THE QUAIDE MILLETH COLLEGE FOR MEN

INDIAN ECONOMY- CDZ2A

I B.Com. General

1. What is economic growth?

It can be defined as "an increase in real terms of the output of goods and services that is sustained over a long period of time, measured in terms of value added."

2. Explain the features of economic growth.

- Measured in terms of real national income (Y).
- Increase in Y should sustain itself over a long-period.
- Percentage change in Y measures the rate of economic growth.

Formula for calculating rate of growth is,

$$RG = \frac{CY - BY}{BY} \times 100$$

Where,

RG – Rate of Growth

CY – Current Year

BY – Base Year

3. Define Economic Development.

Economic development can be defined as "the process of increasing the degree of utilisation and improving the productivity of the available resources of a country which leads to an increase of the economic welfare of the community by stimulating the growth of national income."

4. Distinction between economic growth and economic development.

Economic development is not the same thing as economic growth.

Suppose, by analogy, we were interested in the difference between 'growth' and 'development' in human beings. Growth involves changes in overall aggregates such as height or weight, while development includes changes in functional capacities, physical coordination, leasing capacity, of ability to adapt to changing circumstances.

'Growth is an engine, not an end in itself. The end is being development'.

Economic Growth = Size of output (A quantitative aspect)

Whereas,

Economic development = size of Output + Economic Welfare (A qualitative aspect)

5. Describe the objectives of economic development.

- To increase the availability and widen the distribution of basic life-sustaining goods such as food, cloth, shelter and protection.
- To raise levels of living including, in addition to higher incomes, the provision of more goods, better education and greater attention to cultural and humanistic values, all of which will serve not only to enhance material well-being but also to generate individual and national self-esteem.
- To expand the range of economic and social choice to individuals and nations. Development is about freedom. It is about creating an environment where can people participate in deciding their economic and social future. Economic development is to be assessed ultimately by the enhancement of the 'positive freedom'.

In short, ***quality of life*** is the most important manifestation of economic development.

6. Elucidate the indicators of economic development.

- **GDP and Per Capita Income as Indicators of Development**
- An increase in GDP indicates higher level of economic activity, and hence increased availability of goods and services. Increased availability of goods and services results in better and higher standards of life, implying thereby an improved quality of life.
- Likewise, per capita income also performs the same function. Per capita income in an economy increases if the rate of growth of GDP exceeds the rate of growth of population. It would imply that the availability of goods and services, on average, would increase.

Other Indicators of Development

- **Net Economic Welfare (NEW) – Paul Samuelson**

It is the measurement of real changes of standard of living; by subtracting the hidden costs of production and other disamenities of modern urbanization from GDP. It is also considered about leisure and housewives services.

- **Physical Quality of Life Index (PQLI) – Jan Tinbergen, 1976.**

  This index has three elements, such as

  - Life expectancy
  - Infant mortality, and
  - Literacy

    Each is rated at an index of 1 to 100. A higher index for a country shows that the use of national product has been such that a large number of people have benefited in terms of three indicators.

- **Human Development Index (HDI) – United Nations Development Programme (UNDP)**

  It consist three variables, namely,

  - Long and healthy life
  - Acquire knowledge
  - Access to resources needed for decent standard of living.

- **Economic Development Index (EDI) – National Council of Applied Economic Research (NCAER), New Delhi.**

  Along with HDI, it is also considered policy and quantity changes of some other variables, viz.,

  - Government expenditure on health and education
  - Public investment
  - Tax rates

    and its impact on

  - Output
  - Prices
  - Current account balance, and
  - Human development.

- **Index of Sustainable Economic Welfare (ISEW)**

  It measured economic welfare taking into the account of variables like

    - Consumption as measured in GDP
    - Inequality
    - Household production
    - Defense expenditures
    - Production of ‘bads’
    - Environmental costs
    - Resource depletion and damage.
- **Gross National Happiness (GNH)**

    The GNH aims to ensure that prosperity is shared across society and it is balanced against preserving cultural traditions, protecting the environment and maintaining a responsive government.

7. State the features of developing emerging economy.

- Shift to market system
- Increasing role of private sector
- Financial sector reforms
- External sector reforms
- Reduction in indebtedness
- Reduction in fiscal deficits
- Rapid spread of information technology
- Increasing integration with the global economy

8. Explain the determinants of economic development

- Economic Factors
    - Natural resources
    - Capital formation
    - Productivity of capital
    - Technological progress
    - Knowledge
    - Infrastructure
    - Population and human resources
    - Economic conditions abroad
- **Non Economic Factors**

- Political and social factors
- Economic nationalism
- Luck

9. What is national income? How it is consider as an indicator of economic growth?

National income or national product is the sum-total of value added in all the economic enterprises belonging to the country.

- The rate of growth of national income of an economy is indicative of the pace at which the economy has been growing.
- The rate of growth of the national income when compared with the rate of growth of population indicates whether the economy is declining, stagnant or developing.
- It is only when the national income grows at a rate faster than the rate of growth of population , the per capita income shows a rising trend.
- It is only when the national income grows at a rate faster, then the community is able to improve its living standards and add to its stock of capital, and the economy moves on the path of a rising level of activity and productivity.

10. Explain the Components of National Income.

- **Gross Domestic Product (GDP) at Market Prices =** Consumption of Households (CH) + Investment expenditure (I) + Government Consumption (GC); **GDP = C+I+G**
- **Net Domestic Product (NDP) at Market Prices =** Gross Domestic Product (GDP) at market prices – Depreciation
- **Net Domestic Product (NDP) at Factor Cost =** Net Domestic Product (NDP) at market prices – Net indirect taxes
- **Net National Product (NNP) at Factor Cost =** Net Domestic Product (NDP) at factor cost + Net factor income from abroad
- **National Income =** Net National Product (NNP) at factor cost
- **Income from Domestic Product accruing to Private Sector =** Net Domestic Product (NDP) at factor cost – Income from domestic product accruing to government – Saving of non-departmental enterprises

- **Private Income =** Income from domestic product accruing to private sector + Net factor income from abroad + Net current transfers from the rest-of-the-world + Current transfers from government + Interest on national debt
- **Personal Income** = Private income – corporate taxes – Corporate savings
- **Personal Disposable Income** = Personal income – Personal direct taxes, Fines, etc.
- **Personal Saving** = Personal disposable income – Personal consumption expenditure
- **Gross Domestic Savings** = Personal savings + Private corporate savings + Public savings

11. Elucidate the methods of measurement of national income.

There are three methods of measuring national income. These are as follows:

- Value added method or product method
- Income method, and
- Expenditure method

Value added method or product method

The money value of all the final goods and services produced in a financial year gives us gross domestic product at market prices.

There are there major sectors in which goods and services are produced. These are

- **Primary sector**, which includes agriculture, forestry, mining, fishing and animal husbandry.
- **Secondary sector,** which includes manufacturing enterprises, water, gas and electricity supply etc.,
- **Tertiary sector,** which includes services like transport, communications, banking, insurance, public administration, real estate, and so on.

National income is measured as the sum of net value added by all these producing sectors in a year's time.

Value Added = Total sales + Closing stock of finished and semi-finished goods – Total expenditure on raw materials and intermediate products purchased from other firms – Opening stock of finished and semi-finished goods.

Income method

Goods and services produced with the help of various factors of production such as land, labour, capital and organisation. The reward that the factors of production receive for their services is called 'factor income'.

National income can be measured as the sum of factor payments made by the producers (income paid method) or as the sum of income received by various factors of production (income received method). Both the methods give the same result.

Classification of factor income

The income received by the factors of production from the producing units is classified into the following broad categories:

- **Compensation of employees**
- **Operating Surplus**
- **Mixed Income of Self-employed**

Precautions in the estimation of factor incomes

Includable items

- The commission charged by the broker for the sales proceeds of second-hand goods
- Imputed rent of the self-occupied accommodation
- Value of production for self-consumption

Excludable items

- Income from the sales proceeds of second-hand goods
- Illegal incomes (the income of smugglers, black-marketeers, etc.,)
- Windfall gains (income from lotteries, etc.,)
- Transfer payments
- Corporate income tax (part of profit earned by enterprises, should not be separately included)
- Wealth Tax, Death Duties, Gift Tax (paid out of current income).

Expenditure Method

Final expenditure method is also known as 'consumption and investment method' of measuring national income. In order to use this method, we have to collect data relating to the consumption and investment or expenditure on final consumption by the community. Disposition of national income can take to forms. It can either be consumed by households and general government or may be used to create assets by the enterprises, investment or capital formation. In brief,

$$Y = C + I$$

Where Y = National Income

C = Final Consumption Expenditure

I = Investment Expenditure or Capital Formation.

Components of Final Expenditure

- Private final consumption expenditure
- Government final consumption expenditure

  Compensation of employees + Net purchases of goods and services in domestic market + Net purchases of goods and services abroad
- Gross fixed capital formation
- Change in stock; and
- Net export of goods and services.

National income can be measured in terms of total expenditure of a country on final consumption and capital formation. In brief,

Net National Product = Private and public final expenditure on goods and services + Net capital formation

Precautions in the Estimation of Expenditure

Correct estimation of the aggregate expenditure of the whole economy is not an easy task.

Includable item

Only the expenditure on final goods and services should be included.

