B.A. (ECONOMICS) SYLLABUS
Semester - IV
INDIAN ECONOMY
Discipline Specific Elective - Paper – IV

Module I: Structure of the Indian economy:

Indian Economy at the time of Independence. Changes in the Composition of National Income and Employment. Natural Resource base: Land, Water, Forest, Mineral and Metal Resources. Population: Size, Growth and Composition and their implications for Indian economy.

Module II: Indian Agriculture:

Importance and Role of Agriculture. Trends in Agricultural Production and Productivity. Land Reforms. Greeen Revolution. Agricultural Finance. Agricultural Marketing. Agricultural Price Policy. Food Security in India.

Module III: Indian Industry and Services:

Role and Importance of Industrialization. Trends in Industrial Production and Services. Industrial Policy Resolutions: 1956, 1991 The Role of Public and Private Sectors. Formal and Informal Sectors in Industry and Services

Module IV: NIIT AAYOG

Demise of planning commission. Genesis of NITI Aayog: structure and composition of NIIT Aayog, Functions and objectives of NIIT Aayog, Differences between NIIT Aayog and planning commission, Economic prism- cooperative federalism platform for interface between Centre and State. NIIT Aayog role in strategic planning and innovation and knowledge hub. Challenges ahead.

Module I: Structure of the Indian economy:

Q.1.Discuss the Status of Indian Economy under the British rule ?

Introduction:

On the eve of independence, Indian economy was underdeveloped economy. As an underdeveloped economy, Indian economy had the following features:

(i) Low Per Capita Income:

Underdeveloped economies have low per capita income. India has no exception to it. In 1947-48, per capita income was Rs. 230. People were poor. They were not getting fair square meals a day. They had no shelter and clothing. Most of the people were unemployed.

(ii) Poor Infrastructure:

On the eve of independence infrastructural development which comprised of communication and transport and electricity etc. was very poor. In 1948, power generation capacity was nearly 2100 MW; length of railway lines was 53,596 Kms.

(iii) Dependence on Imports:

The country had to heavily depend on imports. Armed forces of the country also depended on foreign imports. Moreover, several consumer goods like sewing machines, medicines, oil, bicycles etc. were imported from abroad.

(iv) Illiteracy:

Illiteracy was both cause and effect of poverty. Due to illiteracy, people were unable to use new techniques in agriculture and industry. They were unable to organize trade and commerce on modern lines. In 1948, rate of illiteracy was 18%. Thus 82% of the population was illiterate.

(v) Agricultural economy:

Indian economy was predominantly agricultural. In 1948, about 70% population was engaged in agriculture. Moreover, agriculture constituted 50% of national income. But agriculture itself was backward. Regarding productivity, it was 110 kg/hectare for rice in 1947 as against 748 kg in Japan.

(vi) Low Development of Industries:

There was very little development of industries. Large industries used to produce consumer goods. Basic and key industries were very less in number. In 1947, cement production was 26 lakh tonnes, of sugar 10 lakh tonnes and that of cloth just 421 crore meter.

2. Stagnant Economy:

During the British period, Indian economy remained almost stagnant. There was very slow growth of economy. This was clear from the fact that for almost a century, the average annual growth rate of per capita income in India was not more than 0.5%.

The high growth rate of population tended to make it difficult to maintain even the proposed growth rate. In fact poverty was widespread and about 40% people were living below poverty line.

The causes of stagnation and backwardness are laissez faire, commercialization of agriculture, neglect of irrigation, destruction of cottage and handicraft and economic drainage and discriminatory tariff policy.

3. Semi-Feudal Economy:

During the British rule, Indian economy had a mixed mode of production. Feudalism was more prominent than other modes of production.

A substantial developed capitalistic sector had emerged. Handicraftsmen had lost their independent status and were engaged in a simple commodity production. Bonded labour force was prevalent in agriculture. Primitive social organizations existed in areas inhabited by the tribal.

4. Depreciated Economy:

On the eve of Independence Indian economy was depreciated. In every economy, extensive use of factors of production, inevitably leads to their wear and tear. If no arrangements are made to replace the depreciated factors then the stock of gross capital declines.

This results into the fall in production capacity. Such an economy is called depreciated economy. After World War II Indian economy also turned into depreciated economy.
During World War II India had supplied large quantity of goods to Britishers. India was paid for it in terms of sterling. But due to lack of real capital, its production capacity declined.

5. Pre-dominance of Agriculture:

Agriculture is the main sector of Indian economy, which is in total contrast to the economic structure of a developed economy. More than 70 per cent of the total population is engaged in agricultural activities while the picture is absolutely different in advanced countries.

According to Dr. Cloustone, “India has depressed classes, the tool has depressed industries and unfortunately, agriculture is one of them” Therefore, the essence of Indian economy is an agrarian economy.

6. Underutilized Natural Resources:

It has been rightly stated that India is a rich country inhabited by poor people. It means that the country possesses abundant stock of natural resources but the problem is that these resources are not fully utilized for the production of material goods and services. The result is poverty of the people. The vicious circle of poverty moves for year to year together.

7. Heavy Population Pressure:

Population is a major factor influencing the nature of a country’s economy. Over-population creates complex economic problems.

The income per capita is low, the efficiency of labour is not satisfactory and there is an acute housing shortage. Unemployment and low standard of living dominate the scene. In India, the rate of growth of population was about 1.25% per annum during 1941-51.

8. Capital Deficiency:

Deficiency of capital is another basic characteristic of Indian economy. In case of physical capital, its total stock is not adequate for equipping well to the entire labour force and full utilization of natural resources.

Similarly, human capital is far from satisfaction. The major reasons of low level of capital formation in India were (i) low inducement to invest and (ii) low propensity and capacity to save.

9. Famines:

In the pre-British period famines had been occurring. These famines showed an unbridled increase in the 18th and 19th centuries. Between 1765-1858 the country experienced 12 famines and 4 scarcities. Similarly, between 1860-1908, 20 famines spread their wings.

In 1943 Bengal famine shook the foundation of the country. William Digby estimated that during 1854-1901, 28.8 million persons died due to famines. In the famine of 1899-1900 2.5 million persons died of starvation.

10. Industrial Backwardness:

On the eve of independence Indian economy was backward from industrial point of view there was deficiency of basic and heavy industries. Among heavy industries, there was Tata Iron and Steel industry.

The production of machines in the country was negligible. Statistics reveal that in 1947 total production of iron & steel was 9 lakh tonnes.

11. Low Levels of Living:

India has been, and even today is one among the poorest countries of the world. Barma few rich, the common masses forced to lead a miserable life. Almost half of country's population is below the poverty line.

Quantity of goods available per head of population is meager and the quality is invariably indifferent. Nutritional content of consumption is grossly inadequate and hunger, starvation and disease are fairly widespread.

12. Lack of Social Overhead Capital:

Social Overhead Capital comprises of such industries which help in the growth of other industries. Social overhead capital or infrastructure as it is now called, includes such industries like railways and other means of transport, electricity and other sources of energy, communication, banking etc.

Unfortunately not much attention was paid to this during the British rule and consequently the development of industries in India remained slow and tardy.

13. Widespread Unemployment:

Unemployment in India is a direct outcome of rapidly increasing population. More people need more jobs but the underdeveloped economy of India cannot accommodate them. This naturally leads to widespread unemployment. Thus unemployment becomes an all round problem in the country.

14. Income Disparities:

The gap between wealth and poverty is exceedingly wide in India. A handful of rich persons get a relatively large share of the total income while the large mass of poor population gets a relatively small portion of it.

Inequalities of income distribution are to be observed both in the rural and urban sectors of the economy. Inequalities of income are to be seen in the form of unequal distribution of land in the agricultural sector and concentration of economic power in non-agricultural sector.

15. Absence of Enterprise and Initiative:

In India, enterprise and initiative are inhibited by the social system which denies opportunities for creative faculties.

The force of custom, the rigidity of status, absence of intellectual curiosity and distrust of new ideas, combine to create an atmosphere inimical to enterprise, experimentation and innovation. Whatever little entrepreneurship exists tends to become monopolistic and quasi-monopolistic.

Q: 2. Discuss the trends in national income of India since independence?

Introduction:

Each sector of the economy employs natural, human and material resources and contributes to the aggregate flow of goods and services during a given time period which may normally be specified as a year. The aggregate flow of goods and services represents the aggregate income earned by factors of production employed during the year, and is termed as national income or national product. The rate of growth of national income when compared with the rate of growth of population indicates whether the economy is declining, stagnant or developing.

ESTIMATION OF NATIONAL INCOME IN INDIA

In India, the first attempt to estimate national income and per capita income was made in the year 1867-68 by Shri Dadabhai Naoroji. This was followed by several intermittent efforts by individuals, officials as well as non-officials. Immediately after independence, the Government set up the National Income Committee in August, 1949 to prepare a report on national income and related estimates to suggest improvements in the collection of data, and to recommend guidelines for research in the field of national income. The First Report of the Committee was published in 1951, and the Final Report in 1954.

The task of preparing national income estimates has been assigned to the Central Statistical Organisation (CSO). The CSO has been producing annual official estimates of national income of India since 1955 and publishing the same in its annual report National Accounts Statistics. It is with the help of these data that we shall try to establish the trend in India's national income over the last fifty-five years.

Trends in National Income

National Income estimates are published annually by the Central Statistical Organization of the Government of India (CSO) in its publication 'National Accounts Statistics". The current series of national income estimates records India's national income since 1950-51 onwards. The estimates presented are of two types, viz.

Those based on current prices, i.e. the prices prevailing in the year to which the estimates relate and

Those based on specified base-year prices, popularly known as national income at constant prices.

The base year for the current series is 2004-05 till the year 2011-12. For years after 2011-12, as new series has been published and estimates for the later years are available with 2011-12 as the base year.

For the purpose of comparing national income and per capita incomes over different years, it is desirable to take into account only the estimates of national and per capita income at some constant base-year prices. This is so, because the national income figures at current year prices value the output of the year at the prices prevailing in that very year.

National Income (Net National Product at Factor Cost) & Per Capita Income in India 1950-51 to 2014-15

	National Income (Rs. Crore)		Per Capita Income (Rupees)	
Year	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices
Base Year 2004-05				
s1950-51	9829	269724	274	7513
1960-61	17062	411519	393	9482
1970-71	44550	596470	823	11025
1980-81	138565	795193	2041	11711
1990-91	526017	1342031	6270	15996
2000-01	1947788	2291795	19115	22491
2010-11	6942089	4657438	58534	39270
2011-12	8052996	4958849	66997	41255
Base Year 2011-12				
2011-12	7846531	7846531	64316	64316
2012-13	8841733	8193427	71593	66344
2013-14	10056523	8751834	80388	69959
2014-15	11217079	9400266	88533	74193

Source: Economic Survey 2014-15.

indicates that the national income of India, at 2004-05 prices, has grown form Rs. 2,55,405 crore in 1950- 51 to Rs. 45,72,075 crore in 2011-12. This indicates over sixtyfold rise in over sixty years. However, this growth has neither been uniform nor steady during this period.

Trends in Per Capita Income

The per capita income in India has not grown at a pace at which national income has risen over the past four decades. At 2004-05 prices, the per capita income in 1950-51 was Rs. 7,513. It has gone up only to Rs. 41,255 by the end of 2011-12. Under the new series per capita income increased from Rs. 64,316 in 2011-12 to Rs. 74,193 in 2014-15. There has, thus been only about six fold increase in per capita income over this long period of over six decades till 2011-12. The main reason for this slow growth is population explosion in India during this period.

Q: Explain Different types of Natural resources in India?

Introduction :

“Natural resources can be defined as the resources that exist (on the planet) independent of human actions.”

These are the resources that are found in the environment and are developed without the intervention of humans. Common examples of natural resources include air, sunlight, water, soil, stone, plants, animals, and fossil fuels.

The natural resources are naturally occurring materials that are useful to man or could be useful under conceivable technological, economic or social circumstances or supplies drawn from the earth supplies such as food, building and clothing materials, fertilizers, metals, water, and geothermal power. For a long time, natural resources were the domain of the natural sciences.

Based on the availability are two types of natural resources:

Renewable: Renewable resources are the ones that are consistently available regardless of their use. They can be fairly recovered or replaced after utilization. Examples include vegetation, water, and air. Animals can also be categorized as renewable resources because they can be reared and bred to reproduce offspring to substitute the older animals.

