overall reduction in domestic interest rates, improved profitability, a benign investment climate amidst strong global demand and commitment based fiscal policy led to real GDP growth averaging 9 per cent per annum during 2004-08.

Economic growth decelerated in 2008-09 to 6.7 per cent. The global financial crisis and consequent economic recession in developed economies have been major factors in India’s economic slowdown.

In 2009-10, a fast and strong turnaround was noticed. With growth in real GDP at 8.6 per cent in 2009-10 and 9.3 per cent in 2010-11, the economy moved closer to the pre crisis levels.

The boost in consumption along with supply-side constraints led to high inflation in the country. To control this, monetary policy was tightened. This, coupled with weak industrial and agricultural growth, not very encouraging service sector’s growth and unfavorable external causes, resulted in slowdown in the Indian economy with rate of growth falling to 6.2 per cent in 2011-12 and less than 5 per cent both in 2012-13 and 2013-14. Nevertheless, despite this slowdown, the compound annual growth rate for GDP at factor cost, over the decade ending 2012-13 is 7.9 per cent.

How a country is performing can be judged in a two ways- by comparing its performance with other countries and by comparing its performance with the targets set by it.

A broad comparison with a few of the developing countries is shown in the following Table:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>5.9</td>
<td>8.5</td>
<td>3.0</td>
<td>1.7</td>
<td>3.5</td>
<td>3.8</td>
</tr>
<tr>
<td>China</td>
<td>3.0</td>
<td>7.4</td>
<td>9.8</td>
<td>10.0</td>
<td>10.5</td>
<td>9.6</td>
</tr>
<tr>
<td>India</td>
<td>4.0</td>
<td>2.9</td>
<td>5.4</td>
<td>5.6</td>
<td>7.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Korea</td>
<td>8.3</td>
<td>8.3</td>
<td>7.7</td>
<td>6.3</td>
<td>5.2</td>
<td>6.3 (2010 data)</td>
</tr>
<tr>
<td>Thailand</td>
<td>7.8</td>
<td>7.5</td>
<td>7.3</td>
<td>5.3</td>
<td>5.0</td>
<td>7.8 (2010 data)</td>
</tr>
<tr>
<td>World</td>
<td>–</td>
<td>–</td>
<td>3.2</td>
<td>3.0</td>
<td>4.2</td>
<td>2.8</td>
</tr>
</tbody>
</table>

(World Development Indicators, World Bank)
As can be seen in the Table, India’s rate of growth is improving. In fact, India now ranks among the top ten fastest growing countries in the world along with China, Vietnam, South Korea, Malaysia Thailand, Singapore, among others.

Plan-wise study of growth of real income in India, also indicates an encouraging fact that although the annual rate of increase in national income was pretty low during the first three decades of planning, it rose to 5.6 per cent per annum during the eighties, around 5.7 per cent per annum during the nineties and more than 7 per cent per annum during 2000-10. Table 7 shows the targeted and the achieved rates of growth during various plans.

**Table 7**

**Growth Rate in the Five Year Plan**

<table>
<thead>
<tr>
<th>Plan</th>
<th>Target</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (1951-56)</td>
<td>2.1</td>
<td>4.4</td>
</tr>
<tr>
<td>II (1956-61)</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>III (1961-66)</td>
<td>5.6</td>
<td>2.6</td>
</tr>
<tr>
<td>IV (1969-74)</td>
<td>5.7</td>
<td>3.1</td>
</tr>
<tr>
<td>V (1974-79)</td>
<td>4.4</td>
<td>4.9</td>
</tr>
<tr>
<td>VI (1980-85)</td>
<td>5.2</td>
<td>5.4</td>
</tr>
<tr>
<td>VII (1985-90)</td>
<td>5.0</td>
<td>5.5</td>
</tr>
<tr>
<td>VIII (1992-97)</td>
<td>5.6</td>
<td>6.7</td>
</tr>
<tr>
<td>IX (1997-2002)</td>
<td>6.5</td>
<td>5.3</td>
</tr>
<tr>
<td>X (2002-2007)</td>
<td>8.0</td>
<td>7.6</td>
</tr>
<tr>
<td>XI (2007-2012)</td>
<td>9.0</td>
<td>7.8 (P)</td>
</tr>
</tbody>
</table>

(P) - provisional

Source: Eleventh Plan Document (vol I), Draft Twelfth plan (vol - I)

(ii) **Trends in Per Capita Income**: India’s per capita net national product i.e., during the last 60 years of planning has increased at a rate of about 3 per cent per annum. This is modest performance by all means. The rate of increase in per capita net national product was not only conspicuously low but despite 60 years of economic planning, was still unsteady and erratic.