Excludable items

- Expenditure on second-hand goods should be excluded because they form part of the stock of goods produced in the past.
- Expenditure on purchases on shares, bonds, etc. should be excluded because these are paper titles which only represent the ownership of property and its transfer. No material things are produced through the purchase / sales of shares, bonds, etc.
- Government expenditure on pensions, scholarships, unemployment allowance, etc. should be excluded because these are transfer payments.
- Expenditure on intermediate goods or semi-finished goods should be excluded.

Whichever method of national income estimation we employ, the value of national income will be identical. Symbolically,

$$GNP = GNI = GNE$$

12. State the difficulties in the measurement of national income.

Conceptual difficulties

- Determination of intermediate and final goods
- Services without remuneration
- Transfer payments
- Pricing of products
- Income of the foreign companies

Practical difficulties

- Non-monetised sector
- Lack of occupational specialization
- Non-availability of reliable data
- Good for self-consumption
- Double counting

13. Explain the significance of the study of national income.

- Measure of economic progress

ii. Facilitates international comparisons

iii. Indicator of distribution of income

iv. Knowledge about growth of different sectors

v. Helps in policy-making

vi. Significance for business

vii. Indictor of standard of living

In brief, national income estimates are the indicator of economic progress and these provide a basis for policy formulation to achieve a higher rate of economic growth.

14. State the Components of Agricultural Growth.

An increase in agricultural production can result from

- An increase in area under cultivation (horizontal expansion) and / or
- From an increase in the productivity (vertical expansion).

Area Under Cultivation

The area under cultivation can be increased either through adoption of such practices as double cropping and multiple cropping or by the reclamation of uncultivated or water-logged and waste lands.

Productivity

Here, Productivity means the yield per hectare. It may be increased by using modern technology, high yield variety seeds, chemical fertilisers and pesticides, and improvement in irrigation facilities.

15. Explain the contribution of agriculture to economic growth

Kuznets identifies four possible types of contribution that the agricultural sector is capable of making to overall economic development. These are:

- Product contribution, i.e., making available food and raw materials,
- Market contribution, i.e., providing the market for producer goods and consumer goods produced in the non-agricultural sector,
- Factor contribution, i.e., making available labour and capital to the non-agricultural sector, and
- Foreign exchange contribution.

16. Write a note on role of agriculture in the Indian economy

Indian economy is one of the world's oldest agrarian economies. Our ancestors were growing rice and sugarcane at a time when the Europeans were hunting boars and huddling around peat fires. In the present-day India, the vital role of agriculture arises out of the position the agrarian sector occupies in the overall economy of the country. Agriculture is a large sector of the economic activity and has a crucial role to play in the country's economic development by providing food and raw materials, employment to a very large proportion of population, capital for its own development and surpluses for national economic development.

- **Contribution to National Income**

  Agricultural sector contributes a significantly large share to the national income of India. At present, 20% national income comes from various agricultural commodities, animal husbandry and ancillary activities.

- **Major source of livelihood**

  Agriculture has been and is a major source of livelihood in India. …. The sector, is plagued by such evils as underemployment, disguised unemployment, and low productivity employment. To overcome from these evils, steps are taken to raise the level of productivity and create alternative employment opportunities.

- **Role in foreign trade**

  Indian agriculture plays an important role in the country's international trade. About 15% of exports originate in this sector. The main agricultural commodities which are exported are tea, oilcakes, fruits and vegetables, spices, tobacco, cotton, coffee, cocoa, sugar and sugar products, hides and skins, raw wool and other varieties of animal hair and vegetable oils.

  Cotton and jute textiles, which are important export commodities, also depend for their raw materials on agriculture. The important items of import have been rubber, wool, vegetable oils and fats, and agricultural machinery and implements. The agricultural sector is a net earner of foreign exchange which is needed for capital and maintenance imports required in the non-agricultural sector.

- **Role in national economy**

  Fluctuations in agricultural output levels play a key role in the state of the national economy. Obviously, there is a direct relationship between agricultural production and income and demand for industrial goods. These are known as demand linkages among the two sectors. Similarly, performance in agriculture also influences total demand via Government savings and public investment. For example, a rise in agricultural production results in increased Government savings both as a result of the buoyancy of Government revenues and reduction in expenditures like drought relief which might otherwise become necessary.

- **Primary source of savings in the economy**

  Since agriculture is the largest sources of national income, this sector also is the primary source of savings, and hence capital formation for the economy. These are known as savings and investment linkages. The pace of development is largely conditioned by the rate of capital formation in the economy.

17. Describe the interdependence between agriculture and industry

During the process of development, interdependence between agriculture and industry has become stronger through the production linkages, demand linkages, and savings and investment linkages.

Production linkages

Production linkages arise from the interdependence between agriculture and industry for productive inputs, i.e., supply of agricultural materials such as cotton, jute, sugarcane, oil seeds, etc. to agro-based industries and supply of fertiliser, machinery and electricity by industry to agriculture.

It is estimated that for every 1 per cent hike in agricultural growth, industrial growth increases by about a third of 1 per cent that year as well as the next.

Demand linkages

There are strong demand linkages between the two sectors. The impact of urban income and industrialisation on the demand for food and agricultural raw materials is generally recognised.

Savings and investment linkages

Equally significant is the impact of rural income on industrial consumption goods, i.e., clothing, footwear, motor-bikes, etc. A study concludes: "Rural bazaar outbuys urban market." More significant are the savings and investment linkages that have developed between the two sectors. The relative terms of trade between the two sectors not only influence the level of private saving and investment, these also manifest themselves into Government saving and expenditure.

18. State the meaning of green revolution

The word 'revolution' implies two things:

- Fast change in some phenomenon, the change is so fast that it is well-marked, and
- The impact of the change is felt over a fairly long period of time since it brings about certain fundamental changes.

When we add the prefix 'Green' (the colour is symbolic of agricultural crops) to the word revolution and coin the phrase 'Green Revolution', it implies

- Well-marked improvement in agricultural production in a short period, and
- The sustenance of a higher level of agricultural production over a fairly long period of time.

19. Write a note on effects of green revolution

The effects of green revolution can be studied in two parts, viz.,

- its economic effects, and

- its social impact

Economic Effects

Increase in agricultural production

The first major direct effect of the green revolution has been a sharp rise in agricultural production. The results of the implementation of new strategy, as measured by the production of agricultural crops, were immediate and miraculous, i.e., there was no more waiting involved and returns were very fruitful.

Increase in productivity

The increase in agricultural production has resulted from the adoption of intensive agricultural practices. By implication the productivity of agriculture, as measured in terms of yield per hectare, must have also increased during the period assuming that there was no large-scale shift in the land-use pattern.

Sociological Impact of Green Revolution

There is no doubt that green revolution has pushed up the level of income in rural sector of the economy. The increase in production accompanied by many price support measures implemented by the Government has generated large incomes in the rural sector. But there have been two discomforting features of the green revolution also.

First, the green revolution has promoted personal inequalities in the rural sector, and secondly, it has been responsible for widening regional disparities.

- **Personal Inequalities**

The green revolution has promoted inequalities, and has widened the already existing gulf between the rich and the poor in the rural sector.

First, the modern technology is expensive in nature. By ‘expensive’ we do not mean its high-cost. It is expensive in the sense that it offers a package approach to the farmer. In this package a number of inputs are contained. The big rich farmers were the first to adopt the new input-based techniques to agriculture and carry away the first flush of benefits from their adoption. They thus “captured the advantage of starting race earlier.”

Secondly, the use of the new technology requires knowledge about it and proper application of the same. The small farmers, have been ignored by the extension personnel, and thus they have been denied the advantages of new technology.

Thirdly, the risk element in the new technology is very high. The small farmer with his limited staying power has preferred quite often to go in for his ‘safe-bet’ crops that the traditional system of agriculture would offer.

- **Regional Inequalities**

Another harmful consequence of the green revolution has been that it has promoted regional inequalities, however, this could be expected as a natural consequence of the shift of strategy from “something everywhere” to “everything somewhere” .

The main reasons for the differential rates of growth have been the following:

- Differences in the availability of water and irrigation facilities;
- Different levels of fertiliser use at the right time and in the right amount;
- Differential flow of information about the HYV seeds and other complementary inputs:
- Differences in the availability of new varieties of seeds, fertilisers and pesticides; and
- Differences in the nature and attitude of farmers towards risk and uncertainties.

Food Policy and Public Distribution System in India

The most important function of the agricultural sector in a developing economy characterised by fast-rising population and limited ability to import commodities is to meet the ever-increasing requirements of food. Even to maintain the rising population at the existing standards of nutrition calls for extra efforts. In India, with population increasing at an annual average rate of about 2 per cent and the foodgrains production also increasing at almost the same rate, only a precarious balance has been maintained between food supply and demand.

20. State the nature of food economy.

There are two aspects of the food situation in India:

- deficient nutrient contents, and
- high prices of foodgrains.
- **Deficient Nutrient Content**

  The nutrient content in the food of an average Indian is deficient, i.e., an average Indian is malnourished. The low nutrient content of food is responsible to a large degree for the low efficiency of an average Indian.

- **High Prices of Foodgrains.**

A second significant feature of the prevalent food situation in India has been the high prices of foodgrains. Vast agricultural areas have achieved sizeable export surpluses, but at prices beyond the means of the poverty-ridden consumers.

Any marginal rise in its price adversely affects the level of real income of a wage-earner. With most of them already living at a near-subsistence level, the rising food prices have caused misery and hunger.

