ECONOMICS WORK BOOK

CLASS-XII

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Ek Tripura Shrestha Tripura

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Class - XII

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রতন লাল নাথ
মন্ত্রী
শিক্ষা দপ্তর
ত্রিপুরা সরকার

বার্তা

শিক্ষার প্রকৃত বিকাশের জন্য, শিক্ষাকে যুগোপযোগী করে তোলার জন্য প্রয়োজন শিক্ষাসংক্রান্ত নিরন্তর গবেষণা। প্রয়োজন শিক্ষা সংশ্লিষ্ট সকলকে সময়ের সঙ্গো সঙ্গো প্রশিক্ষিত করা এবং প্রয়োজনীয় শিখন সামগ্রী, পাঠ্যক্রম ও পাঠ্যপুস্তকের বিকাশ সাধন করা। এস সি ই আর টি ত্রিপুরা রাজ্যের শিক্ষার বিকাশে এসব কাজ সুনামের সঙ্গো করে আসছে। শিক্ষার্থীর মানসিক, বৌদ্ধিক ও সামাজিক বিকাশের জন্য এস সি ই আর টি পাঠ্যক্রমকে আরো বিজ্ঞানসম্মত, নান্দনিক এবং কার্যকর করবার কাজ করে চলেছে। করা হচ্ছে সুনির্দিষ্ট পরিকল্পনার অধীনে।

এই পরিকল্পনার আওতায় পাঠ্যক্রম ও পাঠ্যপুস্তকের পাশাপাশি শিশুদের শিখন সক্ষমতা বৃদ্ধির জন্য তৈরি করা হয়েছে ওয়ার্ক বুক বা অনুশীলন পুস্তক। প্রসঙ্গাত উল্লেখ্য, ছাত্র-ছাত্রীদের সমস্যার সমাধানকে সহজতর করার লক্ষ্যে এবং তাদের শিখনকে আরো সহজ ও সাবলীল করার জন্য রাজ্য সরকার একটি উদ্যোগ গ্রহণ করেছে, যার নাম 'প্রয়াস'। এই প্রকল্পের অধীনে এস সি ই আর টি এবং জেলা শিক্ষা আধিকারিকরা বিশিষ্ট শিক্ষকদের সহায়তা গ্রহণের মাধ্যমে প্রথম থেকে দ্বাদশ শ্রেণির ছাত্র-ছাত্রীদের জন্য ওয়ার্ক বুকগুলো সুচারুভাবে তৈরি করেছেন। ষষ্ঠ থেকে অষ্টম শ্রেণি পর্যন্ত বিজ্ঞান, গণিত, ইংরেজি, বাংলা ও সমাজবিদ্যার ওয়ার্ক বুক তৈরি হয়েছে। নবম দশম শ্রেণির জন্য হয়েছে গণিত, বিজ্ঞান, সমাজবিদ্যা, ইংরেজি ও বাংলা। একাদশ দ্বাদশ শ্রেণির ছাত্র-ছাত্রীদের জন্য ইংরেজি, বাংলা, হিসাবশাস্ত্র, পদার্থবিদ্যা, রসায়নবিদ্যা, অর্থনীতি এবং গণিত ইত্যাদি বিষয়ের জন্য তৈরি হয়েছে ওয়ার্ক বুক। এইসব ওয়ার্ক বুকের সাহায্যে ছাত্র-ছাত্রীরা জ্ঞানমূলক বিভিন্ন কার্য সম্পাদন করতে পারবে এবং তাদের চিন্তা প্রক্রিয়ার যে স্বাভাবিক ছন্দ রয়েছে, তাকে ব্যবহার করে বিভিন্ন সমস্যার সমাধান করতে পারবে। বাংলা ও ইংরেজি উভয় ভাষায় লিখিত এইসব অনুশীলন পুস্তক ছাত্র-ছাত্রীদের মধ্যে বিনামূল্যে বিতরণ করা হবে।

এই উদ্যোগে সকল শিক্ষার্থী অতিশয় উপকৃত হবে। আমার বিশ্বাস, আমাদের সকলের সক্রিয় এবং নিরলস অংশগ্রহণের মাধ্যমে ত্রিপুরার শিক্ষাজগতে একটি নতুন দিগন্তের উন্মেষ ঘটবে। ব্যক্তিগত ভাবে আমি চাই যথাযথ জ্ঞানের সঙ্গো সঙ্গো শিক্ষার্থীর সামগ্রিক বিকাশ ঘটুক এবং তার আলো রাজ্যের প্রতিটি কোণে ছড়িয়ে পড়ুক।

(রতন লাল নাথ)

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Class : XII

Content

Part-A : Macro Economics

Part-B : Indian Economic Development

CHAPTER 1

"INTRODUCTION"

During1930s the world observed the most dramatic & catastrophic periods in the economic history.The revese recession of 1929-1930 turned into the great depression of 1931-33. It was felt by most of the economists that drastic fall in income & output levels was due to series of errors in fiscal and monetary policies of various economies, especially of USA,where the full of economic activity was greater than the other parts of the world.The economic environment was much that survival of capitalism & democracy seemed impossible.

The economists belived that classical concept of free market economy without government intervention led to this crisis & economic backwardness. It was during this time the keynesian school of thought come into existance,keynes challenges the classical concept stating that full employment should be the norm rather than the exception which always holds good. Classical concept of self correction market forces without government intervention failed to correct the world wide depression in 1929 & this was the time when keynsian belief come into existance that government should attend to, "those functions which fall outside the private sphere & those decissions which are made by no one if the state does not make them"
* [Lord J.M.Keynes-famous British economist]

Keynes is called the "Father of Modern Macroeconomics". He wrote a book on Macro economics named " General Theory of Employment, Interest & Money" in 1936.

In Macro economics, we try to understand how the level of income & employment is determined & how unemployment can be removed- in real terms, Macro economics deals with the economy in its totality. It helps to solve the central problem of full employment of resources in an economy which forms the subject matter for study of Macroeconomic theory. Macroeconomics has enabled to properly organise, collect& analyse tha data about national income & cordinate with international economic policies.

The study of Macro economics deals with- the theory of Employment, National Income, General price level, Money, International Trade & economic growth.

The study of Macr o economics helps to

(a) Understand the measurement of National Income of a country.

(b) Formulate govt. budget & politics to control the situation of inflation & deflation.

(c) Facilitate international comparisons on the basis of aggregate demand & Aggregate supply and surplus & deficit in balance of payment.

(d) Cordinate various policies to solve economic problem like poverty, unemployment, inflationary & deflationary gap etc.

The two branches of economics- Micro & Macro economics are different in their approaches, but changes in micro economic variables have an impact or macroeconomic variables & vice-versa.i.e Micro & Macro economics are interdependent. For example- price of good is influced by the general price level of the economy, National Income of a country is sum total of income of individual units of the country etc. So both micro & marco economics are supplymentary & not substitute of each other.

EXERCISE

1.1 True/ False

1. Study of the problem of unemployment in india is considerd a microeconomic study.
2. Aggregation is involved only in macroeconomics.
3. Monetary & fiscal policy of Government are a part of macro economic analysis.
4. Aggregate demand in macroeconomics is identical with market demand in microeconomics.
5. 'Save more' is always a virtue.
6. Problem of scarcity & choice causes to exists at the macro level when resources of the entire nation are polled together.

1.2 Multiple choice questions:-

1. The study of macro economics includes–

   (a) Theory of employment (b) Theory of money (c) both (a) & (b) (d) None of these.

2. Example of micro economic variables–

   (a) Aggregate demand (b) Total saving (c) Aggregate supply (d) Supply of a firm.

3. According to classical theory there is always–

   (a) Full employment equilibrium (b) over full employment equilibrium (c) under-full employment equilibrium (d) None of these.

4. Micro economics is also called-

   (a) Theory of income & employment (b) classical theory (c) keynesian theory (d) price theory.

5. In micro economics, there exists :

   (a) Limited aggregation (b) No aggregation (c) Vast aggregation (d) none of these.

6. Keynesian School of thought advocates possibility of -

   (a) AD=AS (b) AD>AS (c) AD<AS (d) all of them.

7. Government interferes in the functioning of an economy to correct–

   (a) excess demand (b) deficient demand (c) both a & b (d) Neither (a) nor (b).

8. Economic Agents include–

   (a) Government (b) consumers (c) producers (d) all of them.

9. Macro economics is concerned with–

   (a) The level of output of goods & services in the economy.

   (b) The general price level

   (c) GDP growth

   (d) all of these.

10. An example of micro economic theory:

   (a) consumer behaviour & demand (b) government Budget (c) balance of payment (d) determination of equilibrium level of income.

1.3 Fill in the blanks

1. Great depression of ________ led to full in employment & output.
2. ________ is the determinant to solve the problems of micro economics.
3. ________ is the determinant to solve the problems of macro economics.
4. The branch of economics which deals with aggregates is ________
5. Study of unemployment in India is related with ________ economics.

1.4 **Very short answer type questions:**

1. What is micro economics?
2. What is macro economics?
3. Who are economic agents?
4. Give two examples of micro economic studies?
5. Give two examples of macro economic studies?
6. Give two examples of macro economic variable?
7. What is micro-macro paradox?
8. Give an example of 'micro depends on macro'.
9. Give an example of "macro depends on micro".
10. Which branch of economics solves the problem of "what,how & for whom" to produce in the economy?

1.5 **Short answer type questions <3/4 marks>**

1. Write the differences between micro & macro economics.
2. Explain the concept of micro-macro interdependence with suitable examples.
3. Explain the scopes of macro economics.
4. Explain the "great Depression" of 1929.

ANSWER KEY

1.1 True/false

1. False. As it is the study of whole economy & so included in macro economic study.
2. False. It is involved both in micro & macro economics.
3. True. 4. False.
5. False. Saving is virtue in micro level but not necesarity at macro level.
6. False

1.2 **Multiple choice:**

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

1.3 **Fill in the blanks:**

1. 1929 2. Price 3. Income 4. Macro economics 5. Macro economics

1.4 Very shoryt answer type questions:

1. It is the study of economic relationships, economic problems or economic issues at the level of an individual like a consumer, a firm etc.
2. It is the study of economic relationships,economic problems, or economic issues at the level of economy as a whole, like problem of poverty, unemployment, inflation etc.
3. Economic agents are the individual, or institutions who take economic decessions.
4. Study of consumer behaiviour, study of price determination in the market.
5. Study of unemployment, study of general price level in india.
6. Aggregate demand, Aggregate supply.
7. "What is logical at micro level, may not be logical at macro level"
8. Investment in one industry depends upon the level of investment in the economy as a whole.
9. National income in macro economics is the sum total of income earned at the micro level.
10. Micro economics.

CHAPTER-2

National Income Accounting

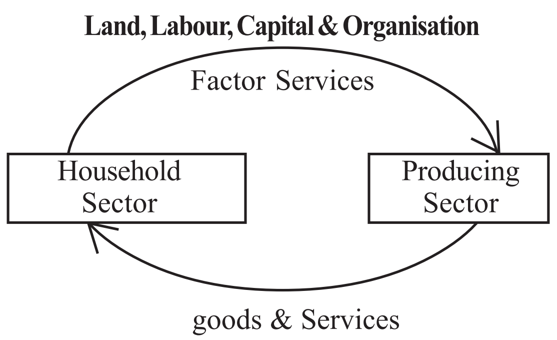
The three basic economic activities of an economy is production, consumption & investment/ expenditure. In the economy, producers produce goods & services, consumer consumes those goods & services and there by generate income.

2.1 **CIRCULAR FLOW OF INCOME:**

Income generated in the production process flows in a circular order & in a contineous process. The endless flow of income is called circular flow of income. It is of the following two types :

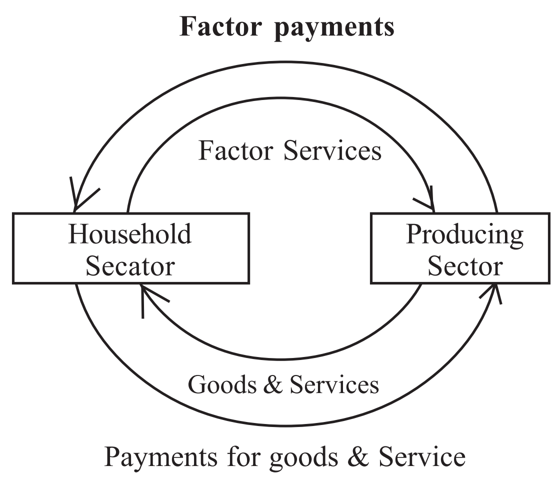
- **Real flow/product flow :**

It is the endless flow of factor services and goods & services among the different sector of the economy,specially household & producing sector.

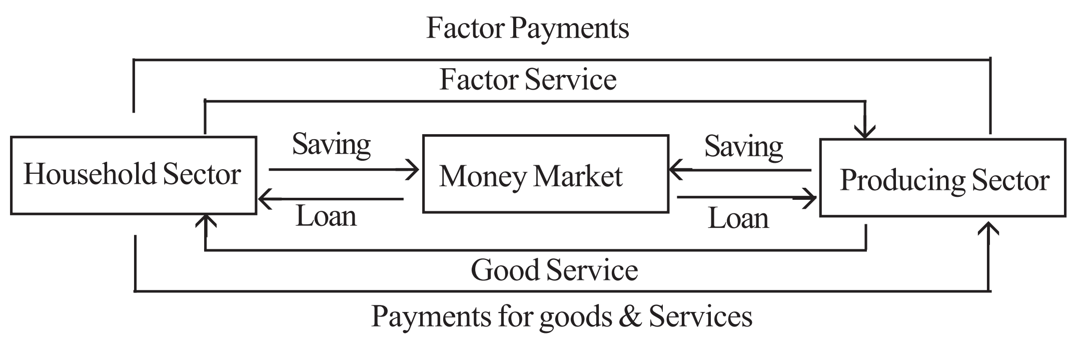


- **Money flow/Income flow:**

It is the endless flow of money or income in terms of factor payments(Rent,wages, interest & profit) and payments for goods & services among the different sectors of the economy.



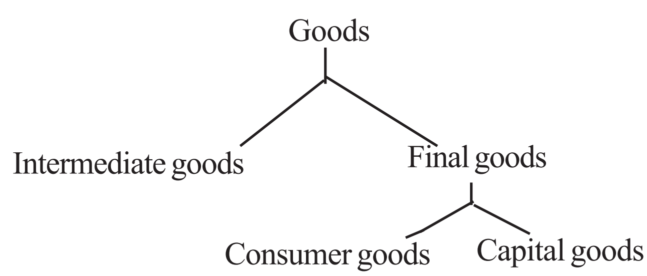
The real flow & money flow constitutes the 2 sector economy model of circular flow of income. Here the household sector provides factor services <Land,Labour,capital & enprepreneurstip> to the producing sector and in return it receives factor payments(Rent,wages,interest & profit) from produers. The producers produces goods & services using these factor services and provide it to household people and in returns receive payments for goods & services. Both the sector keep their savings in financial/money market and borrow from there on requirement.



When money/income flows out from circular flow model, it is called Leakages of circular flow.Like saving,tax,expenditure on import etc. It reduces the level of employment,income & output of the economy. On the other hand,when money/income flows in the circular flow model, it is called injection in curcular flow. Like borrowing, income from export, govt. expenditure etc. It increases the level of employment, income & output of the economy.

2.2 **End use classification of goods:**

Goods/commodities which are produced & required in production process can be classified in the following ways.



Intermediate good:

It refers to those goods which are required in the production process of a commodity. It includes-

(a) Raw materials (Jute, cotton, etc.)

(b) Goods purchased for resale < car purchased by a dealer for resale>

(c) Durable capital goods purchased by govt< for defence purpose>.

Final good : It refers to those goods which are ready for the final users. it includes–

(a) Consumer goods- purchased for direct satisfaction< like- sugar, milk purchased by household>

(b) Capital goods- purchased by the producers for the purpose of production< like- Bus purchased by a transport company>

2.3 **Investment & its types:** Investment or capital formation refers to the sum total of production of capital goods during an accounting year. It increases the production capacity of the producers. It is of the following types :-

(a) fixed investment- It refers to increase in the stock of fixed asset during an accounting year. Example: machine, plant,land,etc.

(b) Inventory investment: It refers to change in inventory stock<like unsold product, semi finished product etc> during an accounting year.

(c) gross investment: It refers to the total production of capital goods during an accounting year.

Gross investment / Capital formation

= Net investment+ consumption of fixed capital i.e. depreciation.

Depreciation is the fall in value of fixed assets<machine etc> due to normal wear & tear and expected obsolence.

2.4 **Normal Residents & Non residents of a country:**

A normal resident is said to be a person or an institution who ordinarity resides or is located in a country (for more than one year) and whose centre of economic interest lies in that country.

A non resident is raid to be a person or an institution who do not fulfill the criterion of centre of economic interest. For example- International organigation (WTO, WB, IMF etc) Foreign travellers, foreign staff of embassies, The crew of foreign ship etc.

2.5 **Domestic/Economic territory:**

Domestic territory is the geographycal territory administered by a government within which persons, frontiers, embassies, residents between two or more countries etc.

2.6 **Domestic & National income:**

Domestic income (Net domestic product at factor cost-NDP_{FC}) is the sum total of factor incomes generated by all the producing units located within domestic territory of a country along with net factor income from abroad during an accouning year.

2.7

Terms used in National Income Accounting

(a) Gross Domestic product <GDP>

(b) Gross National Product <GNP>

(c) Net Domestic Product <NNP>

(d) Net National Product <NNP>

(e) Factor Cost <FC>

(f) Market Price <MP>

Relation between the Terms:-

gross & net

gross-depreciation=Net.

Domestic & National

Domestic + net factor inome from abroad(NFIA)

= National

<NFIA= factor income from abroad- factor income to abroad>

Factor cost & market price

FC + Net indirect Tax(NIT) = NP

(NIT= Indirect tax-subsidy)

2.8 **Methods of Measuring National Income:**

From the earlier discussion of circular flow we learnt that production gives rise to income, income gives rise to expenditure & expenditure causes production of goods & services. Accordingly national income of a country can be measured in three different methods, which are-

- Value added/ production/ output method.
- Income/ Distribution method
- Expenditure method.

All the above three methods provide the same measurement of national income. Each method is important in its own way as it refers to different approaches to study National Income of an country.

2.8.1 **Production method :** National income is meausered on the basis of contribution made by all the producing enterprises in the domestic territory of a country with in the accounting year.

GDP_{MP}= Value of output- Intermediate purchase

= (Sales+ change in stock)- Intermediate purchase.

<Sales= price/ unit × quantity sold>

National Income(NNP_{FC})

= GDP_{MP}

– Depreciation

+ Net factor Income From Abroad(NFIA)

– Net Indirect Tax (NIT)

Precautions of production method:

(a) Only the value of final goods & services are to be include, value of intermedicate goods should be excluded otherwise the problem of double counting will arise.

(b) Value of sales & purchase of second hand good, shares & bonds are to be excluded as these are only related with change in ownership. But brokerage/ commision of sales representative should be included for his productive services rendered.

(c) Services produced for self consumption should be excluded as its market value can not be assessed < like services of house wife etc >.

(d) Own account production for self consumption should be included.

(e) Value of production of illegal activities< like black marketing, gambling> should be excluded.

An important issue related with production method is " problem of double counting". It arise when the value of same product is added more than once in the calculation of GDP and then it provides over estimation of National Income. It can be avoided though the following two methodes:

(a) **Final output method :** Where only the value of final product is included and thus the value of intermediate product is excluded.

(b) **Value added method :** Where the value added in the every stage of production in the production process of a good is added and by this the value of intermediate products are excluded.

2.8.2 **Income Method:** National Income is measured in terms of factor payments (wages, rent, interest & profit) to the owner of factors of production (Labour, land, capital & enterprise) during an accounting year & then Net factor income from abroad is added with NDP_{FC} to obtain National Income (NNP_{FC})

National Income (NNP_{FC})

= Compensation of employees

(wages in cash & kind + Empolyer's contribution to social security schemes)

+ operating surplus(Rent + Interest + Royalty +Profit)

+ Mixed income of self employed.

+ Net Factor Inome From Abroad.

Precautions of income method:

(a) Income from illegal activities(like robbery, gambling etc) are not included in calculation of National income as these are not related with any production activities.

(b) Transfer income(like old age pension etc) are excluded as no goods & services are produced against it.

(c) Penson on retirement is to be included as it is the part of compensation of employees.

(d) Income from windfull gain(like lottaries) is to be excluded as these are unearned income.

(e) Income from sale of shares, old or second-hand good are to be excluded as these are related with only change of ownership not with any productive activities. But brokerage should be included for the factor services of broker.

2.8.3 **Expenditure method:**

National income is measured in terms of expenditure on the purchase of final goods & services produced in the economy during on accunting year. To obtain National Income(NNP_{FC}) Net factor income from abroad is added & depreciation and Net indirect taxes are substructed.

GDP_{MP} = Private final consumption expenditure

+ Government final consumption expenditure

+ Gross domestic capital formation

(Gross domestic fixed capital formation

+ change in stocke)

+ Net export (export-import)

National Income (NNP_{FC}) = GDP_{MP}

– Depreciation

+Net factor income from abroad

– Net indirect ax (NIT)

Precautions of Expenditure Method:

(a) Expenditure on transfer payment(like pension, money given to begger etc) are to be excluded as no goods or services are received against them.

(b) Expenditure on second hand good (expenditure on purchase of old house, car etc) are to be excluded as no new goods are produced on that. But expenditure on brokerage given to sales representative is to be included for his factor services rendered.

(c) Expenditure on intermediate goods are to be excluded and only expenditure on final good should be included otherwise the problem of double counting will arise.

Nominal & Real National Income:

National Income can be measured in monetary terms in two ways- at current prices & at constant prices. When National Income is measured at current prices. i.e. prices of that particular year, then we obtain Nominal National Income. When National Income is measured on the basis of certain base year price then we obtain Real National Income. Out of Real National Incomed & Nominal National Income, Real National Income is a better indicator because it estimates the effect of change in prices where as Nominal Income does not.

2.9.1 **Price Index & GDP deflator:**

It measures the average level of prices of all goods and services taken to find GDP.

$$\text{GDP deflator/ price index} = \frac{\text{National GDP}}{\text{Real GDP}} \times 100$$

$$\text{i.e. } \frac{\text{GDP at current prices}}{\text{GDP at constant prices}} \times 100$$

2.10 GDP & Welfare

" Neither GDP nor GNP nor National Income of a country indicate the welfare of the country"

Higher level of GDP/ GNP/ NI does not indicate the higher level of welfare. Because–

(a) If the distribution of GDP is inequal, i.e if there arises huge gap between rich & poor due to concentration of income in few hands only, then it will reduce the level of welfare of mass of the people of the country.

(b) The value of Externalities is ignorged in GDP. The positive externalities increases the welfare level. But it is not included in GDP & so GDP is under estimated. On the other hand, negative externalities reduces the welfare level. But it is not included in GDP & so GDP is over estimated.

(c) If the rate of population growth is more than the rate of economic(GDP) growth then, per capital income will fall, i.e. per capital availability of goods & services will fall. It implies lesser economic welfare.

2.11. **Externalities:**

It refer to good or bad impact of an economic activity by an individual or organisation for which nothing to be paid or no penalty is imposed. It is of the following 2 types:-

(a) **Positive externalities:-**

It refers to the good impact of an economic activity by an individual or a firm for which nothing to be paid for gaining that good impact.

Example :- The pleasure obtains by the public from a park, flower garden etc. saving of time, energy & money from the use of a flyover made by govt.

(b) **Negative externalituies:-**

It refers to the bad impacts of an economic activity by an individual or a firm for which they are not penalised.

Example:- Pollution caused by an industry for which its neighbours suffer from various diseases.

STUDY AIDS

Differences between different topics:-

1. LEAKAGES in circular flow of income	**INJECTION in circular flow of income**
a) Leakes are those flow variables which which reduces the flow of income / money in circular flow model. Example- saving, taxes,payments for import.	a) Injections are those flow variables which increases the flow of income/money in the circular flow model. Example- Borrowing, govt expenditure, receives from export.
b) It has negative impact on the economy as it reduces the level of employment, income output in the economy	b) It has positive impact on the economy as it increases the level of income, output & employment in the economy.
c) It reduces the growth & development rate of the economy.	c) It increse the growth & development rate of the economy.
2. **Real GDP (GDP at constant price)**	**Nomina GDP(GDP at current price)**
(a) It is the market value of goods & services produced in the domestic territory of a country during an accounting year & it is estimated on the basis of certain base year price.	(a) It is the market value of goods & services produced in the domestic territory of a country during an accounting year & it is estimated on the basis of curremt year price.
(b) It is a good measure of welfare.	(b) It is not a good measure of welfare.
(c) It can increase only when the flow of goods & services increases in the economy.	(c) It can increase only when price level increases even there is no increase in goods & services.

3. Stock	Flow
(a) Stok refers to those variables which are measured at a particular point of time. Ex:- Wealth, money supply, labour force, bank deposite, capital, distance between two place.	a) Flow refers to those variables which are measured during a period of time. Ex:- Income, capital formation, interset on capital, change in stock, speed of a car etc.
(b) It is a static concept as it has no time dimention.	(b) It is a dynamic concept as it has time dimention, like- per day, per year etc.
(c) More the stock of capital more is the flow of goods & services. i.e. Stock impacts the flow.	(c) More the flow of income, more is the stock of wealth. i.e.Flow impacts the stock.
4. Intermediate Goods	**Final Goods**
(a) It refers to those goods which are purchased by a firm as raw materials from another firm. Ex:- sugar, milk etc. Purchased by a broker, cotton pruchased by a cotton mill.	(a) Final goods are those, which are ready to use by the final users. Ex:- Milk, cloths, fruits etc. Purchased by a house wife.
(b) These goods remain within the production boundary and value is yet to be added to this goods	(b) These goods are out of production boundary as no value is to be added with these goods.
(c) Expenditure on intermediate good is called intermediate cost/expenditure.	(c) Expenditure on final good is called final expenditure.
(d) Its value is not included in the calculation of National Income as it creats the problem of "Double-counting".	(d) Its value is included in the calculation of National Income.
5. Consumption Goods	**Capital Goods**
(a) Goods which are purchased by the final consumers are called consumotion goods. Ex:- Cloths, food items etc. Purchased by household.	(a) Goods which are purchased by the producers for the production purpose is called capital goods. Ex:- Machine,raw materials etc. Purchased by a producer.
(b) Expenditure on such goods are called consumption expenditure.	(b) Expenditure on such goods are called investment.
(c) More of production of such goods indicate higher level of welfare of the society.	(c) More of production of such goods indicate higher level of growth of the economy.

6.	**Depreciation**		**Capital loss**
(a)	It refers to normal wear & tear or accidental damages or expected obsolescence of fixed asset.	(a)	It refers to the loss of fixed asset while these are not in use.
(b)	It is a loss due to normal wear & tear	(b)	It is a loss due to natural calamities or change in economic structure, fall in market value etc.
(c)	It is managed through depreciation refund fund.	(c)	It is managed by insurance of the fixed assets.
7.	**Factor Income(Payment)**		**Transfer Income(Payments)**
(a)	It is income received in return of rendering factor services by the factors of production.	(a)	It is income received without any goods & services provided in return.
(b)	It is a earning concept. Ex:- rent, wages, interest & profits.	(b)	It is a receipt concept. Ex:- gifts grants, donation,scholarship etc from household or Govt. or corpotare.
(c)	These are included in national income as there is corresponding flow of goods & services.	(c)	These are not included in National Income as there is no corresponding flow of goods & services.
8.	**Normal Residents of a country**		**Non-Residents of a country**
(a)	A normal resident is said to a person who ordinarily resides in a country for a period of 1 year or more and his centre of economic interest< i.e production, consumption, investment etc> lies in that country.	(a)	Non residents of india are those who who are citizen of india but at the same time a resident of another country to perform basic economic activities.
	Example:-		Examples:-
*	Indians working in foreign Embassy in india	*	Foreigners working in indian Embassy in abroad.
*	Indian working in the branch of WHO/IMF located in india.	*	Foreigners working in the branch of WTO/ IMF in india.
*	Indian Embassador in abroad.	*	Foreign doctors/ technician etc. working in india for less than one year.
*	Foreigner living in india for more than one year for the purpose of treatment, studies etc.	*	Embassadors in india from abroad.

9. Gross Domestic Product (GDP)	Gross National Product (GNP)
(a) It is a territorial concept. (b) It includes production of final goods & services within domestic territory of a country. (c) It doesnot include Net Factor Income from abroad. GNP- NFIA=GDP (d) It includes all the producers with in the domestic territory of a country.	(a) It is a National concept. (b) It includes the production of final goods & services from the entire world. (c) It includes Net Factor Income from abroad. GDP + NFIA=GNP (d) It includes all the producers who are normal residents of a country.
10. Gross Domestic Product (GDP_{MP})	**Net Domestic Product (NDP_{FC})**
(a) It is a territorial concept. (b) It includes production of final goods services & services within domestic territory of a country. (c) It includes Net Indirect Tax(NIT) & Depreciation. $GDP_{MP}=NDP_{FC}$ + dep+ NIT	(a) It is a National concept. (b) It includes the production of final goods & services by normal residents of a country. (c) It excludes Net Indirect Tax(NIT) & Depreciation. $NDP_{FC}=GDP_{MP}$ -NIT – dep

2. **The problem of DOUBLE COUNTING:-**

When the value of a product is estimated more than once in the calculation of GDP, it creats the situation of over estimation of GDP-this problem is called the "problem of double counting"

For example:-

Suppose a farmer produces sugarcane & sells it to a sugar mill at ₹1000. The miller produces sugar & sells it to a confectioner at ₹ 1300. The confectioner produces sweets & sells it to the final cunsumer at ₹ 1400.

Now the problem of double counting will arise if we take all the value of output as ₹(1000++ 1300+ 1400)= ₹ 3700. In this way the value of sugarcane has been included 3 times, sugar for 2 times, where as the value of final products i.e. sweets is only ₹ 1400. or the total value added in (1000+ 300+100)= 1400.

This problem can be avoided in the following 2ways-

a) **Final Output Method:-**

According to this method, only the value of final good is included and by this the value of intermediate products are excluded.

In the above example, the value of final good is sweets is ₹ 1400 should be included only.

b) **Value added method:-**

According to this method the value added in every stage of a production of good is to be included and by this the value of intermediate products are excluded. Thus the problem of over valuation can be avoided.

In the above example, total value added in 3 stages are (1000 + 300+ 100) = ₹1400. ie the value of final product.

EXERCISE

1.1 Are the following statements true or false :

1. Domestic income of a country may be more than National Income.
2. National income is affected by both factor & transfer income.
3. Purchase of a house by an household is a part of gross domestic capital formation.
4. Washing of own cloths will be included in National Income.
5. "An ammount of ₹ 5000 contributed by an employee to his provident fund"- It is a part of compensation of employees.
6. Production for self services consumption are not included in National Income.
7. Real GDP may be equal to Nominal GDP.
8. Rent of own house should be included in National Income.
9. Gross domestic capital formation is the sum of gross domestic fixed capital formation & change in stock.
10. Corporate tax is a part of profit.
11. Sum of export & import is net export.
12. Rent is a part of operating surplus.
13. Change is stock is the difference between closing stock & opening stock.
14. Pollution made by an industrial plant is negative externalities.
15. Leisure is included in GNP.

1.2 Multiple choice question:

1. Out of the following which aggregate represents "National Income"?

   (a) NNP_{MP} (b) NNP_{FC} (c) NDP_{MP} (d) GDP_{MP} .
2. Which one of the following is not a component of " operating surplus"?

   (a) Interest (b) Rent (c) Royalty (d) Compensation of employees
3. In which type of economy domestic income & national income are equal?

   (a) open economy (b) closed economy (c) both (a) & (b) (d) None

4. Which one is included in National Income?

(a) Winning from lottery (b) Milk purchased by a dairy firm (c) National Debt interest (d) None

5. Which of the following is a part of Expenditure Method?

(a) Rent & Royalty (b) Mixed income (c) Net export (d) Sales

6. " Operating surplus" refers -

(a) Income from property (b) Income from entrepreneurship (c) both (a) & (b) (d) None of these

7. When the entire output is not sold in an accounting year, then value of output is equal to:

(a) Sales + change in stock (b) sales-change in stock (c) Sales (d) change in stock

8. National Income includes:

(a) Transfer Income (b) factor income (c) both (a) & (b) (d) none

9. Measure of National Income at constant price constitute its-

(a) Nominal value (b) Real value (c) both (a)& (b) (d) none

10. Value added by a firm is equal to -

(a) sales (b) profit (c) sales-intermediate consumption (d) sales + intermediate consumption.

11. Which of the following statement is correct?

(a) Real GDP = $\frac{\text{Price Index}}{\text{Nominal GDP}} \times 100$ (b) Real GDP = $\frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$

(c) Nominal GDP = $\frac{\text{Real GDP}}{\text{Price Indes}}$ 100 (d) Nominal GDP = $\frac{\text{Price Index}}{\text{Real GDP}} \times 100$

12. Which of the following is a non-economic activity & not included in national income?

(a) Medical services by a doctor (b) A lawyer doing his practice

(c) a house wife cooking for her family members (d) services renderd by house maid.