Non-Renewable: Non-renewable resources are the ones that cannot simply be substituted or recovered once they have been utilized or destroyed. Examples of such natural resources include fossil fuels and minerals. Minerals are categorized as non-renewable because, even though they take shape naturally through the rock cycle, their formation periods take thousands of years. Some animals mostly the endangered species are similarly regarded as non-renewable because they are at the verge of extinction

TYPES OF NATURAL RESOURCES

1. Land Resources
2. Forest Resources
3. Water Resources
4. Energy Resources

1.**LAND RESOURCES**:
Minerals, soil, agricultural crops, natural forest products, medicinal plants, and forest-based industries and livelihoods; Land cover, land use change, land degradation, soil erosion, and desertification; Causes of deforestation; Impacts of mining and dam building on environment, forests, biodiversity, and tribal communities

India has a total geographical area of about 328.73 million hectares but statistics pertaining to land utilization were available for about 305.90 million hectares in 2010-11**.**India has a varied land use pattern given the geographical diversity of the country.

Land use pattern in India is as follows:

- Net Sown Area is 46% of the total geographic area because of the extensive availability of flat terrain in India.
- About 22% area of the country is under forest cover.
- Barren and un-cultivable waste land amount to about 8.5%.
- About 5.5% is under non-agricultural uses like houses, industries, etc.
- Rest of the area is under tree crops, grooves, permanent pastures, and grazing lands, etc**.**

2. Forest Resources

It is important to note that area under actual forest cover is different from the area classified as forest. The latter is the area which the Government has identified and demarcated for forest growth. The land revenue records are consistent with the latter definition. Thus, there may be an increase in this category without any increase in the actual forest cover.

Area under forest cover was 40.41 million hectares in 1950-51 which increased to 69 million hectares in 1999-2000. The total forest cover of the country is 7, 12,249 sq km which is 21.67% of the geographical area of the country according to the India State of Forest Report (ISFR) 2019. Tree and forest cover together made up 24.56% (8, 07,276 sq km) of India's area. In the last assessment, it was 24.39%.

However, 24.39 present of forest land to the total reporting area is not sufficient for a tropical country like India where about 33 present of the total land should be under forests. This will require massive tree plantations, vigorous restrictions on the reckless felling of trees, reclaiming of forest area, etc. The increase in share under forest can be accounted for by an increase in demarcated area under forest rather than the actual increase in forest cover in the country.

3. Water Resources:

Water is an indispensable resource for life on earth. Approximately 70.8 % surface of earth is covered with water in the form of oceans. Out of this, about 97% is not fit for human consumption, about 2% is locked as a glacier and only less than 1% available as fresh water that can be used for human consumption and other uses.

India accounts for about 2.45 per cent of world's surface area, 4 per cent of the world's water resources and about 16 per cent of world's population. The total water available from precipitation in the country in a year is about 4,000 cubic km. The availability from surface water and replenish able groundwater is 1,869 cubic km. Out of this only 60 per cent can be put to beneficial uses. Thus, the total utilisable water resource in the country is only 1,122 cubic km.

Sector wise projected water demand in India (Press Information Bureau 2013)

Sector	**Water demand in bcm (Billion Cubic Metre)**					
	2010		**2025**		**2050**	
	High	Low	High	Low	High	Low
Irrigation	543	557	561	611	628	807
Drinking Water	42	43	55	62	90	111
Industry	37	37	67	67	81	81
Energy	18	19	31	33	63	70
Other	54	54	70	70	111	111
Total	694	710	784	843	973	1180

Rise in demand and development pressure changing the characteristics of water in India. The ground water is more depleted and less available and surface water is getting more and more polluted and unsuitable for human use. Good water quality is essential for human health as well as the ecosystem. However, to ensure sufficient healthy water to everyone is a big challenge now.

4. Energy Resources

Energy is a key input in the economic growth and there is a close link between the availability of energy and the future growth of a nation. Power generation and energy consumption are crucial to economic development.

In India, energy is consumed in a variety of forms such as fuel wood; animal waste and agricultural residues are the traditional sources of energy. These non-commercial fuels are gradually getting replaced by commercial fuels i.e. coal, petroleum products, natural gas and electricity.

Out of total energy, commercial fuels account for 60% where as the balance 40% is coming from non-commercial fuels. Of the total commercial energy produced in the form of power or electricity,

- 69% is from coal (thermal power),
- 25% is from hydel power,
- 4% is from diesel and gas, 2% is from nuclear power,
- Less than 1% from non- conventional sources like solar, wind, ocean, biomass, etc

Petroleum and its products are the other large sources of energy. In a developing country like India, in spite of enhanced energy production, there is still shortage due to increased demand of energy. In spite of the fact that there is a phenomenal increase in power generating capacity, still there is 30% deficit of about 2,000 million units

Use of Alternate Energy Sources

There is a need to develop renewable energy sources which are available and could be utilized (solar or wind) or the sources which could be created and utilized (bio-mass). The main renewable energy sources for India are solar, wind, tidal, waste and bio-mass. Biomass are resources which are agriculture related like wood, bagasse, cow dung, seeds, etc

Q: Discuss critically the relationship between the size of population and economic growth?

Introduction:

The issue of population and economic growth is as old as the discipline of economics itself. The debate on the relationship between population and economic growth could be traced back to 1798 when Thomas Malthus published the book "An Essay on the Principle of Population". Malthus claimed that there is a tendency for the population growth rate to surpass the production growth rate because population increases at a geometrical rate while production increases at an arithmetic rate. Population growth enlarges labour force and, therefore, increases economic growth. A large population also provides a large domestic market for the economy. Moreover, population growth encourages competition, which induces technological advancements and innovations.

Human resource makes use of other resources to produce goods and services. Neither other resources can become useful on their own nor can they use human resource. Therefore, human resource is the most crucial of all resources. Having said that, its clear that a large population can prove to be an asset as well as a liability for the economy depending upon how efficiently it is used. If due investment is done on Population it may turn into ***Human Capital*** otherwise a Liability that is difficult to sustain.

The relationship between the size of population and economic growth

1. As providers of factor services
2. As units of consumption.

Human Resources as Factor Services

These further include:

- **Minimum Scales of Production:** When we provide infrastructure, it has a fixed cost which must be distributed amongst a large population to make it economically viable. An economy like Canada can certainly grow at a higher rate with higher availability of labour. It is for this reason that these countries have lenient immigration rules.
- **Demographic Transition and Savings:** With the increase in population, the age composition of population also changes. It increases the labour force and decreases the number of dependent members. Therefore, savings also increase.
- **Capital Formation in Agriculture:** In agriculture, there is family labour that works on farm. With the increase in number of persons in the family, total labour hours will increase. It will increase agriculture human capital stock.
- **Labour Force Participation:** When there are more dependent members in the family, it motivates more women to work, postponement of retirement age, increasing number of child workers, and longer working hours for men all leading to increased participation of labour force.
- **Trade Specialization:** A labour abundant country can specialize in labour intensive industries and thereby increase its exports. Therefore, growing labour supply would enable the country to participate more in trade.
- **Technological Changes:** A higher population will be able to provide more options and it will increase the pace of technological progress.

A larger population can promote economic growth provided below conditions are existing:

- Existence of a variety of unutilized resources;
- Rising mobility of labour;
- Easier division of labour;
- An improvement in technology that facilitates better utilization of human resource.

Human Resources as Units of Consumption:

A rising population increases current consumption and reduces the capacity to save and capital formation. With the rising population, an economy has to import more of machinery, raw materials etc. to support their increasing population. However, in domestic economy, there will be greater demand for food, clothing and other necessities. Hence, such an economy with limited foreign exchange has to choose between imports of capital goods imports and the imports of necessities. Since both seem to be unavoidable, it chooses to bear trade deficit. If economy is not able to absorb its increasing population productively it will lead to unemployment either open or disguised. Unemployment will create its social and economic side effects. With increase in population, social overhead cost keeps increasing.

Q: Write an essay about Structure of Indian Economy? (Or) Explain Sectors of Indian Economy?

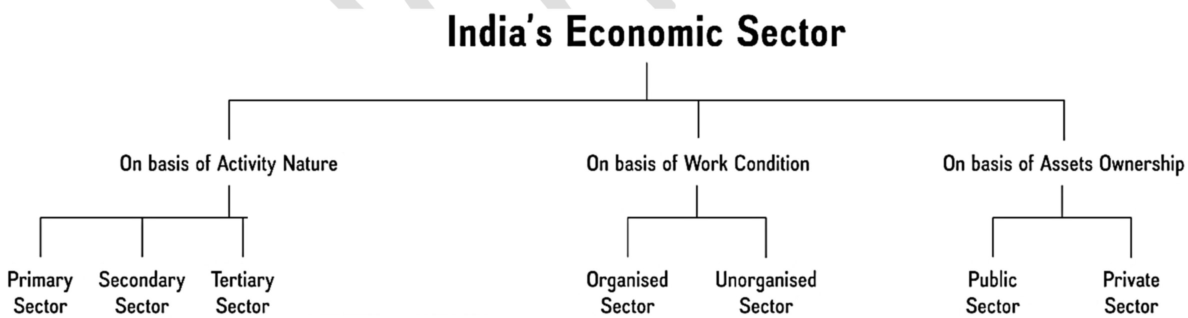
Introduction:

- India is the fastest growing large economy in the world, with an enormous population, favourable demographics and high catch-up potential due to low initial GDP per head.
- As per the World Bank data, in 2017, India became the sixth largest economy with a GDP of USD 2.59 trillion, relegating France to the seventh position.

- India is likely to surpass the United Kingdom in the world's largest economy rankings in 2019, according to a report by global consultancy firm PwC.
- According to World Economic Outlook report of IMF, India's economy is expected to grow by 7.5 per cent in the 2019-20 fiscal year, keeping an upward trajectory as the rest of the world slumps.
- According to report "India's economy is poised to pick up in 2019, benefiting from lower oil prices and a slower pace of monetary tightening than previously expected, as inflation pressures ease," the report said.
- As per Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation (MOSPI), the growth in GDP during 2018-19 is estimated at 7.2% as compared to the growth rate of 6.7 per cent in 2017-18.

Economic Sectors

- Economic activities result in the production of goods and services while sectors are the group of economic activities classified on the basis of some criteria.
- The Indian economy can be classified into various sectors on the basis of ownership, working conditions and the nature of the activities.
- All economic activity was in the primary sector during early civilisation. After the surplus production of food, people's need for other products increased which led to the development of the secondary sector.
- The growth of secondary sector spread its influence during the industrial revolution in the nineteenth century.
- A support system was needed to facilitate the industrial activity. Certain sectors like transport



Primary Sector

- In Primary sector of economy, activities are undertaken by **directly using natural resources**. Agriculture, Mining, Fishing, Forestry, Dairy etc. are some examples of this sector.
- It is called so because it **forms the base for all other products**. Since most of the natural products we get are from agriculture, dairy, forestry, fishing, it is also called Agriculture and allied sector.
- People engaged in primary activities are called **red-collar workers** due to the outdoor nature of their work.

Secondary Sector

- It includes the industries where finished products are made from natural materials produced in the primary sector. Industrial production, cotton fabric, sugar cane production etc. activities comes under this sector.
- Hence its the part of a country's economy that manufactures goods, rather than producing raw materials
- Since this sector is associated with different kinds of industries, it is also called **industrial sector**.
- People engaged in secondary activities are called **blue collar workers**.

Examples of manufacturing sector:

- ➢ Small workshops producing pots, artisan production.
- ➢ Mills producing textiles,
- ➢ Factories producing steel, chemicals, plastic, car.
- ➢ Food production such as brewing plants, and food processing.
- ➢ Oil refinery.

Tertiary Sector/Service Sector

- This sector's activities help in the development of the primary and secondary sectors. By itself, economic activities in tertiary sector do not produce a goods but they are an aid or a support for the production.
- Goods transported by trucks or trains, banking, insurance, finance etc. come under the sector. It provides the value addition to a product same as secondary sector.
- This sector jobs are called **white collar jobs**.

Organised Sector

- In this sector, employment terms are fixed and regular, and the employees get assured work and social security.
- It can also be defined as a sector, which is registered with the government and a number of acts apply to the enterprises. Schools and hospitals are covered under the organised sector.
- Workers in the organised sector enjoy security of employment. They are expected to work only a fixed number of hours. If they work more, they have to be paid overtime by the employer.

Unorganised Sector

- An unorganised worker is a home-based worker or a self-employed worker or a wage worker in the unorganized sector and includes a **worker in the organized sector who is not covered by any of the Acts pertaining to welfare Schemes as mentioned in Schedule-II of Unorganized Workers Social Security Act, 2008**.
- In this sector wage-paid labour is largely non-unionised due to casual and seasonal nature of employment and scattered location of enterprises.
- The sector is marked by low incomes, unstable and irregular employment, and lack of protection either from legislation or trade unions.