21. Elucidate the obectives of food policy in India

In the face of a rising population to be fed and the stagnant agriculture during the 1960s, the management of food economy came to be accepted as an essential goal of the State food policy in India.

Objectives of Food Policy

- To avoid localised and widespread famine and open under-nutrition;
- To maintain remunerative prices to farmers; enthuse farmers to use modern inputs and technology;
- To stabilise prices due to market distortions;
- To provide price support when there is a rapid fall in foodgrain prices;
- To attempt through administrative means to keep down prices when there is a strong upward pressure;
- To supply vulnerable classes with foodgrains at below market prices;
- To procure foodgrains for public distribution at below market prices;
- To build and maintain a buffer stock of foodgrains to facilitate government operations; and
- To use the agricultural price policy to resist general inflationary forces in the economy.

These objectives should be consistent and help achieve broader economic goals:

- A sustained overall economic growth with stability;
- A growing per capita consumption of foodgrains;
- A check on year-to-year fluctuations in foodgrains availability;
- Self-sufficiency in foodrains so that imports can be minimsed and eventually eliminated.

22. What are the instruments of food policy? Explain.

Instruments of food policy in India, are

- Production and supply of foodgrains,
- Consumption of foodgrains, and
- Distribution of foodgrains.

- **Production and supply of foodgrains**

  The basic objective of agricultural planning in India has been to achieve self-reliance in production of foodgrains.

  - **Production**

    Production of foodgrains in particular, and agricultural production in general, has been sought to be raised through the adoption of a package of measures which can conveniently be grouped under three heads, viz.,

    - technological improvements,
    - institutional and infrastructural reforms, and
    - support prices.

Technological improvements and institutional reforms have aimed at providing infrastructure that proves conducive to the goal of a rapid increase in agricultural production.

Minimum support prices are in the nature of long-term guarantee to producers, that in the event of a glut in the market consequent on an increase in production or for any other reasons, prices will not be allowed to fall below the minimum economic levels. These prices are generally announced before the start of the sowing season.

Since 1977-78, the support prices have been raised from year to year. In other words, during more recent years, support prices have been used as an active instrument of food policy. This change is explained by two factors:

- A sharp increase in the production of foodgrains made it almost imperative that farmers be protected against the vagaries of market conditions where a large crop usually spells disaster for the producer.
- In the wake of new technology that has been adopted in agriculture, the cost of inputs like fertilisers, HYV seeds, water, pesticides, etc. has materially gone up. To keep the production of foodgrains profitable, the Government has been practising actively the use of the instrument of support prices.

- **Supply**

Domestic production of foodgrains has always been sought to be supplemented by imports, whenever warranted by the domestic situation. Imports of foodgrains were a regular feature till the mid-1970s; since then, however, we have been in a position, by and large, to dispense with imports. The primary objective of imports as of the food policy in general has been to help sustain the public distribution system and to protect the interest of the weaker sections of society.

- **Consumption of Foodgrains**

There are two aspects of consumption of foodgrains in India:

- There is increasing number of mouths to be fed.
- The consumption pattern of people have been loaded in favour of cereals, specially wheat and rice.

- **Population Policy**

The aim of the Government policy in this regard has been to give the facilities and incentives to people to check the size of their families. The family welfare planning programme which forms a part of the nation's population policy has striven hard to bring down the fertility rate.

- **Nutrition Policy**

The National Nutrition Policy, formulated in 1993, recognises the significance of short-term measures such as nutrition interventions for special vulnerable groups, fortification of food items, control of micro-nutrient and protein-energy deficiencies through inter-sectoral programme such as universalisation of supplementary feeding for pre-school children and expectant and nursing mothers through Integrated Child Development Scheme, basic minimum services including mid-day meals for school-going children, child survival and safe motherhood programme to extend nutrition and universal immunisation.

- **Distribution of Foodgrains**
- **Public Distribution System (PDS)**

The PDS functioning through a wide network of fair price shops aims primarily at protecting the interest of the vulnerable sections of population against high prices.

- **Buffer Stocks**

  The effectiveness of the Government operations in the foodgrains market depends to a large extent on the size of stocks. The size of stocks is determined by two considerations. One is to meet the current needs, i.e., to hold a quantity of stocks adequate to maintain the supply line throughout the year. The other aspect is to have some stock which would enable the Government to maintain the supply line even in a year of crop failure. The first consideration helps to even out seasonal fluctuations in supply; the second helps to even out annual fluctuations. The former may be described as normal stocks the latter buffer stocks.

  The primary objective of buffer stocks is price stabilisation. However, it must be underlined that price stabilisation does not mean price rigidity.

  Another related objective of buffer stocks may be to achieve stability of farm incomes. By eliminating peaks and troughs in commodity prices a stability of farm incomes can be assured, presuming that fluctuations between different seasons and years wean themselves out.

  These two objectives determine the optimum size of buffer stocks that the Government should hold.

- **Procurement**

  Buffer stock operations can be successfully maintained only if these are supported by a proper procurement of foodgrains by the Government. Another related objective is to keep the PDS going.

  The following systems of procurement have been adopted in India in recent years:

  - A monopoly purchase in which the whole of the marketable surplus is to sold to the State only;
  - A graded levy on producer on his total land holdings and with a certain weightage for irrigated land;
  - A levy on millers/dealers;
  - Purchases through licensed wholesale dealers including millers;
  - Support purchases in open market.

- **State Trading in Foodgrains**

State trading in foodgrains has assumed the form of open market purchase of foodgrains by Government agencies such as the Food Corporation of India. The system is in vogue to feed buffer stocks and the PDS.

Evaluation of Food Policy

To sum up, it would be observed that the Government has adopted a comprehensive food policy which is so designed as to affect the different aspects of the food situation production, consumption and distribution. It has not only tried to raise the quantitative level of food consumption, but efforts have also been made to raise the nutrient content of food of an average Indian.

The most **significant achievements of the food policy** can be briefly stated as follows:

- Notable acceleration in output growth after independence and, self-sufficiency in foodgrains production, and the consequent increase in physical access to food.
- Increase in economic access to food, which in turn has been made possible by the fact that

  (a) the real price of food declined over a period of time,

  (b) the proportion of per capita income required to buy food declined over time, and

  (c) operation of poverty alleviation programmes.
- Effective tackling of the problem of drought.
- Reduction in inter-regional and inter-seasonal prices of wheat and rice.
- Insulation of the domestic economy from very large price fluctuations in the world market.
- India is spending less on food. This is true for both towns and villages.

The **food policy** has also invited severe **criticism**:

- The growth rates of production could have been much higher, particularly in respect of rice, had an appropriate incentive structure been provided to the rice farmers and had they been allowed to undertake exports.
- The system has not been good enough for the demands of the equity objective. For example, the poor States have not been able to distribute a big share though the PDS which was their due.
- The PDS has also been criticised for its inability to benefit coarse again producers because of the non-inclusion of coarse grains in its network.

- The food subsidy imposes a heavy burden on the exchequer and that over time this burden has been increasing.
- The cost of intervention becomes high because of several reasons:
    - There is an increasing difference between the economic cost and the producer price,
    - many State Government have introduced additional food subsidy schemes,
    - the management of stocks is marked by inefficiency and the carrying costs of stocks are becoming unbearably heavy,
    - there is increasing pressure on the working of the FCI because of the excessive concentration of sales during the post-harvest season,
    - most of the distortions in the system arise from maintaining parallel and dual market structures.
- The policy has not been able to hold down the real price of grain.
- The Government has failed to recognise the complementary role that private storage can play in stabilising prices. It assumes that private storage is a result of speculative activities and has a destabilising influence on price. It therefore places restrictions on private storage.
- Operation of the FCI are inefficient, staffing patterns and management practices are poor, it is unable to control pilferage and corruption, it lacks storage space, and the grain quality is poor. Nevertheless, it importance in safeguarding interests of both farmers and consumer remains highly relevant in the absence of an alternative.

23.What is public distribution system?

The system of public distribution of a few essential commodities like wheat, rice, sugar, kerosene, edible oils, etc. has been in existence in India for the last five decades. Born of the need to provided food security during the Second World War, this 'food frame' has been strengthened and expanded over the years.

Its broad features have been as follows.

24.State the features of public distribution system

- Selected essential commodities are distributed through the fair-price shops and cooperatives which operate under Governmental control and direction.
- Free market mechanism coexists with the public distribution system.

- The Government maintains a buffer stock and replenishes the same through the system of procurement.
- It has been primarily an urban-oriented system.
- Prices charged are lower than the market prices; more generally, subsidies are extended by the Government.

25.What are the objectives of the public distribution system?

- To improve distribution of basic goods;
- To control price of essential commodities;
- To meet consumption needs of masses;
- To maintain good quality at low cost;
- To bring stability in prices;
- To weave the production and marketing system into a unified whole.

Presently, the PDS is being seen more as an anti-poverty programme. Accordingly in pursuance of this objective, the PDS has been recently restructured. Since June 1, 1997 a system of dual pricing of foodgrains for people falling in the poverty bracket (BPL) and those out of it (APL) has been introduced.

- **Weaknesses and Suggestions**

In actual operation the PDS has been far away from its idea target: the poor. The level of foodgrains lifted from the FCI has no connection with the number of poor in any state.