There were years when the rate of growth of per capita income was quite impressive, but there were also years in which rate of growth remained static or declined. It has been noticed that per capita growth rate in India to a large extent depends upon the agricultural growth rate. In the years of good harvests resulting from good monsoons, there has been spurts in the per capita income. But when there are crop failures resulting from bad monsoons, the per capita income has also not grown much.
It is to be noted that during 1950-51 to 1989-90, growth in GDP per capita per annum was 1.6 per cent per annum. Economic reforms undertaken since 1991 have helped in pushing the growth rate of per capita income. It accelerated to 5.8 per cent per annum during 1990-91 to 2009-10. Per capita income increased at an average rate of 6.3 per cent per annum during the 11th plan.

**SUMMARY**

- **National income** is the money value of all the final goods and services produced by the residents of a country during a period of one year. The common measure is money.

- **Concepts of National Income and output**
  - Gross domestic product is the money value of all final goods and services produced in the domestic territory of a country during an accounting year.
  - GDP at current price is estimated on the basis of the prevailing price.
  - GDP at constant price is estimated on the basis of some fixed prices or the price prevailing at a point of time or in some base year.
  - GDP at factor cost is estimated as the sum of net value added by the different producing units and the consumption of fixed capital.
  - GDP at market price includes indirect taxes and excludes the subsidies given by the government.
  - When depreciation allowance is subtracted from Gross Domestic Product we get net domestic product.
  - Gross National Product is defined as the sum of the Gross Domestic Product and net factor income from abroad.
  - Net National Product is derived by subtracting depreciation allowance from GNP.
  - NNP at factor cost is the volume of commodities and services turned out by the residents of a country during an accounting year, counted without duplication.
  - Personal income is the sum of all income actually received by individuals during a given year.
  - After the deduction of personal taxes from personal income of the individuals, personal disposable income is obtained.

- **Methods of measuring national income**
  - The national income is estimated by using value added method (or product method), income method and expenditure method.
  - Various problems in estimating the national income are presence of non-monetized sector, lack of reliable data, double counting, income from illegal activities, problems of transfer payments etc.
  - The real national income of India has increased at an annual average rate of less than 5% during the 63 years of economic planning.
  - India’s per capita net national product during the last 63 years of planning has increased at a rate of 3% per annum.
CHAPTER – 5

INDIAN ECONOMY – A PROFILE

Unit 4

Basic Understanding of Tax System in India
Learning Objectives

At the end of this unit, you will be able to:

♦ know the meaning of Direct and Indirect Taxes.
♦ know about merits and demerits of Direct and Indirect Taxes.
♦ know about the taxation system prevailing in India.

4.0 MEANING OF DIRECT AND INDIRECT TAXES

Tax is the most important source of revenue of the Government. A tax is a compulsory contribution from a person to the expenses incurred by the State in common interest of all without reference to specific benefits conferred on any individual. Taxes are generally classified into direct taxes and indirect taxes. Taxes which are not shifted i.e., the incidence of which falls on persons who pay them to the Government are direct taxes. Examples of direct taxes are income tax and wealth tax. Where the burden is shifted through a change in price, the taxes are indirect. Examples of indirect taxes are sales tax, custom duty, excise duty etc.

4.1 MERITS AND DEMERITS OF DIRECT AND INDIRECT TAXES

Merits of Direct Taxes:

(i) They are imposed according to the ability of the person to pay. Therefore these taxes are considered progressive.

(ii) The revenue is income elastic; because of the progressive character revenue will increase faster than the increase in income.

(iii) These taxes create better civic consciousness because the person paying knows clearly how much he has paid. This incidentally fulfils the objective of certainty.

(iv) They best serve the purpose of transference of income from the rich to the poor, through provision of amenities to the poor or even direct monetary help like old age pensions.

Demerits of Direct Taxes

(i) The ability to pay is difficult to determine; only a rough idea can be formed.

(ii) Because of undeclared sources of income or evasion, the actual payment may not be strictly according to the ability to pay. It is also sometimes said that direct taxes are taxes on the honesty of the person.

(iii) Such taxes necessitate proper maintenance of accounts which some of the tax payers may not be able to do.

(iv) The assessment procedure is also cumbersome requiring expert assistance of tax advisers. The direct tax system is often very complicated.
Merits of Indirect Taxes

(i) The most important merit is convenience in assessment and a relative difficulty in evasion. This is because they are assessed at flat rates and realised at appropriate point such as at the factory site in the case of an excise duty on production or at point of entry in the case of imports.

(ii) Since the tax is included in the price, the consumer may not even realise that he is paying a tax. The amount of tax on each item is often so small as really not to hurt the tax payer.

(iii) Even these taxes may not be really regressive if they are levied on ad valorem basis or on the basis of value. The rates may also be differential-higher for luxury articles and lower for necessaries; the latter are sometimes fully exempt.

(iv) Such taxes are difficult to evade. Unless the producers resort to manipulation of accounts or smuggling, it is difficult to evade the excise duty. In case of customs duties, articles are taxed the moment they enter the country. However, it is difficult to make a similar claim in respect of sales tax.

(v) Indirect taxes on drinks, narcotics and tobacco, serve a social purpose by discouraging their consumption.