- The unorganised sector uses mainly labour intensive and indigenous technology. The workers in unorganised sector, are so scattered that the implementation of the Legislation is very inadequate and ineffective. There are hardly any unions in this sector to act as watch-dogs.
- But the contributions made by the unorganised sector to the national income, is very substantial as compared to that of the organised sector. It adds more than 60% to the national income while the contribution of the organised sector is almost half of that depending on the industry.

The Public Sector

- In the sector, government owns most of the assets and it is the part of the economy concerned with providing various governmental services.
- The purpose of the public sector is not just to earn profits. Governments raise money through taxes and other ways to meet expenses on the services rendered by it.

Classification of Central Public Sector Enterprises (CPSEs)

- CPSEs are classified into 3 categories- Maharatna, Navratna and Miniratna. Presently, there are 7 Maharatna, 16 Navratna and 71 Miniratna CPSEs.

The Private Sector

- In the private sector, ownership of assets and delivery of services is in the hands of private individuals or companies.
- It is sometimes referred as the citizen sector, which is run by private individuals or groups, usually as a means of enterprise for profit, and is not controlled but regulate by the State.
- Activities in the private sector are guided by the motive to earn profits. To get such services we have to pay money to these individuals and companies.

Module II: Indian Agriculture

Q: Discuss the role of Indian Agriculture sector in the Indian economy?

Introduction:

Agriculture plays a vital role in the Indian economy. Over 70 per cent of the rural households depend on agriculture. Agriculture is an important sector of Indian economy as it **contributes about 17% to the total GDP** and provides employment to over 60% of the population.

1. Contribution to National Income:

From the very beginning, agriculture is contributing a major portion to our national income. In 1950-51, agriculture and allied activities contributed about 59 per cent of the total national income. Although the share of agriculture has been declining gradually with the growth of other sectors but the share still remained very high as compared to that of the developed countries of the world. For example, the share of agriculture has declined to 54 per cent in 1960-61, 48 per cent in 1970-71, 40 per cent in 1980-81 and then to 18.0 per cent in 2008-09, whereas in U.K. and U.S.A. agriculture contributes only 3 per cent to the national income of these countries.

2. Source of Livelihood:

In India over two-thirds of our working population are engaged directly on agriculture and also similarly depend for their livelihood. According to an estimate, about 66 per cent of our working population is engaged in agriculture at present in comparison to that of 2 to 3 per cent in U.K. and U.S.A., 6 per cent in France and 7 per cent in Australia. Thus the employment pattern of our country is very much common to other under-developed countries of the world.

3. Source of Food Supply:

Agriculture is the only major source of food supply as it is providing regular supply of food to such a huge size of population of our country. It has been estimated that about 60 per cent of household consumption is met by agricultural products.

4. Role of Agriculture for Industrial Development:

Agriculture in India has been the major source of supply of raw materials to various important industries of our country. Cotton and jute textiles, sugar, vanaspati, edible oil plantation industries (viz. tea, coffee, rubber) and agro-based cottage industries are also regularly collecting their raw materials directly from agriculture.

About 50 per cent of income generated in the manufacturing sector comes from all these agro-based industries in India. Moreover, agriculture can provide a market for industrial products as increase in the level of agricultural income may lead to expansion of market for industrial products.

5. Commercial Importance:

Indian Agriculture is playing a very important role both in the internal and external trade of the country. Agricultural products like tea, coffee, sugar, tobacco, spices, cashew-nuts etc. are the main items of our exports and constitute about 50 per cent of our total exports. Besides manufactured jute, cotton textiles and sugar also contribute another 20 per cent of the total exports of the country. Thus nearly 70 per cent of India’s exports are originated from agricultural sector. Further, agriculture is helping the country in earning precious foreign exchange to meet the required import bill of the country.

6. Source of Government Revenue:

Agriculture is one of the major sources of revenue to both the Central and State Governments of the country. The Government is getting a substantial income from rising land revenue. Some other sectors like railway, roadways are also deriving a good part of their income from the movement of agricultural goods.

7. Role of Agriculture in Economic Planning:

The prospect of planning in India also depends much on agricultural sector. A good crop always provides impetus towards a planned economic development of the country by creating a better business climate for the transport system, manufacturing industries, internal trade etc.

Q: Explain the benefits and adverse consequences of green revolution in India?

Introduction:

- The Green Revolution was an endeavour initiated by **Norman Borlaug** in the 1960s. He is known as the **'Father of Green Revolution'** in world. It led to him winning the **Nobel Peace Prize** in 1970 for his work in developing **High Yielding Varieties (HYVs) of wheat.**

In India, the Green Revolution was mainly led by **M.S. Swaminathan.** The Green Revolution resulted in a **great increase in production of food grains** (especially wheat and rice) due to the introduction into developing countries of new, high-yielding variety seeds, beginning in the mid-20th century.Its early dramatic successes were in Mexico and the Indian subcontinent.

- The Green Revolution, spreading over the period from 1967-68 to 1977-78, changed India's status from a food-deficient country to one of the world's leading agricultural nations.

Objectives of Green Revolution

- **Short Term:** The revolution was launched to address India's hunger crisis during the **second Five Year Plan.**
- **Long Term:** The long term objectives included overall agriculture modernization based on rural development, industrial development; infrastructure, raw material etc.
- **Employment:** To provide employment to both agricultural and industrial workers.
- **Scientific Studies:** Producing stronger plants which could withstand extreme climates and diseases.
- **Globalization of the Agricultural World:** By spreading technology to non-industrialized nations and setting up many corporations in major agricultural areas.

Basic Elements of the Green Revolution

- **Expansion of Farming Areas:** Although the area of land under cultivation was being increased from 1947 itself, this was not enough to meet the rising demand.
  - The Green Revolution provided assistance in this quantitative expansion of farmlands.
- **Double-cropping System:** Double cropping was a primary feature of the Green Revolution. The decision was made to have two crop seasons per year instead of just one.
  - The one-season-per-year practice was based on the fact that there is only one rainy season annually.
  - Water for the second phase now came from huge irrigation projects. Dams were built and other simple irrigation techniques were also adopted.
- **Using seeds with improved genetics:** Using seeds with superior genetics was the scientific aspect of the Green Revolution.
  - The **Indian Council for Agricultural Research** developed new strains of high yield variety seeds, mainly wheat and rice, millet and corn.
- **Important Crops in the Revolution:**
  - Main crops were Wheat, Rice, Jowar, Bajra and Maize.
  - Non-food grains were excluded from the ambit of the new strategy.
  - Wheat remained the mainstay of the Green Revolution for years.

Background of Green Revolution in India

- In 1943, India suffered from the world's worst recorded food crisis; **the Bengal Famine,** which led to the death of approximately 4 million people in eastern India due to hunger.

- Even after independence in 1947, until 1967 the government largely concentrated on expanding the farming areas.
    - But the population was growing at a much faster rate than food production.
- This called for an immediate and drastic action to increase yield. The action came in the form of the Green Revolution.
- The green revolution in India refers to a period when **Indian Agriculture was converted into an industrial system** due to the **adoption of modern methods and technology** such as the use of HYV seeds, tractors, irrigation facilities, pesticides and fertilizers.
- It was funded by the US and the Indian Government and the Ford and Rockefeller Foundation.
- The Green Revolution in India is largely the Wheat Revolution as the wheat production increased by more than three times between 1967-68 and 2003-04, while the overall increase in the production of cereals was only two times

Benefits of Green Revolution

- **Tremendous Increase in Crop Produce:** It resulted in a grain output of 131 million tonnes in the year 1978-79 and established India as one of the world's biggest agricultural producers.
    - The crop area under high yielding varieties of wheat and rice grew considerably during the Green Revolution.
- **Reduced Import of Food-Grains:** India became self-sufficient in food-grains and had sufficient stock in the central pool, even, at times, India was in a position to export food-grains.
    - The per capita net availability of food-grains has also increased.
- **Benefits to the Farmers:** The introduction of the Green Revolution helped the farmers in raising their level of income.
    - Farmers ploughed back their surplus income for improving agricultural productivity.
    - The big farmers with more than 10 hectares of land were particularly benefited by this revolution by investing large amounts of money in various inputs like HYV seeds, fertilizers, machines, etc. It also promoted capitalist farming.
- **Industrial Growth:** The Revolution brought about large scale farm mechanization which created demand for different types of machines like tractors, harvesters, threshers, combines, diesel engines, electric motors, pumping sets, etc.
    - Besides, demand for chemical fertilizers, pesticides, insecticides, weedicides, etc. also increased considerably.
    - Several agricultural products were also used as raw materials in various industries known as **agro based industries.**
- **Rural Employment:** There was an appreciable increase in the demand for labour force due to multiple cropping and use of fertilizers.
    - The Green Revolution created plenty of jobs not only for agricultural workers but also industrial workers by creating related facilities such as factories and hydroelectric power stations.

Consequences of Green Revolution

- **Non-Food Grains Left Out :** Although all food-grains including wheat, rice, jowar, bajra and maize have gained from the revolution, other crops such as coarse cereals, pulses and oilseeds were left out of the ambit of the revolution.
  - Major commercial crops like cotton, jute, tea and sugarcane were also left almost untouched by the Green Revolution.
- **Limited Coverage of HYVP:** High Yielding Variety Programme (HYVP) was restricted to only five crops: Wheat, Rice, Jowar, Bajra and Maize.
  - Therefore, non-food grains were excluded from the ambit of the new strategy.
    - The HYV seeds in the non-food crops were either not developed so far or they were not good enough for farmers to risk their adoption.
- **Regional Disparities:**
  - Green Revolution technology has given birth to growing disparities in economic development at interred and intra regional levels.
  - It has so far affected only 40 percent of the total cropped area and 60 per cent is still untouched by it.
  - The most affected areas are Punjab, Haryana and western Uttar Pradesh in the north and Andhra Pradesh and Tamil Nadu in the south.
  - It has hardly touched the Eastern region, including Assam, Bihar, West Bengal and Orissa and arid and semi-arid areas of Western and Southern India.
  - The Green Revolution affected only those areas which were already better placed from an agricultural point of view.
  - Thus the problem of regional disparities has further aggravated as a result of the Green Revolution.
- **Excessive Usage of Chemicals:** The Green Revolution resulted in a large-scale use of pesticides and synthetic nitrogen fertilisers for improved irrigation projects and crop varieties.
  - However, little or no efforts were made to educate farmers about the high risk associated with the intensive use of pesticides.
    - Pesticides were sprayed on crops usually by untrained farm labourers without following instructions or precautions.
  - This causes more harm than good to crops and also becomes a cause for environment and soil pollution.
- **Water Consumption:** The crops introduced during the green revolution were water-intensive crops.
  - Most of these crops being cereals, required almost 50% of dietary water footprint.
  - Canal systems were introduced, and irrigation pumps also sucked out the groundwater to supply the water-intensive crops, such as sugarcane and rice, thus depleting the groundwater levels.
    - Punjab is a major wheat- and rice-cultivating area, and hence it is one of the highest water depleted regions in India.

- **Impacts on Soil and Crop Production:** Repeated crop cycle in order to ensure increased crop production depleted the soil's nutrients.
    - To meet the needs of new kinds of seeds, farmers increased fertilizer usage.
        - The pH level of the soil increased due to the usage of these alkaline chemicals.
    - Toxic chemicals in the soil destroyed beneficial pathogens, which further led to the decline in the yield.
- **Unemployment:** Except in Punjab, and to some extent in Haryana, farm mechanization under the Green Revolution created widespread unemployment among agricultural labourers in the rural areas.
    - The worst affected were the poor and the landless labourers.
- **Health Hazards:** The large-scale use of chemical fertilizers and pesticides such as Phosphamidon, Methomyl, Phorate, Triazophos and Monocrotophos resulted in resulted in a number of critical health illnesses including **cancer, renal failure, stillborn babies and birth defects.**

Conclusion :

- Overall, the Green Revolution was a major achievement for many developing countries, specially India and gave them an unprecedented level of national food security.
    - It represented the successful adaptation and transfer of the same scientific revolution in agriculture that the industrial countries had already appropriated for themselves.
- However, lesser heed was paid to factors other than ensuring food security such as environment, the poor farmers and their education about the know-how of such chemicals.
- As a way forward, the policymakers must target the poor more precisely to ensure that they receive greater direct benefits from new technologies and those technologies will also need to be more environmentally sustainable.
    - Also, taking lessons from the past, it must be ensured that such initiatives include all of the beneficiaries covering all the regions rather than sticking to a limited field.

Q : Explain land systems and land reforms in India?

Introduction:

Under British Rule, there were three main types of land tenure systems in India. They were Zamindars, Mahalwari and Rayatwari. Zamindari: This system was introduced by Lord Cornwallis in Bengal in 1973. ... The system took were various forms such as Zamindari, Jagirdari, Inamdari, etc.

Land Revenue Systems in British India

Land revenue was one of the major sources of income for Britishers in India. There were broadly three types of land revenue policies in existence during the British rule in India.