13. With the rise in Real National Income , welfare of the people:

(a) Rises (b) falls (c) Remain same (d) none

14. If NDP_{FC} = ₹1500 & Net factor income from abroad = ₹500, then NNP_{FC} will be

(a) 1500 (b) 2000 (c) 1000 (d) 2500

15. If purchase of raw material is ₹ 1200, import ₹ 300 & export ₹ 500, then value of intermediate consumption is:

(a) 1200 (b) 1500 (c) 1700 (d) 700.

1.3 Fill in the blanks :

1) The difference between value of output & value added is ________.

2) If net national product is given at market prices, we _______ indirect taxes and ________ sybsidies to get National Income of a country.

3) Final goods are those which are used eaither for ________ or for _______.

4) GDP_{MP} = ₹1000 & subsidies= ₹ 50, then GDP_{FC}=__________.

5) Net export is the________ between export & import.

6. Operating surplus is the sum of income from __________ and income from entrepreneurship.

7. Measures of national income at __________ prices constitute its Real value.

8. Change in stock becomes _________ when closing stock & opening stock are equal to each other.

9. _________ sector comes under tertiary sector.

10 . Nature of GST is __________ Taxes.

1.4 Short question :- **(1 mark each)**

1. Define domestic income/product(NDP_{FC})
2. Define national income/product(NNP_{FC})
3. Write 2 methods to avoid the problem of double counting.
4. What is operating surplus?
5. What is mixed income?
6. Why Leisure is excluded in GNP?
7. What is Nominal GDP?
8. What is Real GDP?
9. What is GDP deflator?
10. Give example of positive externalities.
11. Give example of negative externalities.
12. Define intermediate consumption.
13. What is externalities?
14. What is factor income?
15. What is transfer payment?
16. What is non market activitiies.
17. What is Leakages in circular flow of income?

18. What is Injections in circular flow of income?
19. What is the problem of Double Counting?
20. What is value added?

1.5 SHORT ANSWER TYPE QUESTION (3/4 Marks) :

1. Briefly explain the real flow & money flow of income.
2. Describe the circular flow of income in a two sector economy. (with financial sector)
3. Write the difference between real flow & money flow.
4. Write four precautions required while estimating National Income by income method.
5. Write four precautions required while estimating National Income by expenditure method.
6. Write four precautions required while estimating National Income by output method.
7. What is the problem of "double counting"? Expalin with a suitable example.
8. Explain the measures to remove the problem of "Double Counting" arises in calculation of National Income by output method.
9. Explain how "distribution of GDP" is a limitation in taking GDP as an index of welfare.
10. What is externalities? Explain its types with suitable examples.
11. Write the difference between:
    (a) Leakages & Injections in circular flow of income.
    (b) Intermediate & final good.
    (c) Consumtion good & capital good
    (d) Stock & flow
    (e) Depreciation & capital loss
    (f) Gross investment & net investment
    (g) GDP & GNP
    (h) Factor income & Transfer income
    (i) Real & Nominal GDP
12. What is investment? write its types with examples.
13. Calculate Gross value added at market price (GVA_{MP})

Items	**₹ (in Lakhs)**
(a) Sales	50,000
(b) Change in stock	15,000
(c) Intermediate consumption	10,000

(d) Depreciation	9,000
(e) subsidy	12,000
(f) Indirect tax	14,000

14. Find Net value added at factor cost (NVA_{FC})

Items	**₹ (in lakhs)**
(a) Indermediate cost	10,000
(b) Sales	750 units
(c) price/unit	40
(d) depreciation	3000
(e) change in stock	10,000
(f) Indirect tax	2000

15. Find gross value added at factor cost (GVA_{FC})

Items	**₹(in Lakhs)**
(a) sales	2000 unit
(b) price/unit	20
(c) depreciation	2000
(d) change in stock	(–) 500
(e) Intermediate cost	5000
f) Subsidy	3000

16. Calculate Net value added at market price (NVA_{MP}) by production method.

Items	**₹(in Lakhs)**
a) sales	8,000
b) change in stock	100
c) subsidy	1,200
d) depreciation	300
e) Intermediate cost	5,500
f) Rent	500

17. Find NVA_{FC} in production method.

Items	**₹(in Lakhs)**
a) Sales	1000
b)Indirect tax	100

c) subsidy	40
d) change in stock	00
e) depreciation	50
f) Intermediate cost	600
g) operating surplus	60

18. Find NDP_{FC} by production method.

Items	**₹(in Lakhs)**
a) Subsidy	1
b) Sales	100
c) change in stock	(–) 10
d) indirect tax	5
e) Intermediate cost	20
f) depreciation	15

19. Find NVA_{MP} by production method.

a) Depreceations	700
b) sales	36,000
c) change in stock	200
d) sales tax<indirect tax>	3,000
e) Intermediate purchase	2,000

1.6 LONG ANSWER TYPE QUESTIONS (6 marks) :

1. Explain the limitation of GDP as an indicator of welfare.
2. Are the following included in the calculation of National Income of a country/ Give reasons.
   (a) sale of an old house
   (b) purchase of a car by a household
   (c) purchase of raw materials by a producer
   (d) expenditure of government on scholarship to students.
3. **Are the following included in the calculation of National Income of a country? Give reasons.**
   (a) Contribution to profident fund by employer
   (b) Income from robbery
   (c) Commision received by a lottery ticket seller
   (d) Expenditure on purchase of shares.

4. **Are the following included in the estimation of National Income? give reasons.**

(a) Profit earned by a foreign bank in india.

(b) Rent received by an indian on building rented to a foreign bank in india.

(c) Profit earned by a branch of SBI in abroad.

(d) Salary received by a foreigner working in indian ambassy in London.

(e) Salary received by an indian working in USA ambassy located in Delhi.

(f) Salary received by a foreigner working in SBI in india.

NUMERICAL QUESTIONS <6 marks>

1. Calculate NNP_{FC} by income & Expenditure method.

Items	**₹(in crores)**
Interest	250
Net Factor Income from abroad	(–) 50
Govt. final consumption expenditure	1400
Compensation of employees	3000
Mixed Income	1500
Private final consumption expenditure	4,500
Profit	1000
Depreciation	60
Rent	300
Net Investment	600
Net export	(–) 30
Net Indirect tax	420

2. **Calculate NNP_{FC} by Income & Expenditure method.**

Items	**₹(in crores)**
Compensation of employees	1000
operating surplus	500
Social security benifits by employers	120
Net export	(–) 30
Net Indirect tax	40
Mixed Income	600

Net Factor Income from abroad	(–) 20
Depreciation	40
Private consumption expenditure	1400
Govt. final consumption expenditure	490
Net fixed capital formation	250
change in stock	30

3. **Calculate GNP_{FC} by Income & Expenditure method.**

Items	**₹(in crores)**
Net export	20
operating surplus	320
Net investment	250
Contribution on social securities by employers	100
Private final consumption expenditure	1200
wages & salaries	300
Net indirect tax	150
Net factor income from abroad	(–) 20
Rent	100
depreciation	50
Govt. final expenditure	400

4. **Calculate GNP_{MP} by income & expenditure method.**

Items	**₹(in crores)**
Net investment	200
Private final consumption expenditure	1000
Rent, interest & profit	360
Wages & salaries	900
Govt. final consumption expenditure	300
Depreciation	50
Net indirect tax	200
Net factor income from abroad	(–) 10
Employer's contribution to social security	50
Net export	10

5. **Calculate National Income (NNP_{FC}) by income & expenditure.**

Items	**₹(in crores)**
Govt. expenditure	1000
wages & salaries	3800
divident	500
Rent	200
Interest	150
Net domestic capital formation	500
Profit	800
Employers contribution of social security	200
Net export	(–) 50
Net factor income from abroad	(–) 30
Depreciation	40
Private final expenditure	4000
Net indirect tax	300

6. **Calculate National Income by income & expenditure method.**

Items	**₹(in crores)**
Interest	50
Rent	250
Government expenditure(final)	600
Private expenditure (final)	1200
Profit	640
Compensation of employees	1000
Net factor income from abroad	(–) 30
Net indirect tax	60
Net export	(–) 40
Depreciation	60
Net fixed capital formation	340

7. **Calculate NNP_{MP}**

Items	**₹(in crores)**

Compensation of employees	2000
Interset	500
Rent	700
Profit	800
Employer's contribution to social security benefits	200
Divident	300
Depreciation	100
Net indirect tax	250
Net export	70
Net factor income from abroad	150
Mixed income	1500

8. Calculate GDP_{MP} by income method & NNP_{FC} by expenditure method.

Items	**₹(in crores)**
Rent, interest & profit	290
Mixed income	260
Govt. final consumption expenditure	220
Import	170
Export	140
Private final consumption expenditure	1530
Change in stock	100
Compensation of employees	730
Net factor income from abroad	120
Subsidy	30
Depreciation	120
gross fixed investment	400
Indirect tax	850

9. Find GDP_{MP} by income & expenditure method.

Items	**₹(in crores)**
Compensation of employees	1300
Indirect tax	3700

gross fixed capital formation/investment	8100
Rent, interest & profit	5000
govt. final consumption expenditure	3600
Private final consumption expenditure	27000
change in stock	1000
Import of goods & services	1800
export of goods & services	1700
subsidy	300
Net factor income from abroad	(–) 250
depreciation	2200
Mixed income	16000

10. **Find GNP_{MP} by income method & NNP_{FC} by expenditure method.**

Items	**₹(in crores)**
Compensation of employees	400
Private final consumption expenditure	1120
Govt final consumption expenditure	150
Net factor income from abroad	(–) 10
Depreciation/ consumption of fixed capital	80
Indirect tax	180
Change in stock	60
Mixed income of self employed	560
Net fixed investment	180
Net export	(–) 10
Rent, interest, profit	190
Subsidy	20

11. **Calculate GDP_{MP} by income & expenditure method.**

Items	**₹(in crores)**
Private final consumption expenditure	620
wages & salaries	700
Employer's contribution to social security scheme	100

Gross capital formation	180
Profit	100
Govt final expenditure	200
Rent	50
Interest	50
Net export	30
Net factor income from abroad	(–) 10
Depreciation	20
Subsidy	10
Indirect tax	20

12. Calculate NNP_{FC} by income & production method.

Items	**₹ in crores**
Gross value added by primary	300
Gross value added by secondary sector	200
Gross value added by tertiary sector	100
Intermediate consumption by primary sector	100
Intermediate consumption by secondary sector	50
Intermediate consumption by tertiary sector	50
Compensation of employees	150
Net factor income from abroad	(–) 10
operating surplus	140
depreciation	40
Net indirect tax	20
Interest	20
Mixed income	50
Rent	10

13. Calculate GDP_{MP} by income & production method.

Items	**₹ in crores**
Intermediate expenditure by primary & secondary sector	900
Intermediate expenditure by Tertiary sector	300

Gross value added by primary & secondary sector	1900
Gross value added by by Tertiary sector	700
Rent, interest & profit	290
Depreciation	40
Mixed income	100
Net factor income from abrood	(–) 20
Compensation of employees	950
Net Indirect Tax	20

14. Calculate GNP_{MP}

Items	**₹(in crores)**
Change in stock	(–) 10
Private final consumption expenditure	1000
Net fixed capital formation	150
Net factor income from abroad	10
govt. final consumption expenditure	300
Depreciation	30
Net export	20

ANSWER KEY

1.1 True fales type

1. True, when factor income from abroad is more than factor income to abroad.
2. False, affected only by factor income.
3. False, it is a part of private final consumption expenditure.
4. False, as it is not mareket activities.
5. False, as it is not contributed by the employer.
6. True, as it is difficult to measure the proper market value.
7. True, when the price level of both the year is same.
8. True, as it imputed value is to be included.
9. True.
10. True, as profit is the sum of corporate tax, divident & nundistributed profit.
11. False, Nret export = export- import

12. True, operating surplus = Rent + interest + Royalty + profit.
13. True.
14. True.
15. False, as proper valuation of Leisure is not possible.

1.2 Multiple choice question <Answer Key> :

1. b-NNP_{FC}
2. d-compensation of employees.
3. b-closed economy
4. d-none
5. c- Net export
6. c- both (a) & (b)
7. a- sales+change in stock
8. b-Factor income
9. b- real value
10. c- sales- intermediate consumption
11. b- Real GDP = $\frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$
12. c- a house wife cooking for her family members.
13. a- rises.
14. b- 2000
15. a-1200.

1.3 Fill in the blanks :-

1. Intermediate consumption
2. Substract, add.
3. Consumption, investment.
4. ₹ 1050
5. Difference.
6. Property.
7. Constant.
8. Zero.
9. Service.
10. Indirect.

1.4 Short question :-

1. It is the money value of all the final goods & services produced with in the domestic territory of a country during a period of one year.
2. It is the money value of all the final goods & services produced by the normal residents of a country during a period of one year.
3. The 2 methods to avoid the double counting problem are final output method & value added method.
4. OS is the sum total of income from property (Rent, interest & Royalty) and income from entrepreneuship (profit)
5. It is the income generated from self-owned & self employed factors of production. Like farmer, barber etc.

6. Its value is very difficult to calculate.
7. When GDP is estimated on the basis of certain base year price.
8. When GDP is estimated on the basis of current year price.
9. The ratio between Nominal GDP & Real GDP multipled by 100.
10 Use of public park, roads.
11. Polution made by industrial unit.
12. Intermediate consumption is the use of intermediate goods in production process.
13. The benefits or harms which are caused by one unit to another without any penalty for harm or payment for benefit.
14. Income received by the factors of production for their contribution to production process (rent, wages, interest, profit).
15. Payment made without receiving any goods or services in return. Ex: Gift, donation, etc.
16. Activities of acquiring goods & services without entering the market. Example: services of housewife.
17. Leakages are those flow variables which reduces the flow of income/money in the circular flow. Example: Taxes, import etc.
18. Injections are those flow variables which increases the flow of income/ money in the circular flow. Example : export, borrowing etc.
19. It arises when the value of some product is estimated more than once in the calculation of GDP.
20. It is the difference between total value of output & value of intermediate purchase of a firm.

    GVA_{MP} = VO-IC

ANSWER KEY

Numerical question- **(3/4 marks)**

13. GVA_{MP} = sales + change in stock (Δs) - intermediate consumptic (IC)
 = 50000 +15000-10000 = ₹55000 Lakh.

14. GVA_{MP} = SALES + Δ stock-IC<sales= quantity sold x price/unit>
 = 750 x 40 + 10000 - 10000 = ₹ 30000
 NVA_{FC} = GVA_{MP} - depreciation- Net indirect tax (NIT)
 = 30000-3000- (2000-0) [NIT = Indirect tax-subsidy]
 = ₹ 25000

15. GVA_{MP} = sales + ΔS-IC
 = (2000 x 20) + (-500) - 5000 = ₹ 34500
 GVA_{FC} = GVA_{MP}- NIT
 = 34500 - (0-3000) = ₹ 37500

16. GVA_{MP} = sales + Δ S-IC
 = 8000+100-5500 = ₹ 2600 Lakh.
 NVA_{MP} = GVA_{MP}- Ddepreciation
 = 2600-300 = ₹ 2300 Lakh.

17. Value of output = sales + ΔS
 = 1000+00 = ₹1000 Lakh.
 GVA_{MP} = sales + Δ S-IC
 = 1000+00-600 = ₹ 400 Lakh.
 NVA_{FC} = GVA_{MP}-depreciation - NIT
 = 400-50- (100-40) = ₹290 Lakh.

18. GVA_{MP}/GDP_{MP} = sales + ΔS-IC
 = 100+5-20 = 85 crores
 NDP_{FC}/NVA_{FC} = GDP_{MP} -depreciation-NIT
 = 85-15- (5-1) = ₹ 76 crores.

19. GVA_{MP} = sales + Δ S-IC
 = 36000+200-2000 = ₹ 34200
 NVA_{MP} = GVA_{MP}-depreciation
 = 34200-700 = ₹ 33500

Numerical questions : **(6 marks)**

1. **Income method**

National Income (NNP_{FC})

= Compensation of employees

+ mixed income

+ operating surplus

+ Net factor Income from abroad

= 3000+1500+(250+1000+300) + (-50) = ₹ 6000 crores.

Expenditure method

GDP_{MP} = Govt. final consumption expenditure

+ Private final consumption expenditur

+ gross domestic capital formation

+ Net export

= 1400+4500+(600+60) +(-30) = ₹ 6530 crores.

National Income (NNP_{FC})

= GDP_{MP}- depreciation + Net factor income from abroad- Net indirect tax

= 6530-60+(-50) -420 = ₹ 6000 crore

2. **Income method;**

National Income (NNP_{FC}) = 1000+600+500+ (-20) = 2080 crores.

Expenditure method

GDP_{MP} = 490+1400+(250+40+30) +(-30) = 2180 crores.

* (gross domestic capital formation

= Net domestic fixed capital + depreciation + change in stock)

National Income (NNP_{FC}) = 2180-40+(-20)-40= 2080 crores.

3. **Income method:**

National Income(NNP_{FC}) = (1300+100) + 320 + (-20) = 1700 crores.

GNP_{MP} = NNP_{FC}+ depreciation+Net indirect tax

= 1700+50+150= 1900crores.

Expenditure mehod :

GDP_{MP} = 400+1200 + (250+150)+20 = 1920 crores.

GNP_{MP}= GDP_{MP} + Net factor income from abroad

= 1920+(-20) = ₹ 1900 crores.

4. **Income method :**

National Income(NNP_{FC}) =(900+50) + 360+ (-10) = ₹ 1300 crores.

GNP_{MP}= GDP_{MP} +depreciation +Net indirect tax

= 1300+50+200 = ₹ 1550 crores.

Expenditure mehod :

GNP_{MP} = 300+1000+(200+50) +10 = ₹1560 crores.

GNP_{MP} = 1560 + (-10) = ₹ 1550 crores.

5. **Income method :**

National Income(NNP_{FC})=(3800+200) + (200150+800) +(-30) = ₹ 5120 crores.

Expenditure method :

GDP_{MP} = 1000+4000+(500+40)+(-50) = ₹ 5490 crores.

NNP_{FC} = 5490-40+(-30) -300 = ₹ 5120 crores.

6. Income method :

NNP_{FC} = 1000+(250+150+640)+ (-30) = ₹ 2010 crores.

Expenditure mehod:

GDP_{MP} = 600+1200+(340+60)+(-40) = ₹ 2160 crores.

NNP_{FC} = 2160-60+(-30) -60 = ₹2010 crores.

7. **Income method :**

NNP_{FC} = 2000+1500+(700+500+800+300)+150 = ₹ 5950 crores

NNP_{MP}= 5950+250 = ₹ 6200 crores.

8. **Income method :**

NNP_{FC}= 730+260+290+120 = ₹ 1400 crores

GDP_{MP}= 1400+120-(-120) +(850-30) = ₹ 22009 crores

*(Net indirect tax = indirect tax-subsidy)

9. **Income method :**

NNP_{FC}=13000+16000+5000+(-250)= ₹ 34750 crores.

GDP_{MP}= 34750+2200-(-250) + (3700-300) =₹ 39600 crores.

Expenditure method :

GDP_{MP}= 34750+2200-(-250) + (3700-300) =₹ 39600 crores.

10. **Income method :-**

NNP_{FC} = 490+500+290+(-10)= ₹1330 crores

GDP_{MP}= 1330+80-(-10) + (180-20)= ₹1580 crores

Expenditure method :-

GDP_{MP}= 150 +1120+(180+180+60) +(-10) = ₹1580 crores

NNP_{FC}= 1580-80+(-10) – (180–20) = ₹1330 crores

11. **Income method :**

NNP_{FC}= (700+100)+(50+50+100)+(-10)= ₹990 crores.

GDP_{FC} = 990+20-(-10) = ₹1020 crores.

Expenditure method :

GDP_{MP}= 200+620+180+30=₹1030 crores

GDP_{FC}= 1030-(20-10)= ₹1020 crores.

12. **Income method :**

NNP_{FC}=150+50+140+(-10)= ₹330 crores.

Production method :

GDP_{MP}=Value of output of (primary+secondary+tertiary)-intermediate consumption of(primary+secondary+tertiary)

= (300+200+100)-(100+50+50) = ₹400 crores.

NNP_{FC}= 400-40+(-10)- 20= ₹330 crores.

13. **Income method :**

NNP_{FC}= 950+100+290+(-20)= ₹1320 crores.

GDP_{MP}=1320+40-(-20)+20= ₹1400 crores

Production method :

GDP_{MP}= (1900+700)-(900+300)= ₹1400 crores.

14. **Expenditure method** :

GDP_{MP}= 300+1000+{150+30+(-10)}+(-20)= ₹1450 crores.

GNP_{MP}= 1450+10 = 1460 crores.

CHAPTER - 3

Money & Banking

In modern times, it is very difficult to imagine the modern economy without money. It is the basic requirement of all economies as it is the commonly accepted medium of exchange. If economic agents engage themselves in market transaction, money becomes an important for facitilitating these exchanges.

3.1 **Evolution of money :**

Before money was invented, the primitive world's trade was carried out according to the barter system of exchange.

It refers to the exchange of goods for goods. In barter system there requires simultaneous fulfillment of mutual wants of buyers & sellers and it leads to huge trading cost. Some other disadvantages are lack of common measure of value, lack of standard of deffered payments, lack of storing wealth etc.

After barter system, there arises metalic money with growth of human civilisation. The medium of exchange were metals, specially Gold, silver. But after 1930, use of metalic money was discarded because, their supply was limited, difficulty in handling large transaction & lack of safety during transportation.

Metalic money was replaced by paper money which facilitated huge transactions requiring the use of money. In India paper money is regulated & controlled by RBI.

Than after we have bank or credit money which was invented to make the transactions convenient based on the trust and consent between buyers & sellers. People started using credit money like cheques, drafts etc. Plastic money in the form of credit cards, debit cards, ATM cards is also used now as medium of exchange. It reduces risk and easy to handle & commonly accepted in payment.

3.2 **Money :-**

Money refers to the medium of exchange. i.e anything that can be used an a medium of exchange and at the same time acts as a store of value & standard of defered payments is called money.

–This one is the functional defination of money.

Legal tender money/ Fiat money:-

It refers to the money by order or authority of the govt. Which includes currency notes & coins. It has the legal power to discharge debt.

Non legal tender money/Fiduciary Money:-

It refers to the money which is backed by the trust between the payer & the payee, which includes cheques, drafts, bills of exchange etc. It is also called optional money.

– This is the legal defination od money.

Narrow defination of money :-

It is based upon medium of payments function. It includes currency held by public (c) & demand deposits (DD)

$$M=C+DD.$$

i.e anything that is commonly accepted as medium of exchange is included in Narrow defination of money.

Broad defination of money :-

It is based upon the store of value function of money. It includes curency (C), demand deposits (DD) & time deposit (TD) of Banks & post office.

$$M=C+DD+TD.$$

i.e. anything which widely used as a store of value is included in this category of money.

3.3 Function of money :-

Money removes the problems faced in Barter system. The various functions performed by money are-

(a) **Medium of exchange :-**

As a medium of exchange, money is used to purchage & sale of goods & services and thus money offers the freedom of choice.

(b) **Measure of value :-**

Money is a unit of account. By reducing the value of all goods & services in a single unit of account, money has facilitated & simplified the system of exchange and makes it possible to keep the proper business account.

(c) **Store of value :-**

Money is the best form to hold asset as it is the most liquid from of asset. It is the commonly accepted measure of value and its value remains constant compared to other goods & easy to store.

(d) **Tranfer of value :-**

Value available with a person in the form of assets can be transfered to another person with the help of money easily, quickly & efficiently.

(e) **Standerd of diferred payment:-**

Since money has general acceptability, its value is stable, durable & homogeneous, money is also helpful in payment after a gap of time in the form of instalment.

3.4 Classification of money :-

(a) **Full bodies Money:** It is the type of money whose face value is same as its material value.

Example: gold, silver coin, when economy was in metalic standard.

(b) **Representative full bodies money:** It is generally made of paper money whose face value is more than its metalic value & it is backed by 100% gold or silver reserves.

(c) **Credit money:-** It is the money where face value in more than metarial or intrinsic value. Its types are- Token coins, circulating promissory Notes & deposite at Bank.

3.5 **Money supply & its types :-**

Money supply is a stock variable & it refers to the sum total of stock of money which is in circulation in the economy at a particular point of time.

Following are the 4 money supply measures published by RBI

(a) **M_1 Measurement :-**

It is called narrow money & most liquid form of money.

M_1= C+DD+OD

where, C = currency held by public

DD= Net demand deposit with commercial & coperative Banks.

OD= other deposit with RBI of quasi-government institution like ICICI, IDBI etc.

(b) **M_2 Measurement :-**

It is a broader concept of money supply compared to M_1. It includes deposits with post office savings bank by the public along with M_1 Measurement.

M_2= M_1+ deposits with post office savings bank.

(c) **M_3 Measurement :-**

It is still broader concept of money supply compared to M_1 meausurement and it includes net time/term/fixed deposit of people with commercial Banks along M_1.

M_3 = M_1 +Net time deposite with commercial Banks.

d) **M_4 Measurement :-**

It is called least liquid form of money and it is broader concept compared to M_3. It includes deposits with post office (excluding National service certificates) along with M_3

M_4 = M_3 + total deposite with PO(excluding NSC_S)

3.6 Components of money supply :-

a) **Currency held by public-** All the paper currency notes & currency coins which are in circulation are included in currency held by public. Here face value of such currency is more than its material value.

b) **Demand deposite;-** These are the deposits made by the banks which are withdrawable through cheques, drafts etc. This are included in money supply because these are claims of the creditor againsts bank which can be transferred from one person to another through using cheques, drafts etc.

3.7 Factors/ Determinents of money supply :-

a) **Central Bank:-** It is responsible to issue currency notes & coins in the country. So money supply is determined by the central bank first. For this the supply of money can be increased or decreased in the country by the central Bank.

b) **Commercial Bank:-** Ammount of money deposited by the public may or may not be tended by the commercial bank. If the banks increase the rate of interest then money supply will fall in the country & vice-versa.

c) **Government:-** The activities of govt. also affects the money supply. To increase the collection of revenue if govt. increases the existing tax rate or introduces new taxes than money supply will fall and vice-versa.

But if govt. increases its various development & welfare activities the money supply will rise.

d) **Volume of Trade:-** Money supply is directly related with trade & commercial activities. If the trade & commercial activities rises in the country then sale & puechase activities will rise and with that money supply also will rise.

3.8 Commercial Bank

Commercial bank is a safe custody of money which it pays out on customer's demand, order of otherways. Example: SBI, PNB, UBI, TGB etc.

Primary Function of Commercial Bank :

a) Accepting deposit :-

It is the basic function of commercial bank is to accept deposite from each & every class & source of the country. To attract deposit banks accept the following types of deposit–

i) Current account deposit

ii) Savings account deposit.

iii) Recurring deposit.

iv) Fixed deposit.

Different rate of interest is paid by the banks on different mode of deposit on the basis of period of time for which the amount has deposited.

b) Providing loans :-

The second basic function of commercial bank is to provide loans and advances to the public to fulfil their need of fund. Loans may be granted in the form of–

i) Cash credit

ii) Demand credit

iii) Short term loan

iv) Overdraft

v) Discounting of Bills.

Bank charge different rate of intterest from the borrower for different types of loans on the basis of the time for which the loan in sanctioned.

c) Credit Creation :

In the process of accepting deposite & advancing loans, the commercial banks are also able to create credit. Those who receive loans from the bank, a new account is created for that person and loan amount is deposited in that account. Thus, new accounts are created and money multiplies in this process. By this banks are able to create credit.

Agency Function of Commercial Bank

a) Banks provide facilities for easy and cheap transfer of fund from one place to another or one person to another through instruments like cheque, draft, mail transfer, telegraphic transfer etc.

b) Banks also collect fund on behalf of its coustomers through instruments like cheques, draft, bills of exchange etc.

c) Purchase & sale of share & collection of divident on behalf of its costomer.

d) Acting as executors & trustees of wills.

e) Purchase & sale of bonds & securities of govt.

f) Provision of income tax consultancy and acceptance of income tax on behalf of its costomer.

g) Payment of bills and insurance premium of its customer.

General Utility Function of Commercial Bank

a) Purchase & sale of foreign exchange.

b) Issue of traveller's cheque.

c) Safe custody of valuable goods in lockers.

d) Underwriting activities & private placements of securities (Privately to selected entities).

e) Consultancy to customer on finncial matters by collecting & publishing statistics related to trade, commerce & industry.

3.9 **Central Bank & its function**

A central bank is an apex institution of a country which controls & regulates the banking & financial activities of the country. RBI is the central Bank of India. Following are the function of central bank-

(a) **Issuing Authority:-**

One of the basic function of centarl bank is to issue currency for the public of the country. The sole right has been given to the central bank of India to issue of currency (except one rupee notes & coins) in the country. For this–

i) It leads to uniformity in note circulation.

ii) It enables the govt. to control money system through RBI.

iii) It builds up public faith in currency system

It is monitary liability of RBI to issue new currency. In case of deificit, central govt. borrow from RBI. This is done by selling security bills of RBI & then RBI issues new currency (i.e. deficit financing)

(b) **Banker to the govt.:-**

As a banker to the govt., the central bank perfomrs the following functions-

1. It accepts receipts, deposites, makes payments, carries out exchange, remittance & other banking operation on behalf of govt.
2. It provides short term credit against securities to the government,
3. It manages public debt i.e. manages all new issues of govt. loans, services the public debt outstanding & nurtures the public debt outstanding.
4. As a agent, it collects taxes & other payments on behalf of government.
5. As an advisor, it advices the govt. on various economic, banking, financial mattters and international finance.

(c) **Banker of the commercial Banks:-**

As a banker & supervisor of commercial Banks, central bank performs the following functions-

1. **Custodian of cash reserves:-**

Every Commercial bank has to maintain a certain amount of his cash reserve with Central bank, which is called Cash Reserve Ratio (CCR). Central Bank holds that CRR.

2. **Lender of last resort:-**

As a lender of last resort it makes short term loans & advances available to them, i.e. It provides financial accomodation to commercial banks against approved securities.

3. **Clearing house function:-**

when the central bank works in the form of cleaning agency, it is convenient & save time for commercial banks to settle their claims at one place.It also economics the utilisation of money. It also transfer fund from one bank to another to facilitate clearing of cheques.

4. **Supervisor:-**

The central book supervises, regulate & controls the activities of commercial banks .The regulation may be related to their licensing, brance expansion, Liquidity of assets, management, periodic inspection of banks, amalgamation etc.

(d) **Controller of credit & money supply:-**

Through various quantitative & qualitative instruments central bank can control the credit creation capacity of commercial banks & also the money supply of the economy.

The quantitative measures are-

1. Bank Rate/ Repo rate & reverse repo rate.
2. Cash reserve ratio.
3. Statutory Liquidity ratio.
4. open market operation.

The qualitative measures are-

1. Marginal requirement
2. Moral suasion & direct action.
3. Selective credit control & credit rationing.

(e) **Custodian of foreign exchange reserves & gold:-**

The Central bank is the custodian of a countries stock of gold & foreign currencies. It maintains the stability of exchange rate fixed by the Govt. By the sale & purchase of foreign currencies in the market, it maintains the internal & external value of currency.

STUDY AIDS

1. Types of credit issued by commercial Banks

a) **Cash credit:-**

A credit limit is sanctioned up to which the user may borrow from the bank on a given security. Interest is charged on amount actually used.

b) **Demand Credit:-**

The loan can be recalled on demand by the bank at any time. But interest is charged on the whole amount of loan.

c) **Short term loan:-**

This loan is given as personal loans or, are advanced as priority sector. Whole amount of loan is chargeable to interest.

d) **Over draft:-**

Under this arrangement a customer having a current account is allowed to withdwraw more than what he was deposited. The security of over drafts is usually financial assets of the account holder, such as shares, debentures, LIC policies etc. Rate of interest is lower than of cash credit as it is easier to liquidity financial assets than physical assets.

e) **Discounting bills of exchange:-**

Under this arrangement a customer can get the amount of bill receivable from the bank before the date of maturity. Bank deducts the discount charges from the gross amount. On the date of maturity, the bank gets the amount from the acceptor of the bill.

2. **Credit Creation by Commercial Bank:-**

Credit Creation/ Money Multiplier Process- In the process of accepting deposits & advancing loan, commercial banks are also able to creat credit. Those who receive loans from bank, the loan amount created by Commercial Bank. Thus, new accounts are created & money multiplies in this process and banks are able to creat credit.

Example:- Suppose a person deposits ₹1000 in a bank, that ₹ 1000 is called primary deposite (PD) of the bank.

Again, let bank knows from its experience that 20% of cash reserve is required to fulfil the cash demand of the public. This 20% is the cash reserve ratio (CRR) of the bank.

$$\text{Total credit creation} = \text{PD} \times \frac{1}{\text{CRR}}$$

The process is like following-

Out of PD of ₹ 1000, bank will keep 20% of ₹1000 i.e.200 as CRR to meet the demands out of liabilities to its depositors & land the remaining ₹800. Borrower of ₹800 will use this money & the money will come back to the banking system (as drawn on bank). Now ₹800 is the derivative deposite, bank will keep 20% of ₹800 i.e ₹160 as CRR & the remaining ₹640 to the borrow as loans. This process continues and bank can creat a credit of ₹5000 starting from PD of ₹1000.

$$\text{Total credit creation} = \text{PD} \times \frac{1}{\text{CRR}} = ₹1000 \times \frac{1}{20\%} = ₹5000$$

Transaction	Deposits	Legal Reserve Round	Loans
1st Round	1000(PD)	200	800
2nd Round	800	160	640
3rd Round	640	128	512
⋮	⋮	⋮	⋮
Total	₹5000	₹1000	₹4000

3. **Write the difference:-**

Central Bank	Commercial Bank
a) It is an apex institute in the money market.	a) It operates under the control of central Bank.
b) A country has only one central bank which is generally owned & controlled by the Govt.	b) A country has a large number of Comercial banks which may be owned by Govt. or private sector.
c) It doesn't deal with general public.	c) It deals with general public.
d) It is the sole authority to issue currency.	d) It has no such power.
e) It doesn't aim at profit	e) It aims at profit.
f) It controls credit.	f) It creates credit.
g) It works as an agent, advisor & banker to the govt. and also advices the govt. in various fiscal & monetary matters of govt.	g) It has no such status.