Demerits of Indirect Taxes:

(i) These taxes are often criticised for their regressive character. Taxes on necessaries of life will certainly mean taxing the poor and that will mean taxing the rich and the poor alike.

(ii) Also it is contended that these taxes do not create social consciousness because they are often not felt by tax payers.

(iii) Government is not certain about the proceeds of these taxes.

(iv) The burden of indirect taxes can be shifted forward or backward. In most of the cases, the consumers have to bear the ultimate burden of indirect taxes.

(v) These taxes can also be evaded by such methods as smuggling, falsification of accounts etc.

4.2 TAX STRUCTURE IN INDIA

4.2.0 Direct Taxes in India: Under this mainly income tax, wealth tax and gift tax are included.

Income Tax: Income tax is a tax on the income of an individual or an entity. Income Tax in India was introduced in India in 1860 but was discontinued in 1873. It was reintroduced in 1886 and since then it has stayed. Since its reintroduction a number of changes have been made in its structure, rates, exemptions and other dimensions of this system. Important types of Income tax are Personal income tax and Corporate income tax. Though the State Governments have power to levy a tax on agricultural income, in practice this tax has not developed as a major source of revenue for the State Governments.

Personal income tax is levied on the income of individuals, Hindu Undivided Families, unregistered firms and other association of people. For taxation purposes incomes from all sources are added. Certain rebates, deductions, expenditure etc. on account of Life insurance,
medical insurance, savings in Public Provident Fund and certain notified instruments are allowed. Whole income is divided into different slabs and it is taxed on the basis of slab into which it falls.

Like all other countries India has a progressive income tax. That means, as income increases, the rate of tax also increases. There was a time when the income tax rate, inclusive of surcharge was as high as 97.75 per cent for the highest income slab. Since 1974-75, it has been brought down (in stages) to 30 per cent in 1997-98. At present also, the marginal rate of income tax (i.e., tax for the highest slab) is 30 per cent. Thus the degree of the progressivity of the income tax schedule has been considerably reduced.

Corporate Tax is levied on the incomes of registered companies and corporations. The rationale for the corporation tax is that a joint stock company has a separate entity and thus should be taxed separately. Until 1960-61, corporations were taxed in a partial sense. A corporation was required to pay income tax on behalf of its shareholders on dividends paid to them, and each shareholder got a credit to this effect. Since 1960-61, corporations are being treated as independent entities and shareholders are not given any credit. Though the corporates are being taxed at a flat rate, there are provisions for various kinds of rebates and exemptions. Tax rates are different for Indian companies and foreign companies. Certain types of companies (e.g., export houses) are given tax exemptions and tax holidays.

*Taxes on Wealth and Capital*: Taxes which are levied on wealth and capital are mainly estate duty, annual tax on wealth and gift tax. Estate duty was first introduced in India in 1953. It was levied on the total property passing to the heirs on the death of a person. From the point of view of proceeds, the estate duty was a minor source of revenue and it was abolished in 1985. An annual tax on wealth was introduced in 1957. It was levied on the wealth such as land, bonds, shares etc. of the people. Certain types of properties such as agricultural land and funds in Provident Account were exempt. Like estate duty this is also a minor source of revenue. With effect from 1.4.1993, wealth tax has been abolished on all assets except certain specified assets such as residential houses, farm houses, urban land, jewellery, bullion, motor car etc. A gift tax was first introduced in 1958 and was leviable on all donations to recognised charitable institutions, gifts to women dependents and gifts to wife. Gift tax was abolished in 1998.

Income Tax on gifts (received without adequate consideration) was partially reintroduced in April 2005. Gifts received from any person or persons, if the aggregate value exceeds ₹ 50000, have been made taxable under the head “Income from other sources”. Certain exemptions have, however, been given. With effect from 1.10.09 even movable and immovable property given as gift would attract tax if its value exceeds ₹ 50000.

4.2.1 *Indirect Taxes*: The main indirect taxes levied in India are custom duties, excise duties, sales tax and service tax.

*Custom Duties*: Custom duties are levied on exports and imports. From the point of view of revenue, the importance of export duty is limited. Import duties are generally levied on the basis of ad valorem which means they are determined as a percentage of the price of the commodity. On some commodities, specific import duties i.e., per unit taxes on imports are levied. In pre-tax reform period, India had become a country with one of the highest levels of custom tariffs in the world. As a part of rationalisation measures carried out since 1991, the custom duty structure has been pruned.
The peak rate of custom duty on non-agricultural products, which was 20 per cent in 2003-04, was successively reduced in subsequent budgets to reach a level of 10 per cent in 2007-08. In the subsequent budgets, no major change has been made in the overall rate structure of custom duties.

In the first half of 2008-09 fiscal, prices of certain commodities like crude oil, steel and food etc. shot up world wide. This affected their domestic prices and demand. Consequently, as an anti-inflationary measure, custom duties on many commodities were reduced.