Before independence, there were three major types of land tenure systems prevailing in the country:

1. The Zamindari System

2. The Mahalwari System
3. The Ryotwari System

The basic difference in these systems was regarding the mode of payment of land revenue.

1. The Zamindari System

The zamindari system was introduced by **Lord Cornwallis in 1793** through **Permanent Settlement** that fixed the land rights of the members **in perpetuity** without any provision for fixed rent or occupancy right for actual cultivators. Under the Zamindari system, the **land revenue was collected from the farmers by the intermediaries** known as **Zamindars.**

The share of the government in the total land revenue collected by the zamindars was kept at **10/11th,** and the remainder going to zamindars. The system was most prevalent in **West Bengal, Bihar, Odisha, UP, Andhra Pradesh and Madhya Pradesh.**

2. The Ryotwari System

In the British territories in southern India, there was a move away from the idea of Permanent Settlement. A system that came to be known as the **Ryotwari System,** was devised by **Captain Alexander Read and Sir Thomas Munro** at the end of the 18th century and introduced by the latter when he was **governor of Madras Presidency (1819–26).**

Under the Ryotwari system, the land revenue was paid by the farmers directly to the state. In this system, the Individual cultivator called **Ryot** had full rights regarding sale, transfer, and leasing of the land. it was prevalent in most of southern India, first introduced in Tamil Nadu. It was later extended to Maharashtra, Berar, East Punjab, Coorg and Assam. The advantages of this system were the elimination of middlemen, who often oppressed villagers.

3. The Mahalwari System

By the early 19th century, the Company officials were convinced that the system of revenue had to be changed again. The revenues cannot be fixed permanently at such a time when the Company needed more money to meet its expenses of administration and trade. In 1822, Englishman **Holt Mackenzie** devised a new system known as the Mahalwari System in the **North Western Provinces of the Bengal Presidency** (most of this area is now in Uttar Pradesh).

Under the Mahalwari system, the **land revenue was collected from the farmers by the village headmen** on behalf of the whole village (and not the zamindar).The entire village was converted into one bigger unit called **'Mahal'** and was treated as one unit for the payment of land revenue. The system was popularised by **Lord William Bentick in Agra and Awadh** and was later extended to **Madhya Pradesh and Punjab.**

A committee, under the Chairmanship of J. C. Kumarappan was appointed to look into the problem of land. The Kumarappa Committee's report recommended comprehensive agrarian reform measures.

The Land Reforms of the independent India had four components:

1. The Abolition of the Intermediaries
2. Tenancy Reforms
3. Fixing Ceilings on Landholdings
4. Consolidation of Landholdings.

These were taken in phases because of the need to establish a political will for their wider acceptance of these reforms.

1. Abolition of the Intermediaries

Abolition of the zamindari system: The first important legislation was the abolition of the zamindari system, which removed the layer of intermediaries who stood between the cultivators and the state.

The reform was relatively the most effective than the other reforms, for in most areas it succeeded in taking away the superior rights of the zamindars over the land and weakening their economic and political power.

The reform was made to strengthen the actual landholders, the cultivators.

Advantages:

i. The abolition of intermediaries made almost 2 crore tenants the owners of the land they cultivated.
ii. The abolition of intermediaries has led to the end of a parasite class. More lands have been brought to government possession for distribution to landless farmers.
iii. A considerable area of cultivable waste land and private forests belonging to the intermediaries has been vested in the State.
iv. The legal abolition brought the cultivators in direct contact with the government.

Disadvantages:

However, zamindari abolition did not wipe out landlordism or the tenancy or sharecropping systems, which continued in many areas. It only removed the top layer of landlords in the multi-layered agrarian structure.

It has led to large-scale eviction. Large-scale eviction, in turn, has given rise to several problems – social, economic, administrative and legal.

2.Tenancy Reforms

After passing the Zamindari Abolition Acts, the next major problem was of tenancy regulation.The rent paid by the tenants during the pre-independence period was exorbitant; between 35% and 75% of gross produce throughout India.

Tenancy reforms introduced to **regulate rent, provide security of tenure** and **confer ownership to tenants.**With the enactment of legislation (early 1950s) for regulating the rent payable by the cultivators, fair rent was fixed at 20% to 25% of the gross produce level in all the states except Punjab, Haryana, Jammu and Kashmir, Tamil Nadu, and some parts of Andhra Pradesh.

The reform attempted either to outlaw tenancy altogether or to regulate rents to give some security to the tenants. In West Bengal and Kerala, there was a radical restructuring of the agrarian structure that gave land rights to the tenants.

3.Ceilings on Landholdings

The third major category of land reform laws were the **Land Ceiling Acts.** In simpler terms, the ceilings on landholdings referred to **legally stipulating the maximum size** beyond which **no individual farmer or farm household could hold any land.** The imposition of such a ceiling was to deter the concentration of land in the hands of a few.

In 1942 the **Kumarappan Committee** recommended the maximum size of lands a landlord can retain. It was three times the economic holding i.e. sufficient livelihood for a family.By 1961-62, all the state governments had passed the land ceiling acts. But the ceiling limits varied from state to state. To bring uniformity across states, a new land ceiling policy was evolved in 1971.

In 1972, national guidelines were issued with **ceiling limits** varying from region to region, depending on the kind of land, its productivity, and other such factors.It was 10-18 acres for best land, 18-27 acres for second class land and for the rest with 27-54 acres of land with a slightly higher limit in the hill and desert areas.

With the help of these reforms, the state was supposed to identify and take possession of surplus lands (above the ceiling limit) held by each household, and redistribute it to landless families and households in other specified categories, such as SCs and STs.

4.Consolidation of Landholdings

Consolidation referred to reorganization/redistribution of fragmented lands into one plot. The growing population and less work opportunities in non- agricultural sectors, increased pressure on the land, leading to an increasing trend of fragmentation of the landholdings. This fragmentation of land made the irrigation management tasks and personal supervision of the land plots very difficult.

This led to the introduction of landholdings consolidation. Under this act, If a farmer had a few plots of land in the village, those lands were consolidated into one bigger piece of land which was done by either purchasing or exchanging the land. **Almost all states except Tamil Nadu, Kerala, Manipur, Nagaland, Tripura and parts of Andhra Pradesh** enacted laws for consolidation of Holdings.In Punjab and Haryana, there was compulsory consolidation of the lands, whereas in other states law provided for consolidation on voluntary basis; if the majority of the landowners agreed.

Need of re-consolidation: The average holding size in 1970-71 was 2.28 hectares (Ha), which has come down to 1.08 Ha in 2015-16.While Nagaland has the largest average farm size, Punjab and Haryana rank second and third in the list respectively.

The holdings are much smaller in densely populated states like Bihar, West Bengal and Kerala.The multiple subdivisions across generations have reduced even the sub divisions to a very small size.

Q: Explain Agriculture credit source in India?

Introduction:

In India, the finance in agricultural sector consists of different arms like **institutional bodies** (RBI, NABARD, Co-operative banks etc.), non- institutional players like money lenders, traders etc. and the government. ... Non-institutional sources of finance like money lenders, landlords, traders, commission agents etc

Features of Agricultural Finance In our country

Agricultural finance has the special features which are discussed below in detail:

1. Risks in Agriculture: In agriculture sector, it is difficult to foresee risks and uncertainties. A farmer has to face numberless risks and uncertainties as droughts, floods etc. It may cause considerable damage to the farmer

2. Difficulties of Co-operation in Agriculture: In agricultural sector, there is a very little scope of cooperation. It is so because, farmers are mostly individualistic and are suspicious of co-operating with each other for a common purpose. This creates difficulties to the farmers in getting cheap credit.

3. Economic Lags in Agriculture: In agricultural production process, there is a long interval between the reward and effort specially during the period when costs are incurred

4. Credit for Consumption Purpose: Indian farmers require credit not only for production purposes but also for consumption purposes. In the case of crop failure, small farmers need credit which they spend on consumption requirements.

5. Small Size of Farm: In India, size of farms is very small in comparison to the amount of labour employed and the extent of the capital invested. Moreover, there is no control over the yield and the quality of the produce. Thus, there is a lack of security to be offered for loans.

6. Lack of Proper Securities: The large farmers have their own resources which enable them to raise funds from the credit institutions. Small farmers find it extremely difficult to raise credit for their needs. It is due to the reason that small farmers neither possess proper securities to pledge against loans, nor they have adequate repaying capacity. As a result, small farmers are forced to go to the money lenders.

7. Complex of Many Industries: Agriculture is an industrial complex of varying types of production and marketing. The size of holdings and forms of land tenure differ from one area to another.

Need for Agricultural Finance

The need of finance for agriculture can hardly be over emphasized where its productivity is still low due to financial constraints. In this context, All India Rural Credit Survey has observed: “Agricultural credit is a problem when it cannot be obtained.

1. Productive and Unproductive Credit Needs: An agriculturist require credit for the purpose of production and consumption. In other words, credit needs of the farmers can be classified into two parts—(i) Credit needed for productive purposes; and (ii) Credit needed for unproductive purposes.

2. Credit Needs According to Purpose: According to Reserve Bank of India, credit needs can be classified by its purposes:

(i) For Meeting Family Expenditure: This type of credit is needed for purchase of domestic utensils and clothings, paying for medical, educational and other family expenses etc.

(ii) For Non-Farm Business Purpose: Such credit is required for the repair of production ad transport equipment, furniture, construction and repair of building or non-farm houses and other capital expenditure and non farms business.

(iii) For Agricultural Purposes: The farmers need credit for the purpose of seed, manure and fodder, payment of rent, wages, irrigation of crops, hire charges of pumps, purchase of livestock, repair of agricultural implements, land improvement, for laying of orchard and capital expenditure on agriculture.

(iv) Other Purposes: Such expenditure includes repayment of old debts, deposits with cooperative agencies, shares and unspecified purposes etc.

4.Credit Needs According to the Length of the Loan Period:

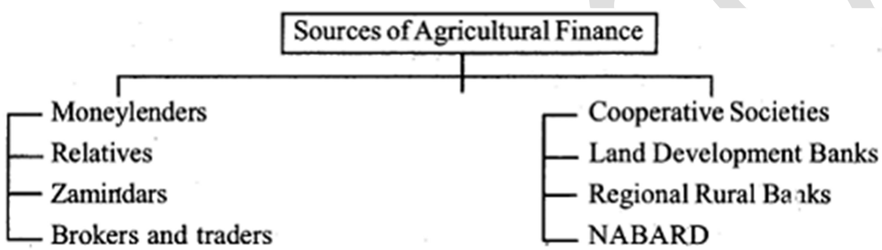
These credits of the farmers can be classified into three parts, short term credit, medium term credit and long term credit as under:

(i) Short Term Credit: These loans are needed for the purchases of seeds, fertilizers, pesticides, feed and fodder of livestock etc. The period of such loans is upto 15 months. The farmers also need these loans to support their family in those years when the crops have not been good enough. Main agencies for the grant of these loans are the money lenders and the co-operative societies. These loans may be both for productive as well as for unproductive purposes.

(ii) Medium Term Credit: Farmers generally obtain these loans for the purchase of cattle, small agricultural implements, repair and construction of wells, farm building and fencing etc. The period of these loans ranges between 15 months to 5 years. These loans are provided by money lenders, relatives of farmers and commercial banks etc.

(iii) Long Term Credit: It includes the loans for making improvement on land, purchase of expensive machinery, purchase of additional land, digging of wells and repayment of old debts etc. The amount involved in such loans is very large. The rate of interest on such loans is generally low. These loans are advanced for a long period ranging between 5 to 20 years.

Sources of Agricultural Finance



There are two broad sources of agricultural credit in India:

A. NON-INSTITUTIONAL SOURCES:

The non-institutional finance forms an important source of rural credit in India, constituting around 40 percent of total credit in India. The interest charged by the non-institutional lenders is usually very high. The land or other assets are kept as collateral.

The important sources of non-institutional credit are as follows:

Money-Lenders: Money-lending has been the widely prevalent profession in the rural areas. The moneylenders charge huge rate of interest and mortgage the property of the cultivators and in some cases even the peasants and members of his family are kept as collateral.

Other Private Sources:

(a) Traders, landlords and commission agents: The agents give credit on the hypothecation of crops which when harvested is used to repay loans.

(b) Credit from relatives: These credits are generally used for meeting personal expenditure.