4) Vaious types of deposites which are accepted in the Commercial Bnak.

a) **Current account deposite:-**

These are payable on demand and can be withdrawn upon by cheque without any restriction. No interest is paid against such deposits & in some cases service charges also may be imposed by the bank.

b) **Savings account deposite:-**

These are also payable on demand but having restriction on number of withdrawl or number of cheque issued. Rate of interest is nominal in such deposite.

c) **Recurring account deposite:-**

It is payable on demand but after a certain period of time a fixed amount of deposite is required in every month for that certain period. Interest rate is more than the savings deposite & less than fixed deposite.

d) **Fixed deposite:-**

It is one time investment for a certain fixed period of time where withdrawl is possible only after the maturity period. Rate of interest is more than reccuring deposite.

EXERCISE

A) True or False:-

1. In barten system, deffered payments are made in the form of goods.
2. In case of credit money, money value is less than commodity value.
3. Supply of money includes stock of money hold by the government.
4. Commercial banks add to the supply of money through demand deposits.
5. Only net demand deposits are taken as a part of money supply
6. In india CRR is determined by the commercial banks themselves.
7. Banks lend money many times more than their cash reserve with the RBI.
8. The central bank focuses on growth and stability of the economy.
9. Credit creation is the principal function of the central bank.
10. The notes issued by the central bank are an unlimited legal tender.

B) Choose the correct option:-

1. Money that is issued by the authority of the government is called-
   - a) full bodied money b) Credit money
   - c) fiat money d) fiduciary money
2. Which of the following is the component of M_1 measure of money supply-
   - a) Term deposit b) Demand deposits
   - c) Cash reserve of the commercial banks d) None of these
3. Bank money is that money which is-
   - a) Printed by RBI b) Printed by the government
   - c) Generated in the form of credit creation, d) None of these
4. Who supplies money in India?
   - a) The RBI b) The commercial banks
   - c) The government d) all of these
5. In India coins are issued by:-
   - a) State Bank of India b) RBI
   - c) Ministry of finance d) Ministrey of urban development.
6. The main aim of the commercial banks is-
   - a) Social welfare b) to earn profits

c) to provide services to the people   d) none of these

7. Central bank is an apex bank of the country that-

a) Controls the entire banking system of the country   b) issues currency

c) acts as a banker to the government   d) All of these

8 Which of the following is not the instrument of credit control?

a) CRR   b) SLR

c) Bank rate   d) Managed floating

9. The credit multiplier(K) = _________

a) $\frac{1}{CRR}$ b) $\frac{1}{SLR}$

c) $\frac{1}{\text{Bank Rate}}$ d) None of these

10. Reverse repo rate-

a) generates interest income   b) is used to curb inflation

c) is not a policy rate   d) both (a) and (b)

C) Fill in the blank:-

1. A thing which is commonly accepted as a medium of exchange is called __________.
2. A system where goods are exchanged for goods is known as _________.
3. Main characteristic of money is ___________.
4. __________ value of a paper note is what is written on it.
5. commercial banks contribute to the supply of money by way of _________.
6. Demand Deposits = Primary deposits + ___________.
7. By selling the securities in the open market, the RBI _________ Liquidity from the economy.
8. Rationing of credit is the __________ method to control money supply in the economy.
9. The _________ bank is a apex bank of the entire banking system.
10. The __________banks are not the note issuing authority.

D) Objective type questions:-

1. What is money?
2. What is Barten system of exchange?
3. What is fiat money?
4. What is fiduciary money?

5. What is full bodied money?
6. What is credit money?
7. Define money supply?
8, What is bank money?
9. What is Bank?
10. Define credit multiplier?
11. What is primary deposits?
12. What is a central bank?
13. Define CRR?
14. What is SLR?
15. Define bank rate?
16. What is repo rate?
17. Define reverse repo rate?
18. Define margin requirement?

E) Answer the following questions:- (3/4 marks)

1. What are the Drawbacks of the Barten system of exchange?
2. Explain " Double coincidence of wants".
3. What are the important forms of money?
4. State M_1 measure of money supply.
5. Explain the process of money creation by the commercial banks.
6. Explain the principal functions of the central bank.
7. Write the differences between " The central Bank" and " A commercial Bank".
8. What are the instruments of monetary policy of RBI?
9. Write short note- open market operation.
10. Write the Agency function of Commercial Bank.

ANSWER

A) True/ False-

1. True. 2. False. 3. False. 4. True. 5. True. 6. False. 7. True. 8. True. 9. False. 10. True.

B) M.C.Qs.

1. fiat money.
2. demand deposits
3. generated in the form of credit creation.
4. All of these
5. Minstry of finance.
6. to earn profit
7. All of the above.
8. Managed floating
9. $\frac{1}{CRR}$
10. both (a) and (b)

C) Fill in the blanks:-

1. money
2. barter system of exchange
3. liquidity
4. money
5. loans and demand deposits
6. secondery deposits.
7. soaks
8. qualitative
9. central
10. commercial.

D) Objective type question answer:-

1. Money is anything which is commonly accepted as a medium of exchange.
2. Barter system of exchange is the system in which commodities are exchanged for commodities.
3. Fiat money refers to that money which is issued by order of the government.
4. Fiduciary money is the money backed with mutual trust between the payer and the payee.
5. Full bodied money refers to money in terms of coins whose commodity value is equal to the money value as and when these are issued.
6. Credit money is the money of which money value is more than commodity value.
7. Money supply refers to the total quantity or stock of money available in the economy at a point of time.
8. Bank money is the money created by the commercial banks in the form of demand deposits, over and above cash deposits of the people with the banks.
9. A bank is a financial institution where customers can save or borrow money.
10. Credit multiplier is the reciprocal of CRR. credit multiplier = $\frac{1}{CRR}$

11. Primary deposits are cash deposits with the commercial banks by the people. These are a part of demand deposits of the banks.
12. A central bank is an apex institution of a country that control and regulates the monetary and financial system of the country.
13. CRR refers to the legally required cash reserves of the commercial banks with the central bank as a percentage of their total deposits.
14. SLR refers to liquid assets of the commercial banks which they are required to maintain as a minimum percentage of their total deposits.
15. The bank rate is the rate at which the central bank offers loans to the commercial banks (long term).
16. Repo rate is the rateof interest at which commercial banks raise short term loans from the central bank.
17. Reserve repo rate is the rate of interest of which commercial banks can park their surplus funds with the central bank, for short period. of time.
18. Margin requirement refers to the difference between market value of the security for loans and the amount of loans offered by the commercial banks.

CHAPTER-4

Income & Employment Determination

In the earlier chapter of National income accounting we learnt how the value of NI (Naional Income) is measured. Now we will know wheather that income is at equailibrium or not. According to J.M Keynes, there can not be automatic equality between Aggregate demand (AD) and full employment. It viewed that the situation of full employment rarely exists. If AD <AS then the situation of full employment disturbed. According to him it is the situation of involuntary unemployment. Keynesian unemployment is different from other types of unemployment. Let us now discuss the AD and AS forming part of Keynesian output and employment.

4.1 Aggregate Demand (AD) and its components :-

AD refers to total demand for all goods and services produced in the economy during a period of time. AD may be studied in relation to (i) general price level or (ii) income of the people here we study AD in relation to income. Accordingly, AD may be defined as under,

AD is the sum of total of expenditure that the people plan to incur on the purchase of goods and services (ex-ante expenditure).

It is noted that AD is directly related to income and inversely related to price level.

Basically, there are four components of AD, namely :

(a) Consumption demand or expenditure (C)

(b) Private Insvestment demand or expenditure (I).

(c) Goverment expenditure or demand (G)

(d) Net exports (X-M)

Keynes has taken, AD = C+I

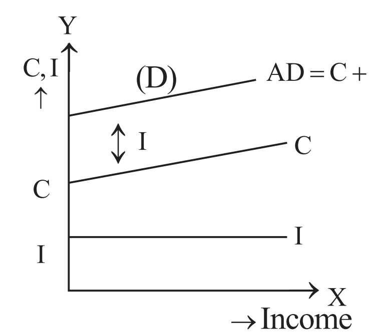


Fig : AD Curve

4.1.1 Consumption Function :

Consumption (C) is an important component of AD. Consumption function shows functional relationship between consumption expenditure (C) and income(Y). Symbolically, C= f (Y). Keynes mentioned that mentioned that as income rises, consumption also rises but in a lesser proportion, depending upon propensity to consume and proportion of income is saved.

Consumption function is given by the equation-

$$C = \bar{C} + bY$$

Where, C = Consumption

$\bar{C}$ = Autonomous consu mption, $\bar{C} > 0$, irrespective of income.

b = Marginal propensity to consume, $0 < b < 1$

Y = Level of income , bY = induced consumption depends on income.

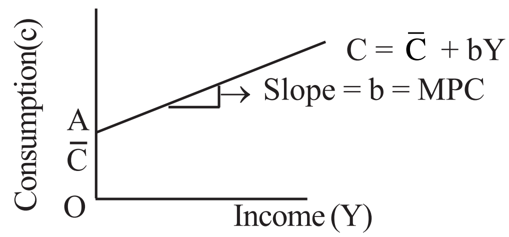


Fig : 4.1 Household Consumption Expenditure Curve

Propensity to consume :

It shows the level of consumption (C) with respect to a given level of income (Y). It has two aspects–

Average Propensity to consume (APC) – The ratio between consumption (C) and income (Y) ,

$APC = \frac{C}{Y}$, $APC > 0$

Marginal Propensity to consume (MPC) - The ratio between change in consumption expenditure (ΔC) with the change in income (ΔY), $MPC = \frac{\Delta C}{\Delta Y}$. The value of MPC lies between 0 and 1.

4.1.2 Saving funtion : Savings is that part of income which is not consumed. The functional relationship between saving (s) and income (Y) is known as saving function, i,e, $S = f(Y)$

The algebric expression of saving function is given by-

$S = -\bar{S} + sY$

Where , S = Saving ,

$\bar{S}$ = Saving when income is zero, i.e, negative savings

s = MPS , $0 > s > 1$

Y= Income

Here , $-S = \bar{C}$, that means when income is zero and less then consumption expenditure on autonomous consumption done by negative saving (Dissaving).

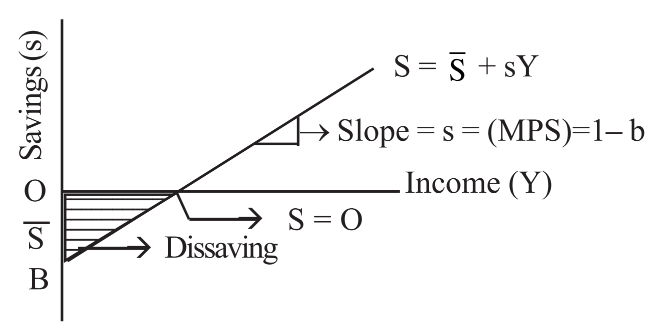


Fig : 4.2 Household saving curve

Propensity to save :

It shows the level of savings (S) with respect to a given level of income (Y). It has two aspects.

Average propensity to save (APS) = $\frac{S}{Y}$, APS may be + ve or – ve

Marginal Propensity to save (MPS) = $\frac{\Delta S}{\Delta Y}$, O < MPS < 1

Relation between MPC and MPS :

Since , $Y = C + S$

Or , $\Delta Y = \Delta C + \Delta S$

Or , $\frac{\Delta Y}{\Delta Y} = \frac{\Delta C}{\Delta Y} + \frac{\Delta S}{\Delta Y}$

Or , MPC + MPS = 1

i,e , MPC (c) = 1 – MPS (s)

and MPS (s) = 1 – MPC (c)

Relation Between APC vs APS :

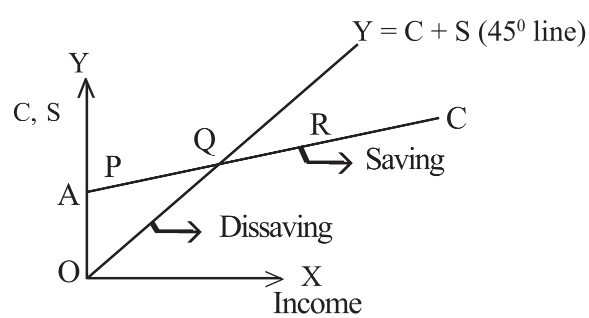
Since , $Y = C + S$

$\Rightarrow \quad \frac{Y}{Y} = \frac{C}{Y} + \frac{S}{Y}$

$\Rightarrow$ APC + APS = 1

Note : MPC is the slope of consumption curve and MPS is the slope of saving curve. Both MPC and MPS is cosntant along the lines.

Graphical Observations :



APC = 1, at point Q when C = Y, and S = O, it is called Break-even point. APC < 1 , at point R when Y > C and S = +ve, APC > 1, at point P when Y < C and S is – ve.

4.1.3 Investment :

Investment means an addition to the existing stock of assets to increase productive capacity of an economy. At equilibrium level, investment are equal to savings. Investment can be classified as.

i) Autonomous Investment : An investment which is not influenced by expected profitability or level of income, is called autonomous investment.

ii) Induced Investment : An investment which is made with the motive of earning profit by private sector is called induced investment. It is positively related to the level of income in an economy.

In the Keynesian framework, investment (I) is assumed to remain constant in the short-run. Therefore, ex-ante investment demand or expenditure is I = $\bar{I}$ where $\bar{I}$ is positive constant autonomous investment.

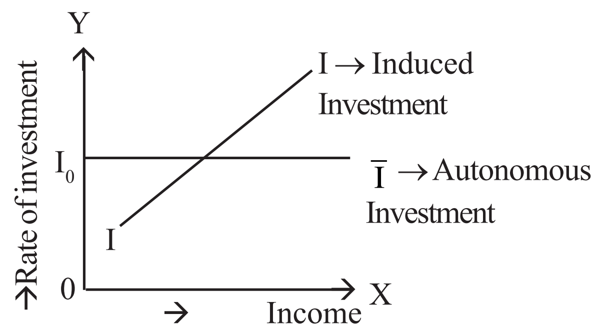


Fig : Autonomous and Induced Investment Curve.

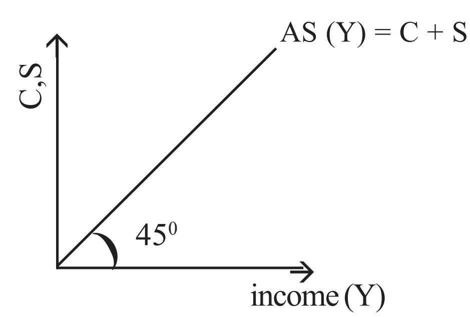
4.2 **Aggregate Supply (AS) :**

It is the money value of the desired level of final goods and services / (output) in the economy that the producers wish to produce during an accounting year. It is the level of GDP (Y) during an accounting year (also called ex ante AS).

In the short run , taking price level constant the level of output is exclusively determined by the level of employment. As resources are not fully utilized (under employment) at each level of GDP , AS = GDP (Y). It is a 45^0 line where AS is equidistant from the X-axis and the Y-axis implying that total income is equal to total expenditure (i,e , C + S)

So, AS(Y) = C+S

Note : In the short run technology remain constant.



4.3 Determination of Equilibrium Level of Income, Output and Employment :

In the context of Keynesian Economics equilibrium level of income/output implies the equilibrium level of employment in the short run. All the three variable are interlinked. They are determined by the level of AD and the relationship among them is direct.

There are two approaches to find the equilibrium level of income.

4.3.1 (i) AD = AS Approach

According to Keynes, in a closed economy without a government, the economy is in equilibrium when AD = AS, implying that desired output = desired expenditure on output and here the equilibrium level of national income is established.

Therefore , $\bar{C} + \bar{I} + bY = Y$

$$Y = \frac{\bar{C} + \bar{I}}{1 - b}$$

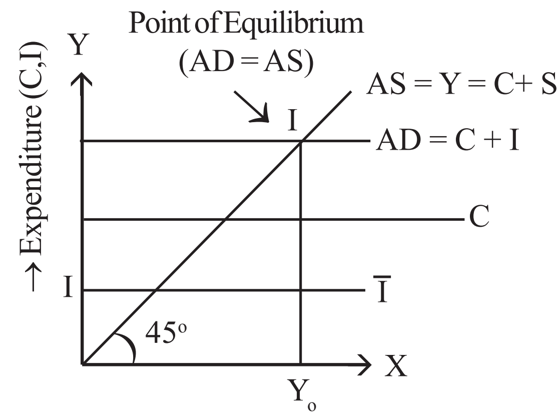


Fig : Equilibrium Output / Income

Shift in equilibrium : Impact of injections and withdrawals

Injections (Like increase in investment) and withdrawals (Like decrease in investment) cause change in the level of AD and as a result, AD shifts upward and downward respectively which causes positive and negative multiple effect on the level of output/income.

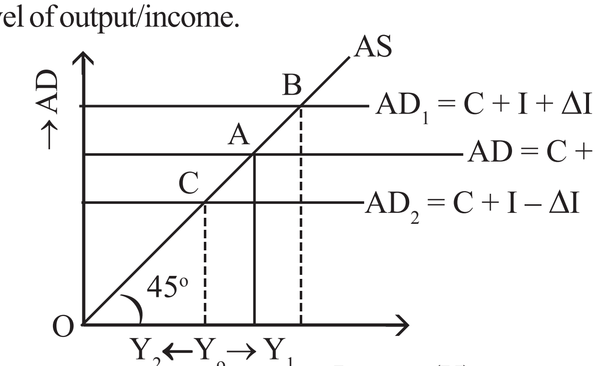


Fig : Impact of injections (ΔI) and withdrawl (–ΔI) and shift in equilibrium

Adjustment Mechanism when AD ≠ AS : Restore of Equilibrium

AS > AD	AD > AS
It implies that there is an excess supply. ↓ Presence of unsold stock ↓ Cutdown production ↓ Use of lesser factors ↓ Fall in income ↓ (AS would reduce to become equal to AD)	It implies that there is an excess demand. ↓ Sold out existing stock ↓ Rise in production ↓ Use more factors ↓ Rise in income ↓ (AS would increase to become equal to AD)

4.3.2 Savings Investment Approach :

Equilibrium level of national income can be alternatively determined by the point where planned (ex-ante) investment equals planned (ex-ante) savings or that injections into the circular flow of income equals to withdrawls from circular flow of income.

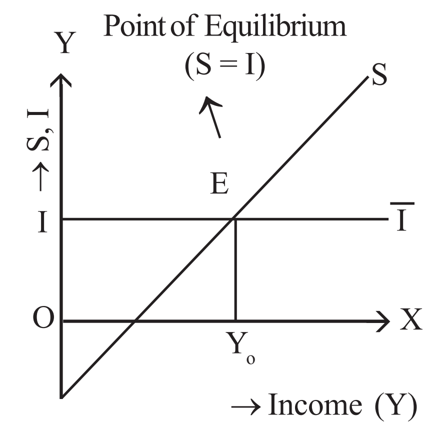


Fig : Equilibrium Output/ Income

Adjustment Mechanism :

Two situations when $S \neq I$

S > I	I > S
It implies excess savings ↓ (Planned savings > Planned investment) ↓ Unplanned investment exists ↓ Investment will decrease ↓ Lay-off workers ↓ Fall in production ↓ Fall in Income	It implies excess investment ↓ (Planned investment> Planned savings) ↓ Unplanned dis-investment exists ↓ Investment will increase ↓ Employs more workers ↓ Rise in production ↓ Rise in Income

Note : (a) Unplanned investment exists mean there is unsold stock as planned savings is more and consumption is less.

(b) Unplanned dis-investment exists mean sold-out of existing stock as planned savings is less and consumption is more.

4.4 Multiplier :

Keynes investment multiplier or output multiplier states that to a change in investment, income/output changes in a multiple amount.

$$\text{Multiplier (K)} = \frac{\Delta Y}{\Delta I}$$

There is a positive relationship between K and MPC

$$K = \frac{1}{1 - MPC} \text{ .... since } \frac{\Delta C}{\Delta Y} = MPC$$

And there is a negative relationship between K and MPS.

$$K = \frac{1}{MPS} \text{ .... since } MPC + MPS = 1$$

Since $0 < MPC < 1$, the multiplier will be greater than 1. Hence a change in investment will cause a multiplier change in income.

Working of Multiplier : Initial increase in income due to initial investment expenditure causes increase in consumption which becomes somebody's income again. So greater the additional consumption (ΔC) out of additional income (ΔY), greater is the generation of income, i.e, greater the MPC ($\Delta C/\Delta Y$), so greater will be the value of the multiplier.

Investment multiplier works both ways, positive and negative. Injection or additional investment causes multiple increase in income (forward action of the multiplier) and withdrawal or disinvestment causes a multiple decrease in income (backward action of the multiplier).

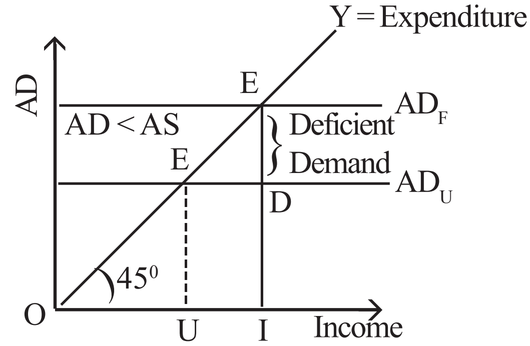
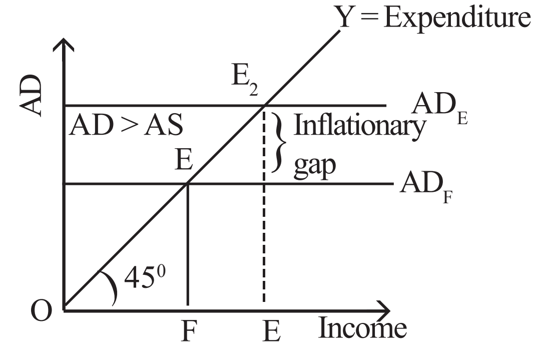
4.5 Full Employment Equilibrium and Under Employment Equilibrium :

Full employment reforms to a situation in which who are able and willing to work at the prevailing rate of wages are employed, that means no involuntary unemployment. Here involuntary unemployment occurs when a perosn is willing to work at the prevailing wage yet do not get work.

Full employment equilibrium : Refers to that situation in the economy when AD = AS corresponding to the situation of full employment. According to the classifical economists there is a build-in mechanism which makes the economy at full employment level. So full employment is a normal situation.

Under employment equilibrium : Refers to the situation in the economy when AD = AS but without the full utilisation of resources (at less than full employment). According to Keynes, under employment equilibrium is a normal situation in economy but full employment is a temporary incident.

4.6 Deficient Demand and Excess Demand :

Deficient Demand	Excess Demand
Meaning	**Meaning**
1. It is a situation when AD < AS at the full employment level.	1. It is a situation when AD > AS at the full employment level.
2. As AD falls AD curve shifts down and creates deflationary gap.	2. As AD rises AD curve shifts up and creates inflationary gap.
3. Deflationary gap is measured as the difference between 'AD - at full employment and 'AD-at under employment'.	3. Deflationary gap is measured as the difference between 'AD - beyond full employment and 'AD-at full employment'.
4. 	4. 
Causes 5.Reduction in consumption expenditure, investment expenditure, government expenditure, exports and rise in imports and tax.	**Causes** 5. Causes of inflationary gap are just opposite to the causes of deflationary gap.
Consequences 6. Deficient Demand causes Deflation and Underemployment. It creates unsold stock, so profits start shrinking, this discourage investmet. As a result the level of employment & output and income decrease. The economy is caught in a low level of equ^m trap.	**Consequences** 6. Excess Demanad causes inflation and price rise. It is a situation beyond full employment, So output cannot be increased which creates pressure of demand on existing supply, that generate inflation. The economy is caught in a wage-price spiral : wage catch price & price catch wage.
Measures to Correct **Fiscal Policy :** Increase in govt. expenditure, public borrowing, borrowing from RBI and decrease in rates of taxes.	**Measures to Correct** **Fiscal Policy :** Decrease in govt. expenditure, public borrowing, borrowing from RBI and increase in rates of taxes.

Monetary Policy : Decrease in Bank Rate, Repo rate, CRR, SLR, margin requirement as well as the central bank buys securities (open market operations), introduce credit Rationing and raises moral persuasion to grant credit.	**Monetary Policy :** Just opposite measures are followed by the central bank to correct excess demand.

EXERCISE

1. Read the following statements and write true/false :

(i) Aggregate demand(AD) is directly related to price level and inversely related to income.

(ii) MPC is the Slope of the consumption curve.

(iii) APC $\geq$ MPC

(iv) The value of APS may be negative but the value of MPS is always positive.

(v) The value of APC is always positive but the value of APS may be negative.

(vi) Aggregate supply is the level of GDP(Y) during an accounting year.

(vii) At equilibrium situation all that is planned to be produced(ex-ante output) is also planned to be purchased(ex-ante expenditure).

(viii) Keynes discusses equilibrium level of output, using the concept of autonomous investment.

(ix) Keynes discusses Short period equilibrium with reference to constant price level. Where AS is perfectly elastic owing to the existence of excess capacities.

(x) AS perfectly elastic means AS adjusts itself to all levels of AD.

(xi) Multiplier is positively related to MPS but negatively related to MPC.

(xii) Full employment means no unemployment.

(xiii) Inflationary gap raises the level of output.

(xiv) Wage-price spiral is the consequence of deficit demand.

(xv) CRR should be raised to correct deflationary gap.

2. MCQ

(i) At the minimum level of AD curve, level of income is-

(a) O (b) minimum (c) maximum (d) None of these

(ii) If consumption function is C = 100+0.8Y ,the saving function will be–

(a) S = 100+0.2Y (b) S = -100+0.8Y (c) S = -100+0.2Y (d) S = 100+0.2Y

(iii) Different people consumption pattern is different that means their _________ different–

(a) MPC (b) MPS (c) Both a & b (d) None of the above

(iv) If MPC = 0.5 and income increases by Rs. 200, then ΔC is–

(a) Rs 50 (b) Rs 100 (c) Rs 150 (d) Rs 200

(v) If MPC = 0.3, the MPS is–

(a) 0.7 (b) 0.3 (c) 0 (d) 1

(vi) Which of the following equation is correct–

(a) Y = C+I (b) Y = C+S (c) S = I (d) C = a+bY

(vii) Equilibrium level of income/output and employment is acheived following-

(a) AS = AD approach (b) S = I approach (c) Both (a) & (b) (d) None of these

(viii) On account of an injection of aggregate demand, equilibrium level of income–

(a) increase (b) decrease (c) remains constant (d) All of these

(ix) If AD increases, AS will increase only when–

(a) excess capacity (b) under utilisation of existing resources

(c) over utilisation of resources (d) Both (a) & (b)

(x) At equilibrium situation the producers do not suffer-

(a) the burden of unwanted supplies (b) the loss of unfulfilled demand

(c) Both (a) & (b) (d) None of these

(xi) An increase in investment expenditure (injection) causes increase in the level of income through-

(a) an upward shift in AD (b) a downward shift in AD

(c) an upward shift in AS (d) a upward shift in AS

(xii) A withdrawl of investment causes a multiple decrease in income, is a ________ action of the multiplier-

(a) forward (b) backward (c) both (a) & (b) (d)none of these

(xiii) Multiplier is estimated as-

(a) $\frac{1}{1-\text{MPC}}$ (b) $\frac{1}{\text{MPS}}$ (c) $\frac{\Delta Y}{\Delta I}$ (d) All of these

(xiv) Full employment means there is no-

(a) involuntary unemployment (b) voluntary unemployment

(c) structural unemployment (d) frictional unemployment

(xv) Which of the following leads to increase in AD–

(a) Fall in imports (b) increase in investment expenditure

(c) increase in govt. expenditure (d) All of these

3. Short question:-(1 marks)

(i) Define Aggregate demand schedule.

(ii) Define Autonomous consumption.

(iii) What is Marginal propensity to consume?

(iv) When dissaving is done by a consumer?

(v) Define Autonomous investment.

(vi) Why aggregate supply is a 45^0 line?

(vii) What do you mean by equilibrium output?

(viii) What is investment multiplier?

(ix) What are the values of autonomous consumption, induced consumption, autonomous saving, when $C = 100 + 0.5Y$ and $Y = 1000$?

(x) What is the value of multiplier when a) $MPS = \frac{1}{4}$ and b) $MPC = \frac{1}{4}$?

(xi) What are the values of a) multiplier, b) MPC and c) MPS when investment increases from Rs 400 to Rs 600 and income increases from Rs. 3000 to Rs. 4000?

(xii) In a two sector economy, the saving and investment functions are : $S = -10 + 0.3Y$

$I = -5 + 0.1Y$

What will be the equilibrium level of income?

(xiii) What is involuntary unemployment?

(xiv) Define inflationary gap?

(xv) What is fiscal policy and monetary policy?

4. Fill in the blanks :-

(i) AD curve is ____________ to consumption curve.

(ii) Consumption function is a functional relationship between consumption and ______________

(iii) In a linear(st.line) consumption function MPC remains _____________

(iv) The autonomous consumption is __________ and _____________ to the autonomous saving.

(v) In the keynesion, framework investment is ____________________ .

(vi) When AS > AD or AD > AS, the equilibrium is restroed through changes in ______________

(vii) An 'injection' causes ____________ in the level of income where as a 'withdrawl' causes ___________ in the level of income.

viii) Investment multiplier works through change in ______________

ix) If MPC = 0.9, then the value of multiplier will be ______________.

x) If MPC = MPS, then the value of multiplier will be _________________

xi) After full employment _________________ only rises.

xii) Deficient or excess demand can be corrected through ___________ policy and ___________ policy.

xiii) If AD rises AD curve shifts ____________.

xiv) Defecient Demand creates __________ stock.

xv) To correct excess demand RBI __________ securities through open market operation.

5. Short answer type questions : (3/4 marks)

i) Define Aggregate Demand. state its components.

ii) Explain AD with its shape.

iii) Explain the concept of consumption function with its diagram.

iv) Explain the components of the equation: $C = 20+0.9Y$ and construct a schedule for consumption where income is Rs 1000, Rs 2000, Rs 3000 and Rs 4000. What is the value of induced consumption when income is Rs. 5000?

v) Find consumption and saving when $\overline{C} = 100$, MPS =0.4 and $Y = 5000$.

vi) Establish the relationship between MPC and MPS.

vii) Complete the following table:-

Income	Consumption	MPS	APC
0	15	-	-
50	50	-	-
100	85	-	-
150	120	-	-

viii) Complete the following table:-

Income	APC	Saving	MPC
0	_	–80	-
100	1.6	-	-
200	1	-	-
300	0.8	-	-

ix) Why the value of MPC and MPS lies between 0 and 1?

x) Explain the concept of saving function with diagram.

xi) What is aggregate supply? Write its components.

xii) Difference between ex-ante investment and ex-post investment.

xiii) Establish the relationship among multiplier, MPC and MPS.

xiv) Why is the value of investment multiplier more than 1?

xv) The saving function of an economy is S = -200 + 0.25Y. The economy is in equilibrium when income is equal to 2000.

a) Calculate investment expenditure at equilibrium level of income.

b) Autonomous consumption

c) Investment multiplier.

xvi) In the economy MPC is 0.75 and investment expenditure increases by Rs 60 crore. Calculate the total increase in national income.

xvii) As a result of increase in investment by Rs 40 crore, national income rises by Rs 160 crore. Calculate MPC

xviii) Find national income from the following- Autonomous consumption = Rs 100, MPC = 0.80 and investment = Rs 50.

xix) Equilibrium level of output/income does not necessarily correspond to full employment in the economy- explain.

xx) Differentiate between full employment equ^m and under employment equ^m.

xxi) What is deficient demand? Write its impact on output and employment.

xxii) What is fiscal policy? Write its various instruments to correct excess and deficient demand.

xxiii) Differentiate between inflationary gap and deflationary gap.

xiv) If autonomous consumption and investment expenditure is Rs. 50 crore, MPS 0.2 and income (Y) Rs 4000 crore, find planned aggregate demand . State with reason whether economy is in equilibrium or not.