Subsequently, in the aftermath of the impact of global financial meltdown since September 2008, there was a sharp decline in international commodity prices and some of the duty cuts were, therefore, reversed.

But since the growth momentum of the economy was slowing down in the second half of 2008-09, fiscal stimuli in the form of certain custom duties cut and exceptions were also given. These stimuli were continued in 2009-10, 2010-11 and 2011-12 as well. In 2012-13 and 2013-14, sector specific changes in custom duties were made depending upon the requirements in the country. For example, when as custom duties on gold jewellery was increased, it was reduced on specified machinery used in leather industry.

**Excise Duties**: An excise duty is levied on production and has absolutely no connection with its actual sale. It is a tax on manufacturing, which is paid by a manufacturer, who passes its incidence on to the customers. Excise duties are mostly levied by the Central Government in India and are known as Central Excise duties. There are certain goods, however, on which only states levy excise duty in India. These are alcoholic liquid for human consumption, opium, Indian hemp, narcotic drugs and narcotics. It is levied in a number of forms. Over the years, number of rate categories has been reduced and number of exemptions has also been brought down.

Taxation on inputs, such as raw materials, components and other intermediaries has a number of limitations. In production process, raw material passes through various processes till a final product emerges. Thus, output of the first manufacturer becomes input for second manufacturer and so on. When the inputs are used in the manufacture of product ‘A’, the cost of the final product increases not only on account of the cost of the inputs, but also on account of the duty paid on such inputs. As the duty on the final product is on ad valorem basis and the final cost of product ‘A’ includes the cost of inputs, inclusive of the duty paid and duty charged on product ‘A’. This means doubly taxing raw materials. In other words, the tax burden goes on increasing as raw material and final product passes from one stage to other because, each subsequent purchaser has to pay tax again and again on the material which has already suffered tax. This is called cascading effect or double taxation. This very often distorts the production structure, and does not allow correct assessment of the tax incidence. In order to remove these defects, the government introduced Modified Value Added Tax (MODVAT) in 1986-87. Value added is the difference between a firm’s revenues and its payments to other firms. It is the value difference between sales and purchased items.

However, MODVAT suffered from many shortcomings. The most important being, the existence of a number of rates on output and inputs leading to disputes relating to classification of both
the output and inputs.

In order to combat the problem, the Budget 2000-01 introduced the Central Value-Added Tax [CENVAT]. Under the Cenvat Scheme, a manufacturer of final product or provider of taxable service, shall be allowed to take credit of duty of excise as well as of service tax paid on any input received in the factory or any input service received by manufacturer of final product.

Sales Tax: Sales Tax in India is a form of indirect tax that is imposed by the government on the sale or purchase of a particular commodity within the country. Sales tax is an indirect form of tax, wherein it is the responsibility of the seller of the commodity to collect and recover the tax from the purchaser. Sales Tax in India is imposed under both, Central Government (Central Sales Tax) and State Government (Sales Tax) Legislation. Generally, each state follows its own sales tax act and levies tax at various rates. In India, many commodities are not covered by sales tax. Sales tax is more in the case of luxury items and less or almost nil in the case of necessities. Under sales tax, the registered trading concerns are required to pay the sales tax to the government. These registered concerns shift the burden of sales tax to the customers. Sales tax regime suffers from many problems, main being, cascading effect, lack of transparency, narrow base, different procedures followed by different states and so on.

In India, sales tax was in two forms – state sales tax and central sales tax. State sale tax (i.e. tax on transactions within a state) is being replaced by Value Added Tax in all states. Central sales tax is inter-state sales tax. This tax is non-rebatable tax and is incongruent with the system of VAT. Therefore, it is being phased out in stages. At present central sales tax is 2 per cent.

VAT: Value Added Tax (VAT) is a multistage sales tax with credit for taxes paid on business purchases. One of the major benefits of VAT over sales tax is that the VAT avoids double taxation.

One of the important components of tax reforms initiated since liberalization relate to introducing state-level value added tax (VAT). The VAT is a multi-point destination based system of taxation, with tax being levied on value addition at each stage of transaction in the production/distributional chain. If for example, inputs worth ₹1,00,000/- are purchased and sales are worth ₹2,00,000/- in a month, and input tax rate and output tax rate are 4% and 10% respectively, then input tax credit and calculation of VAT will be as shown below:

(a) Input purchased : ₹1,00,000.
(b) Output sold : ₹2,00,000.
(c) Input tax paid : ₹4,000.
(d) Output tax payable : ₹20,000.
(e) VAT payable after set-off input tax credit [(d) - (c)] : ₹16,000.

The following are the benefits of VAT:
- A set off will be given for input tax as well as tax paid on previous purchases.
- Other taxes such as turnover tax, surcharge etc. will be abolished.
• Overall tax burden will be rationalised.
• Price will in general fall.
• There will be higher revenue growth.
• The zero rating of exports would increase the competitiveness of Indian exports.
• There is a provision of self-assessment.
• There will be more transparency.