If at all, there is an inverse relationship. Bihar and UP, home for 37 per cent of the country's poor, lift merely 13 per cent of the foodgrains from the PDS, of which only a small proportion goes to the people, whether rich or poor. Less than three per cent of the poor living in the villages of the two States buy anything from the ration shops. In other words, most of these grains are either bought by the non-poor (NSS revealed that 76 per cent of the wealthiest rural households take advantage of subsidised food) or make their way to the open market. Instead of selling ration at subsidised rates, shopkeepers sell them in the open market at higher prices, pocketing the difference.

This clearly suggests that the PDS has not been efficiently targeted .

If the government really wants to have a PDS for the poor, it should devise a system which is less attractive for the non-poor. It should do the following:

- If the government wants the poor to buy foodgrains, ration shops will have to be opened where the poor live. If the Government thinks that PDS is an effective way of reducing poverty in the eight States, Bihar, UP, Madhya Pradesh, Uttarakhand, Jharkhand, Chattisgarh, Orissa and Rajasthan, where most of the poor live, it should open ration shops in their villages and make sure that the people living there get ration
- To discourage traders from diverting PDS foodgrains to the open market, the Government should involve Panchayats in the distribution of ration. Panchayats should also be involved in identifying the poor in rural areas.
- The policy of allocation of foodgrains has been very ad hoc, with allocation being fixed on a 'historical basis'. A thorough look into the pattern of allocation is a must.
- As brought out in a recent study on the subject, PDS alone will not solve the problems of food security. Apart from higher economic growth, a mix of policies such as effective implementation of anti-poverty programmes, including PDS, controlling inflation, improving health facilities is needed for increasing food security in the country.
- The aim of price stability can be achieved simply by the Government taking positions on stock exchanges, rather than actually bearing the cost of storage and distribution. This would be the same as a buffer stock policy, only in a 'demat' sense.

Irrigation

Water is an important component to produce agricultural products. An important source of water is rainfall. The average rainfall in India is about 88 cm. one of the highest in the world. But it is mostly confined to a few monsoon months in the year, and there are great variations in its incidence from year to year. Moreover, rainfall in a large part of the country is low and uncertain in its distribution. Even where it is high the available soil moisture in the winter and summer months is not adequate to support multiple-cropping. These vagaries of weather frequently give rise to drought and scarcity. Therefore, there is an increased need for providing assured supplies of water through irrigation systems.

26. Explain role of irrigation.

Irrigation has two roles:

- **Protective aspect**, i.e., to make up the moisture deficiency in soils during the cropping season so as to ensure proper and sustained growth of the crops.
- **Additional land use aspect**, i.e., to enable a second or third crop being raised on the lands which could otherwise not be cultivated efficiently, more particularly during the post- or pre-monsoon period.

Thus, irrigation, on the one hand, is an insurance against the vagaries of nature and, on the other, helps raise the productivity of land.

Direct benefits of irrigation

- Promoting the greater utilisation of land;
- Enlarging the average size of the farm;
- Generating demand for additional farm labour;
- Bringing a shift in crop pattern in favour of new and improved varieties of crops;
- Increasing additional productive in farm business;
- Bringing favourable input-output ratio; and
- Widening the scope for increase in land revenue and other local receipts.

Indirect benefits of irrigation

- A general expansion of secondary and tertiary activities in the area affected by it resulting in greater work opportunities leading to a reduction in migration of rural poor to the urban areas;
- More employment to both family and hired labour;
- Higher value of output per industrial unit; and
- Higher turnover of business establishments in the project areas.

27. Explain the Sources of irrigation.

Depending on the availability of surface or ground water, types of relief, soils and the moisture requirement of crops, various types of irrigation are practised in India, more important among these are **canals, wells and tanks**.

- **Wells**

  Wells provide the most widely distributed source of irrigation in India. Wells make use of the underground water. Well irrigation, therefore, is possible even in low rainfall areas provided sufficient quantity of ground water is available. Well irrigation is also within the reach of small farmers. It accounts for about 40 per cent of the total irrigated area in the country.

- **Canals**

  Canals are the other important source of irrigation. India has one of the world's largest canal systems stretching over more than one lakh km. and serving more than 20 million hectares. Canals are two types:

  - Inundation canals – canals taken out from rivers without any regulating system are called inundation canals.
  - Perennial canals – too are taken off from perennial rivers or reservoirs with a weir system to regulate the flow of water, which is maintained throughout the year.

- **Tanks**

  Tank irrigation is the most feasible and widely practised method of irrigation in States like Tamil Nadu, Karnataka, Odisa, etc. Tank irrigation involves a high rate of evaporation and occupation of fertile land particularly as the depth of most of the tanks is shallow and the water spreads over a large area. Therefore, wherever canal irrigation has been introduced, tanks have been reclaimed for cultivation. The proportion of tank irrigation to the total irrigation capacity, therefore, has fallen over the years.

Area Irrigated by Sources in India

Sources of irrigation	1950-51		2007-08	
	Area (million hectares)	Percentage	Area (million hectares)	Percentage
Canals	8.3	40.0	16.5	26.5
Wells and Tube wells	6.0	29.0	37.8	60.7
Tanks	3.6	17.0	2.0	3.2
Other sources	3.0	14.0	6.0	9.6
Total	20.9	100.0	62.3	100.0

Source: Central Statistical Organisation (CSO), Agricultural Statistics at a Glance, 2012.

Since 1950-51, considerable importance was attached to the provision of Canal irrigation. Canal irrigated area had increased from 8.3 million hectares to 16.5 million hectares during

1950-51and 2007-08. Even then, its relative importance has come down from 40.0 per cent to 26.5 per cent.

Well irrigated area has increased from 6 million hectares to 37.8 million hectares during 1950-51 and 2007-08. During this period, it is well irrigation, particularly tube well irrigation, which has made the most spectacular progress.

Classification of irrigation work

Since 1978-79, the Planning Commission of India has adopted the following classification of irrigation works:

Major Irrigation works

Those with Culturable Command Areas (CCA) more than 10,000 hectares.

Medium Irrigation works

Those with CCA between 2,000 and 10,000 hectares.

Minor Irrigation works

Those with CCA up to 2,000 hectares.

Irrigation Potential Created and Utilised upto end of 2006-07

(Million hectares)

Source	Potential created	Potential utilised	Per cent utilisation
Major & Medium Irrigation	42.4	34.4	81
Minor Irrigation	60.4	52.8	87
Total Irrigation	102.8	87.2	85

Source: Planning Commission, Eleventh Five Year Plan (2007-12), Vol. III.

The potential created in terms of irrigation area was of the order of 102.8 million hectares – about 42.4 million hectares as a result of Major and Medium irrigation and 60.4 million hectares as a result of Minor irrigation. The potential actually utilised was 87.2 million hectares.

Unfortunately, the irrigation potential created over the years in major and medium works has not been fully utilised and the gap between the potential created and the actual utilisation was widening. The non-utilistion of the created irrigation potential occurs mainly due to delay in the construction of field channels and drains and in land leveling / shaping. Lack of involvement of farmers is also an important constraint in achieving full utilisation of created potential.

28.what is Land Reforms

Verify, the land belongs to him who labours on it.

- Mahatama Gandhi

"on this anniversary of our Republic we must resolve to complete the unfinished task of land reforms that we have embarked upon years ago and empower the landless poor and small farmers who have not got any benefits from the Green Revolution. Much of the poverty and unrest in rural India – the class conflicts and the economic violence – can be traced to gross injustice in the distribution of land and some kind of counter-revolution that is taking place holding up the implementation of land reforms and snatching away of whatever benefits progressive legislations had bestowed upon the poor."

- K. R. Narayanan, Former President of India,

Presidential Speech broadcast on 25th January 1998.

Land Tenure and Land Reforms

'Land Tenure' refers to the system of land ownership and management. The various features that distinguish a land tenure system from the others relate to the following:

- Who owns the land;
- Who cultivates the land; and
- Who is responsible for paying the land revenue to the Government.

On this basis we can think of three different systems of land tenure, viz.,

- The Zamindari system,
- The Mahalwari system, and
- The Ryotwari system.

Zamindari System or the Landlord-Tenant System

In pre-independence India, about 25 per cent of area was covered by this system. The main features of this system are as follows:

- The ownership of the land is separated from the managerial and laboring function.
- At one extreme, the landlord is simply the provider of land the tenant provides all the management and labour.
- The landlord gets predetermined share of the product.
- The landlord is responsible for the payment of land revenue to the State, the actual tiller does not come into contact with the State, the landlord acts as an intermediary.

This system tends to breed a range of inefficiencies and inequities which create pressures for radical reform.

Mahalwari System or Communal System of Farming

About 39 per cent of area was covered by this system in pre-independence India. The main features of this system are as follows:

- The ownership of land is maintained by collective body: usually the village serves as a unit of a management.
- Land is distributed among the individual peasants, revenue is collected from them.
- The responsibility of paying revenue to the State rests with the village.

An experience with this system has also shown that this tends to degenerate and encourage absentee landlordism.

Ryotwari or Owner-cultivator System

About 36 per cent of land area was covered by this system before independence. The main features of this system are as follows:

- The bulk of the rights of use and control of land are held by the family which provides the primary labour force on the farm.
- The owner-cultivator, also known as peasant-proprietor, is responsible directly to the State and pays land revenue and other dues on it.

Of these systems the last one, the peasant-proprietorship system, is economically the most efficient and socially the most just. Any welfare State would be induced to raise such an institutional agricultural framework that fulfils these two conditions.

Any steps or policy changes induced by the Government to bring about these changes in the land ownership system are known as land reforms. Thus, it would be seen that land reforms are the instruments to bring about improvements in the institutional framework of land.