6. Long answer type questions : (6 marks)

1. Outline the steps taken in deriving saving curve from the consumption curve.
2. Explain the national income equilibrium through AD – AS approach. Use diagram.
3. Explain the determination of equilibrium level of output through S-I approach. If planned saving is greater than planned investment, what adjustments will bring about equality between the two?
4. Explain all the changes that will take place in an economy when AD is not equal to AS.
5. Explain the working of investment multiplier with the help of a numerical example.
6. Explain consumption function with the help of a schedule and diagram.
7. In a two-sector economy, the consumption and investment functions are as follows:

   C = 50+0.8Y, I = 50, Y = C+I

   Find a) the equilibrium level of income, b) the level of consumption at equ^m

   c) the level of saving at equ^m
8. Given the equilibrium condition:

   $Y = C+I$, $C = \overline{C} + bY$, $I=I_0$ determine :-

i) The equ^m level of income

ii) The change in income that results from an autonomous change in I_O to I_1 and

iii) The value of multiplier

9. Analysis the distinction between deficient demand and excess demand.
10. What is monetary policy? How is it used during the situations of excess demand and deficient demand.

Answer

1. True/False

i) False, AD is invesely related to price level as if price increase AD false and AD is directly relate to income as raising income cause AD raise.

ii) True, consumption curve rises at the rate of MPC.

iii) True, APC may be more than 1 but MPC always lies between 0 and 1. If APC is constant APC = MPC

iv) True, when consumption> income , APS is negative where as MPS = $\frac{\Delta S}{\Delta Y}$ and $\Delta S > 0$, so MPS > 0.

v) True, as consumption never be less than zero, so APC $\left(\frac{C}{Y}\right) > 0$.

vi) True, vii) True, viii) True, ix) True, x) True, xi) False, xii) False, xiii) False, xiv) False, xv) False.

2. MCQ:-

i) a, ii) c, iii) c, iv) b, v) a, vi) c, vii) c, viii) a, ix) d, x) c, xi) a, xii) b, xiii) d, xiv) a, xv) d

3. Fill in the blanks:-

i) Parallel, ii) income, iii) constant, iv) equal, opposite, v) fixed, vi) Aggregate supply, vii) increase, decrease, viii) consumption, ix) 10, x) 2, xi) price level, xii) fiscal, monetary, xiii) upward, xiv) unsold, xv) buy

4. **1 mark**

i) AD schedule is a table showing AD corresponding to different income level.

ii) Autonomous consumption is the consumption irrespective of income.

iii) The ratio between change in consumption expenditure (Δ **C)** with the change in income (Δ Y) .

iv) When consumption is greater than income.

v) It is the investment irrespective of income.

vi) As long as economy is operating at less than full employment, any thing demanded will be supplied, so AS is a 45^o line.

vii) The output where AD = AS .

viii) The ratio between change in income with the change in investment expenditure $\left(\frac{\Delta Y}{\Delta I} = K\right)$

ix) Autonomous consumption ($\bar{C}$) = 100

Induced consumption $= 0.5 \times 1000 = 500$

Autonomous saving ($\bar{S}$) = -100

x) When MPS = $\frac{1}{4}$, Multiplier = $\frac{1}{MPS} = 4$

When MPC= $\frac{1}{4}$, Multiplier = $\frac{1}{1-MPC} = \frac{4}{3} = 1.33$

xi) When, Δ I = Rs 200

Δ Y = Rs 1000

$\therefore$ multiplier (K) = $\frac{1000}{200} = 5$

$\therefore$ MPS = $\frac{1}{K} = \frac{1}{5} = 0.2$

MPC = $1 - \frac{1}{K} = 1 - \frac{1}{5} = \frac{4}{5} = 0.8$

xii) $\because$ S = I

$-10 + 0.3Y = -5 + 0.1Y$

$0.2Y = 5$

$Y = 25$

xiii) It is a situation where a person is willing to work at the prevailing wage yet do not get work.

xiv) It is the difference between 'AD beyond full employment level' and 'AD at full employment level'?

xv) Fiscal policy refers to the use of government spending and tax policies to influence economic conditions.

CHAPTER - 5

Government Budget and the Economy

India follows mixed economic system, where apart from private sector there exists government sector which plays a vital role. Government aims at the minimising the fuller utilisation of resources to provide maximum welfare in the country. Government requires lot of money to finance various institutional and welfare activities. Government also generates revenue from various sources. To manage its collection of revenue and expenditure, government prepares 'Budget'.

5.1 Budget is a statement of estimated receipts and expenditure of the government during the period of the financial year (1st April to 3rd March in India) . Its main features are–

a) It is an estimate and not an actual statement.

b) It is prepared annually.

c) It has constitutional requirement to present budget before parliament. (under Article 112)

d) Revenue and expenditure framework are prepared according to objectives of govt.

5.2 The main objectives of budget are-

a) Reducing in equalities in income and wealth through taxation and subsidy.

b) Reallocation of resources.

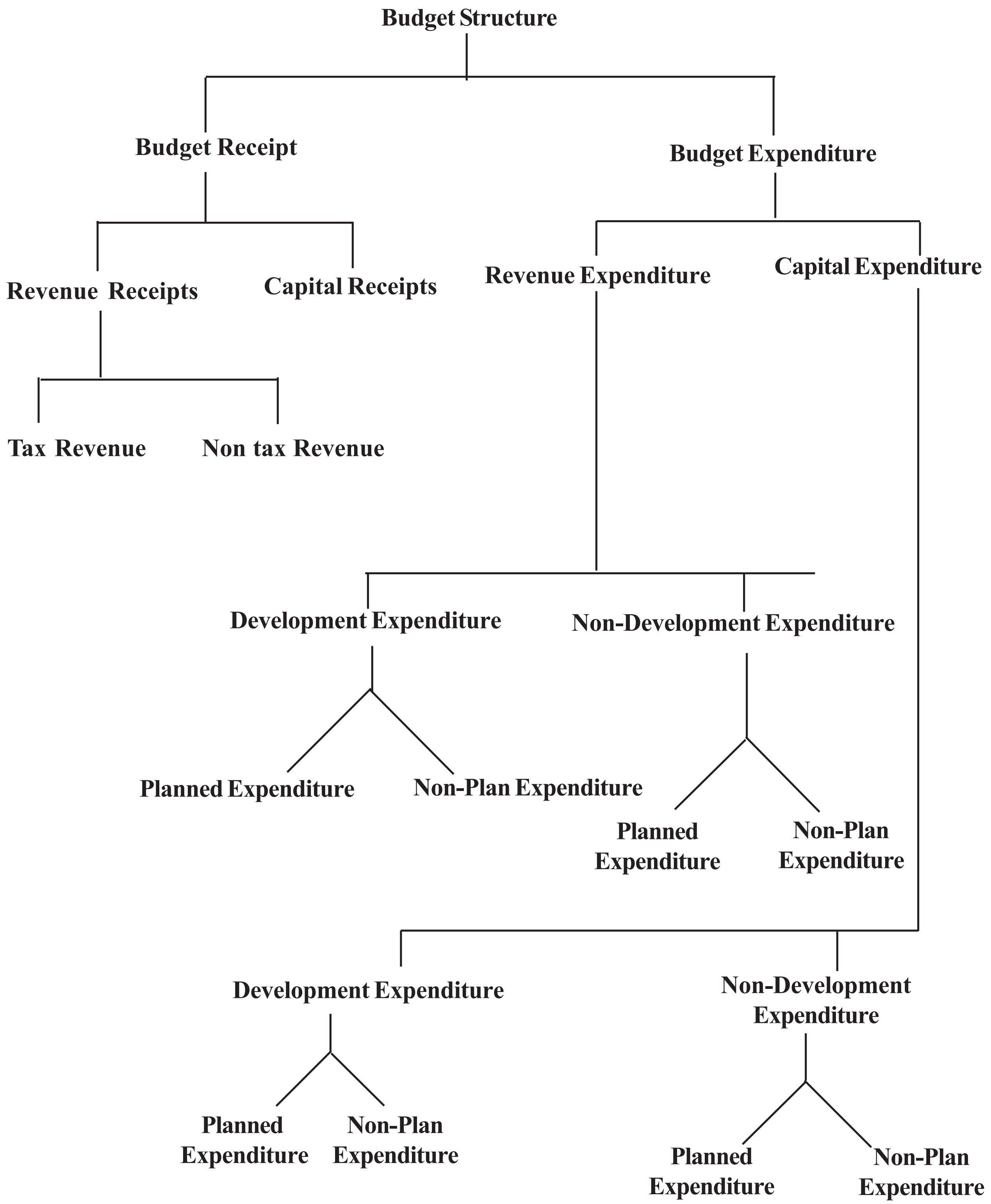
c) GDP growth.

d) Maintaining economic stability in the economy through controlling the fluctuations of business cycles by the use of fiscal policy measures.

e) Managing public sector enterprises through increasing the growth of public sector enterprises and thus also prevents monopoly power of private sector.

f) Generation of employment.

5.3


Budget Structure
Budget Receipt
Budget Expenditure
Revenue Receipts
Capital Receipts
Revenue Expenditure
Capital Expenditure
Tax Revenue
Non tax Revenue
Development Expenditure
Non-Development Expenditure
Planned Expenditure
Non-Plan Expenditure
Planned Expenditure
Non-Plan Expenditure
Development Expenditure
Non-Development Expenditure
Planned Expenditure
Non-Plan Expenditure
Planned Expenditure
Non-Plan Expenditure

5.4.1 **Receipt side of Govt. Budget:**

Two types of receipts are there–

Revenue receipts and capital receipts. In revenue receipts the asset and liability status of govt. doesn't affected (like tax and non tax receipts). In capital receipts, liability of government. rises (like borrowing) and assets reduces like disinvestment.

Tax is an important sources of govt. receipt. Tax is a compulsory payment made by all the person of a country to the govt. either directly or indirectly. So two types of taxes are there- Direct tax and indirect tax.

Direct taxes are those which are paid by the individuals on whom it is imposed. It means its payments are compulsory and can't be avoided and shifted on to others. e.g. Income tax, wealth tax etc. Indirect taxes are those which are paid to the govt. by one Person but it's real burden is to be borne by another. It means its payments are not compulsory and can be avoided and shifted on to others. e.g. sales tax, VAT, excise duty, import duty etc.

Along with tax, various non tax receipts are also accepted by govt. like fees, fine, penalties, gift and grants, escheat, forfeiture of bond etc.

5.4.2 Expenditure side of govt. budget

Two types of expenditure are there-

Revenue expenditure and capital expenditure. In case of revenue expenditure, the asset and liability status of govt. does not affected. e.g. Expenditure on pension, salary, subsidy, unemployment allowances etc. In case of capital expenditure either liability of govt. reduces (like repayment of loans) or asset increases (like construction of dam, roads, hospital etc.)

Govt. Expenditure can further divided into development and non-development expenditure and planned and non-plan expenditure. If the expenditure is directly related with socio- economic development of a country(like Expenditure on health, education, irrigation etc.) It is called development expenditure. On the other hand if expenditure are not directly effects the socio- economic development it is called non-development expenditure (like expenditure on defence, police, administration etc.)

If expenditure to be incurred during the year in accordance with the central plan of the country it is called planned expenditure. e.g. expenditure on rural development, agriculture, education etc. But if expenditure to be incurred on projects which are not covered under central plan, It is called non plan expenditure. e.g. expenditure on victims of earthquake, reconstruction of dam affected by flood etc.

5.5

Types of govt. budget

- **Balanced budget (Receipts= Expenditure)**
- **Un-balanced budget (Receipts** ≠ Expenditure
  - **Deficit budget (Receipts<Expenditure)**
    - **Revenue deficit**
    - **Fiscal deficit**
    - **Primary deficit**
  - **Surplus budget (Receipts>Expenditure)**

5.6 Budget may be either in deficit or in surplus or in balanced. When government receipts are more than govt. expenditures it is called surplus budget. When recepts and expenditures are equal, it is called balanced budget. But the problem arises in case of deficit budget, when receipts side of budget becomes less than its expenditure. It occurs mainly for increase in Unproductive or non-development expenditure by government and lack of revenue collection by the govt. It is of the following three types-

1) **Revenue deficit:-**

It occurs when the estimated revenue expenditure of govt. becomes more than estimated revenue receipts.

Revenue deficit = Revenue expenditure – Revenue receipt.

Implication:-

i) It indicates the inability of the govt. to meet its regular and recurring expenditure in the proposed budget.

ii) It implies that dissavings of Government.

iii) It is a warning signal to either reduce expenditure or increase receipt.

2. Fiscal deficit:-

It occurs when the estimated total expenditure of the budget becomes more than total receipts excluding borrowing.

Fiscal deficit = Total budget expenditure – total budget receipt (excluding borrowing)

= (Revenue expenditure + capital expenditure)–

(Revenue receipt+ capital receipt excluding borrowing)

In other words fiscal deficit is nothing but the amount of borrowing by the government.

Implication:

i) Debt trap

ii) Inflation

iii) Foreign dependence

iv) Hampers future growth

v) Increases liability of the government

3. Primary deficit:-

It is the difference between fiscal deficit of the current year and interest payment of previous borrowing.

Primary deficit = Fiscal deficit – interest payments.

Implication: i) It indicates how much of the govt. borrowings are going to meet expenses other than interest payment.

ii) A low or zero primary deficit indicates that interest have forced the govt. to borrow money.

5.7 To overcome the deficit govt. may follow various steps-

a) Govt. Should reduce various public expenditure through better planning and administration, reducing various unproductive expenditure, including public sector in development activities etc.

b) Govt. should increase its receipts through increasing the existing tax rate and imposing new taxes, increasing non tax receipts, controlling tax evasion, increasing the income from public sector enterprises etc.

c) Effort should be made by the govt. to reduce fiscal deficit and interest payments should be reduced through repayments of loans as early as possible.

5.8 To finance the deficit govt. may adopt the following policies-

a) Govt. may go through printing of new currency notes to the extent deficit which is called deficit financing or monetary expansion.

b) Govt. also may borrow from general public through issuing various bonds and securities.

c) Govt. may sell its own shares to the private companies, i.e. privatisation.

d) Govt. may borrow from external sources like IMF, world bank etc. to finance the deficit.

Exercise

1. State whether the following statements are true or false :

i) In a particular year (1st April to 31st March) estimated receipts and expenditure of the govt. this "annual financial statement" constitutes the main budget document of the government.

ii) Gift tax is an example of 'paper tax'

iii) Greater fiscal deficit implies greater borrowings by the government.

iv) Balanced budget offers the solution to the problem of unemployment.

v) Construction of roads is a revenue expenditure of the government.

vi) Primary deficit include interest payments.

vii) Higher revenue deficit always leads to higher fiscal deficit.

viii) Expenditure on law and order is a component of plan expenditure.

ix) Revenue receipts tend to reduce liability of the government.

x) Deficit budget is desired during periods of inflation.

2. Choose the correct option:

i) Budget is a–

a) Financial statement b) Monetary statement

c) Political statement d) All of these

ii) Which of the following are the objectives of govt. budget?

a) Distribution of income and wealth b) Economic stability

c) GDP Growth d) All of these.

iii) Find direct tax among the following tax-

a) Personal income tax b) excise duty

c) Sales tax d) Service tax

iv) Payment of interest is–

a) Revenue expenditure b) Capital expenditure

c) Primary deficit d) Fiscal deficit.

v) A govt. Budget shows a primary deficit of Rs. 10,000 crore and interest payment is Rs. 5000 crore. How much is the fiscal deficit?

a) 50000 crore b) 10,000 crore

c) 15,000 crore d) 20,000 crore

vi) Which of the following is a non-tax revenue receipts?

a) Gift tax b) Sales tax c) Donation d) Excise duty

vii) Which of the following is an indirect tax?

a) Wealth tax b) Excise duty c) Income tax d) None of the above.

viii) Progressive tax is a tax which is–

a) Charged at a decreasing rate when income of an individual increases.

b) Charged at an increasing rate on income of an individual increases.

c) A fixed percentage of an individual income.

d) None of these.

ix) Revenue deficit is–

a) Revenue receipts-Revenue expenditure.

b) Revenue expenditure-Revenue receipts.

c) Revenue x Receipts – capital receipts.

d) Revenue expenditure-Capital expenditure.

x) Balanced budget is–

a) Total expenditure>Total receipts.

b) Total expenditure = Total receipts.

c) Total expenditure< Total receipts.

d) None of these.

3. **Choose the appropriate word and fill in the blank :**

i) Disinvestment is a component of ____________ budget. (Revenue/Capital)

ii) GST is an example of____________ tax. (Direct/Indirect)

iii) Repayment of loan by the govt. is ____________ expenditure. (Capital/Revenue)

iv) _____________ Expenditure adds to assets of the govt. or reduce its liability. (Revenue/Capital)

v) Primary deficit = ___________ interest payment. (Fiscal deficit/Revenue deficit)

vi) Expenditure on old age pensions is an example of _____________ expenditure. (Revenue/Capital)

vii) _____________ Is the excess of total expenditure over total receipts of the government (Budget deficit/Fiscal deficit)

viii) _____________ Taxes are generally regressive in nature. (Direct/indirect)

ix) ______________ expenditure neither create any assets non reduce any liability of the govt. (Revenue/ Capital)

x) Primary deficit in a govt. budget will be zero when _______________ is equal to interest payment. (Budget deficit/Fiscal deficit)

xi) Dividends received from public sector undertakings are a part of governments ________________ receipts. (Tax revenue/Non tax revenue)

4. **Very short answer objective type questions:**

i) What is govt. budget?

ii) What is meant by fiscal year in India?

iii) What is revenue receipts?

iv) What is revenue expenditure?

v) What is direct tax?

vi) Give examples of indirect tax.

vii) What is capital receipts?

viii) What is capital expenditure?

ix) What is revenue deficit?

x) What is fiscal deficit?

xi) What is primary deficit?

xii) What is revenue budget?

xiii) What is capital budget?

xiv) What is surplus budget?

xv) What is plan expenditure?

xvi) What is non plan expenditure?

5. **Answer the following questions:** **(3/4-marks)**

i) What is govt. Budget? write its objectives.

ii) Write the difference between-

iii) Revenue receipts and capital receipts.

iv) Capital expenditure and revenue expenditure.

v) Tex revenue and non-tax revenue.

vi) Direct tax and indirect tax

vii) Development and non-development expenditure.

viii) Planned expenditure and non-plan expenditure.

ix) What is revenue deficit? Write the measures to correct it.

x) What is fiscal deficit ? Write the measures to correct it.

xi) What is primary deficit? Write the measures to correct it.

xii) Write the measures to finance the various types of deficit?

xiii) Write the implication of revenue deficit.

xiv) Write the implication of fiscal deficit.

xv) Write the implication of primary deficit.

xvi) With reasons categorise the following in revenue and capital receipts-

a) Recovery of loans

b) Corporate tax

c) Sales of shares of public sector understandings (PSUs)

d) Tax receipts

e) Disinvestment

xvii) With reasons categorise the following in revenue and capital expenditure-

a) Receipts from PSUs

b) Profit from PSUs

c) Public borrowing

d) Expenditure on construction of dam

e) Expenditure on subsidy to farmer

f) Expenditure on salary to govt. employee

xviii) How budgetery policy can be used to reduce inequalities of income?

xix) Explain how govt. budget can be helpful in bringing economic stability in the economy.

xx) From the following data about a govt. budget, find a) Revemue deficit b) Fiscal deficit and c) primary deficit.

Particulars	**(Rs.)**
i) Tax Revenue	**47**
ii) Capital Receipts	**34**
iii) Non-tax Revenue	**10**
iv) Borrowings	**32**
v) Revenue Expenditure	**80**
vi) Interest payments	**20**

xxi) Calculate a) Revenue deficit b) Fiscal deficit and primary deficit from the following data.

Perticulars	(Rs in crore)
i) Revenue expenditure	45,000
ii) Borrowings	12,000
iii) Revenue Receipts	35,000
iv) Interest payments	30% of Revenue Deficit

xxii) From the given information, calculate- a) Revenue receipts, b) Fiscal deficit c) Primary deficit.

Particulars	(Rs in crore)
i) Revenue deficit	6,000
ii) Revenue expenditure	11,000
iii) Capitaln expenditure	14,000
iv) Non-debt creating capital receipts	8,000
v) Interest payments	7,000

xxiii) From the following information, determine a) capital expenditure b) Interest payments.

Particulares	(Rs in crore)
i) Primary deficit	8,000
ii) Fiscal deficit	11,000
iii) Non-debt creating receipts	9,000
iv) Revenue deficit	5,000

xxiv) Calculate budget deficit, if total receipts of the govt. are Rs. 7,000 crores and total expenditures are Rs.10,000 crores.

xxv) Find out the value of revenue deficit of an economy, if revenue receipts are Rs. 400 crores and revenue expenditures are Rs. 500 crores.

xxvi) If total expenditure of the govt. are Rs. 15,000 crores and its total receipts (expect borrowings) are Rs. 12,000 crores, calculate fiscal deficit of the govt.

xxvii) Suppose fiscal deficit of an economy is Rs. 7,000 crores and interest payment is Rs. 700 crores, calculate primary deficit.

xxviii) Total expenditure of the govt. are Rs. 20,000 Lakhs and capital expenditures are Rs. 12,000 lakhs. What will be revenue expenditures?

xxix) Calculate budget deficit, revenue deficit, fiscal deficit, and primary deficit from the given data.

Particulars	(Rs in crores)
i) Revenue expenditure	5,000
ii) Revenue receipts	3,000
iii) Capital expenditures	15,000
iv) Capital receipts	8,000
v) Borrowings	3,000
vi) Interest on Borrowings	300

xxx) If an economy revenue receipts are Rs. 200 crores and Revenue expenditures are 250 crores, find out the Revenue deficit.

xxxi) In a govt. budget total receipts are Rs. 500 crores and total expenditure is Rs. 800 crores. Ascertain financial deficit.

xxxii) Total receipts of the govt. are Rs. 50,000 crores and revenue receipts are Rs. 20,000 crores. What will be the value of capital receipts?

xxxiii) Revenue deficit of a country is Rs. 4000 crores and its revenue expenditures are Rs. 19,000 crores. Calculate the value of revenue receipts.

xxxiv) Calculate the value of borrowings of an economy, if its fiscal deficit isRs. 2,000 crores and budget deficit is Rs. 1,200 crores.

xxxv) Calculate the value of interest on borrowings of an economy, if it's fiscal deficit isRs. 5,000 crores and Primary deficit is Rs. 4,000 crores.

xxxvi) In a govt. budget primary deficit is Rs. 4,400 crores and the payment of interest is Rs. 400 crores. How much will the fiscal deficit be?

xxxvii) In an economy fiscal deficit is Rs. 800 crores and revenue expenditure on payment of interest is 50 crores find out the primary deficit.

xxxviii) The revenue and capital receipts of a country are Rs. 400 crores and Rs. 600 crores and revenue and capital expenditures are Rs. 300 crores and Rs. 400 crores. Find out the situation of budget.

xxxix) If revenue deficit is Rs. 350 crores and revenue receipts are Rs. 500 crores, so find out the revenue expenditure.

xl) Explain the role of govt. Budget in influencing allocation of resources in the economy.

xli) 'Fiscal deficits necessarily inflationary'- is it true or false? Give reasons.

xlii) 'Public debt imposes burden in future generation'- explain.

xliii) In a govt. budget, revenue deficit is Rs. 40 crores. If revenue receipts are Rs. 90 crores and capital receiptsRs. 60 crores, then how much is the revenue expenditure.

xliv) In a govt. budget , primary deficit is Rs. 5,000 crores and interest payment is Rs. 4,000 crores. How much is the fiscal deficit?

xlv) As per govt. budget The interest payments are estimated at Rs. 1,60,000 crores. If total borrowing requirements of the govt. Are Rs. 2,40,000 crores. Then how much is primary deficit?

xlvi) The interest payment as per govt. budget during a year are Rs. 13,500 crores, which is 30% of primary deficit. Calculate fiscal deficit.

ANSWER

1. True/False

i) True ii) True iii) True iv) False v) False vi) False vii) False viii) False

ix) False x) False.

2. M.C.Q's

i) a ii) d iii) a iv) a v) c vi) c vii) b viii) b ix) b x) b.

3. Fill in the blanks:-

i) Capital ii) indirect iii) Capital iv) Capital v) Fiscal deficit vi) Revenue

vii) Budget deficit viii) indirect ix) Revenue x) Fiscal deficit xi) Non-tax revenue

4. Answer:

i) Govt. Budget is a statement of estimated receipts and expenditure of the govt. during a financial year.

ii) In india, fiscal year is the year which begins on 1st April and ends on 31st March of the following year.

iii) The receipts of the govt. which neither create any liability nor lead to any reduction in assets.

iv) The expenditure of the govt. which neither creates assets nor causes a reduction in liabilities.

v) Tax which imposed on income and property of individuals and companies and are paid directly to the govt.

vi) GST, custom duty, excise duty, entertainment tax, service tax etc.

vii) The receipts which either creats liability or cause a reduction in the assets of the govt.

viii) Capital expenditure is an expenditure which leads to creation of assets or reduction in liabilities.

ix) Revenue deficit refers to excess of revenue expenditure over revenue receipts during a given financial year.

x) Fiscal deficit refers to access of total expenditure over total receipts excluding borrowings during a given financial year.

xi) Primary deficit is the difference between fiscal deficit and interest payment.

Primary deficit = Fiscal deficit- Interest payment.

xii) Revenue budget is the statement of estimated revenue receipts and expenditure of the govt. during a fiscal year.

xiii) Capital budget is the statement of estimated capital receipts and expenditure of the govt. during a fiscal year.

xiv) Surplus budget is that budget in which govt. receipts are more than govt. Expenditure.

xv) Plan expenditure is the expenditure which is related to some specified plan for the year.

xvi) Non plan expenditure is the expenditure which is not related to any specified plan for the year.

5. Answer :

xxxvii) Revenue deficit = Revenue expenditure - Revenue Receipts

=> 40 = Revenue expenditure - 90

$\therefore$ Revenue expenditure = 40 + 90 = 130 crores

xxxviii) Fiscal deficit = Primary deficit + interest payment

= 5000 + 4000

= 9000 crores.

xxxix) Primary deficit = Fiscal deficit- Interest payment

= 2,40,000- 1,60,000

= 80,000 crores.

xxxx) Interest payment = 30% of primary deficit

$$\Rightarrow 13{,}500 = \frac{30}{100} \times \text{primary deficit}$$

$$\Rightarrow \text{primary deficit} = \frac{13500 \times 100}{30} = 45{,}000$$

$\therefore$ Fiscal deficit = primary deficit + interest payment

= 45,000+ 13,500

= 58,500 vrore.

xiv) Revenue deficit = Revenue expenditure - Revenue receipts

= 80- (47+10)

= 80-57

= 23

Fiscal deficit = Borrowings = 32

$\therefore$ primary deficit = Fisaclm deficit – Interest payments

= 32-20

= 12

xv) Revenue deficit = Revenue expenditure – Revenue Receipts

= 45,000 – 35,000 = 10,000

Fiscal deficit = Borrowings = 12,000

Interest payments = 30% of Revenue deficit

$$= \frac{30}{100} \times 10,000$$

= 3,000

$\therefore$ Primary deficit = Fiscal deficit – Interest payments

= 12,000 – 3,000

= 9,000

xvi) Revenue deficit = Revenue expenditure - Revenue Receipts

=> 6,000 = 11,000 – Revenue Receipts

$\therefore$ Revenue receipts = 11,000 – 6,000 = 5,000

Fiscal deficit = (Revenue expenditure + capital expenditure) - (Revenue Receipts + Nom- debt creating capital receipts)

= (11,000 + 14,000) – (5,000 + 8,000)

= 25,000 – 13,000

= 12,000 .

Primary deficit = Fiscal deficit - Interest payments

= 12,000 –7,000

= 5,000

8,000 = 11,000– Interest payments

$\therefore$ Interest payments = 11,000 – 8,000

= 3,000

xvii) Fiscal deficit = (Revenue expendiure + capital expenditure)- (Revenue receipts + Non-debt creating capital receipts)

=> 11,000 = (Revenue expenditure – Revenue Receipts) + (Capital expenditure – Non-debt creating capital receipts)

=> 11,000 = 5,000 + capital expenditure - 9,000

$\therefore$ Capital expenditure = 15,000.

Primary deficit = Fiscal deficit – Interrest payment

8,000 = 11,000 – Interest payment

Interest payment = 11,000 – 8,000

= 3,000

xviii) Budget deficit = Total expenditure – Total receipts

= 10,000 – 7,000

= 3,000 crores.

xix) Revenue deficit = Revenue expenditure – Revenue receipts

= 500 – 400 = 100 crores.

xx) Fiscal deficit = Total expenditure – Total receipts (except borrowings)

= 15,000 – 12,000 = 3,000 crores.

xxi) Primary deficit = Fiscal deficit – Interest payment

= 7,000 – 700

= 6,300 crores.

xxii) Total expenditure = Revenue expenditure + capital expenditure

=> 20,000 = Revenue expenditure + 12,000

=> Revenue expenditure = 20,000 – 12,000

=> 8,000 crores

xxiii) Budget deficit = Total expenditure - Total receipts

= (5,000 + 15,000) – (3,000 + 8,000)

= 20,000 – 11,000

= 9,000 crores

Revenue deficit = Revenue expenditures - Revenue receipts

= 5,000 – 3,000

= 2,000 crores

Fiscal deficit = (Revenue expenditure + capital expenditure) - (Revenue Receipts + capital receipts except borrowings)

= (5,000 + 15,000) -{3000+ (8,000 – 3,000)}

= 12,000 crores

Primary deficit = Fiscal deficit – Interest payments

= 12,000–300

= 11,700 crores

xxix) Revenue deficit = Revenue expenditure – Revenue Receipts

= 250–200 = 50 crores

xxv) Fiscal deficit = Total expenditure – Total receipts except borrowings

= 800 –500

= 300 crores

xxvi) Total receipts = Revenue receipts + capital receipts

=> 50,000 = 20,000 + capital receipts

∴ capital receipts = 50,000 – 20,000

= 30,000 crores

xxvii) Revenue deficit = Revenue expenditure – Revenue receipts

=> 4,000 = 19,000 - Revenue receipts

∴ Revenue receipts = 19,000 – 4,000 = 15,000 crores

xxviii) Borrowings = Fiscal deficit - Budget deficit

= 2,000 – 1,200 = 800 crores

xxix) Primary deficit = Fiscal deficit - Interest payment

=> 4,000 = 5,000 – Interest payment.

=> Interest payment = 5,000 – 4,000 = 1,000 crores

i.e. interest on borrowings is Rs. 1,000 crores.

xxx) Primary deficit = Fiscal deficit – Interest payment

=> 4,400 = Fiscal deficit - 400

=> Fiscal deficit= 4,400 + 400 = 4,800 crores

xxxi) Primary deficit = Fiscal deficit – Interest payment

800-50 = 750 crores

xxxii) Total receipts = Revenue receipts + capital receipts

= 400 + 600

= 1,000 crores

Total Expenditure = Revenue expenditure + capital expenditure

= 300 + 400

= 700 crores

Here total receipts are more than total expenditure. Hence it is surplus budget and the surplus amount is Rs. 300 crores

xxxiii) Revenue deficit = Revenue expenditure – Revenue receipts

=> 350 = Revenue expenditures –500

=> Revenue expenditures = 350 + 500

= 850 crores

CHAPTER-6

Open Economy Macro Economics

An open economy is one which deals with other countries through distinct methods. Most of the modern economics are open now a days.

There are three ways in which these Connections are made among the countries.

Output market	Financial market	Labour market
Here, an economy can deal and trade in commodities and services with other countries.	**Here, An economy can purchase financial assets from other countries and sell financial assets to other nations**	**A labour market is a place where workers and employees interact with each other.**

An open economy is said to be one that trades with other Countries in goods and services and in financial assets also. Foreign trade effects aggregate demand of a nation.When export increases aggregate demand increases but when import increases aggregate demand falls

International monetary system refers to the system and rules that govern the use and exchange of money around the world and between the countries.

6.1 **Balance of payment:-**

Balance of payment (BOP)of a country is a systematic record of all economic transactions between its residents and residents of foreign countries of the world for a specific time period typically a year.

BOP transactions related to-

i) Visible items of trade

ii) Invisible items of trade(service items)

iii) Capital transfer (Receipt and payments)

iv) Unilateral transfers/ Transfer payments

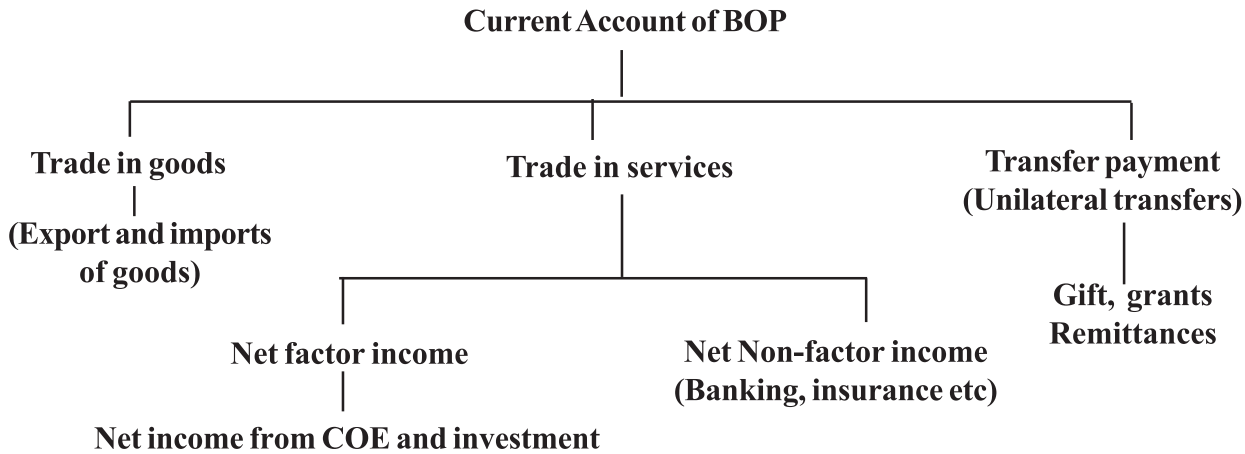
There are two main accounts in the BOP- the current account and the capital account.