VAT was introduced in 1999. At present all states/union territories have successfully implemented VAT.

**Service Tax:** Service tax is a form of indirect tax imposed on services. Introduced in the year 1994-95, service tax network has expanded to cover almost all services except a negative list of services.

The indirect tax regime in India is being replaced by a comprehensive dual Goods and Services Tax (GST). GST would replace most indirect taxes currently in place i.e. octroi, Central Sales Tax, State-level sales tax, entry tax, stamp duty, telecom license fees, turnover tax, tax on consumption or sale of electricity, taxes on transportation of goods and services, etc., thus avoiding multiple layers of taxation that currently exist in India. The GST is likely to be implemented in very near future in India.

4.2.2 **Features of Tax Structure in India:** Following are the main features of tax structure of India:

(i) Tax revenues (on account of the centre, state and union territories) form about 17 per cent (2012-13) of the total national income of India. This was only 6.7 per cent in 1950-51 and 11 per cent in 1960-61.

(ii) Over the last 61 decades tax revenue collected both by the Central and State governments has increased many folds from ₹ 460 crore in 1951-52 to more than ₹ 17,18,000 crore in 2012-13.

(iii) The ratio of direct to indirect taxes which was 40:60 in 1950-51 declined to 20:80 in 1990-91. Thus there has been an increasing reliance on indirect taxes which is not good since they fuel inflationary trends in the country. But since 1990-91, in wake of rationalisation, the proportion of direct taxes has been on rise, whereas that of indirect taxes on the decline. The share of direct taxes in the gross tax revenue (Centre and States combined) was 38.5% in 2012-13 while that of indirect taxes declined to 61.5%.

(iv) The population of the economy is more than 120 crore. But very small fraction (less than 3 per cent) of the population pays income tax in India. Thus Indian tax structure relies on a very narrow population base.

(v) The total tax revenue is highly insufficient to meet the expenditure requirements of the economy. Over time there has been an increasing reliance to internal and external debts.

(vi) The structure of taxes in India has undergone changes. In 1970-71, excise duties were contributing more than half (about 56 per cent) of the central tax revenue. The relative share of personal income tax, corporation tax and custom duties was 5 per cent, 15 per...
In 1990-91, custom duties became the most important source of tax revenue and contributed nearly half of the total tax revenue. In the post economic reforms period, there has been a change in the scenario. In 2012-13, the most important contributor to tax revenue is corporation tax (34.4 per cent) followed by personal income tax (19 per cent) excise duties (17 per cent), custom duties (16 per cent) and service tax (12.8 per cent). Similarly, land revenues were important source of state revenue. Then sale tax became more important.

(vii) In India, the direct taxes are progressive, indirect taxes are differential in nature. In other words, direct tax rates increase with increase in income and indirect tax rates are higher for luxury items and lower for necessities.

(viii) The agriculture income is mostly exempt from the income-tax.

4.2.3 Evaluation of the Indian tax system

Although direct taxes are progressive there is a differential rate schedule for indirect taxes. With the increase in national income, the tax yields in general and from direct taxes in particular have not increased at a rate high enough to show a high degree of income elasticity. Direct taxes (centre and states combined) were 2.1 per cent of the GDP in 1950-51. It has increased to about 7 per cent in 2012-13.

Indian Tax system largely depends on urban incomes and leaves out almost completely agricultural incomes from the purview of direct taxes. India’s tax system has a much reduced scope of manoeuvrability in the field of personal taxation. Thus, while national income rises, with about 14 per cent of it originating in the agricultural sector, the tax system is not able to tap fully the rising income. The indirect tax system too is characterised by inelasticity.

Both the coverage and the rate schedule have been modified from time to time so that the tax system plays a truly functional role for economic growth, stability and social justice.

It is to be noted that while the service sector accounts for about 60 per cent of GDP, service tax (2012-13) contributes just 12.8 per cent towards tax revenues and about 1.3 per cent towards GDP.

In respect of canon of convenience, several, measures have been taken such as self assessment, advance payment, deduction of tax at source, assessment on the basis of returns submitted, etc. However, changes in tax laws in quick succession disturb long-term business decision-making. Indirect taxes, although considered to be regressive, are quite convenient from the collection point of view.

Simplification of tax system has also been attempted. Income tax returns have been simplified and made handy. The Booth Lingam Committee and Chelliah Committee recommended simplification and rationalisation of tax system in India. The proposed Direct Taxes Code and Goods and Services Tax (GST) also aim at simplification of tax laws.

The cost of tax collection (all taxes - direct and indirect) has increased over the years. It has increased from ₹ 543 cores in 1990-91 (Central Government) to more than ₹8,500 crore in 2013-14.