29. Explai the Progress of Land Reforms in India.

Abolition of Zamindari System

Immediately after independence, a strong voice was raised against the vested interests in land. As a result, a high priority was given to the abolition of the Zamindari system. Accordingly, every state enacted its own legislation for the abolition of intermediary interests. Among the States of India, Uttar Pradesh (U.P.) led the way by enacting U.P. Zamindari

Abolition and Land Reforms Act in 1950. By 1952, necessary legislations had been enacted in all the States.

The abolition of statutory landlordism covering a variety of intermediary tenures has now more or less been accomplished bringing nearly 20 million cultivators into direct contact with the State. A considerable area of culturable wasteland and private forests belonging to the intermediaries have been vested in the State. This has facilitated the distribution of 57.7 lakh hectares to landless agriculturists.

Ceilings on Land Holdings

By a 'ceiling' on land holdings we mean the fixing of the maximum size of holdings that an individual cultivator or a household may possess. Beyond this maximum size all land belonging to the landlords is taken over by the Government to be redistributed among the landless labourers. The basic objective of such a measure is to reduce wide disparities of income and wealth found in the agrarian structure.

Land reforms aim at redistributing ownership holding from the viewpoint of social justice, and reorganising operational holdings from the viewpoint of optimum utilisation of land. The entire concept of land reforms aims at the abolition of intermediaries and bringing the actual cultivator in direct contact with the State.

Productivity in agriculture is mainly dependent on two sets of factors viz.,

- Technological, and
- Institutional.

The technological factors are the use of agricultural inputs and methods such as improved seeds, fertilisers, improved ploughs, tractors, harvesters, irrigation, etc., which help to raise productivity, even if no land reforms are introduced.

The institutional reforms include the redistribution of land ownership in favour of the cultivating classes so as to provide them a sense of participation in rural life, improving the size of farms, providing security of tenure, regulation of rents, etc.

The purpose of land reforms

- It aims to make more rational use of the scare land-resources by affecting condition of holdings, imposing ceilings and floors on holdings so that cultivation can be done in the most economical manner., i.e., without any waste of labour and capital.

- It is a means of redistributing agricultural land in favour of the less privileged classes, and of improving the terms and conditions on which land is held for cultivation by the actual tillers, with a view to ending exploitation.

Scope of land reforms

- Abolition of intermediaries;
- Tenancy reforms, i.e., regulation of rent, security of tenure for tenants and conferment of ownership on them;
- Ceiling and floors on land holdings;
- Agrarian reorganisation including consolidation of holdings and prevention of sub-division and fragmentation; and
- Organisation of cooperative farms.

Size of Holdings

By the term 'holding' we mean a unit of land, bounded by borders on all four sides. India is a land of small holdings. There are estimated to be about 130 million holdings in the country. Out of these, about 59.0 per cent holdings are marginal holdings (i.e., below 1 hectare). Other 19 per cent holdings are small holdings (i.e., 1-2 hectare). 13.2 per cent of the total holdings are small-medium (i.e., 2-4 hectare), and 7.2 per cent are medium holdings (i.e., 4-10 hectare).

Only about 1.6 per cent of the holdings are large holdings (10 hectare and above). However, marginal and small holdings (that together account for about 78.0 per cent of the total holdings) have only 32.2 per cent of the land area. On the other extreme, large holdings account for 17.4 per cent of the total land area.

Arguments against land reforms

- It is argued that under the growing pressure of population on land the average size of holding is declining and any further redistribution of land among the landless would increase the number of such small and marginal farms. Since these small and marginal farms do not generate commercial surplus or savings for investment, redistribution of land in their favour might slow down the pace of agricultural growth.
- Farmers cannot enjoy economies of scale unless they acquire more land. Land reforms which limit the size of land-holding to sub-optimal levels have no rationale in capital-intensive modern farming.

- "Fast economic development everywhere has been made possible essentially due to rapid industrialisation." Industrialisation, indeed, holds the key to rapid economic growth, as productivity levels in industry are much higher than in agriculture. Moreover, industrialization is regard as an important policy to affect fundamental economic and social changes in developing countries which are considered as necessary conditions to raise their growth potentials.

Industrialisation is a process by which the centre of gravity of the economy shifts from agriculture to industry. It involves two things:

- Adoption of technologically superior techniques of production that help to transform basic raw materials and intermediate goods into manufactured goods,
- Application of modern techniques of management and organisation like economic calculations, accountancy and management techniques, etc.

Industrialisation and Economic Development

Percentage Industrial Distribution of Gross Domestic Product and Per capita Income - 2009

Country	Per capita income in U.S. Dollar (2008)	Industrial origin of Domestic Product at factor cost (%)		
		Agriculture	Industry	Services
U.S.A.*	46, 436	1.4*	20.9*	77.7*
Belgium	44, 429	0.8*	23.1*	76.1*
U.K.*	35, 164	0.7*	23.9*	75.4*
Japan	39, 726	1.4*	29.3*	69.3*
China	3, 744	10.3	46.3	43.4
India	**1, 134**	**17.1**	**28.3**	**54.6**

Source: World Bank, World Development Indicators, 2010.

Datt & Sundharam (2013), Indian Economy, 68th Revised Edition, S. Chand & Company Pvt. Ltd., New Delhi.

*2008

30. what is industrialization?

Industrialisation has come to be regarded as synonymous with economic development. The essential criteria that are being used to distinguish a developed economy from a developing one relate to the proportion of work force engaged in industrial activity, the proportion of national output originating in the industrial sector, etc.

The following factors favour rapid Industrialisation as a means to fast economic development.

- **Productivity of Labour**

The productivity in the industrial sector is generally higher due to the operation of one or more of the following reasons:

- The existence of greater capital intensity,
- Continuity of production,
- Greater specialization and division of labour,
- Less dependence on natural factors,
- A greater possibility of internal – external economies in the manufacturing sector.

- **Employment Generation**

  With increase in productivity in the industrial sector, it will be possible to create more employment opportunities, thus attracting labour from less productive occupations. This process will add to the national output as also to the purchasing power and aggregate consumption expenditure which, in turn, will pull the aggregate demand upwards and would be instrumental in creating more employment opportunities.

- **Mobilisation of Surplus**

  A major constraint on development in a developing economy is the lack of adequate resources to finance the required needs. Inadequacy of resources is the result of two inter-related factors:

  - The absolute size of resources, national output and saving in a developing economy is low, and
  - It is not possible to mobilise the surpluses.

  Whereas the problem of inadequacy of resources is common to all the sectors of the economy, the problem of mobilization of resources is peculiar in the agricultural sector, where the largest share of national income originates. The task of mobilisation of surplus savings in this sector is rendered difficult by the fact that there is no suitable organisational set-up for this purpose. Such a set-up can more easily be provided in the industrial sector of the economy.

Thus, by concentrating resources on industrialisation the pace of economic development can be quickened.

Small scale industries in India

Small-scale industries have always formed an integral part of the development strategy in India. In the Nehru-Mahalanobis model of growth, small industries were assigned the primary responsibility to produce and supply the economy with light consumer goods. Subsequently in the new economic policy framework also, small industries have the basic responsibility to play complementary role to large manufacturing units. In the fast globalising world, small industries have to create a niche for themselves.

There are two types of small industries:

- **Modern small-scale manufacturing enterprises**

  These are small-firms using 'modern techniques to produce modern product'. Technology used by these firms is on par with or closely approximates the modern large-scale industry. These firms, by their very nature, are located in large towns in order to take advantage of external production economies; they use hired labour and raw materials supplied by large-scale enterprises located at a long distance. Their market is also dispersed in a region or throughout the country, sometimes they operate in export markets.

- **Intermediate group of small enterprises**

  These firms 'use more or less traditional techniques to produce more or less modern products'. Here machine production is substituted by labour-intensive non-mechanised (capital saving) techniques. The orientation of these enterprises, however, is towards urban areas, rather than to villages as they have to procure their raw materials from towns, which also provide market for finished products.

31. Explai n the role of Small Industry and Large Industry.

In the official industrial policy formulation, a small industry is defined as a unit having investment up to Rs. 1 crore in plant and machinery.

It takes into account investments in plant and machinery only and does not consider money put into effluent treatment, quality control, fire-fighting equipment and safety. It also excludes the 'standby' investments in land and buildings.

For units in sports goods, hosiery, hand tool, stationery, drugs and pharmaceuticals subsectors the investment limit has been revised from Rs. 1 crore to Rs. 5 crore, since May 2005.

The Micro, Small and Medium Enterprises Development Act, 2006 provides for the recognition of the concept of 'enterprise' (comprising both manufacturing and services), and integrating the three tiers of these enterprises, viz., micro, small and medium. Manufacturing enterprises have been classified as follows:

- Micro – investment upto Rs. 25 lakh.
- Small – investment Above Rs. 25 lakh and upto Rs. 5 crore.
- Medium – investment above Rs. 5 crore and upto Rs. 10 crore.

Rationale of Small Industries

The key arguments in favour of Small-Scale Industries (SSIs) are;

- **Employment Argument**

  The most important argument in favour of the SSIs is that they have a potential to create large employment opportunities. These are labour-intensive in character, i.e., they use more of labour per unit of output and investment. There has also been an implicit assumption in this argument that small enterprises use less capital per unit of output.

  Therefore, in a country where labour is surplus and capital is scare, it is only to be expected that the production process should be decentralised and should be divided into small units.