B. INSTITUTIONAL SOURCES:

The general policy on agricultural credit has been one of progressive institutionalization aimed at providing timely and adequate credit to farmers for increasing agricultural production and productivity. Providing better access to institutional credit for the small and marginal farmers and other weaker sections to enable them to adopt modern technology and improved agricultural practices has been a major thrust of the policy. National Bank for Agriculture and Rural Development (NABARD) is an apex institution established in 1982 for rural credit in India. It doesn't directly finance farmers and other rural people. It grants assistance to them through the institutions described as follows:

Rural Co-Operative Credit Institutions:

Rural Credit cooperatives are the oldest and most extensive form of rural institutional financing in India. The major thrust of these cooperatives in the area of agricultural credit is the prevention of exploitation of the peasants by moneylenders. The rural credit cooperatives may be further divided into short-term credit cooperatives and long-term credit cooperatives.

The short-term credit cooperatives provide short-term rural credit and are based on a three-tier structure as follows:

(a) Primary Agricultural Credit Societies (PACs): These are organized at the village level. These societies generally advance loans only for productive purposes. The main objective of a PACS is to raise capital for the purpose of giving loans and supporting the essential activities of the members such as supply of agricultural inputs at cheap price, improving irrigation on land owned by members, encourage various income-augmenting activities such as horticulture, animal husbandry, poultry etc. In India, around 99.5 percent of villages are covered by PACs.

(b) District Central Cooperative Banks: These cooperatives are organized at the district level. The PACS are affiliated to the District Central Co-operative Banks (DCCBs). DCCBs coordinate the activities of district central financing agencies, organize credit for PACs and carry out banking business.

(c) State Co-Operative Banks: The DCCBs are affiliated to State Co-operative Banks (SCBs), which coordinate the activities of DCCBs, organize provision of finance for credit worthy farmers, carry out banking business and act as leader of the Co-operatives in the States.

Long-term credit Cooperatives:

These cooperatives meet long-term credit of the farmers and are organized at two levels:

(i) Primary Co-Operative Agriculture and Rural Development Banks: These banks operate at the village level as an independent unit.

(ii) State Co-Operative Agriculture and Rural Development Banks: These banks operate at state level through their branches in different villages.

Commercial Banks: Commercial Banks (CBs) provide rural credit by establishing their branches in the rural areas. The share of commercial banks in rural credit was very meager till 1969. The All India Rural Credit Review Committee (1969) recommended multi agency approach to the rural and especially agricultural credit. It suggested the increasing role of the CBs in providing agricultural credit. Further, under the Social Control Policy introduced in 1967 and subsequently the nationalization of 14 major CBs in 1969 (followed by another six banks in 1980), CBs have been given a special responsibility to set up their advances for agricultural and allied activities in the country

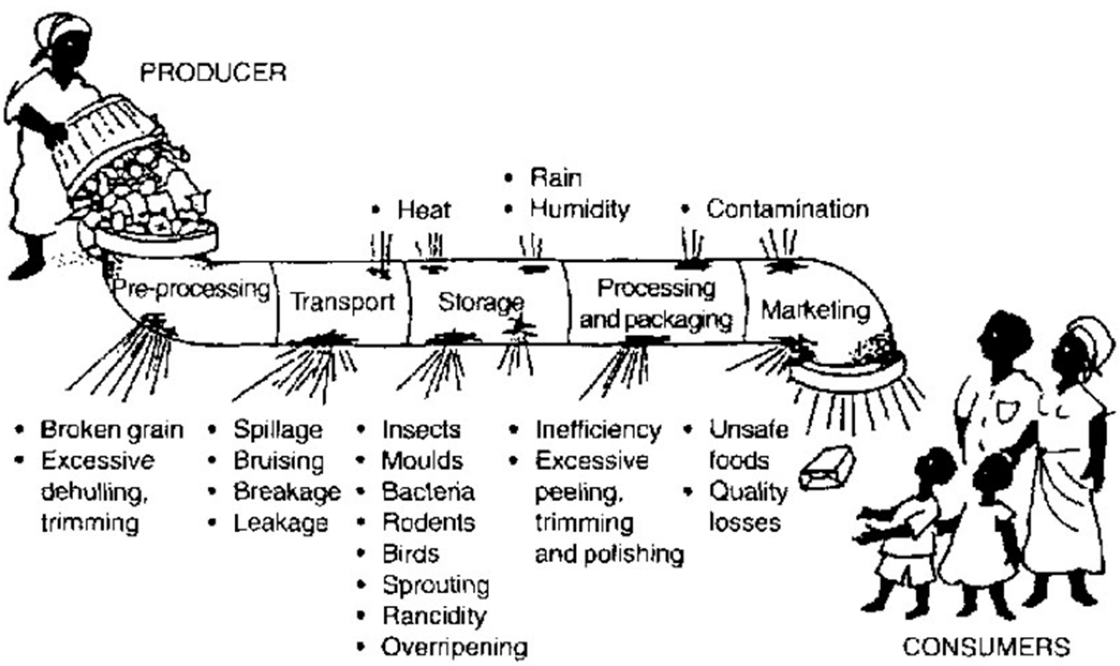
Regional Rural Banks (RRBS): RRBs are the specialized banks established under RRB Act, 1976 to cater to the needs of the rural poor. RRBs are set-up as rural-oriented commercial banks with the low cost profile of cooperatives but with the professional discipline and modern outlook of commercial banks. Between 1975 and 1987, 196 RRBs were established with over 14,000 branches.

Q: Explain Agricultural Marketing in India?

Introduction

Agricultural marketing is **mainly the buying and selling of agricultural products**. ... Most of the agricultural products in India are sold by farmers in the private sector to moneylenders (to whom the farmer may be indebted) or to village traders. Products are sold in various ways.

Functions in Agriculture Marketing:



Marketing functions:

In modern marketing, the agricultural produce has to undergo a series of transfers or exchanges from one hand to another before it finally reaches the consumer. This is achieved through three important marketing functions namely

a. **Assembling (Concentration)–** Concentration pertains to the operations concerned with the assembly and transport of produce from the field to a common assembling area or the market.

b. **Preparation for consumption(processing)** – The produce may be sold, as obtained from the field, or may be cleaned, graded, processed and packed either by the farmer or village merchant before it is taken to the market. Some of the processing is necessary for the conservation of quality.

c. **Distribution (Dispersion)–** It involves the operations of whole selling and retailing as various points. By a series of indispensable adjustments and equalizing functions, it is the task of distribution system o matches the available supplies with the existing demand.

The essential functions of agricultural marketing may be described as follows:

1 **Assembling:**

Collection of produce for sale in mandis or larger markets is called Assembling. Assembling is of two types: Bringing together of smaller amounts of produce for greater convenience and economy in buying, transporting or processing.

Assembling occurs in the distribution of finished products. Wholesaler buys from many processor to have on hand the commodities wanted by retailers to supply the consumers.

2.**Grading and Standardization :**

Grading is the sorting out of the commodities into different groups on the basis of size, variety, taste, quality, colour etc. Such separation may or may not conform to established standards. Whereas standardization fixes the grades and does not allow them vary from season to season and year to year. Grading and standardization are used interchangeably.
Advantages of Grading and standardization

1. Uniformity between markets is provided
2. Products of similar grade can be stored in bulk
3. Market values are better understood
4. Commodities can be bought and sold without previous examination
5. Standards provide a basis for market reporting and advertising

3.**Processing :**

Processing is the conversion of farm produce into more consumable form. E.g. conversion of wheat into floors, preparation of butter, ghee from milk, hulling of paddy into rice etc. Processing imparts form utility
Advantages

- Surplus produce may be conserved
- Reduces the work in home

4.**Transportation:**

Physical movement of produce from the place of production to the final consumer is called transportation. Transportation creates place utility. Transportation takes place through different means like road, rail, air, and water.

5.**Storage :**

Storage is the holding of produce from time of production until needed by the consumers. Storing creates time utility. Storage helps to spread out market supply. Some products are stored for short period whereas fresh fruits, vegetables require cold storage.

6.**Packaging**:

Packaging is the packing or covering the product in such sizes and pattern as to be most Marketable. The objectives of packaging are

- to facilitate the handling of product
- to reduce the storage and marketing cost
- to prevent loss by deterioration and rob
- to make products more attractive

7.**Distributing:**

It relates to dispersing, retailing and marketing of produce. Distribution bridges the gap between the wholesalers and large number of consumers.

Types of Agriculture Markets:

Agricultural marketing comprises marketing of food grain, commercial crops, plantation crops, horticultural produce and semi-processed products.

Economists have divided market in different manners based on the frequency with which they are held, the type of products traded the scale of transaction and the kind of marketing functions performed.

The important types of agricultural markets in India are as follows:

1. Primary or Local Markets
2. Secondary Markets
3. Terminal Markets
4. Fairs
5. Regulated Markets
6. Co-Operative Marketing

1.Primary or Local Markets:

Primary markets, known as Hatts or Shandies are held once or twice a week in the neighbourhood of a group of villages. There are more than 22,000 such markets in India. Most of the agriculturists sell their farm products in these markets

2. Secondary Markets:

These are also known as 'wholesale' or 'assembling' markets and are called 'mandis' or 'gungs'. There are about 4145 such markets. These markets are permanent in nature; business in the markets is transacted regularly throughout the year.

3.Terminal Markets:

These markets perform the function of carrying goods to consumers, final buyers or to places of processing. Such markets are to be found in big cities or at ports. The area of their operation extends over a state.

4.Fairs:

Fairs held on religious occasions at pilgrim centres are important sources of marketing of agricultural produce in India. Such fairs are held annually and are organized by district officers, local bodies or private agencies. These fairs are very popular in Bihar, W. Bengal, UP, Orissa, Maharashtra, Gujarat and Rajasthan.

5.Regulated Markets:

These have been set up by the Government with the purpose of checking fraudulent practices which are generally practiced by traders in the primary and secondary markets. In these markets, the rules and regulations are prescribed by the Government marketing practices.

6.Co-Operative Marketing:

These markets function on the basis of principles of cooperation. A cooperative marketing society carry the agricultural produce direct to the consumers thus eliminating a large army of middlemen and intermediaries

Q: Write an essay on Agriculture price policy in India?

Introduction:

The government has formulated a price policy for agricultural produce that aims at securing remunerative prices to farmers to encourage them to invest more in agricultural production. The government announces minimum support prices for major agricultural products every year on the recommendations of the Commission for Agricultural Costs and Prices (CACP).

The government formulated price policy for agricultural produce to secure remunerative prices for farmers to encourage them to invest more in agricultural production. Keeping in mind, the government announces Minimum Support Prices (MSP) for major agricultural products every year. Government provides food grains to the BPL families through the public distribution system. These prices are fixed after consulting the Commission for Agricultural Costs and Prices (CACP).

The Commission of Agricultural Costs and Prices (CACP) while recommending prices takes into account important factors, such as:

i. Cost of production
ii. Changes in input prices1.
iii. Input/output Price Parity
iv. Trends in market prices
v. Inter-crop Price Parity
vi. Demand and supply situation
vii. Effect on Industrial Cost Structure
viii. Effect on general price level
ix. Effect on cost of living
x. International market price situation
xi. Parity between prices paid and prices received by farmers (Terms of Trade)

Advantages behind the announcement of Minimum Support Price (MSP):

To secure the interests of the farmers as also the need of self reliance, government has been announcing the minimum support price for 24 major crops. The main objectives f the MSP are:

1. To prevent fall in the price in the situation of over production.
2. To protect the interests of the farmers by ensuring them a minimum price for their crops in the situation of a price fall in the market.
3. To meet the domestic consumption requirement
4. To provide price stability in the agricultural product
5. To ensure reasonable relationship between prices of agricultural commodities and manufactured goods
6. To remove price difference between two regions or the whole country.
7. To increase the production and exports of agricultural produce.
8. To provide raw material to the different industries at reasonable prices in the whole country.

Disadvantages of the Minimum Support Price:

1. To increase the income of the farmers, the poor of the country have to pay more. This practice will create the problem to allocate inefficiency in the country.
2. Subsidizing farmers through higher product prices is an inefficient method because it penalizes the consumer with higher prices. Also it means large farmers will benefit the most. They have received more than they need but small farmers are still struggling.
3. Farmers use fertilizers in the huge quantity to increase their production but it creates problems for those peoples who do not get benefits from this increment in the production.

Q: Explain Food Security Missions in India?

Introduction:

Food security has been a major concern in India. According to UN-India, there are nearly 195 million undernourished people in India, which is a quarter of the world's hunger burden. ... **India ranks 71 out of 113 major countries** in terms of food security index 2020.

What is Food Security?

Food security, as defined by the United Nations' Committee on World Food Security, means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life.

Food security is the combination of the following three elements:

1. **Food availability** i.e. food must be available in sufficient quantities and on a consistent basis. It considers stock and production in a given area and the capacity to bring in food from elsewhere, through trade or aid.
2. **Food access** i.e. people must be able to regularly acquire adequate quantities of food, through purchase, home production, barter, gifts, borrowing or food aid.
3. **Food utilization:** Consumed food must have a positive nutritional impact on people. It entails cooking, storage and hygiene practices, individuals health, water and sanitations, feeding and sharing practices within the household.