However, it is also noticed that the cost of tax collection for the Income Tax Department is one of the lowest in the world at the rate of less than 60 paise for every Rs. 100 collected as a direct tax.
Evasion and tax avoidance are reported to be very high. It has been estimated that black money is generated at the rate of 50 per cent of the country’s GDP. Because of this, the black money accumulation is of considerable magnitude. It is growing every year. The unaccounted funds are invested into business through diverse means and add further to the existing funds of black money. A part of it is squandered and wasted lavishly on social functions and on anti-social activities. Besides, the Indian tax system is also accused of (i) discouraging employment (ii) distorting prices (iii) and adversely affecting savings.

**SUMMARY**

- A tax is a compulsory contribution from a person to the expenses incurred by the state in common interest of all without reference to specific benefit conferred on any individual.
- Taxes are generally classified into direct taxes and indirect taxes.
- Direct taxes means taxes which are not shifted. The incidence and the impact are on the same person. For e.g. income tax.
- Indirect tax is that where the burden can be shifted to others. The tax payer is not a tax bearer. For e.g. sales tax, custom duty.
- Direct tax is progressive but indirect taxes are generally regressive in nature.
- Direct taxes contributed 7% of the GDP in 2012-13.
- **Direct Tax**
  - Income tax is a tax on the income of an individual or an entity
  - Corporate tax is levied on the incomes of registered companies and corporations
  - Taxes which are levied on wealth and capital are mainly estate duty, wealth tax and gift tax.
  - Wealth Tax in India is levied on certain specified assets.
- **Indirect Tax**
  - Custom duties are levied on exports and imports.
  - An excise duty is levied on production and has absolutely no connection with its actual sale.
  - Sales tax is a tax on sale of commodities.
  - Value added tax is a multistage sales tax with credit for taxes paid on business purchases. At present all states /union territories have successfully implemented VAT.
  - Service tax is imposed on services.
- The tax revenue on account of centre, state and union territories form about 17 per cent (2012-13) of the total national income of India
- Due to tax evasion and avoidance the black money is generated at the rate of 50% of the country’s GDP.
MULTIPLE CHOICE QUESTIONS

1. Generally an economy is considered under developed if
   a. the standard of living of people is low and productivity is also considerably low.
   b. agriculture is the main occupation of the people and productivity in agriculture is quite low.
   c. the production techniques are backward.
   d. all of the above.

2. Which of the following statements is correct?
   a. Agriculture occupies 10 per cent population of India.
   b. Nearly 5 per cent population of India is below the poverty line.
   c. The production techniques in agriculture are backward.
   d. None of the above.

3. Which of the statements is correct?
   a. The tertiary sector contributes the maximum to the GDP.
   b. India is basically a socialist economy.
   c. The distribution of income and wealth is quite equitable.
   d. None of the above.

4. ___________ is the apex bank for agriculture credit in India.
   a. RBI
   b. SIDBI
   c. NABARD
   d. ICICI

5. The share of agriculture in India’s national income has __________ over the years.
   a. remained constant.
   b. decreased.
   c. increased.
   d. first decreased and then increased.

6. The green revolution is also known as
   a. wheat revolution.
   b. rice revolution.
   c. maize revolution.
   d. forest revolution.
7. The area under irrigation has __________ over the years in India.
   a. remained constant.
   b. decreased
   c. increased.
   d. first increased and then decreased.

8. Which of the following statements is correct?
   a. Under zamindari system, farmers directly paid land revenue to the state.
   b. At present, income tax revenues from the agriculture sector are negligible.
   c. Commercial banks are providing loans to the agriculture sector at zero interest rate.
   d. None of the above.

9. Which of the following is incorrect?
   a. Special schemes have been started to promote export of agro-products.
   b. India has been a big importer of food grains especially since 1990s.
   c. High yielding varieties programme has resulted in improvement in production and
      productivity of food grains in India.
   d. None of the above.

10. Abolition of intermediaries and tenancy reforms are both parts of
    a. industrial reforms in India.
    b. external sector reforms in India.
    c. land reforms in India.
    d. banking reforms in India.

11. Agriculture sector faces the problem of
    a. slow and uneven growth.
    b. inadequate and incomplete land reforms.
    c. inadequate finance.
    d. all of the above.

12. In absolute terms, the number of people engaged in agricultural activities over the planning
    period has
    a. remained constant.
    b. increased.
    c. decreased.
    d. first increased and then decreased.
13. We can say Indian agriculture has become modern since
   a. there has been an increase in the use of high yielding varieties of seeds, fertilizers, pesticides etc.
   b. there has been noticeable positive change in the attitude of farmers towards new techniques of production.
   c. farmers are increasingly resorting to intensive cultivation, multiple cropping, scientific water management
   d. all of the above.

14. Which of the following were specifically established to meet the requirements of credit of the farmers and villagers?
   a. ICICI bank.
   b. Regional Rural Banks.
   c. State Bank of India.
   d. EXIM bank.