- **Decentralisation Argument**

  There are two aspects to this argument –

  - first, there is the need to prevent congestion in large cities through prevention of growth of industries there;
  - secondly this negative measure has to be reinforced by promoting industrial growth in semi-urban and rural areas so that the local people can stay on their areas without emigrating to the nearby cities.

- **Equality Argument**

  Large-scale industries, generally, lead to inequalities of income and concentration of economic power. An SSI, on the other hand, will result in a more equitable distribution of the produce of industry. It is also held that as most of the small enterprises are either proprietary or partnership concerns, the relations between workers and employers are more harmonious in small enterprises than in large enterprises.

- **Latent Resources Argument**

  This argument justifies the cause of SSIs on three grounds as follows:

  - It presumes that there is to be found large number of small and potential entrepreneurs who are capable of running industrial units efficiently if appropriate opportunity and help is extended to them.
  - There are large number of potential enterprises whose full capacities have not been used so far.
  - SSIs will be helpful in putting idle savings to productive use.

- **Allocation Efficiency**

  It is argued that small enterprises use the factors of production more efficiently, since they face factor prices that are closer to the existing scarcities, i.e., they pay lower wages and incur higher capital costs. This should then be reflected, on the one hand, in lower capital-output ratios, since a higher interest rate corresponds to a higher capital productivity, and, on the other hand, in lower capital-labour ratios, since the wage-rental ratio is lower.

- **Other Arguments**

  - For minimization of risk, a new line is opened on a small scale.
  - Where the material to be worked upon is not uniform, where the process are not amenable to quick repetitions and where the products are not standardised, large-scale methods are not suitable or economical, and here small industry thrives on its own strength.
  - The small sector has certain inherent advantages in terms of flexibility of decision-making. This makes small firms more innovative and open to new ideas.
  - This sector is better placed to cater to specific and changing customer needs.

32. Explain the Problems of SSIs

- **Problem of finance –** The creditworthiness of small borrowers is generally weak, and, therefore, they find themselves face with reluctant creditors who may be induced to lend only at higher rates of interest.
- **Problem of raw materials –** The SSIs facing the difficulty for procurement of raw materials. Scarcity of raw material means a waste of productive capacity for the economy, and loss for the unit. The problem has assumed the shape of
    - an absolute scarcity,
    - a poor quality of materials, and
    - a high cost.

    Because of scarcity, competitions has increased, and the small units competing with the large-scale producers have suffered severely.
- **Problem of power –** power supply is not always, everywhere, available to the small industry on the mere asking, and wherever it is available, it is rationed out, limited to a few hours in a day.

    Unlike large industries the SSIs cannot afford alternatives, like installing own thermal units, because of heavy costs involved.
- **Problem of marketing -** Most of the SSIs, except a few urban-based units which act as ancillaries to the large industry, are forced to restrict their sales to the local market. Furtheron, in the post-WTO scenario SSIs would have to face increasing competition from imports.

    In addition, ancillary industries have their own problems, like:
    - Delayed payments by parent units,
    - Inadequacy of technological support extended and / or supply of critical raw materials by parent units,
    - Non-adherence to quality and delivery schedules, thus disturbing the programme of the parent units,
    - Frequent chances in fiscal levies, and
    - Absence of a well-defined pricing system and regulatory agency.

- **Problem of Technical Know-How** - Except for a small segment of modern small-scale industry that makes use of state of art technology, the sector is saddled with obsolete technology.

  Further, there is a growing tendency for small units to go in for capital-intensive and labour-saving techniques of production, defeating the very concept and the very justification of small units. This can be attributed in a large measure to entrepreneurs' fear of getting involved in employment-related laws and of getting victimised.
- **Exogenous Forces** – The exogenous forces acting on SSI performance are both direct and indirect. They come from multiple sources and influence the policy environment within which the SSIs operate. Such forces are exposing SSIs to a world of intense competition, risks and uncertainties, technological progress, mandatory and voluntary standards. Some of these exogenous forces are as under:
  - Advancement in generic technology of computers and telecommunications
  - Rise in E-commerce
  - Globalisation and liberalisation policies including unilateral liberalisation
  - Multilateral trading rules under the WTO
  - Bilateral / regional agreements
  - Mergers and acquisitions
  - Labour and environmental standards
  - Growth in world demand for variety of services, such as web-marketing, market research-based advertising, customised products, micro retail marketing, etc.

    Two important consequences of these have been

    i. closure of a large number of units, and

    ii. growing shift from manufacturing to service activities.

SSIs constitute an important segment of the Indian economy. It is admitted that some of the problems facing SSIs are a part of the problems being faced by the economy in general, but the other problems of SSIs are due to their peculiar character. The State's role would very much be called for to remove the disadvantages arising out of such peculiarities.

33. What are the Suggested Remedies for SSIs

i. Steps to improve managerial efficiency

ii. Steps up improve the skill-base

iii. Steps to encourage inter-industry linkages

iv. Need to create new markets

v. Need for up-to-date market intelligence

vi. Need to adopt low-cost automation

vii. Need to spread globalising technology

34. Explain New Industrial Policy, 1991.

Making a sharp departure from the Industrial Policy Resolution, 1956, the Government announced a New Industrial Policy (NIP) on July 24, 1991. The basic philosophy of new policy has been summed up as: ‘continuity with change’.

Objectives

- To consolidate the strengths built up during the last four decades of economic planning and to build on the gains already made;
- To correct the distortions or weaknesses that may have crept in the industrial structure as it has developed over the last four decades;
- To maintain a sustained growth in the productivity and gainful employment; and
- To attain international competitiveness.

The pursuit of these objectives will be tempered by

- the need to preserve the environment, and
- the need to ensure the efficient use of available resources.

Important policy changes in the NIP 1991, are in the avenues of industrial licensing policy, foreign investment, and foreign technology agreements, etc.

35. Explain the role of Large-Scale Industries.

The important industries are Iron and Steel, Cotton Textiles, Jute, Sugar, Cement, Paper and Petro-Chemicals. These industries occupy an important position in the country. Their production ranges from basic producer goods, such as cement and iron and steel, to most important consumer goods – cotton textiles and sugar. Thus, the growth of these industries provides a fair understanding of industrial growth on the one hand and the relationship between Government policies and their growth on the other.

The Iron and Steel Industry

The rapid development of steel capacity is indeed a logical corollary of any programme of rapid industrialisation for a developing country. Steel is used as a basic material in the manufacture of metal products, electrical machinery, transport equipment, textile and other machinery. India has many intrinsic advantages in the production of steel. Some of the richest iron ore mines with the highest iron content are to be found in India. What is more, coal and iron ore are found in close proximity to each other.

The industry provides direct employment to 2.5 lakh workers. In spite of the tremendous importance given to the iron and steel industry and the heavy investment made, it is a pity that the country had to import increasingly large amount of steel – the magnitude of imports of finished steel was 6.83 million tonnes in 2011-12.

According to World Steel Association, India has been ranked among the world's top 10 producers of crude steel. Though it is a good achievement but we have miles to go before we reach the level of Japan and China.

World's Top Crude Steel Producers

(Production in million tonnes)

Country	2012
China	716.5
Japan	107.2
United States	88.6
India	**76.8**
Russia	70.6

Source: Annual Report, Ministry of Steel 2012-13.

Datt & Sundharam (2013), Indian Economy, 68th Revised Edition, S. Chand & Company Pvt. Ltd., New Delhi.

Production in Steel Industry

(million tonnes)

Year	Finished Steel
1950-51	1.0
1990-91	9.6

2000-01	30.3
2010-11	66.0

Source: Economic Survey, 2012-13

RBI Handbook of Statistics on the Indian Economy – 2009-10.

Datt & Sundharam (2013), Indian Economy, 68th Revised Edition, S. Chand & Company Pvt. Ltd., New Delhi.

Initially, the development of the steel industry was regarded as a opportunity and a challenge. In a way, the iron and steel industry has made considerable progress – from 1 million ton of finished steel in 1950-51 to 66.0 million tonnes in 2010-11.

An important feature of the growth of iron and steel industry is the growth of research, design and development within the country. India is self-reliant and is now in a position to set up new steel plants without depending on foreign countries. Moreover, the Government gave licences to set up electric arc furnace units – popularly known as mini steel plants. They account for 30 per cent of the steel production in the country, producing mild steel as well as alloy steel. There are 179 mini-steel plants with a total capacity of 5.6 million tonnes.

The Cotton and Synthetic Textile Industry

The organised cotton textile industry is one of our oldest and most firmly established major industries. There are about 1,100 mills in the country (900 spinning mills and 200 composite mills) with 28 million spindles and 2 lakh looms.

The structure of the textile industry is extremely complex with the modern, sophisticated and highly mechanised mill sector on the one hand and the hand spinning and hand-weaving (handloom) sector on the other; in between falls the decentralised small scale powerloom sector. If we include all the three sectors, the cotton and synthetic textile industry in India is the largest industry in the country, accounting for about 20 per cent of the industrial output, providing employment to over 20 million persons and contributing around 12 per cent of the total export earnings. The textile industry is one in which India has an opportunity for success on a global scale, given the low cost of labour.

The Indian textile industry is predominantly cotton based with 65 per cent of the cloth production in the country being accounted for by cotton. Production of raw cotton varies from year to year depending upon rainfall and weather conditions, and fluctuations in raw cotton affect the industry.