6.2 Balance of trade (BOT)

Balance of trade is the difference between the money value of exports and imports of material goods (visible items) of a country in a given period of time.

BOP has two major accounts: Current account and capital account.

6.2.1. **Major components of current account:-** Current account consists of export and imports of goods and services as well as current transfer (transfer payment).



Current account balance:-

Receipt on = payment on

Current A/C Current A/C

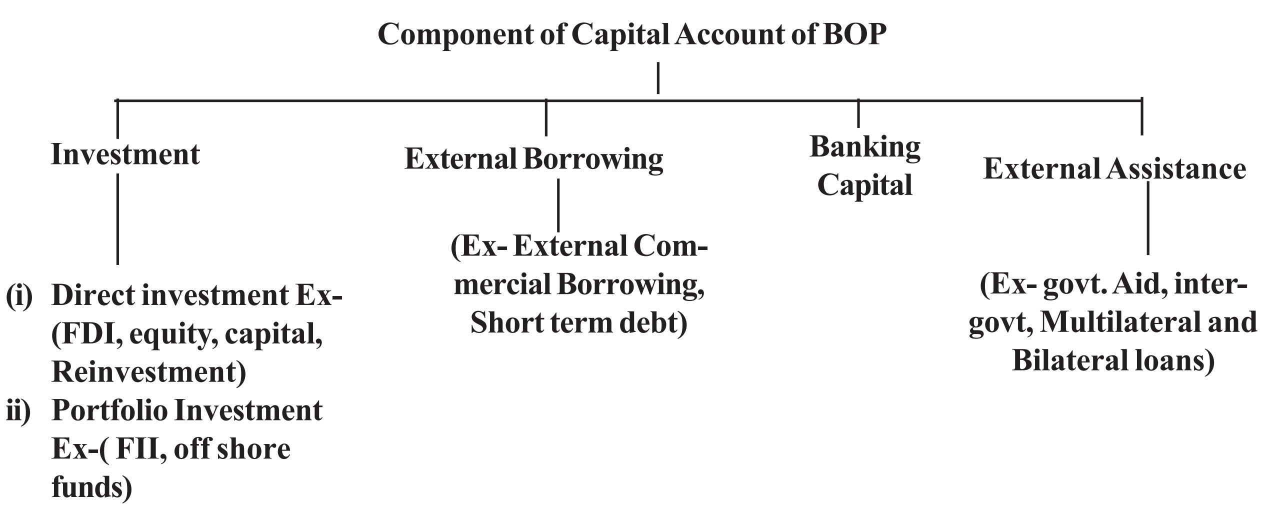
Current account balance has two components.

i) Balance of trade or Trade balance (visible items of trade) (Export-import of goods)Ex-Rice, apple.

ii) Balance on Invisibles (invisibles items of trade) (exports –Imports of services, Transfer and flow of incomes) Ex:- Shipping, banking, insurance, gifts, grants, etc.

6.2.2 Capital account records all international transactions of assets.

Ex- Money, Stocks, Bonds, government debt, sale or purchase of assets. FDI, FII, External Borrowings and assistance.



Capital account transaction changes the assets and liability status of the government but current account transaction does not changes the assets and liabilities of the government

(An asset is any one of the form in which wealth can be held)

Capital account balance occurs when capital inflows are equal to capital outflows.

Capital inflow > Capital outflow =>Surplus in capital account.

Capital inflow < capital outflow => Deficit in capital account

6.3 **BOP equilibrium:-**

A country is said to be in BOP equilibrium when current account plus capital account transaction becomes zero.

Current account + capital account = 0

BOP is said to be in state of equilibrium when there is either surplus or deficit in BOP.

The decrease in official reserves is called overall balance of payment deficit. i.e

BOP deficit = Receipt on account of autonomous transactions< payments on account of autonomous transactions.

The increase in official reserves is called the overall balance of payments surplus, i.e

BOP surplus = Receipt on account of autonomous transactions >payments on account of autonomous transactions.

6.4 **Autonomous and accommodating transactions:**

International economic transactions are called autonomous when transactions are made independent of the state of BOP but to earn profit only.

On the other hand, accommodating transactions are determined by gap in the BOP, i.e. Whether there is deficit or surplus in the balance of payments.

Items of autonomous transaction are called "above the lines" items in the BOP but items of accommodating transactions are called "below the line" items in the BOP.

Main Autonomous items	**Main Accommodating items**
i) Export and import of good and services. ii) Transfer payments or unilateral transfers iii) Capital transactions. (Both current account and capital account)	i) Borrowing from IMF or other International financial institutions. ii) Foreign exchange reserves. (only capital account).

Errors and omissions reflect the imbalance, resulting from imperfections in source data and compilation of the balance of payments accounts. So it is also included in BOP along with current and capital accounts.

6.5 BOP Disequilibrium:

Disequilibrium in BOP(Deficit) occurs due to many causes:-

Causes of Disequilibrium (Deficit) in BOP

Economic Factors

- **a) Inflation/Deflation**
- **b) Expenditure on developing relations**
- **c) Fall in demand or Rise in demand**
- **d) Import or exports of services and goods.**

Social Factors

- **a) Demonstration effects**
- **b) Change in tastes, preferences, fashion and trends**
- **c) Cross border prejudice**

Political Factors

- **a) Political instability**
- **b) Govt. policy**

Some of the effects of disequilibrium in BOP (Deficit)-

i) It reduces foreign exchange reserve of a country.

ii) It shows the pace of economic development.

iii) A country's economic credibility is hampered

Different measures can be introduced to correct BOP disequilibrium like

i) Export promotion

ii) Restrictions and import substitution.

iii) Reducing inflation

iv) Devaluation and depreciation.

Along with that govt. may take different monetary policies (Bank rate, cash reserve ratio, open market operations) and fiscal policies (tax concessions, subsidies) to influence BOPdisequilibrium (Deficit).

6.6 The foreign exchange market:

The market in which national currencies are traded for one another is known as the foreign exchange market.

The major participants in the foreign exchange market are commercial banks, foreign exchange brokers and other authorised dealers and monetary authorities.

Foreign exchange refers to currencies other than the domestic currency.

Foreign Exchange Rate(Forex Rate) is the price of one currency in terms of another. Ex- if ₹60 are to be paid to buy one dollar ($1), then exchange rate is 60. i.e. ₹60 per dollar.

Types of foreign exchange market:

i) **Spot market:-**The market which handles only spot transactions or current transactions of foreign exchange are termed as spot market or current market.

ii) **Forward market:-** It refers to that market which covers sale and purchase of foreign exchange for future delivery, at a decided rate.

Function of foreign exchange market-

i) International transfer of foreign currency

ii) Provide credit for foreign trade

iii) Hedging foreign exchange risk.

6.6.1 **Demand for foreign exchange occurs:**

1. To purchase goods and services from other countries.
2. To send gift abroad
3. To purchase financial assets abroad (share, bonds)
4. To undertake foreign tour
5. To invest directly in foreign companies

6.6.2. **Supply of foreign exchange:**

Supply of foreign currency occurs due to-

1. Export of goods and services from domestic country
2. Foreign investment (FDI and FII)
3. Gifts and transfer payments made by foreigners.
4. Purchase of assets by foreigner in domestic country
5. Foreign tourism from abroad

6.7 **Exchange Rate**

Exchange rate of a nation can be determined through Fixed exchange rate, flexible exchange rate, and managed exchange rate.

Fixed exchange rate:

An exchange rate between the Currencies of two or more countries that is fixed at some level and adjusted only infrequently. It is officially fixed by the government, Monetary Authority and not determined by market forces. There are two measures of fixed exchange rate:- i) gold standard ii) Bretton woods system.

Flexible exchange rate:

An exchange rate determined by the forces of demand and supply in the foreign exchange market without central bank intervention.

Managed floating rate:-

A system is which the Central bank allows the exchange rate to be determined by market forces but intervene at same time to influence the exchange rate, it is also called as ‘dirty floating’.

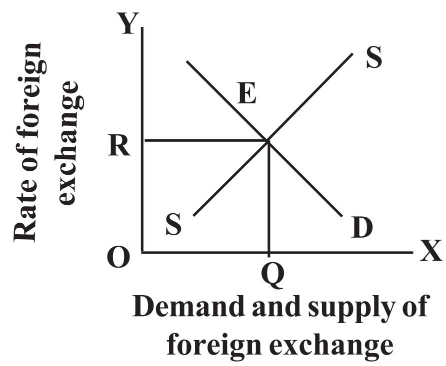
Each exchange system has some merits and demerits.

Fixed exchange rate ensures stability due to certainity and it promotes foreign trade. But it requires high reserves of gold and foreign currency. It may result in under valuation or over valuation of currency.

Flexible exchange rate provide the government higher flexibility and there is no need to hold larger reserves of foreign exchange. Surplus or deficit in BOP automatically corrected. But sometime it may create market instability and encourage speculation.

6.7.1 **Determination of foreign exchange rate:**

Foreign exchange rate is determined by the demand and supply of foreign exchange.



The rate of foreign exchange is said to be equilibrium when the demand for foreign exchange equals its supply. In the given figure, the line SS shows supply of foreign currency (positively sloped). The line DD shows the demand for foreign currency which is negatively sloped. The point E, at which DD equals to SS represents equilibrium rate of exchange (OR).

Moreover speculation, interest rates and general income(spending) and price level also influence the exchange rate in different ways, government fixed exchange rate at a particular level to influence trade volume(export-import) of the country in fixed change rate system.

When some government action increases the exchange rate (making domestic currency cheaper) is called Devaluation.

Revaluation is said to occur, when government decreases the exchange rate (making domestic currency costlier).

Devaluation or revaluation of currency may occur under fixed exchange rate system only.

Moreover, change in exchange rate under flexible exchange rate system may take two forms like currency appreciation and currency depreciation.

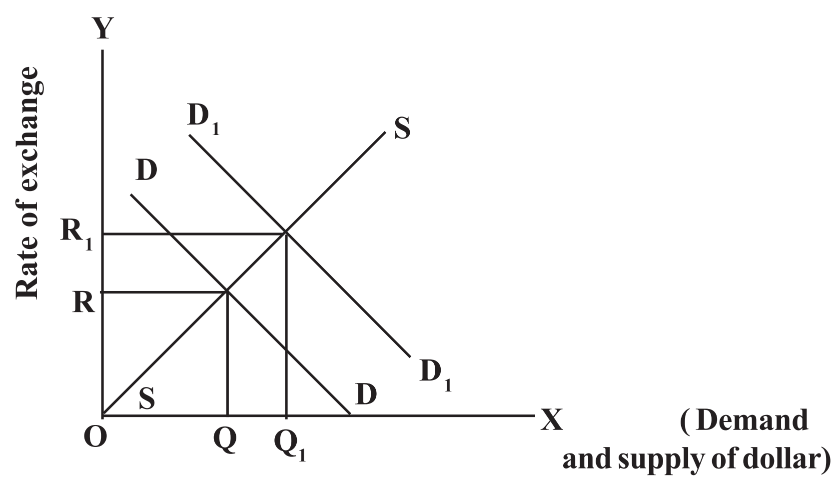
Currency depreciation refers to decrease in the value of domestic currency in terms of foreign currency.

Currency(Rupees) is said to be depreciated if price of $1 rises from ₹70 to ₹75. It makes domestic goods cheaper in foreign countries. So it leads to increase in exports of the country.

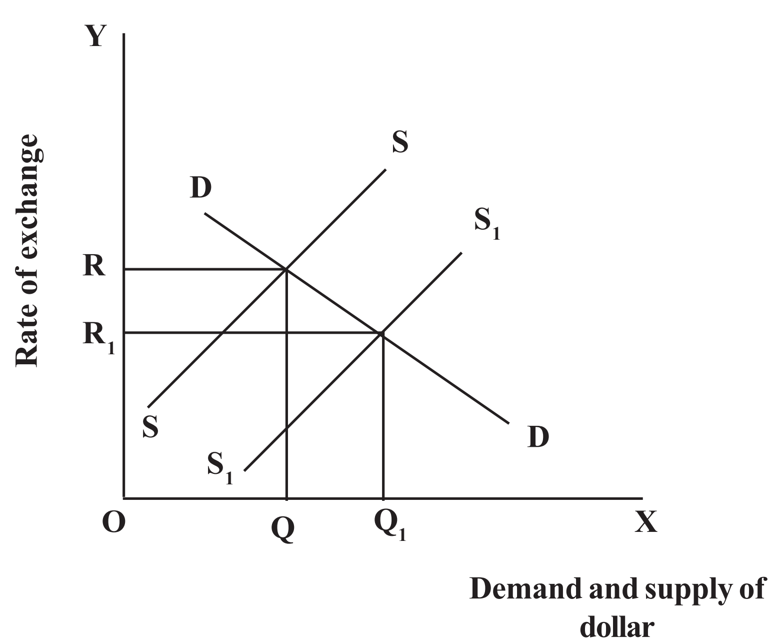
Currency appreciation refers to increase in the value of domestic currency in terms of foreign currency.

Currency (Rupee) is said to be appreciated if price of $1 falls from ₹75 to ₹70. It makes foreign goods cheaper in domestic country. So it leads to increase in imports of the country.

Remaining supply constant, its demand for foreign exchange increases then exchange rate increases.



Remaining demand constant, if supply of foreign exchange increases the exchange rate falls.



EXERCISE

1.1 Are the following statements true or false?

1. BOP and BOT on current account are same. (True/False)
2. Capital receipts is an item of 'debit side' of BOP account. (True/False)
3. BOP is always in disequilibrium. (True/False)
4. Export of services come under invisible item of exports. (True/False)
5. BOP Accounts consider both current and capital account. (True/False)
6. Increase in demonstration effect will lead to disequilibrium in BOP. (True/False)
7. Devaluation policy helps to correct disequilibrium in BOP. (True/False)
8. Countries gain independence in conducting their monetary policies under flexible exchange rate system.(True/False)
9. Government plays major role in the flexible exchange rate system. (True/False)
10. FDI is the major component of capital account in the BOP. (True/False)
11. 'Quotas' are the quantitative limits on imports. (True/False)
12. Depreciation of currency means a fall in the external value of domestic currency.(True/False)
13. Fixed exchange rate encourages speculative activities. (True/False)
14. The demand curve of foreign exchange is upward sloping. (True/False)
15. A rise in the interest rates at home often leads to an appreciation of the domestic currency. (True/False)

1.2. **Multiple choice questions (MCQ)**

1. Which items in balance of payments are called "above the line" items?
   a) Autonomous items b) Accommodating items
   c) Visible items d) Invisible items
2. What is difference between the value of exports and imports of goods called?
   a) Balance of payments b) Balance of trade
   c) Foreign exchange d) Dirty flow
3. In case of currency appreciation the domestic currency becomes-
   a) Zero valued b) More valuable
   c) less valuable d) None of these

4. The price of one currency in terms of another is known as-

a) Trade rate b) Interest rate

c) Foreign exchange rate d) BOP

5. Which one is the invisible item of BOP?

a) Banking b) Shipping

c) Communication d) All of these

6. Measures to improve the adverse balance of payment includes-

a) Currency devaluation b) Import substitution

c) Exchange control d) All of these

7. In flexible exchange rate system the foreign exchange rate is determined by-

a) Government b) Bargaining power

c) IMF d) Demand and supply forces.

8. Where there is favourable balance of trade?

a) Export >Import b) Export = Import

c) Export <Import d) None of these

9. Autonomous transactions takes place on-

a) Current account only b) Capital accounts only

c) Both current and capital accounts d) None of these.

10. Export of machinery is recorded on the-

a) Debit side of current account b) Credit side of current account

c) Credit side of capital account d) Debit side of capital account.

11. Gift and remittances To abroad are recorded on the –

a) Credit side of current account b) Debit side of current account

c) Credit side of capital account d) Debit side of capital account.

12. Any foreign exchange transactions dependent on other foreign exchange transactions are called-

a) Current account transactions b) Capital account transactions

c) Autonomous transactions d) Accommodating transactions.

13. Balance of payment is a ____________ concept.

a) Stock b) Flow c) Both (a) and (b) d) None of these.

14. ____________ Transactions are undertaken to cover the deficit or surplus is autonomous transaction.

a) Current Account b) Capital Account c) Accommodating transactions d) None of these.

15. Unilateral transfer (Transfer payments) are a Part of–

    a) Capital accounts b) Current accounts

    c) Balance of trade accounts d) Balance of payments and current account.

16. Which exchange rate is officially declared by the government?

    a) Fixed exchange rate b) Flexible exchange rate

    c) Managed exchange rate d) None of these

17. Other things remaining constant, When in a country market price of foreign currency falls,National income is likely-

    a) to rise b) to fall c) to rise or to fall d) to remaining uneffected.

18. In case of currency ______________ less rupees (Domestic currency) are to be paid to buy one US dollar-

    a) Appreciation b) Depreciation

    c) Devaluation d) none of these.

19. Floating exchange rate is determined by-

    a) Market forces b) government

    c) United Nations d) RBI

20. The status of assets and liabilities of the government changes due to-

    a) current account transaction b) capital account transactions

    c) Both (a) and (b) d) none of these.

1.3 Fill in the gaps:-

1. The Reserve Bank sells foreign exchange when there is a deficit this is called_____________.
2. An increase in demand for foreign exchange will shift the demand curve _____________.
3. A decrease in supply of foreign exchange will shift the supply curve ______________.
4. ______________ is the quantity limit on import.
5. ______________ is the taxes on trade.
6. IMF was set up in _____________.
7. ________________ Which was adopted by many countries which kept their money exchangeable at fixed prices with respect to gold but held little or no gold.
8. External borrowing is the component of ______________ account in the BOP.
9. Trade is services (Banking, Insurances) are the component of ________________ account in the BOP.

10. When Indians buy foreign goods, this spending escapes as a _______________ from the circular flow of income.

1.4 Very short answer type questions:- (1 marks)

1. What is a fixed exchange rate?
2. What is foreign exchange?
3. Define devaluation of currency
4. Define depreciation of currency.
5. What does a change from \$1 = ₹50 to \$1 = ₹60 mean?
6. What is meant by spot exchange rate?
7. What is foreign exchange rate?
8. Name the market exchange rate System in which the central bank can actively intervene.
9. What is meant by visible items of trade?
10. What is meant by balance of trade?
11. When will balance of trade show a deficit?
12. What is meant by capital account?
13. What is meant by autonomous transaction?
14. Calculate the value of import when balance of trade is ₹(-)400crores and the value of exports is ₹ 300 crores.
15. Give an example of Trade in services under current account in the BOP

2. Answer the following questions: (3/4 marks)

i) Why is foreign exchange demanded?
ii) What determines the inflow of foreign exchange into the country?
iii) Distinguish between autonomous and accommodating transaction of BOP.
iv) What are the difference between BOP and BOT?
v) What are the difference between fixed exchange rate and flexible exchange rate?
vi) Explain the merits of fixed exchange rate.
vii) Explain the demerits of fixed exchange rate.
viii) What are the differences between appreciation and depreciation of currency?
ix) Explain the merits of flexible exchange rate.
x) What do you mean by “floating exchange rate system”?

xi) Explain the differences between current account transaction and capital account transaction of BOP.

xii) What is the impact of appreciation of currency of the demand for foreign exchange?

3. **Answer the following questions:** **(6 marks)**

i) What do you mean by current account of BOP? Explain the components(items) of current account in BOP.

ii) What do you mean by capital account of BOP? Explain the components(items) of capital account in BOP.

iii) State the causes of disequilibrium in BOP

iv) State the measures to correct the disequilibrium in BOP.

v) How the equilibrium rate of exchange is determined under the flexible exchange rate system? (Explain with diagram)

1.1 Answer to True/False questions:

1. False	2. False	3. False	4. True
5. True	6. True	7. True	8. True
9. False	10. True	11. True	12. True
13. False	14. False	15. True	

1.1 Answer to the MCQS:

1. (a) 2.(b) 3. (b) 4. (c) 5. (d) 6. (d) 7. (d) 8. (a) 9. (c) 10. (b) 11. (b) 12. (d) 13. (b) 14. (c) 15. (d) 16. (a) 17. (b) 18. (a) 19. (a) 20. (b)

1.3 **Answer to the fill in the blanks:-**

1. Official reserve sale.
2. Upward and rightward.
3. Left ward.
4. Quota.
5. Tariff
6. 1944.
7. Gold exchange standard.
8. Capital.
9. Current.
10. Leakage.

1.4

1. Fixed exchange rate system refers to a system in which exchange rate for a currency is fixed by the government at a particular level.
2. Foreign exchange refers to all currencies other than domestic currency of a given country.
3. Devaluation refers to reduction in price of domestic currency in terms of all foreign currencies under fixed exchange rate system.
4. Currency depreciation refers to decrease in the value of domestic currency in terms of foreign currency under flexible exchange rate system.
5. It means depreciation or devaluation of domestic currency.
6. The spot exchange rate is the amount of one currency will trade for another today (imediatly)
7. Foreign exchange rate is the price of one currency in terms of another.
8. Managed floating rate system.
9. Visible items of trade refers to those items which are made of some matter or material and can be seen, touched and measured. Example-Jute,cotton etc.
10. Balance of trade refers to the difference between the amounts of exports and imports of visible items (goods) only.
11. When the value of exports is less than imports.
12. Capital account of BOP records all those transactions between the residents of a country and the rest of the world, which cause a change in the assets or liabilities of the residents of the country.
13. Autonomous transactions refer to those international economic transactions, which take place due to some economic motives such as profit maximisation, interest earnings etc.
14. We know, Balance of Trade(BOT) = Export-Import

    => Import = Export-BOT.

    = 300– (–400)

    = 300 + 400

    = ₹ 700 crores.
15. Banking, Shipping, Insurance etc.

Class-XII

Indian Economic Development

Part-B

CHAPTER-1

Indian Economy on the Eve of Independence

After the battle of Plassey in1757, the british colonial rule started in India & last for about 200 years and it changed the destiny of our cuntry. The main target of British rule was to exploite India systematically through their policy of "divide & rule". Their main motive was to safe guard the economic interest of England. So when they left India in 1947, we inherited a crippled, backward & stagnant economy.

1.1 Features of Indian Economy on the eve of Independence :

Following are the characteristics of Indian economy on the eve of Independence :

a) **Stagnant Economy:** On the eve of independence, Indian economy was completely a stagnant one having no growth in income. Growth rate of per capita income was only 0.5% per annum in 1860-1945. As a result there was mass poverty & very low standard of living

b) **Backward Economy:** On the eve of Independence, Indian economy was a backward economy where per capita income was very low (₹230 in 1947-48). So large number of people was poor, unemployed and lack of sufficient food, clothing & shelter.

c) **Backwardness in Agriculture:** Productivity in Agriculture sector was very low & it was only 50% of GDP and it was due to premitive production technique. Production of food grain was barely enough for subsistence.

d) **Backwardness in Industry:** There was a lack of basic & heavy industries and production of machines. For that India was fully depended on the import from Britain. Small scale & Cottage industries was almost destroyed by colonial government to expand the market of finished product of Britain.

e) **Backwardness in infrastructure:** Development in infrastructure facilities i.e transport & communication , power etc was very low. Some efforts were made in these sectors but the main motive behind it was to serve various colonial interest .

f) **Semi-feudal Economy:** On the eve of independence, Indian economy was semi-feudal which was a mixture of feudalistic & capitalist modes of production. It leads to low productivity & so there was backwardness.

1.2 Agricultural sector on the eve of Independence :

On the eve of independence, Indian agriculture was primitive & stagnant. The major characteristics were-

a) Land settlement system: All the profits accruing in Agricultural sector went to the pocket of Zamindars or land lords in the form of 'Lagaan' and they did nothing to develope this sector.

b) Commercialisation : Farmers were forced to produce cash crops rather than food grains. Those cash crops were used as raw material for the industries of Britain .

c) Low level of productivity: Productivity level was very low in agricultural sector due to subdivison of land holding, primitive technology, lack of irrigation facilities , negligible use of fertilisers etc.

d) Lack of investment : Agricultural sector was facing lack of investment in flood control, irrigation, storage, modern technology etc.

1.3 Industrial sector on the eve of Independence :

During british period the industrial development of India was totally unbalanced and in poor state. The state of this sector was-

a) De-industrialisation: The British government adopted the "Two fold motive"- where they made India a cheaper exporter of raw material from India to Britain for their industrial develpment and on the other hand they made India an expensive importer of finished product from Britain . For that they systematically destroyed India's world famous handicraft industries.

b) Lack of capital goods industries: During British period there was few capital goods industries and they never paid any attention for the development of industrial sector in India.

c) Limited role of public sector: That time public sector remained confined only to the railways, power generation, communication, ports and some other departmental undertaking.

d) Lopsided Modern Industrial sector: In the name of modern industries there was few Jute mills in West Bengal, TISCO (Tata Iron & steel company) in Bihar, few cotton textile mills in Maharastra & Gujrat . Other industries were cement, paper etc.

1.4 Foreign trade on the eve of Independence :-

The restrictive policy adopted by the Colonial government on commodity production , trade & tariff adversely affected the structure, composition, volume of India's foreign trade. The features of foreign trade was –

a) India became a cheaper exporter of primary product and expensive importer of finished consumer product.

b) British Government maintained a monopoly control over India's exports & imports . The suez canal served as a direct route for the ships operating both India & Britain.

c) There was drain of Indian export surplus during British period to make payments for expenses incurred by the office set by the colonial Government in Britain, to meet expensses on war fought by the British Government and to import invisible itmes.

1.5 Demographic Condition on the eve of independence :-

Demographic condition during the colonial Government exhibited all features of a stagnant and backward indian economy. First official census conducted in 1881 revealed unevenness in India's population growth . The features were–

a) Both the birth & Death rate were very high at nearly 48 & 40 per thousand respectively.

b) Infant mortality rate was quite alarming about 218 per thousand.

c) The overall literacy rate was less than 16% out of this female literacy rate was very negligible at about 7% .

d) Average life expectancy was only 44 years, where as it was 63 years in 2014-15.

e) There was limited role of government sector on health facilities as british government spend very less in this sector . As a result water & air borne diseases were wide spread and took a huge toll on life.

f) Level of GDP & per capita income was very low and as a result there was wide spread of unemployment & poverty level.

1.6 Infrastructure on the eve of Independence:-

During british period, some basic infrastructure was develope in the form of railways, water transport, ports, post & telegraph etc. However the real target behind such development was to safe guard their own colonial interest . Their main motive behind infrastructure development was

a) The Roads were built to mobilize the army within India and to draw out raw materials from the remote country side to the nearest rail station & port to send these to England or other Lucrative foreign destinations.

b) The Railways were developed to have effective control and administration over the vast Indian territory to earn profit through foreign trade by linking railways with major ports, to make profitable investment of British funds in India.

c) The function of telegraph & post was developed to serve the purpose of law & order of british administration.

1.7 Occupational Structure on the eve of Independence :

During British rule the occupational structure was not satisfactory as there was predominance of agriculture sector & there was growing regional variation.

a) The agricultural sector accounted for the largest share of work force, which was 72% . The manufacturing and service sectors accounted for 10% & 18% respectively.

b) There was growing regional variation . In the state of Tamilnadu, Andhra pradesh, Kerala, Karnataka, Maharasta & West bengal , the dependence of the workforce on the agricultural sector declined . On the other hand, there was increase in the share of work force in the agriculture sector in the states of Orrisa, Rajasthan & Punjab.

From the above discussion it is clear that british colonial government's main target was to use Indian economy as feeder economy for the development of their own country Britain. The various policies that they pursued, were to exploite india & to protect and promote their own economic interest, along with that those policies also resulted in some positive impact on India. Those positive impacts are -

a) Commercialisation of agriculture implied a good breakthrough in agriculture and resulted in self- sufficiency in food grain production.

b) The develpment of infrastructure , railways, roadways, waterways generated new opportunities for socio- economic growth.

c) Roadways & railways worked as a great check on the occurance and impact of famines as food supplies could be transported to the affected areas in case of droughts.

d) British Rule helped Indian economy to shift from barter system of exchange to monetary system of exchange .

e) The British Government had an efficient administrative system , which served as a ready reckoner for Indian politicians.

Exercise :

A. Very short answer type Question :- (1 marks)

1. True / False.

a) On the eve of independence, Indian economy was developed.

b) Land holding at the time of independence was large.

c) On the eve of Independence India was net exporter of primary products.

d) On the eve independence majority of the population was engaged in Agricultural sector.

e) The main reason behind the stagnation of agricultural sector during british period was land settlement system.

2. Fill in the blanks:

a) India's jute Industry suffered heavily due to lack of ______ after partition.

b) ______ is described as a "year of great Divide"

c) The most important infrastructure development was ______ during british rule.

d) British rule introduced railways in India in the year ______.

e) ______ Industry or mills dominated by the foreigners were concentrated in bengal.

3) Multiple choice Question:

a) High infant mortality a sign of :

(i) Extreme poverty (ii) poor health care (iii) both (i) & (ii) (iv) None.

b) During colonial period Indian's demograhphic profile showed:

(i) High birth rate (ii) high death rate (iii) high infant mortality rate. iv) all of these

c) Gender bias in the society on the eve of independence was indicated by:

i) Death rate ii) literacy rate iii) Infant Mortality rate iv) Life expectancy.

d) First official census was conducted in the year

i) 1891 ii)1921 iii)1791 iv)1881.

e) Which industry received major set back during British period?

i) Cement ii) Handicraft iii) Paper iv) Iron & steel.

f) More than half of India's foreign Trade was restricted to

i) China ii) Britain iii) Korea iv) Srilanka

g) Decline of handicraft industries lead to:

(i) Massive unemployment (ii) Import of finished prolduct (iii) Both (i) & (ii) (iv) None

(h) Decay of handicraft Industry was caused by:

(i) Tariff policy of British (ii) Competition from Machine (iii) New patterns of demand (iv) all of these

4. Answer the following in a single sentence:

(a) What is stagnant economy?

(b) Define occupational structure ?

(c) What is infant mortality rate?

(d) What is life expectancy?

(e) What is Commercialisation of Agriculture?

(f) What was the main reason of food shortage in India?

(g) State major indicators of back-wardness & poverty of the mass during British period .

(h) Name some notable economists who estimated India's per capita Income during british period ?

(B) Short Answer type Question : (3/4 Marks)

(a) Why there was low level of productivity in Agriculture during british period?

(b) How did Commercialisation of Agriculture resulted in famines?

(c) Discuss the status of capital goods industry during british period.

(d) Write a short role on "drain of India's wealth" during british period .

(e) State 3 reasons behind the development of railways in india?

(f) "Decline of handicraft industry adversely affected the indian economy"- comment.

(g) State "two fold motive" behind the de- industrialisation by the colonial Government in India.

(i) How had export surplus provided disadvenatages to India during colonial period ?

(C) Long Answer type Questions (6 marks)

(a) Mention the state of Indian Industries during British period .

(b) Write the main causes of India's agriculture stagnation during colonial period.

(c) Describe the state of India's occupational structure during british period .

(d) Give a brief appraisal of India's demographic profile during the colonial period .

(e) Explain the positive contribution of british rule in India.

(f) Explain the condition of Indian economy on the eve of Independence .

(g) Explain the state of Inidia's foreign Trade during colonial period .

Answer Key

A. Very short Question :

1) True / False :

(a) False (b) false (c) True (d) True.

2) Fill in the blanks :

(a) raw material (b) 1921 (c) Railways (d) 1850 (e) Jute

3) MCQ

(a) iii (b) iv (c) ii (d) iv (e) ii (g) iii (h) iv

4) (a) Such type of economy in which there is little or no scope of growth in income, output & employment .

(b) Distribution of working population across primary, secondary and tertiary sector of the economy

(c) Infant mortality rote is an estimate of the number of infant deaths for every 1000 live birth (below age group of 1 year)

(d) Average number of years that a person can expect to live.

(e) Shift from cultivation for self consumption to cultivation for the market.

(f) Food surplus areas & most of the fertile land of west Punjab & Sind went to Pakistan.

(g) High mortality rate & low life expectancy rate.

(h) Dadabhai Naoroji, V.K.R.V. Rau, william Digby, R.C. desai. etc.

CHAPTER-2

Indian Economy (1950-1990)

India got freedom on 15th August, 1947. Then leaders of India had to decide the type of economic system which was most suitable for India: a system which would promote welfare of all rather than a few.

Every economy has to take the decisions regarding-

a) what to produce i.e choice of production.

b) How to produce i.e choice of technology.

c) For whom to produce i.e distribution of goods & services among the people of the country.

These are the central problem of an economy.

2.1 ECONOMIC SYSTEM

Economic system refers to an arrangement or a means by which the central problems of an economy are solved . There are mainly 3 types of economic system in the world-

a) Socialist or command Economy, where the means of production are owned, controlled & operated by the government. The motive of production in this system is social welfare and the production is governed by planning mechanism. There is no competition & distribution of income are quite equal.

b) Capitalist or market Economy, where the means of production are owned, controlled & governed by the private sector. The main motive of production is profit and production is governed by price or market mechanism. Competition exists in this system and distribution of income are very unequal.

c) Mixed Economy, where the means of production are owned, controlled & operated by both the government & private sector. The motive of production is welfare in government sector but profit in private sector and both the price & planning mechanism are followed in the production process. Competition prevails only in private sector. Considerable inequalities exist in distribution of income.