15. Which of the following statements is incorrect?
   a. About 80 per cent of agricultural area has irrigation facilities.
   b. About 55 per cent net cropped area is rain fed in India.
   c. Productivity per worker in agriculture is much lower than that in industry.
   d. Cropping pattern is quite skewed in India.

16. Which of the following statements is correct?
   a. Countries which are industrially well-developed generally have higher per capita income than countries which are not.
   b. India is a capital surplus economy.
   c. Agriculture sector need not depend upon industrial sector for its growth.
   d. None of the above.

17. Mahalanobis model stressed upon the establishment of
   a. consumer goods industries.
   b. export oriented industries.
   c. agro-based industries.
   d. capital and basic goods industries.

18. Three steel plants in Bhilai, Rourkela and Durgapur were set up in the
   a. First plan.
   b. Second plan.
c. Third plan.
d. Fourth plan.

19. The industrial sector faced the process of retrogression and deceleration during

20. Which of the following has resulted in failure to achieve targets of industrial production?
   a. Poor planning.
   b. Power, finance and labour problems.
   c. Technical complications.
   d. All of the above.

21. Which of the following statements is correct?
   a. A large number of industries face under utilization of production-capacity.
   b. The incremental capital-output ratio has been falling over the planning period.
   c. In terms of regions, industrial development is quite balanced.
   d. None of the above.

22. More than _______ per cent of the sick units in India are small and medium units.
   a. 10 per cent
   b. 5 per cent
   c. 30 per cent
   d. 90 per cent.

23. The Eleventh Plan aimed at achieving a growth rate of __________ in the industrial sector.
   a. 5 per cent
   b. 8 per cent
   c. 10 per cent
   d. 6 per cent

24. Oil and Natural Gas Corporation Indian Oil Corporation, Steel Authority of India, and Bharat Heavy Electricals are all examples of
   a. small scale units.
   b. private sector units.
   c. public sector units.
   d. sick units.
25. The Indian industry faced the process of retrogression and deceleration because of
   a. unsatisfactory performance of agriculture
   b. slackening of real investment in public sector
   c. narrow market for industrial goods, especially in rural areas.
   d. all of the above.

26. Which of the following statements is correct?
   a. The industrial pattern on the eve of Independence was quite balanced.
   b. During the planning period, the structure of Indian industry has shifted in favour of
      basic and capital goods and intermediate sector.
   c. Most of the big industrial units in India are sick.
   d. None of the above.

27. Over the planning period the share of industrial sector in the GDP of India has __________.
   a. increased
   b. decreased
   c. remained constant
   d. remained above 50 per cent

28. The industrial sector depends on the agricultural sector because
   a. the agriculture sector provides food and other products for the consumption purposes
      of industrial sector.
   b. the agriculture sector provides raw-materials for the development of agro-based
      industries of the economy.
   c. the agricultural sector provides market for the industrial products.
   d. all of the above.

29. According to the RBI, an enterprise is considered as sick if:
   a. Where most of the employees are sick.
   b. Any of the borrowal account of the enterprise remains NPA for three months or
      more, or, b) there is erosion due to accumulated losses to the extent of 50% of its net
      worth during the previous accounting year.
   c. which is unable to make profits more than 10 per cent of its capital employed.
   d. which borrows money from bank for its fixed assets.

30. All of the following can cause sickness to an industrial unit except:
   a. demand recession.
   b. uneconomic size.
   c. high productivity of labour and capital.
   d. financial mismanagement.
31. The service sector in India now accounts for
   a. more than 80 per cent of GDP.
   b. more than 70 per cent of GDP.
   c. nearly 60 per cent of GDP.
   d. more than 90 per cent of GDP.

32. Nearly __________ percent of working population is engaged in the service sector. [2011-12]
   a. 27 per cent
   b. 45 per cent
   c. 80 per cent
   d. 50 per cent

33. Service sector accounted for nearly ______________ of exports (2012-13).
   a. Two Third
   b. One Fourth
   c. One Third
   d. Two Fourth

34. India has the _____________ largest scientific and technical manpower in the world (2010-11).
   a. fifth
   b. tenth
   c. eighth
   d. third

35. Which of the following statements is correct?
   a. The service sector contributes more than half of the GDP of India.
   b. The scope of attracting tourists is limited as there is hardly any place of tourist attraction in India.
   c. Generally as an economy grows first service sector grows and then agriculture and industrial sectors grow.
   d. None of the above.

36. BPO stands for
   a. Bharat Petro Organisation
   b. Business Process Outsourcing
   c. Big Portfolio outsourcing
   d. Business Partners Organisation
37. Small scale units exist in India because
   a. they are labour intensive and India is a labour surplus economy.
   b. they offer methods of ensuring more equitable distribution of income and wealth.
   c. they facilitate the creation of a wider entrepreneurial base.
   d. all of the above.

38. Which of the following is incorrect?
   a. GDP at market price = GDP at factor cost plus net indirect taxes.
   b. NNP at factor cost = NNP at market price minus net indirect taxes.
   c. GNP at market price = GDP at market price plus net factor income from abroad.
   d. none of the above.