Production of yarn is almost entirely in the organised sector and over the years, it has been showing a steadily rising trend – as for example, from 550 million kg. in 1950-51 to over 7,052 million kg. in 2011-12. The fabric production has also recorded an increasing trend over the years – from 4,740 million meters in 1950-51 to 60,453 million meters in 2011-12.

The Sugar Industry

India is the fourth major sugar producing country in the world, the first three being Cuba, Russia, and Brazil in that order. India has now emerged as the largest sugar producing country in the world, with a 22 per cent share of the world's sugar production. Sugar industry is the second largest agro-based industry in the country. It ranks third largest industry in terms of its contribution to the net value added by manufacture and employs nearly 3.25 lakh workers, besides creating extensive indirect employment for 45 million farmers of sugarcane, the various agencies of distributive trade and through subsidiary industries such as confectionary.

Sugarcane cultivation accounts for 3 per cent of total cultivated area and contributes 7.5 per cent of the gross value of agricultural production. It is also an important source of excise duty for the Central Government. There are now 571 sugar factories in India with a total installed capacity of 30 million tonnes.

During the 1950's production of sugar was little more than one million tonnes, it further rose to 24.3 million tonnes in 2010-11.

Production of Sugar in India

(in million tonnes)

Year	Production
1950-51	1.1
1990-91	11.8
2000-01	18.5
2010-11	24.3

Source: Economic Survey 2012-13.

Hand book on Indian Economy 2010-11.

Datt & Sundharam (2013), Indian Economy, 68th Revised Edition, S. Chand & Company Pvt. Ltd., New Delhi.

The Cement Industry

The foundation of a stable Indian cement industry was laid in 1914 when the Indian Cement Company Ltd. Manufactured cement at Porbundar in Gujarat. Today India is second largest producer of cement, next to China. There are 139 large cement units and 365 mini-cement plants with a total installed capacity of 230 million tonnes and actual production of nearly 224 million tonnes in 2011-12. Over two lakh persons are employed in the industry. The per capita consumption of cement in India, however, is one of the lowest in the whole world – 136 kgs. in 2011-12 as compared to world average of 508 kgs.

Performance of the Cement Industry

Year	Installed Capacity	Production	Production as a percentage of capacity
1950-51	3.3	2.7	82
1990-91	64.0	48.8	76
2003-04	151.7	117.0	77
2011-12	330.0	223.5	68

Source: RBI, Report on Currency and Finance, 1997-98.

Hand book of Statistics on Indian Economy 2011-12.

Economic Survey 2012-13.

Datt & Sundharam (2013), Indian Economy, 68th Revised Edition, S. Chand & Company Pvt. Ltd., New Delhi.

The cement industry has recorded continuous growth since 1990-91. The average annual growth rate of production of cement has fluctuated violently due to unimaginative Government policy on control and distribution of cement. But the industry has maintained an upward trend throughout. From 1990-91 to 2011-12 average annual rate of growth of cement industry has been 7.5 per cent per annum.

Centralisation of Ownership in the Cement Industry

In no other industry of India is there grater centralisation of ownership and control than in the cement industry. The public sector, the A.C.C., the Dalmia Jain and the Birlas control bulk of the cement units. The centralisation of ownership and control has inevitably led to the financial and administrative integration of different cement factories, thus exerting profound influence on the size of individual units.

In recent years, mergers and acquisition have been quite significant in the cement industry. The leaders in the industry have found it economical to acquire an existing under-utilised or ill-managed company rather than float a new company.

Diversified over the country

The industry is well diversified over all the states of India and in close proximity of railway lines so that the industry shows a tendency of regional dispersal of productive activity. However, as late as 1980, cement factories were largely concentrated in the southern and western regions of the country. For example, the northern and eastern regions produce about 21 per cent of the total output but consume 44 per cent of the total output. On the other hand, southern and western regions produce 79 per cent of the output and consume only 56 per cent of the total output.

Cement is a key factor in economic development. There has been huge increase in the demand for cement in house construction, road construction, etc. There is great scope for increase in export of cement. The industry has tremendous potential for development as limestone of excellent quality is found almost throughout the country.

New Economic Policy 1991

[Liberalisation, Privatisation and Globalisation (LPG)]

New Economic Policy – Economic Reforms Programme

The Economic Reforms Programme (ERP) envisages rapid industrialisation with modernisation for attaining faster growth of GDP. The conditions which the ERP introduces for this kind of industrialisation and growth are:

- Substitution of the market and of private enterprise for planning and public sector leadership in industry;
- Orientation towards export production in place of import substitution;
- Removing the capital goods industries bias in resource allocation and letting the market do the allocation.

Background

The regime of economic planning in India began about six and a-half decades ago. It began with a glorious vision of a resurgent India marching firmly on the path of progress while ensuring an equitable distribution of the nation's wealth. Until July 1991, the Government had pursued a package of conservative macro-economic policies.

- Fiscal policy aimed at mobilising resources from the private sector to finance development programmes and public investment in infrastructure.
- Monetary policy sought to regulate financial flows in accordance with the needs of the industrial sector and keep the rate of inflation under control.
- Foreign trade policy was formulated to protect domestic industry and keep the trade balance in manageable limits.

The macro-economic policy achieved may of its objectives.

However, economic imbalances grew to critical levels. The inevitable compromises which had to be made in order to bridge the gap between that vision and the reality of our limitations took the economy towards the misguided alternative of deficit financing. A monetised deficit quickly works itself through the foreign trade multiplier into a current account deficit in the Balance of Payment (BOP). As a rising BOP deficit cannot be financed beyond a point, it would result in a haemorrhage of the foreign exchange reserves which then makes it necessary to adopt measures to adjust for the monetisation of the budget deficit.

The fiscal adjustment requires a slow down of the economy as the public sector, given its role as a prime mover, inevitably reduces its activity. Thus, the tyranny of the twin deficits held sway and any sustained revival of growth was quickly punctured as the fiscal expansion would reflect in a monetisation which in turn would result in a widening of the current account deficit. Thus, the economy was caught in the vice of the twin deficits. The factor responsible for this situation could be identified as:

- Excess of consumption and expenditure over revenue, resulting in heavy Government borrowing;
- Growing inefficiency in use of resources;
- Over-protection;
- Mismanagement of the firms and the economy;
- Various distortions like poor technological development and a shortage of foreign exchange.

To this catalogue may be added another factor:

- Imprudent borrowing from abroad, and

- Mishandling and mismanagement of foreign exchange reserves.

Policy response

To meet the situation it came to be widely agreed that the policy should be crafted along the following lines:

- The crises has to be met by well-coordinated structural reforms. Mere short-term adjustment to tackle these problems may ultimately lead to long-term imbalance and may push the economy in greater critical position than the present economic crisis. We cannot, therefore, overlook or defer the basic structural reforms necessary to overcome the concealed structural deficiencies in our development process.
- What is required is a growth-oriented adjustment as growth cannot be sacrificed at the alter of adjustment.
- The central point of structural reforms has to be the restoration of fiscal balance to contain inflation and to relive pressure on the BOP not only from the angle of long-run sustainability of development but also from the even distribution of costs and benefits of the development process to the development process to the vast majority of population.

In appreciations of these considerations, the reforms, since July 1991, have essentially followed the neo-classical paradigm. There has been a judicious blending of real sector policies designed to step up the momentum of growth with financial policies that ensure macroeconomic and financial stability. Thus, LPG.

36. What is Liberalisation ?

"It refers to reduce the restrictive and complex features of the licensing policy."

- **Privatisation**

  "It refers to any process that reduces the involvement of the State / public sector (otherwise more involvement of private sector) in economic activities of a nation to promote both economic efficiency and technical efficiency."

- **Globalisation**

  "It defined as a process associated with increasing economic openness, growing economic interdependence and deepening economic integration in the world economy." There are three economic aspects of this phenomenon:

- International trade,
- International investment, and
- International finance.

Economic openness also extends to flows of services, technology, information and ideas across national boundaries.

For the sake of brevity, India's model of economic reforms as compared with pre-reform approach to development can be summarised as given in table.

Model of Economic Management in India

Pre-Reform Strategies	Economic Reform Strategies
Closed economy	Open economy
Self-reliance	Integrate with world markets
State-led economic growth	Market-determined economic growth
Import substitution strategies	Export oriented strategies
Licence-dominated regime	Delicensing, deregulations, debureaucratisation
Frequent State interventions	Selective and effective State interventions
Politically administered prices	Market-determined prices at large
Not much concern for deficits	Contain all kind of deficits
Development by inflationary process	Deflationary monetary and fiscal policies
Public Sector Undertakings (PSUs) as engines of growth	Private investment as growth engine
Dominance of PSUs	Withdrawal from the areas of private interest
Philosophy of natural monopoly	Minimise gap between public and private sectors
Restrictions on Foreign Direct Investment (FDI) and Multi National Companies (MNCs)	Inducement of FDI and MNCs
Restrictions on currency movement	Liberalisation of restrictions
State-controlled interest rates	Deregulation of interest rates
State controlled credit	Credit policy reforms
Underdeveloped capital market	Reforms in capital market

Huge Public Sector Budgetary Resources (PSBR) liability on Government	Minimise PSBR
High tax rates	Tax reforms

Within the contours of this new model of economic management, we can enumerate the various measures of reforms as follows:

Economic Reform Measures

- **Exchange Rate Policy**

  After a steep devaluation of about 22 per cent vis-à-vis dollar in July 1991, the rupee was floated in phased manner. In March 1992, rupee was partially floated. This was followed by shift to market-determined rate of rupee in March 1993.