Importance of food security :

1) For boosting the agricultural sector.
2) For having a control on food prices.
3) For economic growth and job creation leading to poverty reduction
4) For trade opportunities
5) For increased global security and stability
6) For improved health and healthcare

Food Security in India

Food security concerns can be traced back to the experience of the **Bengal Famine in 1943** during British colonial rule, during which about 2 million to 3 million people perished due to starvation.

Since attaining independence, an initial rush to industrialize while ignoring agriculture, two successive droughts in the mid-1960s, and dependence on food aid from the United States exposed India's vulnerability to several shocks on the food security front.

The country went through a **Green Revolution** in the late 1960s and early 1970s, enabling it to overcome productivity stagnation and to significantly improve food grain production.

The Green Revolution was followed by the **White Revolution**, which was initiated by **Operation Flood** during the 1970s and 1980s. This national initiative has revolutionized liquid milk production and marketing in India, making it the largest producer of milk.

about 14.8% of the population is undernourished in India.Also, 51.4% of women in reproductive age between 15 to 49 years are anaemic.

Further according to the report 38.4% of children aged under five in India are stunted (too short for their age), while 21% suffer from wasting, meaning their weight is too low for their height.

India ranked 76th in 113 countries assessed by The Global Food Security Index (GFSI) in the year 2018, based on four parameters—affordability, availability and quality and safety.

As per the Global Hunger Index, 2018, India was ranked 103rd out of 119 qualifying countries.

Challenges to Food Security

1) **Climate Change:** Higher temperatures and unreliable rainfall makes farming difficult. Climate change not only impacts crop but also livestock, forestry, fisheries and aquaculture, and can cause grave social and economic consequences in the form of reduced incomes, eroded livelihoods, trade disruption and adverse health impacts.
2) **Lack of access to remote areas:** For the tribal communities, habitation in remote difficult terrains and practice of subsistence farming has led to significant economic backwardness.
3) Increase in **rural-to-urban migration,** large proportion of informal workforce resulting in unplanned growth of slums which lack in the basic health and hygiene facilities, insufficient housing and increased food insecurity.
4) **Overpopulation, poverty, lack of education and gender inequality.**
5) **Inadequate distribution of food** through public distribution mechanisms (PDS i.e. Public Distribution System).
6) Deserving beneficiaries of the subsidy are excluded on the basis of non-ownership of below poverty line (BPL) status, as the criterion for identifying a household as BPL is arbitrary and varies from state to state.
7) **Biofuels:** The growth of the biofuel market has reduced the land used for growing food crops.
8) **Conflict:** Food can be used as a weapon, with enemies cutting off food supplies in order to gain ground. Crops can also be destroyed during the conflict.
9) **Unmonitored nutrition programmes:** Although a number of programmes with improving nutrition as their main component are planned in the country but these are not properly implemented.
10) **Lack of coherent food and nutrition policies** along with the **absence of intersectoral coordination** between various ministries.
11) **Corruption:** Diverting the grains to open market to get better margin, selling poor quality grains at ration shops, irregular opening of the shops add to the issue of food insecurity.

Recent Government Initiatives

1.National Food Security Mission

- It is a Centrally Sponsored Scheme launched in 2007.

- It aims to increase production of rice, wheat, pulses, coarse cereals and commercial crops, through area expansion and productivity enhancement.
- It works toward restoring soil fertility and productivity at the individual farm level and enhancing farm level economy.
- It further aims to augment the availability of vegetable oils and to reduce the import of edible oils.

2.Rashtriya Krishi Vikas Yojana (RKVY)

- It was initiated in 2007, and allowed states to choose their own agriculture and allied sector development activities as per the district/state agriculture plan.
- It was converted into a Centrally Sponsored Scheme in 2014-15 also with 100% central assistance.
- Rashtriya Krishi Vikas Yojana (RKVY) has been named as **Rashtriya Krishi Vikas Yojana-Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR)** for three years i.e. from 2017-18 to 2019-20.

Objectives: Making farming a remunerative economic activity through strengthening the farmer's effort, risk mitigation and promoting agri-business entrepreneurship. Major focus is on pre & post-harvest infrastructure, besides promoting agri-entrepreneurship and innovations.

3.Integrated Schemes on Oilseeds, Pulses, Palm oil and Maize (ISOPOM)

4.Pradhan Mantri Fasal Bima Yojana

5.E-marketplace:

The government has created an electronic national agriculture market (eNAM) to connect all regulated wholesale produce markets through a pan-India trading portal.

6.Massive irrigation and soil and water harvesting programme to increase the country's gross irrigated area from 90 million hectares to 103 million hectares by 2017.

The government has also taken significant steps to combat under- and malnutrition over the past two decades, through

- The introduction of **mid-day meals** at schools. It is a Centrally-Sponsored Scheme which covers all school children studying in Classes I-VIII of Government, Government-Aided Schools.
- **Anganwadi systems** to provide rations to pregnant and lactating mothers,
- **Subsidised grain** for those living below the poverty line through a public distribution system.
- Food fortification

7.The National Food Security Act (NFSA), 2013, legally entitles up to 75% of the rural population and 50% of the urban population to receive subsidized food grains under the Targeted Public Distribution System.

The eldest woman of the household of age 18 years or above is mandated to be the head of the household for the purpose of issuing of ration cards under the Act.

Module III: Indian Industry and Services

Q: Write an essay on Role and Importance of Industrialization in India?

Introduction:

It comprises the **development of industry, trade, transport, power, agriculture and mining** etc. It leads to spectacular progress of all-round and raising the level of living. In a way, real progress of an economy depends largely on industrialization.

Role of industrial development in economic growth

1. Modernisation of Industry:

Industrial development is necessary for modernisation of agriculture. In India, agriculture is traditional and backward. The cost of production is high and productivity is low. We need tractors, threshers, pump sets and harvesters to modernise agriculture. To increase productivity, we need chemical fertilizers, pesticides and weedicides etc. These are all industrial products. Without industrial development, these goods cannot be produced.

2. Development of Science and Technology:

Industrial development encourages the development of science and technology. The industrial enterprises conduct research and develop new products. Ethanol in the form of biofuel is an example of industrial development.

3. Capital Formation:

Acute deficiency of capital is the main problem of Indian economy. In agricultural sector, the surplus is small. Its mobilisation is also very difficult. In large scale industries, the surplus is very high. By using external and internal economies, industry can get higher profit.

4. Industrialisation and Urbanisation:

Urbanisation succeeds industrialisation. Industrialisation in a particular region brings growth of transport and communication. Schools, colleges, technical institutions, banking and health facilities are established near industrial base.

5. Self-reliance in Defence Production:

To achieve self-reliance in defence production, industrialisation is necessary. During war and emergency dependence on foreign countries for war weapons may prove fatal. Self-reliance in capital goods and industrial infra-structure is also necessary.

6. Importance in International Trade:

Industrialisation plays an important role in the promotion of trade. The advanced nations gain in trade than countries who are industrially backward. The underdeveloped countries export primary products and import industrial products.

7. Use of Natural Resources:

It is a common saying that India is a rich country inhabited by the poor. It implies that India is rich in natural resources but due to lack of capital and technology, these resources have not been tapped. Resources should be properly utilized to transform them into finished industrial products.

8. Alleviation of Poverty and Unemployment:

Poverty and unemployment can be eradicated quickly through rapid industrialisation. It has occurred in industrially advanced countries like Japan. The slow growth of industrial sector is responsible for widespread poverty and mass unemployment.

9. Main Sector of Economic Development:

Industry is viewed as leading sector to economic development. We can have economies of scale by applying advanced technology and division of labour and scientific management. So production and employment will increase rapidly. This will bring economic growth and capital formation.

10. Fast Growth of National and Per Capita Income:

Industrial development helps in the rapid growth of national and per capita income. The history of economic development of advanced countries shows that there is a close relation between the level of industrial development and the level of national and per capita income.

11. Sign of Higher Standard of Living and Social Change:

A country cannot produce goods and services of high quality in order to attain decent living standard without the progress of industrial sector.

Q: Discuss the recent Trends in Industrial Production in India?

Introduction:

In India, industrial sector has achieved a significant achievement in diversifying its productive capacities. In respect of almost all consumer goods both durables and non-durables, the stage of self-sufficiency has already been attained. A substantial increase in the production of capital goods has also been achieved.

The country has also achieved an impressive industrial productive capacity in respect of mining and metallurgical industries, capital goods industries even producing highly sophisticated equipment's necessary for the production of steel, chemical, fertilizer, software, refinery products etc., chemical and petrochemical industries, medium and heavy engineering industries, fertilizer and paper industry, power and transportation industry, construction industry etc.

TRENDS IN INDUSTRIAL PRODUCTION :

Industrial development in India during the planning period can be divided into the following 4 phases :-

- **PHASE 1:** Covers the period of the first 3 five year plans in India (1951-1965). It laid down the basis for industrial development in future by building up a strong industrial structure.
- **PHASE 2:** Covers the period from 1965 to roughly 1980. It is marked by industrial deceleration and structural regression.
- **PHASE 3:** Covers the period of 1980s (1981-1991). This period was marked by industrial recovery.
- **PHASE 4:** Covers the post reform period (1991 onwards).

PHASE 1(1951-1965): Building up the Industrial base

Industries producing intermediated goods like coal, cement, steel etc. were established but their productive capacity was way below the required levels While consumer goods industries were well established, producer goods industries lagged considerably behind

- Phase-1 laid the basis for industrial development in future.
- The 2nd plan based on Mahalnobis model emphasised the development of capital goods industries and basic industries.
- Accordingly, huge investments were made in industries like iron and steel, heavy engineering and machine building industries. The same pattern of investment was continued in the 3rd plan as well.

PHASE 2 (1965-80) : Industrial Deceleration and Structural Retrogression

Industries producing intermediated goods like coal, cement, steel etc. were established but their productive capacity was way below the required levels While consumer goods industries were well established, producer goods industries lagged considerably behind.

- The 2nd phase of industrial growth covers the period of 3 annual plans, 4 th plan and 5th plan
- The period from 1965 to 1976 was marked by a sharp deceleration in industrial growth. The rate of growth fell from 9% per annum during the 3rd plan to a mere 4.1% per annum during the period 1965 to 1976
- The last year of phase 2 (1979-80) recorded a negative rate of industrial growth of -1.6% over the preceding year
- Structural regression plagued the industrial sector during this period. After experiencing a tremendous growth rate in the 1st phase, the growth rate of the capital goods industries fell considerably in the 2nd phaseIn the next 11 yrs. the capital goods industries grew at an annual rate of only 2.6%. However, in the 5th plan period, the rate of growth of capital goods industries went up to 5.7%
- As shown by S.L. Shetty, many industries of crucial importance experienced insignificant growth as compared wit the average from the previous 5 year period.
- This decline in growth rate of basic and capital goods industries in the period after 3rd plan clearly represents the phenomenon of Structural Retrogression.

PHASE 3 (1981-91) : The period of Industrial recovery

The period of 1980s can broadly be classified as a period of industrial recovery. This is clearly brought out by a study of the revised index of industrial production (base 1980-81).

- During the 3rd phase, there is a clear shift in the pattern of industrialization in the country. Chemicals, petrochemicals and allied industries recorded a faster rate as compared to others
- During this period, the production of chemicals and chemical product industries expanded at an annual avg. rate of 11.9% as compared to only 5.47% in the machine -building sector
- Also during the same period, iron and steel, basic metal and alloys and metal products recorded only 5.15%, 4.94% and 3.95% growth rates respectively.

PHASE 4: Industrial retrogression followed by an upturn and downturn nineties (after 1991-92)

The fourth phase of industrial growth covers the early part of nineties, i.e., from 1991-92 to 1997-98. This short period experienced a sharp industrial retrogression followed by an immediate upturn in the industrial growth of the country

- During 1991-92, the country had a bitter experience of negative growth rate of (—) 0.10 per cent as compared to that of 8.5 per cent in 1990-91. This is the clear evidence of sharp industrial retrogression in the country
- But after that in 1995-96 the country experienced an industrial upturn trend as annual growth rate during this year stood at 11.7 per cent
- During the year 1996-97 industrial output has increased by 7.1 per cent and further 8.6 per cent in 1997-98.

Q: Explain the 1956 Industrial Policy?

Introduction :

- The Industrial Policy Resolution of 1956 was based upon the Mahalanobis Model of growth. This Model suggested that there should be an emphasis on the heavy industries, which can lead the Indian Economy to a long term higher growth path. It was regarded as the **"Economic Constitution of India" or "The Bible of State Capitalism".**

The main objectives of the Industrial Policy of the Government in India are:

- to maintain a sustained growth in productivity;
- to enhance gainful employment;
- to achieve optimal utilisation of human resources;
- to attain international competitiveness; and
- to transform India into a major partner and player in the global arena.