India adopted the mixed economic system. In this view, India would be a socialist society, with a strong public sector , but also with private property & democracy.

2.2 ECONOMIC PLANNING

Economiuc planning means planned co-ordination and utilisation of available resources in an economy to achieve certain pre specified social & economic objectives in a time bound programme.

To make the economic planning effective, the Government of India set up planning Commission in 1950, with the prime minister as the chairman. The commision fixed the planning period of five years, which began the era of "Five year plans". 1st FYP was launched for the period from 1st April, 1951 to 31st March, 1956. Each plan listed the basic goals of India's development , which are –

a) **GROWTH :** It refers to increase in the country's capacity to produce the output of goods & services within the country. It implies either a large stock of productive capital or a large size of supporting services or an increase in the efficiency of productive capital or service. A steady increase in the GDP is a good indicator of economic growth.

b) **MODERNISATION:** It aims to increase the production of goods & service through use of new technology. It also requires change in social outlook, such as gender empowerment or providing equal rights to women.

c) **SELF-RELIANCE:** It means to overcome the need of external assistance . The five years plans stressed on the use of own resources to reduce the dependence on foreign countries . The policy of self reliance was required to reduce foreign dependence & to avoid foreign interference .

d) **EQUITY:** It aims that every Indian should be able to meet his/her own basic requirements (food, shelter , clothing, education & health care facilities) and inequality of distribution of income & wealth should be reduced. It also aims to raise the standard of living of the people and promote social justice and welfare.

2.3 AGRICULTURE

Agricultural development was focused right from the first five year plan because this sector accounted for the largest share of workforce . The main measures undertaken to promote growth of agricultural sector can be broadly clssified as- Land reform & Green Revolution.

2.3.1 Land Reforms : It refers to change in the ownership of land holdings. It was required to achieve the objective of EQUITY in Agriculture. It has done in the following two ways.

a) **Abolition of Intermediaries :** Government of India took various steps to abolish intermediaries and to make tillers, the owner of land . The ownership rights granted to tenants gave them the incentive to increase production and it contribute to the growth of agriculture.

(b) **Land ceiling :-** It refers to fixing the upper limit of land holding , which could be owned by an individual. Beyond the specific limit , all lands belongs to a particular person would be taken over by the Government and will be alloted to the landless cultivators & small farmers. It helped to promote equity in the agricultral sector and to reduce the concentration of laud ownership in a few hands.

2.3.2 Green Revolution :- It was introduced in the mid of 1960s where production of food grains was increased in large quantity through the use of HYV seeds, proper irrigation, fertilizers & pesticides. That time it was limited with few developed states like punjab, Andrapradesh & Tamilnadu and later it was started in some others states of India. The Green Revolution having the following good effects-

(a) It resulted in marketable surplus as after meeting own consumption requirement, farmers had huge quantity left with them to sold in the market.

(b) It enabled the Government to procure large amount of food grains to build a buffer stock which could be used during shortage of food.

(c) Due to huge production, food grains price declined in the market and people of lower income groups, benefited from that price fall.

(d) It also removed the problem of seasonal unemployment as multiple cropping was possible in a single piece of land and so more working hands were needed throughout the year.

Along with good effects, Green Revolution also having the following failures–

(a) It was mainly restricted to two crops– Wheat & Rice and did not spread to other commercial crops. Green Revolution spreaded only few states like Punjab, Hariayana, U.P, Andrapradesh.

(b) Costly inputs (HYV seeds, pesticides fertilizers etc) required under green revolution also increased the disparities between small and big farmers because only large farmers could affort that costly inputs.

(c) Due to mechanisatioin of Agriculture , green revolution led to rise in unemployment of unskilled workers.

(d) HYV crops were more prone to attack by pests and so there was some risk involved under green revolution. To overcome the risk , Government provided loans at low interest rate & subsides to small farmers, so that they could buy required inputs. Although , that subsidy policy of government were criticised as it did not benefit the target group and it is a huge burden on the government's finance.

2.4 INDUSTRIAL DEVELOPMENT:

Industrialisation plays an important role in the economic development of a country. So Five year plans stressed a lot on the Industrial development . The cotton textile & Jute Industries were mostly developed in India. However, there was a strong need to expand the industrial base with a varity of industries for developement.

2.4.1 Role of public sector in industrial Development :-

Role of public sector was required because -

(a) private sectors did not have the capital to undertake investment in industrial ventures.

(b) The Indian market was not so big to encourage private industrialist to undertake major projects.

(c) The objective of social welfare could be achieved only through direct participation of state in the process of industrialisation.

2.4.2 Industial policy Resolution 1956(IPR 1956) :- Industrial policy is a comprehensive package or strategy of policy measures which covers various issues connected with different industrial enterprises of the country. On 30th April, 1956 Industries were classified into three categories-

(a) **Schedule A :-** It comprised industries which would be exclusively owned by the state. 17 Industries were included here like arms & ammunitions, atomic energy, heavy & core industries, aircraft, oil, railways etc.

(b) **Schedule B:-** Here, the 12 industries were placed , which would be progressively state- owned and private sector will suppliment efforts of the state. It includes industries like -aluminium, machine tools, fertilizers, other mining industries etc.

(c) **Schedule C:-** The remaing industries were consisted in this category which were to be the private sector. These industries were controlled by state through licensing policy, enforced under industries act, 1951.

Industrial License is a written permission from the Government , to an industrial unit to manufacture goods. The industries Act, 1951 empowerd the Government , to issue license for setting up new industries , Expansion of existing units, diversification of products.

According to that licensing policy, no new industry was allowed unless a license is obtainted from government . It was easier to obtain license if the industrial unit was established in an economically backward areas.

2.4.3 Small scale Industries (SSI) :

Small scale industry is defined with reference to maximum investment allowed on the assests of a unit. The investment limit is ₹ 1crores, but for upgradation & enhance competitiveness, the investment limit has been raised upto ₹ 5 Crores. SSI also having important role-

(a) SSIs are more labour intensive i.e. they generate more employment

(b) SSIs provide opportunities for self employment.

(c) SSIs offer vast opportunities for export promotion.

(d) SSIs are import light & so reduces the need for foreign capital.

(e) SSIs promote the objectives of regional development .

But SSIs can not compete with big industrial firms. So Government reserved production of number of products for them and concession also given to them such as lower excise duty, bank loans at lower rate of interest etc.

2.5 FOREIGN TRADE :

Foreign trade in India includes all imports from & exports to India. From begining of planning period, import substituion was a major element of India's Trade policy.

2.5.1 Trade policy : Import substitution

Import substitution refers to a policy of replacement of imports by domestic production. This policy can serve two definite objectives

a) Savings of precious foreign exchange

b) Achieving self- reliance.

Import substituting was required because–

a) To protect domestic producers from foreign competition

b) To prevent drain of foreign exchange reserves on the import of luxury goods.

2.5.2 Trade policy:- Protection from import through 'Tariffs & Quotas'

Government made use of two ways to protect goods produced in India from imports–

(a) **Tariff:-** It refers to taxes imposed on imported items and it is done to make them more expensive & discourage their use in India

(b) **Quotas:-** It refers to fixing the maximum limit on the import of a commodity by a domestic producer . So domestic producers are benefited.

2.6 STUDY AIDS

2.6.1 Critical Appraisal of Agricultural Development (1950-1990) :- During the period of 1950-1990–

(a) Land reform measures & 'Green revolution" helped in enhancing agricultural production & productivity.

(b) Land Reforms resulted in abolition of Zamindari system & landless farmers became the owner of land.

(c) Due to green revolution, India became self- sufficient in the production of food grains.

(d) Proportion of GDP contributed by agriculture declined significantly, but not the population depending on it.

2.6.2 Critical Appraisal of Industrial development (1950-1990):- The achievements of Industrial sector during the period of 1950-1990 are-

(a) The proportion of GDP increased from 11.8% to 24.6%

(b) Industrial sector became well diversified by 1990, largely due to public sector.

(c) Promotion of small scale industries gave opportunities to people with small capital to get into business.

(d) Protection form foreign competition through import substitution enabled development of indegeneous industries.

(e) Licensing policy help the government to monitor & control the industrial production .

(f) Public sector made a remarkable contribution by creating a strong industrial base, developing infrastructure and promoting development of backward areas and promotions employment opportunities.

Exercise

A) True / False Type Question:-

1) Planning commission formulate plans in India.
2) Land reform is a goal of 5 year plan.
3) Capitalist economy is controlled & managed by Government.
4) Profit is the motive of production in capitalist economy.
5) Ownership right of property does not exist in socialist economy.
6) There is no competition in mixed economy.
7) Tariff & Quota are used to protect import from abroad.
8) Green Revolution is related with production of fruits & vegetables.
9) Subsidy put a huge burden on Government's finance .
10) Licensing policy helped the Government to monitor & control the industrial production.

B) Fill in thle Blanks:

1) _______economy is the economy in which means of production are owned, controlled & operated by the Government.

2) _______ refers to the taxes imposed on imported goods.

3) India adopted _______ economy system after independence.

4) First five yeat plan was launced for a period from _______.

5) _______ refers to fixing the maximum limit on the import of a commodity by a domestic producer.

C) Multiple choice Question (MCQ)

1) Which one of the following is a goal of five year plan?

(a) growth (b) land reform. (c) green revolution (d) None

2) To protect imports, government made use of

(a) Quotas. (b) Tariffs (c) both(a) & (b) (d) Neither (a) nor (b)

3) When was planning initiated in India?

(a) 1947 (b) 1951 (c) 1950 (d) 1949.

4) Land ceiling is a part of

a) Industrial reform b) External sector reform

c) Land reform d) Banking sector reform.

5) Which schedule comprise of Industries that would be exclusively owned by the state.

(a) Schedule A (b) Schedule B (c) Schedule C (d) None

6) In which year, India adopted High Yielding Varities <HYV.> programe for the first time in India.

a) 1977 b) 1966 c) 1986 d) 1956

7) Capitalist economy is controlled & managed by

a) Private sector b) Government sector

c) Both (a) &(b) d) Neither (a) Nor (b)

8) Mixed economy is controlled & managed by

a) Private sector b) Government sector

c) Both (a) & (b) d) Neither (a) nor (b)

D) Very short Answer type question:

1) Define plan.
2) Define tariffs.
3) Define Quotas.
4) What do you mean by growth ?
5) What is the sectoral Composition of an economy?
6) What is import substitution.
7) What is Land ceiling?
8) What is modernisation ?
9) What is an economic system?
10) Define subsidy.

E) Short answer type Question : (3/4 marks)

1) Write dthe differences between socialist & capitalist economy.
2) Write the differences between socialist & mixed economy.
3) Write the differences between capitalist & mixed economy.
4) Discuss any three achievement of green revolution.
5) Discuss any three drawbacks of green revolution.
6) Explain ‘modernisation’ as a goal of 5 year plans .
7) Explain ‘Equity’ as a goal of 5 year plans.
8) How were the industries classified according to the industrial policy Resolution 1956?
9) Discuss the role of small scale industries in the generation of employment.
10) Explain any four features of mixed economy?
11) Explain any four features of socialist economy?
12) Explain any four features of capitalist economy?

F) Long Answer type Question (6 marks)

1) Briefly discuss the policy of industrial licensing .
2) Critically appraise the development of Agriculture between 1950-1960.
3) Critially apprise the industrial development between 1950-1990.
4) Give the features of IRP, 1956.
5) Explain the achievements & failures of planning from 1950 till 1990.

Answer Key

A) True False :-

1) True 2) False 3) False . 4) True 5) True 6) False 7) True. 8) False 9) True 10) True.

B) Fill in the blanks:-

1) Socialist 2) Tariff 3) Mixed 4) 1951-1956 5) Quota

C) MCQ:-

1) a. growth.	2) c. both (a) & (b)	3) c. 1950.	4) c. land reform.
5) a. A	6) b. 1966.	7) a. private sector .	8) c. both (a) & (b)

D) Very short Answer type Question:-

1) Plan is a document showing detailed scheme , program & strategy worked out in advance to fulfill an objective.
2) Tariffs refer to taxes imposed on imported items.
3) Quotas refer to fixing the miximum limit on the import of a good by a domestic producer.
4) Growth refers to increase in the country's capacity to produce the output of goods & services within the country.
5) The contribution made by each sector of the economy to GDP of a country.
6) It refers to a policy of replacement or substitution of imports by domestic production.
7) It refers to fixing the specific limit of land , which could be owned by an individual .
8) It refers to adoption of new technology, new methods of production , and changes in social outlook.
9) It is defined as an arrangement or means by which the central problems of an economy are solved.
10) Subsidy refers to an economic benefit , direct or indirectly granted by a government to domestic producers of goods and services.

CHAPTER-3

Economic reforms since 1991

3.1 Liberalisation, Privatisation and Globalisation: An Appraisal :

In 1991, the condition of Indian economy was in a state of crisis relating to its external debt. The economy was nearly in the condition of getting collapsed. The government was not able to make repayments on its borrowings from abroad. Foreign exchange reserves were not sufficient to import petrol and other essential items. The crisis was further compounded by rising prices of essential goods, but origin of the financial crisis seen from the inefficient management of the Indian economy in the 1980s. All these led the government to introduce a new set of policy measures which changed the direction of our development strategies.

The government of India has introduced 'New Economic Policy' since 1991 in order to solve the economic crisis and to accelerate the rate of economic growth. The new economic policies mainly focussed on structural reforms in industrial sector, trade, public sector, financial sector etc. Such economic reforms were possible with the help of broad and comprehensive policies on liberalisation, privatisation and globalisation.

3.2 Factors responsible for Economic Reforms:- The main factors responsible for economic reforms in India are -

(i) Deficit in Balance of payments:- Due to slow growth of exports and huge increment in imports, the balance of payment in our country remain deficit.(i.e. foreign payments > Foreign receipts). In India, deficit in balance of payments increased from Rs. 2214 crore in 1980-81 to Rs 17,367 crore in year 1990-91.

(ii) Poor performance of public sector:- The most important factor responsible for economic reforms was poor performance of public sector. The low rate of development in public sector undertakings causes massive poverty and unemployment in the economy.

(iii) Fall in foreign exchange reserves:- During the process of industrialisation, the imports of the economy grew much faster than the amount of exports. Increase in imports reduces the foreign exchange reserves of the economy. Foreign exchange reserves reduced to nearly 6,000 crore in 1990-91 from nearly 9,200 crore in 1980-81.

(iv) Inflation:-There was a consistent rise in the general price level in the economy due to shortage of aggregate supply. The rate of inflation was 16.7% in 1990-91.

(v) Fiscal deficit:- It refers to the borrowings of the government. The expenditure of the government was much higher than revenue collection and rising deficit forced the government to borrow from banks, public , international financial institutions. It represents the poor financial condition of the economy.

(vi) Inefficient management:- In India, public sector plays an important role for the development of economy. However the performance of the majority of public enterprises was disappointing . There were incurring huge losses because of inefficient management.

3.3) New Economic Policy:- The New Economic policy (NEP) was announced in July 1991. NEP consisted of wide ranging economic reforms. The thrust of the polices was towards creating a more competitive environment in the economy and removing the barriers to entry and growth of firms.

3.3.1 Measures of New Economic Policy :-

The New Economic policy can broadly be classified into two kinds of measures:- the stabilisation measures and the structural measurs.

(i) Stabilisation measures:- Stabilisation measures are short term measures, intended to correct some of the weakness that have developed in the balance of payments and to bring inflation under control.

(ii) Structural measures:- These are long term measures, aimed at improving the efficiency of the economy and increasing its international competitiveness by removing the rigidities in various segments of the Indian economy.

3.3.2 Elements of New Economic policy:-

The government of India initiated a variety of policies also known as element of New Economic Policy. viz. Liberalisation, Privatisation and Globalisation.

Main policies of NEP

Liberalisation   Privatisation   Globalisation

3.4 Liberalisation :- The removal of entry and growth restrictions on private section enterprises on the removal of trade barriers is also known as liberalisation. The rules and laws which were imposed by the government and aimed at regualting the economic activities became major hindrence in the growth and development . According to the policy of 1991, the government tries to remove such barriers so that the private sector of the economy shall grow.

Objectives: -

(i) To increase competition among domestic industries.

(ii) To decrease the debt of the country.

(iii) To expand the size of market.

(iv) To increase cross boarder trade.

(v) To increase foreign capital formation and improve the technology.

The following reforms were initiated under Liberalisation.

Reforms under Liberalisation

- Industrial section reforms
- Financial section reforms
- Fiscal reforms
- Foreign exchange reforms
- Trade and investment policy reforms

A) Industrial sector Reforms :-

Under industrial sector, government provides liberalisation in the following ways.

Industrials sector Reforms

- Reducing industrial licencing
- Decreasing the role of Public sector
- Making MRTP act more liberal
- De- reservation under small scale industries
- Freedom to import capital goods

(i) Reducing industiral licencing:- In the new economic policy industrial licensing was abolished for almost all the product categories i.e. alcohal, cigarette, industrial explosives, dangerous chemicals, eletronics, aerospace, drug and pharmaceuticals.

(ii) Decreasing the role of public sector :- The only industries which are now reserved for the public sector are a part of defence equipments , atomic energy and railway transport.

(iii) Making MRTP act more liberal :- Big industries are now no longer required to seek prior approval for expansion and establishment of new industries.

(iv) De reservation under small scale industries:- Prior to 1991, some goods could be produced only in small scale industries, but now many goods produced by small scale industries have been dereserved.

(v) Freedom to import capital goods:-Indian industrialist will be free to import machinery or raw material in order to expand and modernise their industries.

B) Financial sector Reforms:- Financial sector includes financial institutions such as commercial banks, investment banks, stock exchange operations and foreign exchange market . The financial sector in India is regulated by the Reserve Bank of India.

Financial Sector Reforms

Changing the role of RBI	Establishment of . private sector Bank	Increasing foreign investment limit	Ease in expansion process

(i) Changing role of RBI :- The role of RBI is now changed from regulator to facilitator of financial sector .i.e now financial sector can take decision on many financial matters without consulting RBI.

(ii) Establishment of private sector Bank:- The reform policies led to the establishment of private sector banks, Indian as well as foreign . The basic purpose is to increase campetition to provide good quality of services. Though banks have been given permission to generate resources from India and abroad , certain managirial aspects have been retained with the RBI to safeguard the interest of the account holders and the nation.

(iii) Increasing foreign investment limit:- Foreign investment limit in banks was raised to around 50 percent i.e. foreign investors are allowed to invest in Indian Financial Markets. (FII)

(iv) Ease in expansion process:- Those banks which fulfill certain conditions have been given freedom to set up new branches without the approval of RBI.

(C) Fiscal Reforms:- Fiscal reforms are concerned with the reforms in government's taxation and public expenditure policies which are collectively known as its fiscal policy .The following measures have been taken in this regard.

Fiscal Reforms

Reduction in direct tax	Reforms in indirect taxes	Simplification of tax paying procedure	Goods and service tax

(i) Reduction in direct taxes :- Since 1991, there has been a continuous reduction in the taxes on individuals income. The rate of corporation tax, which was very high in earlier, has been gradually reduced.

(ii) Reforms in Indirect Tax :- Government also regulate and reduce the rate of indirect tax, so that a common national market for goods and services can be established.

(iii) Simplification of tax paying procedure :- In order to encourage better compliance on the part of tax payers many procedures have been simplified.

(iv) Goods and service Tax :- To simplify and introduce a unified tax system in India, the parliament passed a law Goods and Service Tax Act 2016. The main purpose is to increased government revenue to stop tax evasion and to create 'one nation, one tax and one market'.

D) Foreign exchange Reforms:- The foreign exchange reforms was introduce in order to bring stability in import and export and to stabilise the crisis of BOP. Foreign Exchange rate measures the number of units of one currency required to exchange with one unit of other currency.

Foreign Exchange Reforms

- Devaluation of Rupee
- Market detemination of exchange rate

(i) Devaluation of Rupee:- Devalution refers to decrease in the value of domestic currency by the government. To overcome balance of payment crisis government devalued Rupee against foreign currencies and this lead to an increase in the inflow of foreign exchange.

(ii) Market determination of exchange rate:- Flexible exchange rate system refers to a system in which the exchange rate is determined by the forces of demand and supply of currency of different countries in the foreign exchange market. Here, the government allowed Rupee value to be free from its control.

E) Trade and investment policy reforms:- Before 1991, to protect the domestic industries government imposed lots of restrictions (high tariff and quota), but this policy results in reduction of efficiency and slow growth of the economy. In order to boost up the competition and to attract foreign investments, government implemented Trade and investment policy Reforms.

Trade and Investment Policy Reforms

- Removal of quantitative restriction on import and export.
- Removal of export duties
- Reduction in import duties
- Removal of import licensing system.

(i) Removal of quantitative restriction on imports and export:- Under the new economic policy, quantitative restriction on import and exports were greatly reduced.

(ii) Removal of export duties:- Earlier, government imposed heavy export duties to encourage domestic production for domestic demand only, but now it has been removed .

(iii) Reduction in import duties:- Before, 1991, the government imposed high tariff on imports for the protection of domestic industries, but now it has been reduced.

(iv) Removal of import licensing system:- Under the new economic policy, import licensing was removed except in case of hazardous and environmentally sensitive industries.

Advantages of Liberalisation:-

(i) De-licensing of industries

(ii) Increase in foreign direct investment

(iii) Liberalisation of foreign technology import.

(iv) Faster economic growth

(v) Poverty reduction

(vi) Control price level

Disadvantages of Liberalisation:-

(i) Increase dependency on foreign nations

(ii) Loss in domestic units.

(iii) Unbalanced development of sectors

3.5) Privatisation :- The transfer of ownership, management, control right from public sector undertaking to private sector undertaking is known as privatisation. Government companies are converted into private companies in two ways.

(i) By withdrawal of the government from ownership and management of public sector companies.

(ii) By outright sale of public sector companies.

The reforms aimed at bringing in greater participation of the private sector in the growth process of the Indian economy.

Objectives :-

(i) It helps to improve the financial condition of the government .

(ii) It helps to raise funds through disinvestment.

(iii) It facilitates Foreign Direct Investment.

(iv) It reduces the workload of Public sector.

(v) It encourages healthy competition within an economy.

(vi) It provides better goods and services to consumers

Positive impact of privatisation:-

(i) Reduction in budgetary deficit.

(ii) Improvement in economic efficiency and technical efficiency.

(iii) Less political intervention.

(iv) Increase of accountability.

(v) Promote consumer's sovereignty.

(vi) Sources of new job.

(vii) Increase foreign investment .

(viii) Increase industrial growth.

Negative impact of privatisation :

(i) Social interest neglected.

(ii) Concentration of economic power.

(iii) Substitution of monopoly power.

(iv) Industrial sickness.

(v) Highly priced goods.

(vi) Corruption

3.6) Globalisation:- The integration of domestic economy with world economy is known as globalisation. It is an outcome of the set of various policies that are aimed at transforming the world towards greater interdependence and integration. Globalisation attempts to establish links in such a way that the happenings in India can be influenced by events happening miles way.

Policies Promoting Globalisation :

(i) Increase in limit of equity in foreign investment :- The concept of increasing the limit is to encourage foreign investment and increase the flow of foreign exchange.

(ii) Removal of quantitative restriction:- Since 2001, the quantitative restriction on all import items have been withdrawn.

(iii) Reduction in tariffs:- Tariff barriers have been withdrawn on most goods traded between India and rest of the world, so that international competition and technological upgradation can be enjoyed.

(iv) Partial convertibility of Rupee:- To achieve the objectives of globalisation, partial convertibility of Indian Rupee has been allowed that attracts the foreign investors to invest in India.

(v) Long term trade policy:- Under the policy, all restrictions and controls on foreign trade have been removed. A new 5 year foreign trade policy was announced to establish the framework of trade with the rest of the world.

(vi) Modification in technology agreement :- Prior to 1991, there were restrictions for hiring foreign technology or foreign technicians but now all foreign collaborations concerning higher technology have been made easy by the government .

Positive impact of Globalisation:-

(i) Increasing share of exports in world trade.

(ii) Favourable effects on export- imports ratio.

(iii) Application of high technology.

(iv) Stable and strong exchange rate.

(v) Expansion of culture integration.

Negative impact of Globalisation:-

(i) Decrease in Revenue of Indian Industries.

(ii) Increasing share in capital and management by foreign entrepreneurs.

(iii) Increasing regional disparities.

(iv) Export of profit.

(v) Unemployment.

(vi) Negetive effect on environment.

3.6.1 Outsourcing :- Outsourcing is one of the important outcomes of the globalisation process. Under this a company hires regular services from external sources, mostly from other countries, which was previously provided internally or from within the country (like legal advice, computer services, advertisement , security each provided by respective departments of the company). The low wage rate , availability of skilled manpower and existence of special economic zone made it a destination for global outsourcing in the post reform period. Many services such as BPO or call centres, record keeping, banking services, music recording, film editing, book transcription, clinical advice or even teaching are being outsourced by the companies in developed countries to India.

3.6.2 World Trade Organisation :- The World Trade Organisation (WTO) was founded in 1995 as the successor organisation to the General Agreement on Trade and Tariff (GATT). GATT was established in 1948 with 23 countries as the global trade organisation to administer all opportunities to all countries in the international market for trading purposes WTO is expected to establish a rule based trading regime in which nations cannot place arbitary restrictions on trade. In addition, its purpose is also to enlarge production and trade services, to ensure optimum utilisation of world resources and to protect the environment . As an important member of WTO Indian has been in the forefront of framing fair global rules, regulations and safeguards and advocating the interest of the developing world.

Objectives of WTO :-

(i) To set and excute rules for international trade.

(ii) To present a panel for negotiating and controlling additional trade liberalisation.

(iii) To solve trade conflict.

(iv) To increase the transparency of decision making methods.

(v) Development of multilateral trading system.

(vi) To facilites international trade.

(vii) To provide financial assistance to the member country in international trade.

(viii) To improve the standard of living of people in the member countries.

(ix) To ensure full employment and broad increase in effective demand.

(x) To ensure optimum utilisation of world resource.

3.7) An appraisal of LPG policies:- LPG (Liberalisation, Privatisation and Globalisation) policies have both positive and negative effects on the economy of India. Such as–

Achievements of New Economic policy 1991:-

(i) Increase in rate of economic growth:- After reforms, a rapid growth of GDP is seen. The growth of GDP increased from 5.6 percent during 1980-91 to 8.2 percent during 2007-12.

(ii) Rise in foreign exchange reserves:- Due to relaxation in tariff and increasing the limit of foreign direct investmsent, the foreign exchange reserves increases from about US $ 6 billion in 1990-91 to US $321 billion in 2014-15.

(iii) Rise in foreign investment :- After 1991, the foreign direct investment (FDI) and foreign institutional investment (FII) increased from about US $100 million in 1990-91 to US $73.5 billion in 2014-15.

(iv) Rise in export:- Due to removal of export duty, the exports of India started to increase.

(v) Control of fiscal deficit:- Fiscal deficit of the economy is also reduced from 8.5 percent in 1991 to nearly 3.5 percent in 2016-17.

(vi) Control of inflation:- Due to economic reforms, the rate of inflation decreases from nearly 16.7 percent in 1991 to around 4.9 percent in 2015-16.

(vii) Reduction in deficit in balance of payments:- Due to economic reforms 1991, the deficit in balance of payments (current account) has reduced from US $9680 million in 1990-91 to nearly US $ 152 million in 2016-17.

Demerits of New Economic Policy 1991:-

(i) Neglect of agricultural sector:- As the new economic policy has special emphasize on industrial and IT sector, it neglected the agricultural sector.

(ii) Growing unemployment:- Security of job has been decreased because of entry of FDI and MNCs.

(iii) Adverse effect on small scale Industries:- Small and cottage industries has declined because of increase in competition due to globalisation.

(iv) Low level of industrial growth:- Low level of industrial growth is seen because of decreasing demand of industrial products due to various reasons such as cheaper imports, lack of infrastructure facilities, non- tariff barriers by developed countries.

(v) Ineffective disinvestment policy:- The disinvestment policy was not favourable for domestic investors.

(vi) Spread of consumerism:- The economic policy has been encouraging a dangerous trend on consumerism by encouraging the production of luxurious items and items of superior consumption.

(vii) Ineffectiveness of fiscal polices:- The tax reductions in the reforms period, aimed at yielding larger revenue and to curb tax evasion but have not resulted on increase in tax revenue for the govt. Tariff reduction decreases the scope of rising revenue through custom duties and the tax incentives provided to foreign investors to attract foreign investment further reduce the scope of raising tax revenues.

Exercise

1) State whether the following statements are True or False:-

(i) Liberalisation of the economy under the new economic policy changed the role of RBI in the economy from a 'regulator' to 'facilitator'.

(ii) Economic growth along with structural transformation is called economic development.

(iii) Agricultural sector has shown positive growth due to economic reforms.

(iv) Increase the role of public sector was the main features of industrial sector reform.

(v) Due to economic reforms India has become a favourable destination of outsourcing for most of MNCs.

(vi) Disinvestment is an example of Liberalisation.

(vii) Cheaper imported goods was one of the reason behind low level of industrial growth.

(viii) All restrictions on imports by the government in the form of other than taxes is called non-tariff barriers.

(ix) Navaratna policy of the government helped in improving the performance of pulic sector undertakings in India.

(x) In financial sector reforms, foreign investment limit in banking institution was raised to 42%.

2) Choose the correct option:-

(i) New Economic policy 1991 is also called -

(a) L- Turn policy (b) S- Turn policy (c) U- Turn policy. (d) None of these.

(ii) The new economic policy includes-

(a) Liberalisation (b) Privatisation (c) Globalisation. (d) All of these.

(iii) Out of the following, which industry is reserved for public sector?

(a) Atomic energy (b) Defence equipments (c) Cement (d) Both a and b .

(iv) The reform in a country's monetary and banking policies is known as -

(a) Agricultural reforms (b) Political reforms (c) Financial reforms (d) None of these.

(v) India experience BOP crissis during 1950- 1990 due to which of the following reasons?

(a) High import (b) Low export (c) Focus on agriculture (d) Both a and b.

(vi) Which of the following reforms are included in liberalisation policy?

(a) Industrial sector reforms (b) Financial sector reforms (c) Fiscal reforms (d) All of the above.

(vii) Under foreign exchange reforms Indian Rupee was devalued with the objective of-

(a) Increase price of exports (b) Decrease price of exports (c) Increase price of import

(d) Both b and c .

(viii) Which of the following organisations settles the disputes among the member countries?

(a) IMF (b) World bank (c) WTO (d) None of these.

(ix) Private foreign investment has increased with increase in-

(a) FDI (b) FII (c) Both a and b (d) None of these.

(x) Which market form has declined with comming of NEP?

(a) Monopoly market (b) perfect competition market (c) Oligopoly market (d) None of these.

3) Choose the appropriate word and fill in the blank :

(i) Outsourcing is an off shoot of _______ (Liberalisation / Globalisation)

(ii) _______ implies supremacy of self interest over social interest (Privatisation/ Liberalisation)

(iii) Tax reforms are the principal components of _______ reforms (Monetary/ Fiscal)

(iv) Liberalisation and laissez-fair system are the _______ term.(same / Different)

(v) Selling off part of the equity of PSU's is called _______.(Liberalisation / Disinvestment)

(vi) Economic reforms have _______ the role of public sector. (Increased / reduced)

(vii) In industrial sector reforms, the number of industries exclusively reserved for the public sector, reduced from 17 to _______ industries.(3/9)

(viii) As part of globalisation process , tariff rates were _______ in India. (lowered / raised)

(ix) Predecessor of WTO is _______.(GATT/ IMF)

(x) _______ is one of the Navaratna companies in India. (SAIL/ TISCO)

4) Very short answer objective type questions:-

(i) What is meant by economic reforms?

(ii) When was New Economic policy announced?

(iii) What do you mean by 'structural reforms measures' under the new economic policy?

(iv) What is 'stabilisation measures'?

(v) What is meant by Liberalisation?

(vi) What is meant by privatisation ?

(vii) What is meant by Globalisation?

(viii) What is disinvestment ?

(ix) What is outsourcing?

(x) What do you understand by devaluation of rupee?

(xi) What is meant by quantitative restrictions?

(xii) Write the full form of MRTP act.

(xiii) What do you mean by fiscal reform?

(xiv) What is Bilateral Trade Agreement ?

5) Answer the following questions: (3/4 marks)

i) What do you mean by economic reforms?

(ii) Briefly explain the background of crisis of India before 1991.

(iii) Write a short note on :-

(a) New Economic Policy-1991.

(b) Devaluation of Rupee

(c) Quantitative restrictions.

(d) Goods and service Tax.

(iv) Write the objectives of the following.

(a) Liberalisation.

(b) Globalisation.

(c) Privatisation

(d) WTO

(v) Distinguish between -

(i) Bilateral trade and Multilateral trade.

(ii) Tariff and Non- tariff barriers.

(iii) Liberalisation and privatisation.

(vi) Why tariffs are imposed?

(vii) It is said , new economic policy is liberal. Do you agree? Arguements in support of your answer.

(viii) Mention the changes made by the globalisation of the Indian economy.