- **Fiscal Policy**

  Tax reforms aim at

  - reducing the dependence on indirect taxes for revenue,
  - reduction in tax rates (excise, customs, corporation tax, and personal income tax),
  - rationalisation (slabs for tax rates have been reduced to few levels from several levels), and
  - widening of tax base.

  Deficit reforms aimed at

  - reduction in the fiscal deficits, and
  - curtailing monetisation of budget deficits.

b.1. Impact of Fiscal Policy Reforms

- Falling interest rates have ensured that the cost of servicing huge public debt is more manageable than before.
- Debt management is more sophisticated – the Government raises more long-term debt today, while its dependence on short-term debt has fallen.
- Buoyant capital flows have helped fund the fiscal deficit with some ease.
- While the Government has been on a huge internal borrowing binge, external debt is well under control.

- **Monetary and Financial Sector Policy**

    - Objective has been to control inflation and stabilise the value of rupee in market system.
    - Broad money growth brought down to reasonable levels from previously high levels.
    - Reserve ratios for banks progressively reduced.
    - Banks selectively allowed to access the capital market.
    - New banks allowed to function parallel with the public sector banks.
    - Interest rates progressively deregulated.
- **Trade Policy and FDI Policy**
    - Tariffs progressively brought down (currently the average tariff rate is close to 10 per cent and maximum rate at 30 per cent).
    - All quantitative restrictions on imports have been removed.
    - Automatic approval is granted for foreign investment up to certain equity in selected sectors.
    - 100 per cent equity is also allowed in these and all other sectors, but requires case-by-case approval by the Foreign Investment Promotion Board.
- **Short-term Foreign Investment Policy**
    - Some restrictions exist on both inward and outward flows of short-term capital for loans, purchase of bonds and shares.
    - Since September 1992, Foreign Institutional Investors (FII) are allowed to invest in Indian capital market, but there are restrictions on acquisition of shares of companies by these investors.
    - Selected companies allowed to raise equity in the international markets.
    - Domestic residents and firms permitted to buy stocks and bonds, subject to ceilings, from international markets.

Source: http:// indmin.nic.in.

I. C. Dhingra, Indian Economy, 2013, Sultan Chand & Sons, Delhi.

GDP Growth at Factor Cost at 1999-00 Prices

Year	GDP (Rs. Crores)
at 1999-00 Prices	
1980-81	6,41,921
1990-91	10,83,572
2000-01	19,72,606
at 2004-05 Prices	
2004-05	29,67,599
2009-10	45,07,637
2010-11 (2RE)	48,82,249

37. Explain Five Year Plans in India.

Just after the attainment of independence the Prime Minister Nehru set up the Planning Commission in 1950 to assess the country's needs of material capital and human resources and to formulate economic plans for their more balanced and effective utilisation. The First Five-Year Plan commenced in 1951 and it was followed by a series of Five-Year Plans, since then 12 Five-Year Plans were implemented in India.

38. State the Objectives of Economic Planning in India .

- To increase production to the maximum possible extent so as to achieve higher level of national and per capita income;
- To achieve full employment;
- To reduce inequalities of income and wealth; and
- To set up a socialist society based on equality and justice and absence of exploitation.

39. Assess the Five Year Plans in India.

The First Five-Year Plan (1951-56) gave more importance for agricultural development so as to achieve food self-sufficiency in the shortest possible time and control of inflation. Of course the growth of agricultural products were considerably increased especially wheat and rice production. The Second Five-Year Plan (1956-61) framed by Prof. P. C. Mahalanobis and it gave considerable importance for basic and heavy industries, this was also achieved by this plan period. However, the Third Five-Year Plan (1961-66) was faced may difficulties because India-China war in 1962 and India-Pakistan war in 1965. As a result, this plan was failed and thereafter 3 Annual Plans executed from 1966-67 to 1968-69 and these years called as 'Plan Holidays'.

The Fourth Plan (1969-74) set before itself two principal objectives of "growth with stability" and "progressive achievement of self-reliance". The Fifth Plan (1974-79) emerged with the slogan of "growth with social justice". The Fifth Plan prepared and launched by D. P. Dhar proposed to achieve the two main objectives, viz., removal of poverty and attainment of self-reliance, through promotion of higher rate of growth, better distribution of income and a very significant step-up in the domestic rate of saving. The Fifth Plan, however, was terminated by the Janata Party at the end of the fourth year of the Plan in March 1978.

There were two Sixth Plans. The Janata Party Sixth Plan (1978-83) openly praised the achievements of economy in terms of self-reliance and modernisation. After the defeat of the Janata Party, the Congress came to power in 1980 and decided to have new Sixth Plan (1980-85) by aiming at a direct attack on the problem of poverty by creating conditions of an expanding economy.

The Seventh Five Year Plan (1985-90) was introduced in April 1985, after the country had enjoyed a reasonable rate of economic growth of the order of 5.4 per cent during the Sixth Plan. The objectives of this Plan were accelerate the growth in foodgrains production, increase employment opportunities and raise productivity.

The approach to the Eighth Five Year Plan (1990-95) was approved in September 1989 and the Eighth Plan was to be introduced in April 1990. However, there were a series of changes in Government at the Centre, necessitating constant reconstitution of the Planning Commission and preparation of a series of versions of the "approach" to the Eighth Plan.

Finally, the fourth version of the Eighth Plan (1992-97) was approved at a time the country was going through a severe economic crisis caused by a balance of payments crisis, a rising debt burden, ever-widening budget deficits, mounting inflation and recession in industry. The Narasimha Rao Government initiated the process of fiscal reforms as also of economic reforms with a view to provide a new dynamism to the economy. The Eighth Plan reflected these changes in its attempt to accelerate economic growth and improve the quality of life of the common man.

The Ninth Plan prepared under the United Front Government was released in March 1998. The same was modified and approved by the National Developmental Council (NDC) in February 1999, nearly two years after its implementation from April 1, 1997. The focus of the Ninth Plan was on "Growth with Social Justice and Equality". It aimed at achieving GDP growth of 7 per cent per annum, however, the Plan failed to achieve the GDP growth target of 7 per cent and realised only 5.35 per cent average GDP growth.

The Tenth Plan (2002-07) has targeted at 8 per cent GDP growth for its period. Further, it also includes enhancement of human well being, and the expansion of economic and social opportunities for all individuals and groups and greater participation in decision making.

The Eleventh Plan (2007-12) document is titled "Towards faster and more Inclusive growth". The plan envisages a high growth of GDP of the order of 9 per cent for country as whole.

Vision of the Eleventh Plan

The broad vision of the 11th Plan includes several inter-related components.

- Rapid growth that reduce poverty and creates employment opportunities;
- Access to essential services in health and education especially for the poor;
- Empowerment through education and skill development;
- Extension of employment opportunities using National Rural Employment Guarantee Programme;
- Environmental sustainability;
- Reduction of gender inequality; and
- Improvement of governance.

It is, thus, clear that the approach to each Plan-reflect the current state of the economy and the economic thinking of the Party in power and of the planners in the Planning Commission.

Growth Performance in the Five Year Plans

It is clear that the actual growth rates was less than the target from the Second Plan onwards and particularly during the Third and Fourth Plans. But from the Fifth Plan onwards, there has been a steady improvement in GDP growth from 4.8 per cent per annum during the Fifth Plan to 6.8 per cent during the Eighth Plan. This was indeed a healthy development. However, GDP growth rate declined to 5.4 per cent in the Ninth Plan. During 10th Plan and 11th Plan we find higher GDP growth at 7.5 per cent and 8.3 per cent respectively. However it was lower than targeted per cent growth.

Growth Performance in the Five Year Plans (at 1993-94 prices)

(in per cent)

Plan	Duration	Target	Actual
First Plan	1951-56	2.1	3.6
Second Plan	1956-61	4.5	4.1
Third Plan	1961-66	5.6	2.8
Fourth Plan	1969-74	5.7	3.3
Fifth Plan	1974-79	4.4	4.8
Sixth Plan	1980-85	5.2	5.7
Seventh Plan	1985-90	5.0	6.0
Eighth Plan	1992-97	5.6	6.8
Ninth Plan	1997-2002	6.5	5.4
Tenth Plan	2002-07	8.0	7.5
Eleventh Plan	2007-12	9.0	8.3

Note: The growth targets of the first three Plans were set with respect to national income.
In the Fourth Plan, it was with the NDP.
In all the subsequent plans, the GDP has been used.

Source: Planning Commission, Ninth Five Year Plan (1997-2002), Vol. I and Tenth Five Year Plan (2002-07), CSO, Press Release 31st May 2012.

The Twelfth Five Year Plan period is 2012-17, however, in the course of its second year the Planning Commission abolished. The reason for behind this was, the fund transferred by planning commission to the States were ‘discretionary transfer’, thus, there is no any constitutional rights to claim the fund.

Moreover, the Planning Commission was done the duplication of work, which means there is a ‘statutory transfer’ availed to the States, transferred by ‘Finance Commission’, consequently, Finance Commission, economists, scholars and many ruler of States are opposed the Planning Commission transfer.

In addition to this the Union Minister of Finance is announced in its budget speech that the distinction of ‘Plan’ and ‘Non-plan expenditure’ is meaningless, therefore, there is no space for this type of classification of expenditure in the forthcoming years.