39. National income differs from net national product at market price by the amount of
   a. current transfers from the rest of the world.
   b. net indirect taxes.
   c. national debt interest.
   d. it does not differ.

40. Net national product at factor cost is
   a. equal to national income.
   b. less than national income.
   c. more than national income.
   d. sometimes less than national income and sometimes more than it.

41. Transfer payments refer to payments which are made.
   a. without any exchange of goods and services.
   b. to workers on transfer from one job to another.
   c. as compensation to employees.
   d. none of the above.

42. The net values added method of measuring national income is also known as:
   a. net output method.
   b. production method.
   c. industry of origin method.
   d. all of the above.

43. Identify the items which is not a factor payment
   a. free uniform to defense personnel.
   b. salaries to the members of Parliament.
c. imputed rent of an owner occupied building.
d. scholarships given to the scheduled caste students.

44. Mixed income of the self employed means
   a. gross profits received by proprietors.
   b. rent, interest and profit of an enterprise.
   c. combined factor payments which are not distinguishable.
   d. wages due to family workers.

45. Demand for final consumption arises in
   a. household sector only.
   b. government sector only.
   c. both household and government sectors.
   d. neither household nor government sector.

46. Demand for intermediate consumption arises in
   a. consumer households.
   b. government enterprises only.
   c. corporate enterprises only.
   d. all producing sectors of an economy.

47. Which of the following is an economic activity?
   a. Listening to music on the radio.
   b. Teaching one's own son at home.
   c. Medical facilities rendered by a charitable dispensary.
   d. A housewife doing household duties.

48. Net value added is equal to
   a. payments accruing to factors of production.
   b. compensation to employees.
   c. wages plus rent.
   d. value of output minus depreciation.

49. Per capita national income means
   a. \( \text{NNP} / \text{population} \)
   b. \( \text{Total capital} / \text{population} \)
   c. \( \text{Population} / \text{NNP} \)
   d. None of the above.
50. Which of the following is correct?
   a. If national income rises, per capita income must also rise
   b. If population rises, per capita income must fall.
   c. If national income rises, welfare of the people must rise.
   d. None of the above.

51. One of the following is not the merit of direct taxes. Find it.
   a. They are imposed according to the ability of the person to pay.
   b. These taxes create civil consciousness.
   c. The revenue is income elastic.
   d. They do not require maintenance of accounts.

52. Find the tax which is direct tax among the following:
   a. Personal income tax.
   b. Excise duty.
   c. Sales tax.
   d. Service tax.

53. Among the following types of taxes, find the one which is indirect?
   a. Gift tax.
   b. Corporate income tax.
   c. VAT.
   d. Wealth tax.

54. Which of the following statements is correct?
   a. Income tax was abolished in India in 1991.
   b. Gift tax was abolished in India in 1998, but income tax on gifts (received without adequate consideration) was partially reintroduced in April 2005.
   c. No state has adopted VAT system of indirect taxation.
   d. Estate duty was abolished in 1995.

55. Which of the following statements is correct?
   a. Excise duty is levied on sales volume.
   b. Custom duties have been drastically cut down since 1991.
   c. VAT has been adopted by two-three states in India.
   d. Agriculture contributes the maximum to the direct tax revenues in India.
56. NABARD was established on the recommendation of:
   a. Public Accounts Committee
   b. Shivaraman Committee
   c. Narasimhan Committee
   d. None of the above

**ANSWERS**

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>d</td>
<td>2</td>
<td>c</td>
<td>3</td>
<td>a</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>c</td>
<td>8</td>
<td>b</td>
<td>9</td>
<td>b</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>d</td>
<td>14</td>
<td>b</td>
<td>15</td>
<td>a</td>
<td>16</td>
</tr>
<tr>
<td>19</td>
<td>d</td>
<td>20</td>
<td>d</td>
<td>21</td>
<td>a</td>
<td>22</td>
</tr>
<tr>
<td>25</td>
<td>d</td>
<td>26</td>
<td>b</td>
<td>27</td>
<td>a</td>
<td>28</td>
</tr>
<tr>
<td>31</td>
<td>c</td>
<td>32</td>
<td>a</td>
<td>33</td>
<td>c</td>
<td>34</td>
</tr>
<tr>
<td>37</td>
<td>d</td>
<td>38</td>
<td>d</td>
<td>39</td>
<td>b</td>
<td>40</td>
</tr>
<tr>
<td>43</td>
<td>d</td>
<td>44</td>
<td>c</td>
<td>45</td>
<td>c</td>
<td>46</td>
</tr>
<tr>
<td>49</td>
<td>a</td>
<td>50</td>
<td>d</td>
<td>51</td>
<td>d</td>
<td>52</td>
</tr>
<tr>
<td>55</td>
<td>b</td>
<td>56</td>
<td>b</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>