(ix) 'Foreign exchange crisis was the basic of economic policies of liberalisation , privatisation and globalisation' Justify.

(x) What measures taken towards privatisation in 1991?

xi) 'Agricultural sector appears to be adversely affected by the reform process' why?

(xii) Explain the following reforms initiated under Liberalisation.

(i) Industrial sector reforms.

(ii) Financial sector refoms.

(iii) Fiscal reforms

(iv) Foreign exchange refomrs.

(v) Trade and investment policy reforms.

(xiii) Globalisation is the outcome of liberalisation and privatisation strategies. Explain.

(xiv) Why has the industrial sector perfomed poorly in the reform period?

(xv) What are the major factors responsible for the high growth of service sector?

(xvi) Why it is necessary to become a member of WTO?

(xvii) Do you think outsourcing is good for India? Why developed countries opposing it?

(xviii) India has certain advantages which makes it a favourite outsourcing destination. What are these advantages?

6) Answer the following questions. (6 marks)

(i) Why were economic reforms needed in India in 1991?

(ii) Describe the main components of the new economic policy?

(iii) Write the advantages and disadvantages of

(a) Liberalisation

(b) Globalisation.

(c) Privatisation.

(iv) Critically evaluate the LPG policies.

(v) What is meant by globalisation of the economy?
state the measures adopted by the government to promote globalisation.

(vi) Describe the effects of reforms on various sectors of the economy.

(vii) Discuss economic reforms in India in the light of social justice.

Answer Key

1) (i) True (ii) True (iii)False (iv) False (v) True (vi) False (vii) True (viii) True (ix) True (x) False.

2) (i) c (ii) d (iii) d (iv) c (v) d (vi) d (vii)d (viii) c (ix) c (x) a.

3) (i) Globalisation (ii) Privatisation (iii) Fiscal (iv) Different (v) Disinvestment (vi) Reduced. (vii) 3 (viii) lowered (ix) GATT (x) SAIL.

4) (i) Economic reforms are the long term dynamic combination of policies and programmes for speedy growth, efficeiency in production and make a competitive environment.

(ii) July-1991.

(iii) Structural reforms policies are long term measures, aimed at improving the efficiency of the economy and increasing its international competitiveness by removing the rigidities in various segments of the Indian economy.

(iv) Stabilisation measures are short term measures, intended to correct some of the weakness that have developed in the balance of payments and to bring inflation under control.

(v) The removal of entry and growth restrictions on private sector enterprises or the removal of trade barriers is known as liberalisation.

(vi) Transfer of ownership, management, control right from public sector undertaking is known as privatisation.

(vii) The integration of domestic economy with world economy is known as globalisation.

(viii) It refers to selling off share capital of public sector undertakings to private enterpreneurs.

(ix) Hiring of regular services from external sources mostly from foreign contries, which was previously provided internally or from within the country in known as outsourcing.

(x) Devaluation refers to reduction in the value of domestic currency by the government in relation to other countries of the world.

(xi) Quantitative restrictions refer to non-tariff barriers imposed on the quantity of imports and exports .

(xii) Monopoly Restrictive Trade Practice Act.

(xiii) Fiscal reforms are concerned with the reforms in government taxation and public expenditure policies.

(xiv) Bilateral trade agreement refer to the trade agreements between the two trading contries.

CHAPTER-4

Poverty

4.1 We can define poverty as the condition where the basic requirements of life like food, shelter, clothing, education & health are not fulfilled. It can lead to other problems like illiteracy, unemployment, malnutrition etc. i.e. it is the root cause of other problems in Inida. Poverty is a peculiar problem from which various countries of the world have been suffering. It is a challenge not only for Inida, as more than one- fifth of world's poor live in India alone, but also for the world , where 300 million poeple are not able to meet their basic needs. In India, five year plans have always stress on upliftment of poor people and achieving a minimum standard of living for all. However , poverty is still one of most serious problem, from which the country suffering.

4.2 The problem of poverty can be overcome when poor people are identified : There are two measures to determine the extent of poverty-Relative poverty and Absolute poverty.

Measures of poverty

Relative poverty | Absolute poverty

i) **Relative Poverty:-** It refers to poverty of people, in comparison to other people, region or nations. It helps in understanding the relative position of different segments of the population. It does not consider, how the poor person is or whether he is deprived of the basic minimum requirements of life. The concept of Ginni coefficient are used to measure relative poverty.

ii) **Absolute poverty:-** In India, the concept of poverty line is used as a measure of absolute poverty. It refers to the total number of people living below poverty line. i.e. the total number of people fails to reach the minimum consumption level. According to absolute measures, around 22% of Indian population is below poverty line-

Absolute poverty is measured on the basis of two criteria :-

a) **Minimum calories consumption :-** People who are not getting 2400 calories per person per day in rural areas and 2100 calories in urban areas is considered to be living below Proverty line.

b) **Minimum consumption expenditure criteria:-** If the people of rural areas consume less than Rs. 816 per person per month and urban areas Rs. 1000 per person per month at 2011-12 price, are treated as those below the poverty line.

4.3 Categorising poverty:- There are many ways to categorise poverty. Such as–

Poverty

- Chronic poor
- Transient poor
- Non-poor.

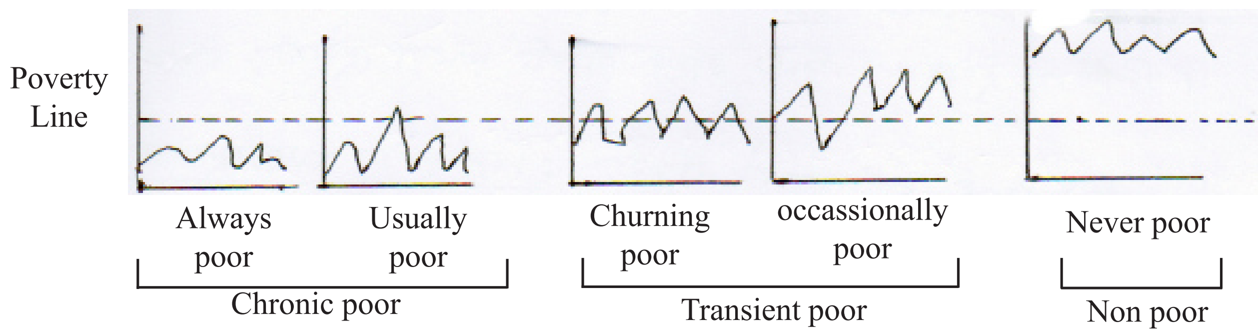


Figure 4.1. The chronic poor , tranisent poor and non-poor.

(i) Chronic poor :- Those people who are always poor or usually poor . e.g. casual workers.

(ii) Transient poor :- Transient poor may be classified as churning poor (who regularly move in and out of poverty, like small farmers) and occassionally poor (who are rich most of the time and poor sometimes).

(iii) Non- poor :- These are those who are never poor.

4.4 Poverty Line:- planning commission of India has defined poverty on the basis of poverty line. Poverty line is an imaginary line which demarcates the population into two parts, those who are below poverty line are poor and those who are above poverty line are non- poor.

Determination of poverty line:- In india, Monthly Per Capita Expenditure Method (MPCE) is used to determine the poverty line. According to this method monetary value (Per capita expenditure) of the minimum calorie intake is calculated.

(i) Minimum calorie intake:- The planning commission has defined poverty line on the basis of recommended nutritional requirements of 2400 calories per person per day for rural areas and 2100 calories per person per day in urban areas.

(ii) Monetary value of minimum calorie intake :- Based on calorie consumption , in 2011-12, the poverty line was defined for rural areas as consumption worth Rs. 816 per person per month and urban areas it was Rs. 1000 as monetary value of minimum calorie intake.

Poverty line devides the poor from the non- poor:- There are many kind of poor; the absolutely poor, the very poor and the poor. Similarly there are various kind of non- poor, the middle class, the upper class, the rich, the very rich and the absolutely rich . The poverty line divides the poor from the non-poor.

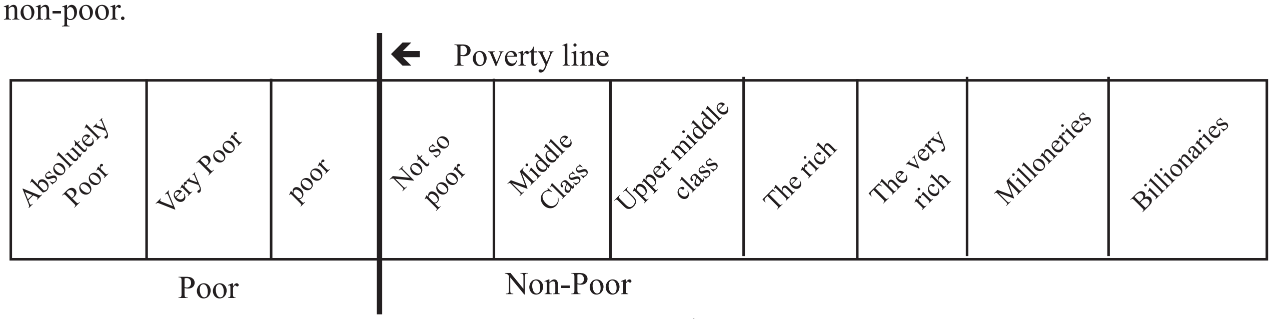


Figure 4.2 : Poor and Non-Poor

4.5 Causes of Poverty :- The main causes of poverty in India are–

i) Impact of British rule on Indian economy:- The low level of economic development seen under colonial rule, which is one of the reason of poverty in India. The policies of the British govt. ruined and devasted all the traditional handicrafts and discouraged the development of industries like textiles.

ii) Rapidly rising population :- Population has been rising in India at a rapid speed. Rising population adds to the burden of existing scarce resources and this leads to rise in prices and people are not able to afford the minimum level of subsistance.

(iii) Inequalities of income and wealth:- To a large extent , inequalities of income and wealth distribution are also responsible for poverty in India.

(iv) Unemployment:- Due to continuous rise in population there is chronic unemployment in India which is responsible for poverty. The problem of unemployment has many forms, such as educated unemployment , seasonal unemployment, disguised unemployment etc.

(v) **Backwardness of Agriculture :-** The inadequate supply of water , fertilizer, pesticides and low level of technology are the main causes responsible for backwardness of agriculture in India and as a result poverty level rises.

(vi) Low rate of capital formation:- In India, the rate of capital formation in quite low . This adversely affected the growth of industrial sector.and leads to low productivity and generates unemployment which is another cause of poverty in India.

(vii) Under utilization of natural resources:- India possess vast and rich natural resources but a large part of water , forest energy and mineral resources is either unutilised or under utilised.

(viii) Inflation:- Inflation is also a cause of poverty in India , because of inflation people cannot buy much with their incomes.

(ix) Social factors:- Illiteracy , ignorance , backwardness , outdated technology, social infrastructure and unscientific outlook are also responsible for poverty in India.

(x) Lack of infrastructure:- Lack of infrastructure affects the quality of life and leads to fall in income earning capacity of the individual. As income level falls, the level of poverty in the country rises.

(xi) Govt. policies:- Government policies have not been used effectively to bridge the gap between rich and poor.

4.6 Measures to eradicate poverty :

The following measures should be taken to eradicate poverty in India.

(i) Acceleration of economic growth:- To eradicate poverty , the first and formost measure is acceleration of economic growth. When GDP growth is accerlerated , new employment opportunities are generated. As a result income level increases and reduce poverty.

(ii) Improving distribution of Income:- Various fiscal and legislative measures can be taken to eradicate poverty. Govt. can increase revenue by improving tax system (e.g. high rate of progressive tax) and utilise the excess revenue to provide subsidies to the poor. Legislative measures like minimum wage act, minimum support price, free education at primary level , free Mid- Day- Meal etc. can be used to eradicate poverty.

(iii) Population control:- To remove poverty from India, population control is important . If growth rate of population is checked, per capita income will increase and thereby remove poverty.

(iv) Agricultural development:- India's large proportion of population depends on the agricultural sector. So govt. should take necessary steps to enhence agricultural production.

(v) Increase in employment opportunities:- Employment opportunities must be made for people in rural areas so that they can meet their basic needs. Small scale industries and cottage industries must be encouraged.

(vi) Land reforms:- As many land reforms policy introduced by the govt., they must be implimented properly as they will help the small farmers to get employment and thereby remove poverty.

(vii) Social security measures:- Provident fund, pension, free medical and health service, affordable housing etc. should be provided to the rural and urban poor. This will help to improve the living condition of people.

(viii) Balanced regional development:- Government must allocate more funds and facilities to the backward and rural regions.

(ix) Strengthening public distribution system:- By strengthening public distribution system, govt. can help the poor people to buy the basic goods at a reasonable price.

4.7 Government approach to poverty eradication:- The Inidan constitutioin and five year plans have always stated, social justice, as the primary objective of the developmental strategies of the govt. In all the five year plans and policies, govt emphasis on poverty alleviation and to achieve the objective of poverty eradication, govt. has adopted a three dimensional approach based on economic growth, poverty alleviation programmes and providing minimum basic amenities to the people.

Approach to eradicate poverty

- Growth oriented approach
- Poverty alleviation programmes
  - Self employed programmes
  - Wage employment programmes
- Minimum needs programme.

(i) Growth oriented approach :- This approach was initiated from the first five year plan. It is based on the expectation that the effect of economic growth (i.e. rapid increase in GDP and per capita income) will affect all sections of society and generate new employment opportunities and this would lead to fall in poverty level. However this approach was not much successful, because –

(a) Population growth has resulted in a very low growth in per capita income.

(b) Green Revolution widened regional disparities and gap between small and large farmers.

(c) There was unwillngness and inability to redistribute land.

(ii) Poverty alleviation programes:- This programe has been initiated from the 3rd five year plan to eradicate poverty through self employment programmes and wage employment programmes.

(a) Self employment programmes:- Some of the self employment programmes initiated by the government are:

Rural Employment Generation programme (REGP): This programme was started by the govt. to create self employment opportunities in rural areas and was implimented by khadi and village industries commision . Here one could get financial assistance from bank to set up small industries.

Prime Minister Rojgar Yojana(PMRY) : This scheme was started on 2nd october 1993 and under this scheme the educated unemployed from lower income families in rural and urban areas can get financial help to setup any kind of enterprise that generates employment.

Swarna Jayanti Shahari Rojgar Yojana(SJSRY) : This scheme was initiated in December 1997, creating self employment and wage employment opportunities in urban areas. The cost of the programme is shared between the central and state in the ratio of 75:25.

Swarna Jayanti Gram Swarozgar Yojana (SJGSY) : This scheme was launched w.e.f. 1st April, 1999. It aimed at promoting micro- enterprises and helping the rural poor to establish self-Help Groups(SHGs). This scheme has now been restructured as National Rural Livelihood Mission (NRLM). A similar programme called National Urban Livelihood Mission has also been introduced for urban poor.

(b) Wage Employment programmes:- Some wage employment programmes initiated by the govt. are.

(i) Sampoorna Grameen Rozgar Yojana(SGRY):- This scheme was launced in 2001 to provide greater thrust to wage employment , infrastructural development and food security in rural areas. Employment Assistance scheme (EAS) and Jawhar Gram samridhi Yojana (JGSY) were merged with this scheme.

(ii) National Food For Work Programme(NFFWP) :- This programme was launched in 2004. The objectives of this scheme is to intensify food security through wage employment. It was initially implemented in 150 most backward district of the country to generate wage employment. It is a 100% centrally sponsored scheme. This programme was incorporated in Mahatma Gandhi National Rural Employment Guarntee Act (MGNREGA) in 2005. (Work is offered for a minimum of 100 days)

(iii) Minimum needs programme:- This programme was introduced in the first year of the fifth Five year plan to provide certain basic minimum needs like food grains at subsidised rates, education, health, water supply , sanitation etc. and to improve the living standards of people. It aims at social and economic development of the community, particularly the unprivileged and undeserved population.

Three major programmes that aim at improving the food and nutritional status of the poor are:- Public distribution system, Integrated child Development Scheme, Mid- Day - Meal scheme. Again, pradhan Mantri Gramodaya Yojana, Valmiki Ambedkar Awas Yojana also benefited the underprivileged section of society by providing basic amenities to the people.

Other Social security Programmes :- The govt. also introduce other social security programmes to help a few specific group of people. It is a centrally sponsored scheme of the govt. that provides financial asssistance to the elderly, widows and persons with disablities in the form of social pension. Some of the social security programmes are - National Old Age pension scheme, National Family Benefit scheme, National Maternity Benefit Schelme, Pradhan Mantri Jana- Dhana Yojana (2014), Indira Gandhi National Disability Pension Scheme, etc.

4.8 Critical evalution of poverty alleviation porgrammes:- Poverty alleviation programmes are initiated by the govt. to uplift the downtrodden section of the society but the result of such programme has been a mixed bag of sorts. The percentage of absolute poor in some states is now well below the national average. Despite various strategies to alleviate poverty, hunger, malnutrition; illiteracy and lack of basic amenities continue to be a common features in many parts of India.

Achievements of poverty alleviation programmes:-

(i) Percentage of population below poverty line has declined from 37.2 percent in 2004-05 to about 28% in 2011-12.

(ii) Wage rates has tended to rise over time.

(iii) Government's three dimensional approach have been able to reduce poverty level to some extent.

Shortcomings of poverty Alleviation programmes:-

(i) Lack of resources

(ii) Unequal distribution of assests.

(iii) Improper implimention

(iv) Lack of infrastructure

(v) Lack of active participation of people.

(vi) Lack of accountability.

Exercise

1) State whether the following statements are True or False:-

(i) The method of poverty line is used to measure relative poverty.

(ii) The incidence of poverty is greater in urban areas.

(iii) Population explosion in India in not responsible for widespread poverty in the country.

(iv) 47 percent of total population in India was below poverty line in the year 2004-05.

(v) The poverty has shifted from rural to urban areas.

(vi) Under MGNREGA, work is offered for a minimum number of 100 days.

(vii) Poverty can exist even when real GDP is rising.

(viii) Under social Assistance programme , elderly prople who do not have any one to take care of them are given pension to sustain themselves.

(ix) Valmiki Ambedkar Awas Yojana scheme was launched in December 2001.

(x) Gini coefficient in used to measure the relative poverty.

2) Choose the correct option :-

(i) In pre- independent India, who was the first to discuss the concept of a poverty line?

a) Dadhabhai Naoroji (b) V.K.R.V. Rao (c) R.C. Desai (d) Findlay shirras.

(ii) Economists identify the poor on the basis of :

(a) their wealth (b) their Annual income (c) Occupation & ownership of assests (d) their savings.

(iii) The official data on poverty is made available to the public by the :-

(a) NSSO (b) Planning commission (c) Govt. of India (d) None of thel above.

(iv) The Govt approach to poverty eradication was of :-

(a) One dimensional (b) Two dimensional (c) Three dimensional (d) None of these

(v) Which is not belongs to poverty alleviation programme:

(a) REGP (b) SJSRY (c) PMRY (d) NSAP

(vi) A person in urban India is considered below poverty line, if his daily intake of calories is less than:

(a) 2000 calories (b) 2100 calories (c) 2400 calories (d) 2500 calories.

(vii) Which of the following programme has been merged with MGNREGA?

(a) MNP (b) PMRY (c) IRDP (d) NFFWP

viii) Which of the following measures are aimed at combating poverty India?

a) Distribution of Income (b) GDP Growth (c) Population control (d) All of these.

(ix) Which of the following programme intend to improve the food and nutritional status of the poor?

a) Mid-Day- Meal Scheme (b) Public distribution system (c) Integrated child development programme (d) All of these

(x) Which of the following measures are aimed at enhencing the quality of life of the poor?

(a) Development of agriculture (b) Labour intensive technique of production

(c) both a and b (d) None of these.

3) Choose the appropriate word and fill in the blank:

(i) Pradhan Mantri Rojgar Yojana is for providing employment to ——— unemployed. (educated/ uneducated)

ii) Swarana Jayanti Gram Swarojgar Yojana aims to remove poverty from ——— areas. (urban/ rural)

(iii) Higher calorie intake has been fixed for rural areas because the rural worker has to do greater ——— work as compared to the urban worker . (physical/ Mental)

(iv) National Food For Work Programme was launched in the year ——— (2004/2005).

(v) Non- poor implies persons who are ——— (Never poor / usually poor)

(vi) ——— organisation collects statistics on poverty on India.(NSSO/ Ministry of statistics)

(vii) Amartya sen has developed on index related to poverty , known as ——— (poverty Gap Index/ Sen Index)

(viii) Sampoorna Gramin Rojgar Yojana is ——— porgrame. (wage employment/self employment)

(ix) Under fiscal measures to improve the distribution of income is an economy, the govt. places greater reliance on a ——— tax structure. (progressive / regressive)

(x) In India absolute poverty in measured with reference to ———

(per capita income/ poverty line)

4) Very short answer objective questions:-

(i) What do you understand by poverty?

(ii) What is meant by relative poverty?

(iii) What is meant by absolute poverty?

(iv) What is poverty line?

(v) What is meant by 'Head count Ratio'?

(vi) What do you understand by 'chronic poor'?

(vii) What is meant by 'churning poor'?

(viii) What does economic growth leads to economic development?

(ix) Why are poverty alleviation programmes targeted to rural areas?

(x) What is vicious circle of poverty?

5) Answer the following questions: (3/4 marks)

(i) What are the difference between relaltive poverty and absolute poverty?

(ii) Illustrate the difference between rural poor and urban poor.

(iii) Explain the concept of vicious circle of poverty.

(iv) Why calorie based norm is not adequate to identify the poor?

(v) Briefly explain 'Food For Work' programme.

(vi) 'It is not possible to eradicate poverty'- Do you agree ? Give reasons.

(vii) Is there any relationship between poverty and unemployment?

(viii) Why are emloyment generation programmes important in poverty alleviation in India?

(ix) What are the limitations of poverty line?

(x) How can poor people be categorised?

(xi) Briefly explain the growth oriented approach to eradicate poverty?

(xii) Briefly explain the 'minimum needs programmes.

(xiii) Write a note on trends of poverty line in India.

(xiv) How has poverty line been defined in India?

(xv) How poverty and inequality related to each other?

(xvi) Briefly explain any one of ‘self employment programme’ initiated by the govt. of India.

(xvii) What programmes has the govt. adopted to help the elderly people and poor and destitue women?

6) Answer the following questions : (6 marks)

(i) Explain the main causes of poverty in India.

(ii) What general measures should be taken to eradicate poverty in India?

(iii) Discuss the governments 3-dimensional approach to eradicate poverty in India.

(iv) Discuss some poverty alleviation programmes presenting in operation in India.

(v) Critically evaluate the poverty alleviation programmes in India.

Answer Key

1) (i) False (ii) False (iii) False (iv) False (v) True (vi) True (vii) True (viii) True (ix) True (x) True

2) (i) a (ii) c (iii) b (iv) c (v)d (vi) b (vii)d (viii) d (ix) d (x)c

3) (i) educated (ii) rural (iii) physical (iv) 2004 (v) Never poor (vi) NSSO (vii) Sen Index (viii) wage employment (ix) progressive (x) Poverty line.

4) (i) We can define poverty as a condition where the basic requirements of life like food, shelter, clothing, education and health are not fulfilled.

(ii) It refers to poverty of people, in comparison to other poeple , region or nation.

(iii) It refers to the total number of people living below poverty line.

(iv) Poverty line is an imaginary line which demarcates the population in two parts, those who are below poverty line are poor and those who are above poverty line are non- poor.

(v) When the number of poor is estimated as the proportion of people below the poverty line, it is known as ‘Head count Ratio’

(vi) Those people who are always poor or usually poor are called ‘chronic poor’.

(vii) Those people who are regularly move in and out of poverty are called ‘churning poor’.

(viii) Economic growth leads to economic development only when it helps to eradicate poverty.

(ix) Because the poor people in rural areas are more than poor people in urban areas.

(x) It is defined as a situation of such phenomenon in which some factors cause continuation of poverty and under development in a circular way.

CHAPTER-5

Human Capital Formation In India

Human capital refers to the stock of skill, ability, expertise , education and knowledge in a country at a point of time. It includes experienced engineers, doctors, professors, teachers and all types of productive workers.

According to G.M. Meier Human capital formation is the process of increasing the number of skilled, educated and experienced persons which are essential for an economy to develop the economic condition of a country.

Physical capital implies the non- human assests of the production unit, such as machinery, tools and equipment, office supplies etc. that help in the production process. But human capital refers to stock of knowledge, talent, skills and abilites brought in by the employee to the unit.

5.1 Some important ways to increase the stock of human capital are as follows:-

(i) Expenditure on Education:- Expenditure on Education is the most effective way to raise the productive workforce in an economy.

(ii) Expenditure on Health:- Good health always increase the productivity of the human capital.

(iii) On-the Job Training:- It helps the producer to increase their marginal productivity

(iv) Expenditure on information:- It always helps the producers to increase the total volume of production.

(v) Study programmes for Adults:- These kind of programmes organised by the Government and NGOs, helps the adults to make them efficient in their work areas.

(vi) Migration :- People migrate in search of better job. Because gains of migration are greater than the cost of migration.

So, we can say that human capital formation can be increased by investment on education , health, training, information etc.

5.2 Human capital formation and Economic growth:- Human capital formation helps the growth and development in the following ways-

(i) Change in Emotional and material environment of growth:- Human capital formation makes the people more realistic that help to increase productivity.

(ii) Higer productivity of physical capital:- It enhances productivity and accelerates the growth rate.

(iii) Innovative skills:- More human capital means greater the possibilities of innovations in the production area.

(iv) Employment and Equality:- It increases the opportunity of employment along with equality in the economy.

5.3 Human capital vs Human Development:- Human capital is referred to as the measure of the capabilities of labour which includes skills, working capacity, education, health and intelligence. Here the focuses on the point that not all resources are equal, but with proper training and instrument the gap can be fulfilled.

But human development is referred to as the process of expansion of the capabilites of human in terms of abilities and rights. It provide a good environment for the people to enjoy a healthy, creative and long life.

5.4 Main problems facing human capital formation in India:-

Few major problems facing the human capital formation in India are as follows:-

(i) Increasing population:- Rapid increase in population adversely affecting the quality and quantity of human capital, as it decreases per head facilites like housing, sanitation, drainage, water system, education, power and health etc.

(ii) Brain Drain:- Migration of scientists , doctors, engineers, and high caliber persons is a serious threat to the process of human capital formation.

(iii) Deficient Manpower planning:- Imbalance in the demand - supply of labour force resulting an explosive problem relating to graduate unemployment.

(iv) Insufficient on-the- job Training:- Deficiency in 'on-the Job training' is a serious problem in India.

(v) Limited Academic standards:- Low and limited academic standard impairs our competitiveness in the global market of human capital.

5.5 Education is an essential element of human resource development:-

Education improves knowledge and productivity. It is the under flow of economic and social development. Education develops science and technology, promotes cultural standard of the society. So, Indian government should invest and monitor this sector very carefully.

5.6 Education sector in India:

The following review indicate the growth of education in India:-

(i) In 1951, 18% of total population was literate. But in 2011, the literacy rate increased to 74%.

(ii) The number of of elementary schools increased from 2.23 Lakh (1950-51) to 12.70 Lakh (2015-16).

(iii) The number of secondary and senior secondary level schools rose to 2.52 Lakh in the year 2015-16 compare to 7.4 thousand in the year 1950-51.

(iv) After independence, higher education has shown a sharpe growth over time. Total number of colleges for general education in the country is 39,071, and 799 universities are there.

(v) Beside the general education the number of institution for technical, medical, agricultural and rural education has increased significantly.

Despite the increase of educational facilities in India large number of people and children are still illiterate in India.

5.7 Future aspects:-

(i) Education for all:- It is a long period dream. Though the steps were taken since 1950 but we need more time for 100% literacy.

(ii) Gender equility:- There is a significant gender bias in education system in India. The enrolment ratio is relatively low for the female candidates. Though the inequility between male and female literacy is reducing now.

(iii) Higher Education:- According to NSSO report published on 2011-12. it was shown that 30 percent graduate were unemployed in the rural areas. So, government should invest in quality education for the employment of these unemployed people.

The government is trying to fulfill its commitment of spending nearly 6 percent (recommened by Education commision, 1964-66) of GDP on education, but still actual expenditure has been around 4-5 percent. This point to the gap between what is desired and the reality.

Study Aids

 # Need for promoting women's education in India:-

There is a need for promoting women's education in India:-

(a) It promotes women's economic independence.

(b) It increases her social status.

(c) It makes the positive impact on fertility rate and reduces birth rate.

(d) It makes favourable impact on health of women and children.

 # Human develpment a broader than as compared to human capital:-

Human development is a broader term as compared to human capital because:-

(a) Human capital is concerned only with the economic dimension of human life while human development is multi dimensional which considers economic, socio, cultural , political, spiritual aspects.

(b) Human capital gives importance to that kind of education which increases productivity. But Human development considers education and health as inseperable part of a good quality of life.

Migration is a source of human capital formation:- People migrate from one place to another that gives them higher salaries. Unemployed people migrate from rural to urban areas. Qualified people migrate to developed countries for higher salaries. It enhances earnings more than their cost of migration . Hence, it is a source of human capital formation.

Exercise

A) True/False:-

1) Expenditure on health make the people more productive.
2) Training do not help workers to make them specialist.
3) Migration increase human capital formation.
4) Human capital formation affects the economic growth.
5) Information does not help to improve skill.
6) Rising population is not a major problem for human capital formation in India.
7) Human capital and human development are related concepts.
8) Education develops science and technology in the economy.
9) Human capital formation causes higher rate of participation.
10) UGC is engaged in designing text material up to senior secondary level

B) Choose the correct option :-

1) The ability to read and write is known as :

   a) Education (b) Human capital (c) Literacy (d) Human development

2) Human capital formation leads to :

(a) Increase physical capital (b) Proper utilisation of inputs (c) Increase in GDP growth

   (d) Both (a) & (c)

3) What percent of GDP was recommendedby Education commission (1964-66) to be spent on education sector?

   (a) 6% (b) 5% (c)3% (d) 4%

4) Which of the following is an indicator of health attainments?

(a) Life expectancy (b) Infant Mortality rate (c) Maternal Mortality rate (d) All of above.

5) Which of the following is an institution to regulate health sector:

(a) NCERT (b) ICMR (c) UGC (d) AICTE

6) What was infant mortality rate as per 2001 census?

(a) 146 (b) 110 (c) 80 (d) 63

7) The total number of universities in India:-

(a) 800 (b) 799 (c) 599 (d) 790

8) Expenditure on education is a source of:-

(a) Physical capital formation (b)Human capital formation (c) Both of the above

(d) None of the above

C) Fill in the blanks:-

1) Expenditure on ——— is the most effective way to increase human capital.

2) Overall literacy in India is ——— in 2011 census.

3) People migrate in search of better ——— opportunities.

4) Expenditure on health is an important determinant of ——— formation.

5) Elementary education covers students from ——— to ——— years age- group .

6) In the year ------, the right to education Act brought in India.

7) The full form of NCERT is -------.

8) Physical capital ----- human capital.

D) Very short type Questions:-

1) What is human capital?

2) Define human capital.

3) What is physical capital?

4) Define migration.

5) Define - 'on- the-job training'.

6) What is human development?

7) What do you mean by 'literacy'?

8) What is brain drain?

9) What are two major sources of human capital in a country?

10) Who prepares Human Development Index?

E) Answer the following questions:- **3/4 marks**

1) What is the difference between physical capital and human capital?

2) How human capital formation helps the growth and development ?

OR

Establish the relationship between human capital and economic growth

3) What do you mean by 'human development?

4) How education is an essential element of human resource development?

5) What are the future aspects of education in India?

6) By reducing inequality of income we can raise human capital- how?

7) Discuss the need for promoting women's education in India.

8) Explain the role of education for the development of a country.

9) What factors contribute to human capital formation.

10) Discuss the role of migration as a source of human capital formation?

11) Bring out the need for on-the-job training.

12) How is human development a broader term compare to human capital.

F) Answer the following questions :-

1) Discuss some important ways to increase the stock of human capital.

2) Explain the main problems of human capital formation in India.

3) Discuss the growth of education sector in India.

Answer Key

True / False :

1) True (2) False (3) True(4) True (5) False (6) False (7) True (8) True (9) True (10)False

M.C.Q.

1) (c) literacy 2) (d) both (b) and (c) 3) a 6% 4) (d) all of the above 5) (b) ICMR

6) (d) 63 7) (b) 799 8) (b) Human capital formation.

Fill in the blanks :

1) Education (2) 74 % (3) Job (4) Human capital (5) 6to 14 (6) 2009 (7) National council of Education Research and training (8) Excludes

Very short type questions answers:-

1) The stock of skills and knowledge in human beings is refferred to as human capital .
2) Investment in human resources with a view to increase their productivity is called human capital formation.
3) Physical capital implies the non - human assets of the production unit, which helps the production process.
4) It refers the shifting of works from low paid area to high paid area to increase their worth as human capital
5) The training takes place in a normal working situation is called on-the- job training .
6) The overall development which includes economic, socio, political spiritual aspect is called human development
7) Literacy refers to ability to read and write.
8) The migration of skilled and productive manpower to developed countries is called brain drain.
9) Education and health are two major sources of human capital in a country.
10) United Nations Development programme prepares human development index.