Mahalanobis Model

In 1950s, an Old Russian Model was indianized by PC Mahalanobis, the founder of Indian Statistical Institute and a close aide of Pandit Nehru. This model is known to have set the statistical foundations for state-directed investments and created the intellectual underpinnings of the license-raj through an elaborate input-output model. This Model suggested that there should be an emphasis on the heavy industries, which can lead the Indian Economy to a long term higher growth path. India's second five year plan and Industrial policy Resolution 1956, which paved the way for development of Public Sector and license raj; were based upon this model.

The four fold classification of the 1948 Industrial Policy was changed now to a threefold classification in Schedule A, B and C industries.

Three Fold Classification of the Industries

1. Schedule A Industries:

This comprised 17 industrial areas which were strictly under the Central Government. The companies of this area were known as CPSE (central Public Sector Undertakings). These included key industries such as Defence Equipment; Atomic Energy; Iron & Steel and heavy plants / machineries required for iron & steel production; Heavy power plants; Coal & Lignite; Mining & processing of key minerals; Railways and Air Transport; Aircraft & ship building; Telephones, Telegraphs and wireless except radio sets; Electricity generation and distribution.

2. Schedule B Industries

This category comprised 12 industries that were put to the State Governments to take measures and was left to the state government to follow up with the private sector with provisions of compulsory licensing. However, states were not given monopoly over these industries. They had to be state owned but private sector was expected to supplement the efforts of the State. States were expected to facilitate and encourage development of these industries in the private sector, in accordance with the programmes formulated under the Five Year Plans.

The schedule B industries included other minerals than central monopoly; machine tools; ferro alloys, steel tools; raw material needed for manufacturing of drugs, dyes and plastics; essential drugs and antibiotics; fertilizers; synthetic rubber; chemical pulp, road and sea transport.

3. Schedule C Industries

The Industrial areas which were left out of the Schedule A & B were left with the private sectors subject to licensing and regulation under the IDR Act.

Q: Explain the 1956 Industrial Policy?

Introduction:

The long-awaited liberalised industrial policy was announced by the Government of India in 1991 in the midst of severe economic instability in the country. The objective of the policy was to raise efficiency and accelerate economic growth.

On July 24, 1991, Government of India announced its new industrial policy with an aim to correct the distortion and weakness of the Industrial Structure of the country that had developed in 4 decades; raise industrial efficiency to the international level; and accelerate industrial growth.

Features of New Industrial Policy

1. De-reservation of Public sector: Sectors that were earlier exclusively reserved for public sector were reduced. However, pre-eminent place of public sector in 5 core areas like arms and ammunition, atomic energy, mineral oils, rail transport and mining was continued.

Presently, only two sectors- Atomic Energy and Railway operations- are reserved exclusively for the public sector.

2. De-licensing: Abolition of Industrial Licensing for all projects except for a short list of industries.

There are only 4 industries at present related to security, strategic and environmental concerns, where an industrial license is currently required-

A. Electronic aerospace and defence equipment
B. Specified hazardous chemicals
C. Industrial explosives
D. Cigars and cigarettes of tobacco and manufactured tobacco substitutes

3. Disinvestment of Public Sector: Government stakes in Public Sector Enterprises were reduced to enhance their efficiency and competitiveness.

4. Liberalisation of Foreign Investment: This was the first Industrial policy in which foreign companies were allowed to have majority stake in India. In 47 high priority industries, upto 51% FDI was allowed. For export trading houses, FDI up to 74% was allowed.

Today, there are numerous sectors in the economy where government allows 100% FDI.

5. Foreign Technology Agreement: Automatic approvals for technology related agreements.

6. **Abolition of MRTP Act:** MRTP Act was amended to remove the threshold limits of assets in respect of MRTP companies and dominant undertakings. MRTP Act was replaced by the Competition Act 2002.(The MRTP Act will be amended to remove the threshold limits of assets in respect of MRTP companies and dominant undertakings).

Q: Explain the role of public sector in India?

Introduction:

The public sector is that portion of society controlled by national, state or prolvincial, and local governments. In the United States, the public sector encompasses universal, critical services such as national defence, homeland security, police protection, fire fighting, urban planning, corrections, taxation, and various social programs. In India, it consists of defence, police, taxation, railways, roads and bridges, postal services.

The main objectives of public sectors units (PSUs) were:
1. To maintain a sustained growth in productivity
2. To enhance gainful employment
3. To achieve optimum utilization of human resources
4. To transform India into a major partner and player in the global arena.
5. To take out Indian economy from the vicious circle of poverty.
6. Open the Indian economy to interact openly with the rest of the world.

The main result of this new policy was that reserved sectors were opened for the private players. Public sectors were not able to operate at its optimum pace.

Role of public sectors in the development of the country is explained below:

I. **Public Sector and Capital Formation:** The role of public sector in collecting saving and investing them during the planning ear has been very important. During the first and second five year plan it was 54% of the total investment, which declined to 24.6 % in the 2010-11.

II. **Employment Generation:** Public sector has created millions of jobs to tackle the unemployment problem in the country. The number of persons employed in the as on march 2011 was 150 lakh. Public sector has also contributed a lot towards the improvement of working and living conditions of workers by serving as a model employer.

III. **Balanced Regional Development:** Public sector undertakings have located their plants in backward parts of the county. These areas lacked basic industrial and civic facilities like electricity, water supply, township and manpower. Public enterprises have developed these facilities thereby bringing about complete transformation in the socio-economic life of the people in these regions. Steel plants of Bhilai, Rourkela and Durgapur; fertilizer factory at Sindri, are few examples of the development of backward regions by the public sector.

IV. **Contribution to Public Exchequer:** Apart from generation of internal resources and payment of dividend, public enterprises have been making substantial contribution to the

Government exchequer through payment of corporate taxes, excise duty, custom duty etc. gross internal resource generation in 1990- 2000 was 36000 cr which rose to 1, 11,000 cr in 2008-09, while net profit was 92,077 cr in 2010-11.

V. **Export Promotion and Foreign Exchange Earnings:** Some public enterprises have done much to promote India's export. The State Trading Corporation (STC), the Minerals and Metals Trading Corporation (MMTC), Hindustan Steel Ltd., the Bharat Electronics Ltd., the Hindustan Machine Tools, etc., have done very well in export promotion.

VI. **Import Substitution:** Some public sector enterprises were started specifically to produce goods which were formerly imported and thus to save foreign exchange. The Hindustan Antibiotics Ltd., the Indian Drugs and Pharmaceuticals Ltd. (IDPL), the Oil and Natural Gas Commission (ONGC), the Indian Oil Corporation Ltd., the Bharat Electronics Ltd., etc., have saved foreign exchange by way of import substitution.

VII. **Promotion of Research and Development:** As most of the public enterprises are engaged in high technology and heavy industries, they have undertaken research and development programmes in a big way. Public sector has laid strong and wide base for self-reliance in the field of technical know-how, maintenance and operation of sophisticated industrial plants, machinery and equipment in the country. Expenditure on research and development reduces the cost of production.

Problems of Public Sectors:

• Poor policy making and its execution
• Over staffing
• Wastage of resources or underutilization of resources
• Higher operating cost
• Lack of motivation for self-improvement
• Lack of proper price policy

<u>Conclusion:</u>

The expansion of the public sector was aimed at the fulfillment of our national goals, that is., the removal of poverty, the attainment of self-reliance, reduction in inequalities of income, expansion of employment opportunities, removal of regional imbalances, acceleration of the pace of agricultural and industrial development

Q: Discuss critically the role of private sector in Indian Economy?

Introduction:

The role of private sector is quite dominant in agriculture and allied activities, small scale industry, retail trade etc. ... Thus, even after making a huge volume of investments in the public sector and completing more than 50 years of planning, Indian economy is still broadly based on the private sector.

Recently, the Prime Minister Narendra Modi has **stressed on the private sector's vital role in the economy** and asserted that the culture of "abusing" it for votes is no longer acceptable. The private sector has played a **huge role in India's development** and is largely responsible for the phenomenal growth registered by the country since the economy was opened up in 1991.

Role of Private Sector in Indian Economy

i. **Industrial Development:** During the pre-independence period, the private sector has played a responsible role in Indian economy where it set up and expanded cotton and jute textiles, sugar, paper, edible oil, tea etc.
ii. **Agriculture:** The share of agriculture and its allied activities like fishing, poultry, cattle rearing, animal husbandry, dairy farming etc. to the national income is nearly 22%. About 60% of the total working population is engaged in this area. Hence, this large agriculture sector is controlled by the private sector.
iii. **Infrastructural Development:** The major areas of the infrastructural sector lie in the hands of public sector but still the private sector is participating in those areas which remain open for it.
iv. **Small Scale and Cottage Industry:** These industries are mostly labour-intensive in nature, thus they can utilize the local employment opportunities suitably.

Importance of increasing Private Sector's role in Indian Economic Development

I. **Best allocator of capital in the economy:** India is a capital scarce-country and a scarce resource should be given to that sector that will deliver the most benefit from its usage.
II. **Linking jobs, growth and hope for Indian Economy:** The industries that have created growth, jobs, buzz and hope in the last three decades have been driven by private enterprise i.e. airlines, banks, telecom, insurance, IT services, IT-enabled services, internet companies and others.
III. **High Potentiality**: The private sector can play a vital role in increasing the gross domestic saving (GDS) and gross domestic capital formation (GDCF) within the economy.
IV. **Making use of technology:** With the advent of the Fourth Industrial Revolution, India is at the cusp of a technology revolution that could transform manufacturing and industrial production in the country.
V. **Fostering entrepreneurship and innovation:** The corporates are integral to fostering innovation and entrepreneurship and ensuring the future progress of an economy.
VI. **Environmental Efficiency:** Engaging the private sector has become critical to ensuring environmental efficiency through its greater adoption of cleaner, greener technologies and the adoption and sharing of best practices.

Challenges faced by Indian Private Sector

I. **Increasing Disparity between Rich and Poor:** The increased private sector involvement in development processes is also associated with increasing disparity and widening inequality among the rich and the poor.
II. **Regulatory Procedure and Related Delays:** Too many regulatory measures imposed by the Government on the private sector has resulted in lengthy procedure and delays in getting final clearance of a new industrial project.
III. **Unnecessary Control:** The price controls imposed by the government on certain goods has resulted in disincentive to increase production.
IV. **Inadequate Diversification:** The private sector has been suffering from inadequate diversification as the Government did not allow them to participate in those basic, heavy and infrastructural sectors which were earlier reserved for the public sector.

V. **Lack of Finance and Credit:** Although the large scale industrial corporate units of the private sector are mobilizing their fund from banks and from the market through sale of their equities or debentures but the small scale units are facing acute problem in raising fund for their expansion.
VI. **Low Ratio of Profit:** Another important problem of the private sector enterprises is the declining trend in its net profit ratio.
VII. **Private Sector involvement limited to financing:** While private sector has always been the engine spurring economic growth, its role in furthering social outcomes has usually been viewed with a myopic pair of lenses.

Q: Discuss the Formal and Informal Sectors in India?

Introduction:

Looking into the composition of the Indian economy, as mentioned above, the formal or organized sector and the informal or unorganized sector constitutes the Indian economy.

Formal sectors represent all jobs with specific working hours and regular wages and the worker's job is assured. The workers are employed by the government, state or private sector enterprises. It is a licensed organization and is liable to pay taxes. It includes large-scale operations such as banks and other corporations.

Informal or unorganized sectors are the ones where the employees or the workers do not have regular working hours and wages and are exempted from taxes. It is mainly concerned with the primary production of goods and services with the primary aim of generating employment and income on a small scale.

Examples:
(a) Farming, market gardening, self employed artisans, shoemakers, tailors, etc.
(b) Working in construction, housing, road building.
(c) Small scale distribution, e.g. petty traders, street hawkers, etc.
(d) Other services, e.g. barbers, shoe-shiners etc

Distinguish between formal and informal sectors of the economy

Formal sector in India

I. In this sector all jobs with specific working hours and regular wages and the worker's job is assured
II. It is a licensed organization and is liable to pay taxes.
III. Banks and other corporations comes under formal sectors
IV. Rag pickers, moneylenders, brokers are considered as a part of an informal economy.
V. It is also described as the grey economy.

Informal sector in India

I. Majority of the population is into the informal sectors.
II. Informal sectors are deemed low with low production value.
III. In India agriculture, dairy, horticulture and related occupation employ 52 percent of the workers.
IV. It lacks security both legally and economically
V. About 25 percent of the informal sectors constitute urban employment in India

Module IV: NIIT AAYOG

Q: Write an essay about NITI Aayog?

Introduction:

Planning has been in Indian psyche as our leaders came under influence of the socialist clime of erstwhile USSR. Planning commission served as the planning vehicle for close to six decades with a focus on control and command approach.

The Planning Commission which has a legacy of 65 years has been replaced by the **NITI Aayog**. The utility and significance of the Planning Commission had been questioned for long. The replacement seems to be more relevant and responsive to the present economic needs and scenario in the country.

NITI Aayog Evolution

The NITI Aayog was formed on January 1, 2015. In Sanskrit, the word "NITI" means morality, behaviour, guidance, etc. But, in the present context, it means policy and the NITI stands for **"National Institution for Transforming India"**. It is the country's premier policy-making institution that is expected to bolster the economic growth of the country. It aims to construct a strong state that will help to create a dynamic and strong nation. This helps India to emerge as a major economy in the world. The NITI Aayog's creation has two hubs called **"Team India Hub"** and "**Knowledge and Innovation Hub"**.

1. **Team India:** It leads to the participation of Indian states with the central government.
2. **The Knowledge and Innovation Hub:** it builds the institution's think tank capabilities.

NITI Aayog is additionally creating itself as a State of the Art Resource Center, with the essential resources, knowledge, and skills that will empower it to act with speed, advance research and innovation, bestow crucial policy vision to the government and manage unforeseen issues. The reason for setting up the NITI Aayog is that people had expectations for growth and development in the administration through their participation. This required institutional changes in administration and active strategy shifts that could seed and foster substantial scale change.

Major defference between the planning commission and Niti Aayog:

Parameter	Planning Commission	NITI Aayog
Members	Full-time: 8 full-time members Part-time: No provision as such for part-time members	Full-time: Fewer full-time members Part-time: Depends on the need
Financial Clout	Could allocate funds to ministries and state governments	Is a think tank and advisory body
Role of the States	Role limited to the NDC and the annual interaction during the Plan meetings	State governments play a more significant role
Secretaries	Secretaries or member secretaries were appointments through the usual process	Secretaries will be called CEO and be appointed by the Prime Minister

Policy formation	Policies were formed by the Commission after which states were consulted about fund allocation	Consulting would be done while the policy is being formulated
Power to allocate funds	Had the power to allocate funds	No power to allocate funds
Policy imposition	Imposed policies on states	No power to impose policies

Objectives of NITI Aayog

1. The active participation of States in the light of national objectives and to provide a framework 'national agenda'.
2. To promote cooperative federalism through well-ordered support initiatives and mechanisms with the States on an uninterrupted basis.
3. To construct methods to formulate a reliable strategy at the village level and aggregate these gradually at higher levels of government.
4. An economic policy that incorporates national security interests.
5. To pay special consideration to the sections of the society that may be at risk of not profiting satisfactorily from economic progress.
6. To propose strategic and long-term policy and programme frameworks and initiatives, and review their progress and their effectiveness.
7. To grant advice and encourage partnerships between important stakeholders and national-international Think Tanks, as well as educational and policy research institutions.
8. To generate knowledge, innovation, and entrepreneurial support system through a shared community of national and international experts, etc.
9. To provide a platform for resolution of inter-sectoral and inter-departmental issues to speed up the accomplishment of the progressive agenda.
10. To preserve a state-of-the-art Resource Centre, be a repository of research on good governance and best practices in sustainable and equitable development as well as help their distribution to participants.
11. To effectively screen and assess the implementation of programmes and initiatives, including the identification of the needed resources to strengthen the likelihood of success.
12. To pay attention to technology improvement and capacity building for the discharge of programs and initiatives.
13. To undertake other necessary activities to the implementation of the national development agenda, and the objectives.

The NITI Aayog is based on the **7 pillars of effective Governance**. They are**:**

1. Pro-people: it fulfils the aspirations of society as well as individuals
2. Pro-activity: in anticipation of and response to citizen needs
3. Participation: involvement of the citizenry
4. Empowering: Empowering, especially women in all aspects
5. Inclusion of all: inclusion of all people irrespective of caste, creed, and gender
6. Equality: Providing equal opportunity to all especially for youth
7. Transparency: Making the government visible and responsive

NITI Aayog Composition

The NITI Aayog will comprise the following:

1. **Prime Minister** of India is the Chairperson
2. **Governing Council** consists of the Chief_Ministers of all the States and Lt. Governors of Union Territories in India.
3. **Regional Councils** will be created to address particular issues and possibilities affecting more than one state. These will be formed for a fixed term. It will be summoned by the Prime Minister. It will consist of the Chief Ministers of States and Lt. Governors of Union Territories. These will be chaired by the Chairperson of the NITI Aayog or his nominee.
4. **Special invitees:** Eminent experts, specialists with relevant domain knowledge, which will be nominated by the Prime Minister.
5. The full-time organizational framework will include, in addition to the Prime Minister as the Chairperson:
    1. **Vice-Chairperson** (appointed by the Prime Minister)
    2. **Members:**
        - Full-time
        - Part-time members: Maximum of 2 members from foremost universities, leading research organizations, and other innovative organizations in an ex-officio capacity. Part-time members will be on a rotational basis.
    3. **Ex Officio members:** Maximum of 4 members of the Council of Ministers which is to be nominated by the Prime Minister.
    4. **Chief Executive Officer:** CEO will be appointed by the Prime Minister for a fixed tenure. He will be in the rank of Secretary to the Government of India.

Q: Explain Difference between the Planning commission and NITI Aayog?

Introduction:

The NITI Aayog (National Institution for Transforming India) is a policy think tank established on 1st January 2015 by the Government of India. “15-year Road map”, “7- year vision, strategy and action plan” are some of its initiatives.

The Planning Commission was formed on 15th March 1950 and dissolved on 17th August 2014. Planning Commission of India formulated Five-Year plans of India.

Planning has been in Indian psyche as our leaders came under influence of the socialist clime of erstwhile USSR. Planning commission served as the planning vehicle for close to six decades with a focus on control and command approach. Planning Commission was replaced by a new institution – NITI AAYYOG on January 1, 2015 with emphasis on ‘Bottom –Up’ approach to envisage the vision of Maximum Governance, Minimum Government, echoing the spirit of ‘Cooperative Federalism’.

The differences between NITI Aayog and Planning Commission are:

NITI Aayog	**Planning Commission**
NITI Aayog has not been given the mandate or powers to impose policies on States. NITI Aayog is basically a think-tank or an advisory body.	The Planning Commission had the power to impose policies on States and for the projects approved by the Planning Commission.
The powers for allocation of funds have not been given to the NITI Aayog. The powers are with the Finance Ministry.	The Planning Commission had the power to allocate funds to the State Governments and various Central Government Ministries for various programmes and projects at National and State Levels.

In NITI Aayog, State Governments have to play a more proactive role.	State Governments did not have much role to play apart from taking part in the meetings. The State Government's role was confined to the National Development Council.
Based on the requirements, there are part-time members appointed in NITI Aayog.	The Planning Commission did not have any provisions for the appointment of part-time members.
The Governing Council of NITI Aayog has Lieutenant Governors of Union Territories and State Chief Ministers.	The National Development Council had Lieutenant Governors and State Chief Ministers. Planning Commission had to report to the National Development Commission
The CEO of NITI Aayog is appointed by the Prime Minister. Secretaries are known as CEO.	Planning Commission secretaries were appointed through the usual process.
The number of full-time members in NITI Aayog could be lesser than the numbers that the Planning Commission had.	The last Planning Commission had eight full-time members.
Under NITI Aayog organisation structure new posts were created – CEO, Vice-Chairperson. CEO has the rank of a Secretary. Four Cabinet members would serve as ex-officio members. NITI Aayog has two-part time members and five full-time members.	The Planning Commission organisational structure consisted of full-time members, member secretary and a Deputy Chairperson.
In NITI Aayog, the final policy would bear fruit after due consultations are held with State Governments in the policy formulation stage.	The Planning Commission first formulated policies and then State Governments were consulted regarding the allocation of funds for the programmes or projects.
NITI Aayog is also an Executive Body as it is not mentioned in the Constitution of India, and it was not established by an Act of Parliament. However, if needed it can be converted into a Statutory Body by passing a law in Parliament, an example is UIDAI.	The now-defunct Planning Commission was an Executive Body.

Q: Discuss critically about NIIT Aayog role in strategic planning and Challenges?

Introduction:

NITI Aayog recently released the document "Strategy for New India@75" to define clear objectives for 2022-23 in a diverse range of 41 different areas. This aspirational strategy aims to achieve a 'New India' by 2022 when the country celebrates its 75th year of Independence.

<u>Strategy for New India@75"</u>

- The document has identified 41 different areas that require either a sharper focus on implementing the flagship schemes already in place or a new design and initiative to achieve India's true potential.
- Each chapter summarizes the current status of the sector, takes full cognizance of the progress made thus far, and spells out the
- It then identifies the binding constraints and proposes measures to address these constraints.

- The approach is believed to provide an inventory of readily implementable measures for the government departments and agencies both in the central and state
- The focus is to improve the policy environment so that the contribution of private investors and other stakeholders can be maximized to achieve the goals set out for New India

NITI Aayog Challenges:

To prove its mettle in policy formulation, the NITI Aayog needs to prioritize from the long list of 13 objectives with clear understanding of the difference in policy, planning and strategy.

To build the trust, faith and confidence more than the planning commission, NITI Aayog needs freedom of various kinds with budgetary provisions not in terms of plan and non-plan expenditures but revenue and capital expenditure as the higher rate of increase in capital expenditure can remove infrastructural deficits at all levels of operation in the economy.

NITI Aayog	**Planning Commission**
It serves as an advisory Think Tank.	It served as extra-constitutional body.
It draws membership from a wider expertise.	It had limited expertise.
It serves in spirit of Cooperative Federalism as states are equal partners.	States participated as spectators in annual plan meetings.
Secretaries to be known as CEO appointed by Prime- Minister.	Secretaries were appointed through usual process.
It focuses upon ‘Bottom-Up’ approach of Planning.	It followed a ‘Top-Down’ approach.
It does not possess mandate to impose policies.	Imposed policies on states and tied allocation of funds with projects it approved.
It does not have powers to allocate funds, which are vested in Finance Minister.	It had powers to allocate funds to ministries and state governments.

Q: Explain the Role of NITI Aayog in Promoting Co-Operative, Competitive Federalism in India?

Introduction:

Based on the relationship between the central and state government–the concept of federalism is divided into- Co-operative federalism and Competitive federalism.

In Cooperative federalism the Centre and states share a horizontal relationship, where they “cooperate” in the larger public interest .It is an important tool to enable states’ participation in the formulation and implementation of national policies. Union and the states are constitutionally obliged to cooperate with each other on the matters specified in Schedule VII of the constitution.

In Competitive federalism the relationship between the Central and state governments is vertical and between state governments is horizontal.This idea of Competitive federalism gained significance in India post 1990s economic reforms.

In a free-market economy, the endowments of states, available resource base and their comparative advantages all foster a spirit of competition. Increasing globalisation, however, increased the existing inequalities and imbalances between states.In Competitive federalism States need to compete among themselves and also with the Centre for benefits.

Role of NITI Aayog in Promoting Co-Operative, Competitive Federalism

- In 2017, the Niti Aayog called out for competitive “cooperative federalism” stressing that this formula would **redefine the relationship between the Centre and the Sta**tes.
- Former vice chairman of Niti Aayog Arvind Panagariya put the onus on **the States to reimagine brand India.**
- **Chief secretaries of States in one of the meetings** even showcased the best practices being incorporated in their respective States, a move aimed at promoting cross fertilisation of ideas.
- There appears to be a silver lining in the functioning of the Aayog in enabling states competing with each other to promote governance initiatives in the spirit **of “co-operative, competitive federalism”.**
- An important objective of NITI Aayog is to establish a dynamic institutional mechanisms where ‘**eminent individuals outside the government system’** could contribute to policy making.
- The priorities for the Aayog are evident with the suggestions for rationalisation of **66 central schemes on skill development and making Clean India** a continuous program leading to the formation of three CM sub-committees.
- In a subtle manner, NITI Aayog not only puts the onus on Chief Ministers to hasten implementation of projects for the betterment of the state, but also make the state an attractive investment destination – **a kind of competitive federalism**.
- Given the greater scope for states to work together and learn from each other, it is obvious that for federalism to work well, these states must also fulfil their role in promoting the shared national objectives.
- It is true that India cannot advance without all its states advancing in tandem but it may so happen that by not granting the statutory status for the NITI Aayog, government has made it vulnerable to future ambush under a different political dispensation.

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