CHAPTER-6

Rural Development

In India the majority of the poor people live in the rural areas and agriculture is the major source of livelihood in these areas. Mahatama Gandhi said that the real progress of India did not mean simply the growth of urban areas but mainly the development of villages. This idea of village development being at the centre of the overall dvelopment of the nation is relevant even today. It is because two-third of the Indian population depends on agriculture. That is why we have to see a developed rural India if our nation has to realise real progress.

6.1 Meaning of Rural development:-

Rural development focuses on the challenges and need for fresh initiatives for development of areas that are lagging behind in overall development of village economy. It includes: Human capital formation in rural areas, Land reforms, provision of social and economic infrastructure, Rural credit, Rural marketing, etc. So, we can say that rural development is a continuous and comprehensive socio-economic process.

6.2 The challenges of Rural Development:- The chronic challenges of Rural development are:

(i) Challenges of rural credit.

(ii) Challenges of rural marketing

On the other hand, the emerging challenges of rural development are:

(i) Diversification of Agriculture activity.

(ii) Sustainable development and organic farming.

6.2.1 The chronic challenges of Rual Development :-

A) Rural Credit :- Rural Credit means provision of loans especially in production for agriculture and non- agricultural sectors. Credit is the lifeline of farming activity in rural areas because most farming families are small and marginal land holders and the gap between swoing and harvesting of crops in quite long.

In India, the credit for farmers are divided into three broad categories as under:

(i) Short-term-credit: These loans required for the purchase of seeds, fertilisers, pesticides etc. This kind of loan raised for the time period of 6 months to 1 year.

(ii) Medium - term credit : This type of loans need for purchasing machinery , construction of fences, digging the wells . Time period for these loans from 1 year to 5 years.

(iii) Long term credit: The period of such loans ranges between 5 to 20 years. This is required for purchase of additional land.

Sources of Rural Credit :

The sources of rural credit are divided into two categories: (a) Institutional and (b) Non-institutional.

(a) Institutional sources:- The institutional sources are cooperative credit societies, land development banks, commercial banks, regional rural banks, government, National Bank for Agriculture and Rural Development(NABARD) and also self- help groups.

Out of total institutional credit, cooperative credit contributes nearly 15% and commercial banks about 75%

(b) Non-institutional sources:-

The traditional sources of agricultural credit in India are money lenders, landlords, village traders, commission agents etc.

Rural Banking a critical appraisal:- In India the rural banking has significantly expanded over time. This expansion increase the income in agriculture and non- agricultural sectors in rural areas. Establishment of NABARD has made a positive difference in institutional credit that has gone a long way in liberating the farmers from debt trap of money lenders, it also promoted commercialisation of agriculture.

There are some notable deficiencies in our rural banking system till today. They are as follows:-

(i) Apart from commercial banks, most financial institutions have failed to develop a culture of saving for the future among the farmers.

(ii) The government often shown lack of strictness in the loan recovery. As a result default rate has tended rise over time.

(iii) Banking credit has invariably been tied to collaterd, so that large section of holders often left out

(B) Rural Marketing:- Rural or agricultural marketing is a process which involves assembling , storage, processing, transportation, Packing, grading and distribution of different agricultural commodities across the country. At the time of independence, agricultural marketing was almost under the complete control of moneylenders, traders and commission agents. The farmers were obliged to sell their crop to them only.

Measures to improve rural or agricultural marketing by the government:- After independence government has adopted various measures to improve the system of agricultural marketing in the country.

(i) Regulated markets:- This market is organized in order to protect farmers from malpracties of sellers and brokers. The market commities ensure that the farmers get appropiate price for their produce.

(ii) Cooperative marketing:- Market wise society are formed by farmers to sell the output collectively and to get better price.

(iii) Infrastructural facilites:- Government had also provided infrastructural facilities like roads, railways, storage and processing units.

(iv) Strandardization Grading:- Grading and quality control helps farmers to get good price for quality products.

(v) Minimum support price policy:- MPS policy is an important step initiated by the government to improve agricultural marketing system. MPS is an assurance to the farmers that their produce would be purchased by the government at the specified price. Thus, the farmer are always assured of same minimum income from the sale of their products. In the year 1966-67 that Minimum Support Price (MSP) was introduced by the Indian government.

Emerging Alternative marketing channels:-

Emerging alternatives of agricultural marketing are a ray of hope to the small and marginal farmers. Direct sale by the farmers to the consumers is one such channel. Various states launching this channels through 'Apni Mandi', 'Big Bazars' etc.

Direct sales contract with farmers by the national and multinational companies like 'Reliance Retails' is another alternative channel of agricultural marketing.

These kind of marketing system not only help in expanison of market for the products but also reduce 'price-risk' for the small and marginal farmers.

6.2.2 The emerging challenges of Rural Development:-

The emerging challenges of rural development are

(i) Diversification of agricultural activity and

(ii) Sustainable development and organic farming.

(A) Diversification of agricultural activity:- This means the excess of people in agriculture can be given gainful employment in some other allied activities in agriculture and non- farm activities. Diversification includes two aspects:-

(a) Diversification of crop production:- This invlolves shift from single cropping system to multiple cropping system. This also involves shifting cropping pattern from food grains to cash crops. The main aim is to promote the subsistence farming to commercial farming.

(b) Diversification of productive Activities:- The increasing labour force needs to find alternative employment opportunities in other non- farm sectors like Animal Husbandary, Fisheries, Horticulture, Cottage Industry etc.

Animal Husbandary:- Animal husbandary is an important area of employment in India, it is also called live stock farming. Nearly 70 million small and marginal farmers are employed in this sector. "operation Flood" resulted in eight times increase in milk production between 1951-2014. Poultry, Cattle, goat/sheep are important components of livestock in India.

Fisheries:- The fishing community in India depends on inland sources like rivers, lakes, ponds, streams, and also the marine sources like seas and oceans. Total fish production accounts for 1.8% of GDP. Fishing sector suffers from low earnings, low level of literacy. 60% of the workforce in export marketing and 40% in internal market are women.

Horticulture: Horticulture is another alternative source of employment in rural areas . Horticulture crops include fruits, vegetables and flowers. Presently, India is second largest producer of fruits and vegetables in the world. High crop productivity led to Golden Revolution in horticulture farming during the years 1991-2012. India has emerging as a leading producer of mangoes, bananas, coconuts, cashew nuts and spices.

Cottage industry:- Cottage industry has been a traditional source of non- farm production activity in rural areas. This industry has been dominated by activities like spinning, weaving, dyeing and bleaching.

Other alternatives livelihood options:- Applicatioin of IT to rural develoment may help in weather forecasting, predict areas of food insecurity, provide information on demand patterns etc.

(B) Sustainable Development and organic Farming:- It is the development which aims to develop the present generation without affecting the quality of life of future genration. It does not prohibit the use of any resources, but aim to restrict their use in such a way that it can be left for the future generation.

Oranic farming is a system of farming that relies upon the use of organic inputs like animal manures and composts for cultivatioin. It avoids the use of chemical fertilizers, insecticides and pesticides.

Advnantages of organic farming:-

(i) It provides healthy food as organcally grown food has more nutirutional value than food grown through chemical farming .

(ii) Use of animal manures and composts helps sustain soil fertility.

(iii) Organic farming is environment friendly.

(iv) It can provide more employment and income in rural areas.

Though the organic farming offers lesser yield as compared to conventional farming, but being a sustainable development process and environmental-friedndly, organic farming must be given preference.

Exercise

(A) True/ False

1) Medium term credit is required for purrchase of machinery.
2) Money lender, land-lords are the institutional sources of credit.
3) Rural marketing is a chronic challenge of rural development.
4) The time period for long term credit is 5 to 20 years.
5) Regulated markets are organized in ordre to protect farmers from alternative marketing channels.
6) Multiple cropping is an example of diversification of crop production.
7) Agriculture marketing include the grading of produce according to its quality.
8) The state Bank of India was set up in 1955 with a focus on urban credit.
9) The aims of sustainable development is to protect future generation.
10) Organic farming is eco-friendly.

(B) Multiple choicd Questions:

1) India adopt social banking and multi agency approach to meet rural credit in the year.

   (a) 1965 (b) 1969 (c) 1991 (d) 2001

2) When was NABARD set up ?

   (a) 1965 (b) 1981 (c) 1991 (d) 1982

3) During reform period public investment in agriculture has:

   (a) declined (b) increased (c) stable (d) fluctuated

4) Operation flood is associated with -

   (a) Fish (b) Eggs (c) Wheat (d) Milk

5) Total fish production accounts for ---------% of GDP.

   (a) 2 (b) 3.2 (c) 4.1 (d) 1.4

   6) ---------- is not a key issue in Rural development.

   (a) Rural credit (b) Rural marketing (c) Self- help Group (d) Tourism

7) Short period credit is need for:

   (a) purchase of new land (b) purchase machinery

   (c) purchase of seeds (d) maintence of existing land

8) Need for organic farming arises due to–

(a) it is eco- friendly (b) it sustains soil fertility.

(c) it provides healthy food (d) all of these.

(C) Fill in the blanks:-

1) Commercial banks , NABARD etc, are --------- source of rural credit.

2) SHG stands for ------.

3) NABARD stands for ------.

4) -------- million small an marginal farmers are employed in animal husbandary in India.

5) Golden Revolutin is concerned with -----.

6) Diversification of crop production ----- market risks.

7) MSP means -------.

8) More than ----% of farm produce gets wasted due to lack of storage.

(D) Very short type questions answers:-

1) What do you mean by Rural development?

2) Define micro- credit ?

3) What is rural credit?

4) What is sustainable development?

5) What are the non- institutional sources of credit?

6) What is organic farming?

7) What is minimum support price?

8) Define "Operation Flood".

9) When golden revolution occured in India?

10) What is agriculture surplus?

(E) Answer the following questions:- (3/4 marks)

1) What are the chronic challenges of rural development?

2) Describe Rural credit.

3) What are the main sources of rural credit?

4) What are the deficiencies in our rural banking system?

5) What is Rural marketing?

6) What measures taken by the Indian government to improve agricultural marketing?

7) Define - MSP.

8) Write a short note about ‘emerging alternative marketing channels in India.

9) What is diversification of agricultural activity?

10) How organic farming is better than conventional farming ?

11) Write a short note about - sustainable development.

12) What are the advantages of organic farming?

13) Write short note about - Horticulture, Fisheries, Animal Husbandary.

14) Explain the limitations of organic farming.

(F) Answer the following questions:- **(6 marks)**

1) What are the emerging challenges of rural development ?

2) Why agricultural diversification is essential for sustainable development?

3) Write the importance of animal husbandary, fisheries horticulture and information technology as a source of diversification of activity.

4) Describe the chronic challenges of rural development in India.

Answer Key

A) True/False:

1) True 2) False 3) True 4) True 5) False 6) True 7) True 8) False 9) True 10) True

B) Multiple Choice:

1. (b) 2. (d) 3. (a) 4. (d) 5. (d) 6. (d) 7. (c) 8. (d)

C) 1) Institutional 2) Self- help group 3) National Bank for Agriculture and Rural Development 4) 70 5) Horticulture 6) minimises 7) Minimum support price 8) 10%

D) Very short type questions answers:

1) Rural development means an 'action- plan' for the social and economic growth of the rural areas.

2) Micro- credit is the lending of small amount of money at low interest to new businesses in the developing world.

3) Rural - credit means provision of loans especially in production for agriculture and non-agricultural sectors.

4) The development which aims to develop the present generation without affecting thel quality of life of future generation is called sustainable development.

5) Land- lords, villages, traders and money lenders are the three important sources of non-institutional agricultural credit in India.

6) Organic farming is a production system that sustains the health of soils, ecosystem and people.

7) Minimum support price is the price fixed by the government to safe guard the interest of farmers.

8) In the time period 1951-2014, the milk production increased by eight times. This milk was pooling according to different quality and processing and marketing by cooperatives . This is called 'operation flood'.

9) In the years 1991-2012 the golden revolution occurred in India.

10) The excess of production over consumption which is sold in the market is called agriculdture surplus.

CHAPTER-7

Employment

People work for earning a living. It gives us a sense of self worth and enables us to relate ourselves meaningfully with others. This enables human resources to contribute to national income and hence the development of the country by engaging in various economic activities. That is the real meaning of earning a living.

Studing about working people helps to understand the quality and nature of employment in our country, to plan human resources, to analyse the contribution of different industries and sectors to national income and helps to address many social issues such as exploitation of marginalised sections of the society, child labour etc.

7.1 BASIC CONCEPTS :- To understand employment and problem of unemployment and underemployment , we need to understand some basic concepts. These are–

(i) Gross Domestic product (GDP):- Money value of all final goods and services produced in a country in a year is called GDP at market price (GDP_{MP}).

If we add net factor income from abroad (NFIA may be negative, positive or zero) to GDP_{MP} this become gross national product at market price(GNP_{MP}) .i.e , $GNP_{MP}=GDP_{MP}+NFIA$.

(ii) Economic Activities:- These are the activities which contribute to gross domestic product or gross national product of the country.

(iii) Workers:- All those people who are engaged in economic activities, in any capacity-high or low, are workers. It includes-

(a) All those who are engaged in economic activities .

(b) Those who temporarily absent from work due to illness, injury, physical disabilitly, festivals, bad weather, social function etc.

(c) Those who help the main workers in economic activity.

(d) Workers who are paid by their employers for their work.

(e) Those who are self employed.

(iv) Types of workers:

- Workers
  - Hired workers
    - Regular
    - Casual
  - Self employed

Workers who are employed by others and are paid wages or salaries in return of their services are called Hired workers. They work on resources (land , capital and entrepreneur) provided by others. This is also known as wage employment. They are of two types-

(a) Regular workers:- They are hired on permanent/ regular basis by their employers, who have strong bargaining power and entitled to social security benefits from their employers. e.g teachers employed in a school, bus conductors etc.

(b) Casual workers:- These are not hired on permanent/ regular basis by their employers and they have weak bargaining power and not entitled to social security benefits from their employers. e.g construction workers, labourers etc.

Workers who use their own resources (land, labour, capital, enterprise) to earn their living are called self- employed workers. e.g, a shop owner, a doctor running his own clinic, businessman.

It is noted that about 52% of workforce in India are self-employed and nearly 18% and 30% of India's workforce are regula workers and casual workers respectively.

(v) Labour Force and Workforce :-

Labour force includes all persons in the age group between 15 years and 60 years, who are working and not working but available for work. In other words, it includes employed and unemployed workers.

Work force includes all persons who are employed at a particular point of time , that is who are engaged in economic activities.

Relation between labour force and work force is–

Labour force = work force + unemployed persons

So, unemployed persons = Labour force – work force.

(vi) Rate of unemployment-

It is the ratio of number of unemployed persons to labour force multiplied by 100

$$\text{Rate of unemployment} = \frac{\text{No of unemployed persons}}{\text{Labour force}} \times 100$$

(vii) India's workforce:- During 2011-12 , India had about 473 million strong workforce. The rural workers constitute about three-fourth of this 473 million. In India, 70% of the workforce are men and the rest are women. One third of the rural workers are women whereas just one - fifth are women in urban areas. Women who carry out domestic work as well as participate in farm labour but not paid wages are not categorised as wosrkers.

7.2 Participation of people in employment:-

Employment is an activity which enables a person to earn. When undertaken this activity, a person renders his services and get paid in return . Employment may be classified as wage employment (hired workers) and self- employment (self- employed workers).

The nature of employment in India is multifaceted . Some get employment through out the year; some others get employed for only a few months in a year.

7.2.1 Worker population Ratio:- Worker population ratio is an indicator which is used for analysing the employment situation in the country. The ratio tells us the proportion of population actively contribute to the production of goods and services of a country.

If the ratio is high, it means that the engagement of people is greater . If it is medium or low, it means that a very high proportion of population is not involved directly in economic activities.

$$\text{Worker population ratio or workforce participation ratio} = \frac{\text{Work force / Total workers}}{\text{Total Population}} \times 100$$

Here population is defined as total number of people who reside in a particular locality at a particular point of time.

7.2.2 Worker Population Ratio in India (2011-12)

	Worker Population Ratio		
Sex	Total	Rural	Urban
Men	54.4	54.3	54.6
Women	21.9	24.8	14.7
Total	38.6	39.9	35.5

Let us study some statistaical data on worker population ratio in India. This table shows -

(i) Compare to urban sector, people in rural areas have limited resources to earn and have limited scope of education at higher level, so they participate more in employment market. For every 100 person, about 39 are workers in India. In urban areas the proportion is about 36 as compared to about 40 in rural areas.

(ii) number of men workers in rural areas (54.3%) is less than the men workers in urban areas (54.6%) which shows migrants from rural areas taking up unskillled and semi- skilled job in urban areas.

(iii) Due to poor economic conditions of rural people, number of women workers in rural areas (24.8%) is more than the women workers in urban areas (14.7%)

(iv) Compare to females, move males are found to be working. Families in Inida discourage female members to work because men are able to earn high incomes.

(v) Women in general and urban women in particular are not working, one of the reasons is that their many activities are not recognised as productive work.

7.3 Distribution of Employment in India (By Gender, Region and differnt sectors)

7.3.1 Distribution of Employment by Gender (Male and Female) :-

(i) **Self employment -** in 2011-12 , more than 50 % workforce for both male and female workers are self employed in India.

(ii) **Casual workers:-** Casual wage work is the second major source (approx 30%) for both men and women. They casually engaged in others farms and get salary in return.

(iii) **Regular workers:-** Regular salaried work is more popular among men (20%) as compared to women (13%). The reason for this could be that since this type of work requires skills and a higher level of literacy, and women might not have been engaged to a great extent.

7.3.2 Distribution of Employment by Region (Urban and Rural areas) :-

(i) Self Employment - It is a major source of livelihood in both the rural areas (56%) and urban areas(43%) . Rural people work on their own plots of land and cultivate independently, so self employment is more in rural areas.

(ii) Casual Workers :- Casual wage work is second major source of employment in rural areas with 35% compare to 15% in urban areas. It is higher in rural areas due to lack of availability of regular jobs.

(iii) Regular Workers:- Regular salaried work is major source of employment in urban areas with 42% as compared to just 9% in rural areas. It is because there are more job opportunities available in urban areas.

The nature of work in urban areas is different. There are factories, shops, offices of various types as well as enterprises in urban areas require worker on a regular basis.

7.3.3 Distribution of Employment in Different sectors (Employment in firms, factories and offices) :

In the course of economic development of a country, labour (workers) flows from agriculture (primary sector) to industry (secondary sector) and services (tertiary sector) . In this process , workers migrate from rural to urban areas .

When this structural changes take place , share of employment reduces in primary sector and secondary sector and increases in the tertiary sector . This shift can be understood by looking at the distribution of workers by industry in eight different industrial divisions. They are - (i) Agriculture, (ii) Mining and Quarrying , (iii) Manufacturing (iv) Electricity, Gas and water supply, (v) Construction, (vi) Trade, (vii) Transport and storage , (viii) services.

All the working person engaged in these divisions can be clubbed into three major sectors viz.

(a) Primary sector whihc includes (i)

(b) Secondary sector which includes (ii), (iii), (iv), (v)

(c) Tertiary sector which includes (vi) , (viii) and (viii)

Table below shows the distribution of working persons in different sectors during the year 2011-12.

Distribution of work force by industries (in %), 2011-12

Industrial Category	Place of Residence		Sex		Total
	Rural	Urban	Men	Women	
Primary Sector	64.1	6.7	43.6	62.8	48.9
Secondary Sector	20.4	35.0	25.9	20.0	24.3
Tertiary Sector	15.5	58.3	30.5	17.2	26.8

The above Table shows:

(i) Primary sector is the major source of employment in India. Next is tertiary sector and lastly secondary sector.

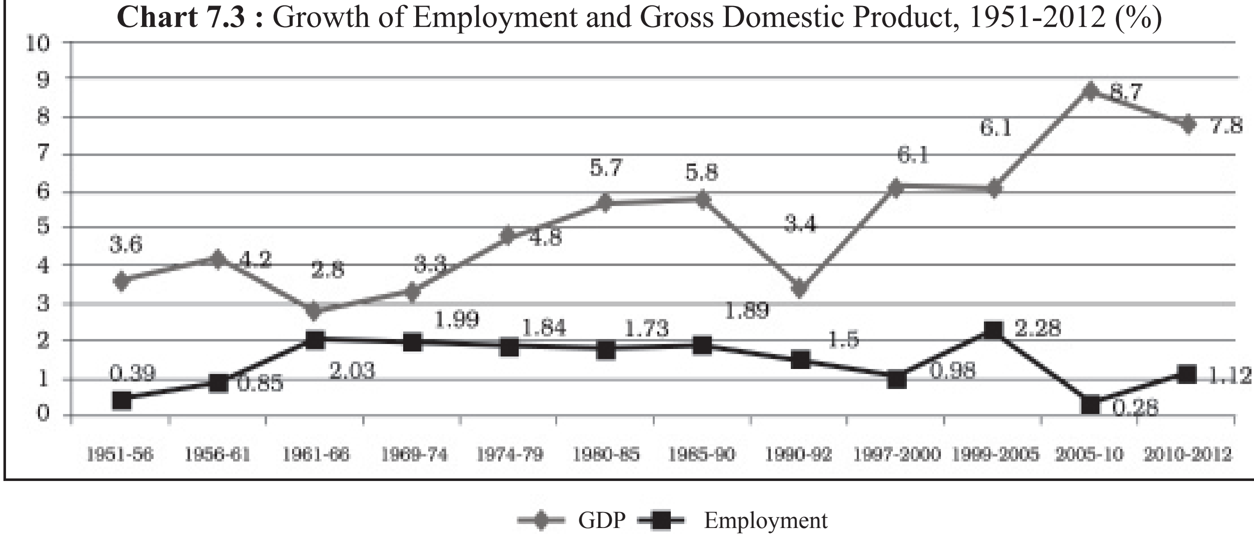
(ii) Primary sector is the main source of employment in rural areas also but in urban areas service sector contributes more in employment generation. It is because of better infrastructural facilities like banking, insurance, transport in urban areas.

(ii) Secondary sector (manufacturing industries, construction and other industrial activities) contributes more in urban areas (35%) compare to rural areas (20.4%)

(iii) It is shown that women workers concentration is very high in primary sector(62.8%) both in urban and rural areas. It is because women are confined to work in primary sector due to lack of skills and education and their poor economic condition . Men get more opportunities in both secondary and service sectors.

7.4 Growth and changing structure of Employment :- There are two main developmental indicators to explain an economy-Growth of employment and Growth of GDP.

Chart 7.3 : Growth of Employment and Gross Domestic Product, 1951-2012 (%)



Trends in Employment Pattern (Sector-wise and Status-wise). 1972-2021 (in%)

Item	*1972-73*	*1983*	*1993-94*	*1999-2000*	*2011-2012*
Sector					
Primary	74.3	68.6	64	60.4	48.9
Secondary	10.9	11.5	16	15.8	24.3
Services	14.8	16.9	20	23.8	26.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Status					
Self-employed	61.4	57.3	54.6	52.6	52.0
Regular Salaried Employees	15.4	13.8	13.6	14.6	18.0
Casual Wage Labourers	23.2	28.9	31.8	32.8	30.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Highlights

(i) Since 60 years of planned development , India aimed at expansion of economy through increase in national product and employment.

(ii) During this period of 1950-2010, GDP of India grew positively, ranging between 4% to 7% and was higher than the growth of employment. The growth of GDP was fluctuated always but employment grew at a stable rate of about 2%

(iii) During this period, there was a widening gap between the growth of GDP and employment.

(iv) It means that India has able to produce more goods and services without generating employment. This phenomenon is referred to as 'jobless growth'.

So, jobless growth is a situation when there is an increase in the growth of GDP without corresponding increase in level of employment.

(v) The above line diagrame also shows that in the late 1990s employment growth started declining and reached the level of growth that India had in the early stages of planning.

7.4.1 Changing structure of Employment (sector wise)

In the scenario of jobless growth it is necessary to analyse employment trends according to sectors and status.

Trends in Employment pattern, sector wise, 1972-2012 (in %)

Sector	1972-73	1983	1993-94	1999-2000	2011-12
Primary	74.3	6836	64	60.4	48.9
Secondary	10.9	11.5	16	15.8	24.3
Services	14.8	16.9	20	23.8	26.8
Total	100.0	100.0	100.0	100.0	100.0

(i) Due to job options available in secondary and tertiary sectors a sharp decline in primary sector has been noticed.

(ii) Secondary sector exhibited incease from around 11% in 1972-73 to around 24.3% in 2011-12. It is because of increase in public and private sector establishments.

(iii) Tertiary sector showed increase from around 15% in 1972-73 to around 27% in 2011-12. It is because of better infrastructural facilities like banking, insurance, transport and communation etc.

(iv) These trends prove that structural changes took place in Inida. There is shift in employment from primary sector to secondary and tertiary sector.

7.4.2 Changing Structure of Employment (Status wise) : Processs of Casualisation of Workers

Trends in employment pattern status wise 1971-2012, (in %)

Status	1972-73	1983	1993-94	1999-2000	2011-12
Self-employed	61.4	57.3	54.6	52.6	52.0
Regular salaried employees	15.4	13.8	13.6	14.6	18.0
Casual Wadge labourers	23.2	28.9	31.8	32.8	30.0

The above table shows that–

(i) Percentage of self-employed workers declined from about 61% in 1972-73 to about 52% in 2011-2012, though it still continues to be the major source of employment . `

(ii) Regular salaried workers has increased slightly from 15.4% in 1972-73 to 18% in 2011-12 .

(iii) Share of casual workers has increased from around 23% in 1972-73 to 30% in 2011-12.

(iv) The process of moving from self-employment and regular salaried employment to casual wage work is called casualisation of workforce . It is a situation which percentage of casually hired workers in the workforce tends to grow overtime

7.5 Informalisation of Indian workforce :-

The structure of employment in India can be divided into - Formal or organised sector and Informal or unorganized sector.

It is observed that employment growth has declined in the organised sector and has increased in the unorganised or informal sector . This situation is called informalisation of workforce. It refers to a situation when the proportion of workforce in the informal sector to total workforce increase.

Difference between formal and informal sector

Formal sector	Informal sector
1) All the public sector establishments and those private sector establishments which employ 10 or more hired workers are called formal sector establishments.	1) All private sector establishments to which employ less than 10 workers are called informal sector establishments. It includes millions of farmers, agricultural labourers, owners of small enterprises etc.
2) Employees working in this sector are known as formal workers.	2) Employees working in this sector are known as informal workers.
3) The workers are entitled to social security benefits.	3) They are not entitled to social security benefits and do not have any protection from government.
4) The workers in this sector can form trade unions. They earn more than those in informal sectors.	4) They cannot form trade unions and have weak bargaining power .They do not get regular income and also dismiss without any compensation.
5) Their rights are protected by labour laws.	5) Their rights are not protected by labour laws.
6) Out of 473 million workers around 30 million workers(around 6%) is employed in the formal sector . Out of 30 million formal workers only 6 million i.e., 20% are women and rest 24 million are men. (According to 2009- 2012 data)	6) 94% of work force is employed is informal sector. In the informal sector male workers account for 69% i.e. 310 million workers and 31% (133 million) is women workers.

7.6 Unemployment :-

Unemployment is a challenge which is generally found in every economy whether developed or less developed. NSSO defines unemployment as a situation in which all those, owning to lack of work, are not working but seek work through many medias . Unemployment measures involuntary idleness of individuals.

7.6.1 Types of unemployment

There are three sources of data on unemployment- (i) Reports of census of India, (ii) NSSO'S Reports of employment unemployment situation and (iii) Data of Directorate General of Employment and Training according to the Registration with Employment Exchanges.

They provide date on the attributes of the unemployment and the variety of unemployment prevailing in our country.

On the basis of different estimates of enemployment, it can be broadly classified into three catagories–

Unemployment

- Rural unemployment
  - ⇒ Disguised unemployment
  - ⇒ Seasonal unemployment
- Urban unemployment
  - ⇒ Educated unemployment
  - ⇒ Industrial unemployment
- Other types of unemployment
  - ⇒ Open unemployment
  - ⇒ Underemployment
  - ⇒ Structural Unemployment
  - ⇒ Frictional unemployment
  - ⇒ Cyclical unemployment

7.6.2 Causes of increasing Unemployment in India

Following are the main casuses of increasing unemployment in India:-

(i) Population Explosion.

(ii) Low rate of economic growth.

(iii) Low level of development in agriculture.

(iv) Low level of industrial development .

(v) Lack of vocational and technical education.

(vi) Low level of capital formation.

(vii) Immobility of labour.

7.6.3 Consequences of unemployment in India:-

Problem of unemployment brings many harmful effects along major points are mentioned as below:-

a) Economic effects:

(i) Fall in production and income .

(ii) Low level of saving and investment .

(iii) Poverty

(b) Social Effects:

(i) Low level of standard of living .

(ii) Inequality in the distribution of income.

(iii) Social unrest .

7.6.4 Suggestions to solve the problem of unemployment:

Following are some important measures to solve unemployment :-

(i) Increase in growth rate of GDP .

(ii) Population control .

(iii) Development of agricultural sector..

(iv) Educational sector reforms .

(v) Financial help to self- employed workers .

(vi) Infrastructural Develpment .

(vii) Implementation of employment programmes .

7.6.5 Government and Employment Generation :-

Since India got freedom, the central and state government have stressed upon generating employment opportunities in their policies . The effort of government can be broadly classified into two catagories.

Direct efforts :- Government employs people in various departments for administration purpose .It runs industries , hotels and transport companies and hence provides employment directly to workers. People working in Government schools, Government hospitals, Government offices are some of the example of direct employment by the Government.

Indirect efforts :- When production of goods and services of Government enterprises increases, then private enterpirses which receive raw materials from them , will also be able to incease their production . It will increase employment opportunities in private sector too.

Many programmes that the Government has implemented aim at alleviating poverty through employment generation. That is why these are also known as employment generation programmes. They provide not only employment but also services in area such primary health, primary education, development of community assets by generating wage employment, construction of houses and sanitaion, laying of rural roads etc. Some specific porgrames aiming at generation of employment are REGP, PMRY, SJSRY, SGSY, MGNREGA 2005 etc.

Exercise

MCQ

1) Who is not casual worker-

(a) Construction worker, (b) labourer, (c) Bus conductor, (d) None of them.

2) Rate of unemployment = $\frac{\text{No of unemployed person}}{?} \times 100$

(a) Labour force, (b) work force , (c) Labour force - work force . (d) Labour force +work force

3) Worker population ratio = $\frac{\text{Work force}}{?} \times 100$

(a) Total population, (b) Total workers, (c) labour force, (d) None of these.

4) In India ,________of workforce are women .

(a) 70% (b) 60% (c) 30% , (d) 40%

5) In India, ________ of the rural worker are women.

(a) $\frac{1}{5}$th (b) $\frac{1}{3}$th (c) $\frac{1}{6}$ th (d) $\frac{1}{2}$ th

6) According to 2011- 12 data , worker populatin ratio in India is about ------.

(a) 38.6, (b) 40 , (c) 35.5, (d) 39.9.

7) The newly emerging jobs ae found mostly in ---------- sector.

(a) primary, (b) secondary , (c) service, (d) All of these.

8) Formal sector includes all those enterprises which employ.

(a) More than 10 workers (b) 10 workers, (c) Both (a) & (b), (d) Neither (a) nor (b)

9) Unemployment common in urban area-

(a) Seasonal unemployment, (b) Disguised unemployment, (c) Open unemployment

(d) None of these .

10) MGNREGA is a scheme to provide.

(a) Wage employment (b) Self- employment, (c) Both (a) & (b), (d) Neither (a) nor (b)

True / False

1) Who temporarily absent from work is a worker .
2) Labour force includes employed and unemployed workers.
3) About 52% of workforce in India are self- employed.
4) In India, the rural workers constitute about three- fourth of total workforce (473 million).
5) In India, worker population ratio in urban is higher than rural areas.
6) In India, casual workers is more than self employed
7) Regular salaried work is major source of employment in urban areas in India.
8) 94% of workforce is employed in informal sector in India.
9) Cyclical unemployment occurs due to phases of recession and depression.
10) Unemployment causes high level of saving and investment.

Fill in the gaps:

1) Economic activities are the activities which contribute to -------- of the country.
2) Self- employed workers use their own --------- to earn their living.
3) Labour force= work force + --------------.
4) Employment may be classified as ------------------. and -------------.
5) In the course of structural change, share of employment reduces in ---------- sector.
6) Transport and storage includes in --------- sector.
7) In urban areas -------- sector contributes more in employment generation.
8) The workers is informal sector are not entitled to ----- benefits.
9) In the late 1950s about -------- of agriculture workers in India was disguised unemployment .
10) Income earned by a smuggler is a part of --------- income.

Short question carrying : 1 mark

1) What is the real meaning earning a living?
2) What is meant by workforce?
3) Write a use of worker population ratio or participation rate?
4) Define jobless growth.
5) What is meant by informalisation of workforce?

6) What is meant by casualisation of workforce?

7) Define Disguised unemployment.

8) Define structural unemployment.

9) What is meant by indirect employment ?

10) Name any two sources of data on unemployment .

Answer the following: carrying: 3 or 4 marks

1) Who are workers? Discuss.

2) Write the differences between hired workers and self- employed workers.

3) Write the differences between regular workers and casual workers.

4) Write the importance to study workers population ratio or participation ratio.

5) Discuss the situation of organized and unorganized sector in India.

6) Write the causes and consequences of unemployment .

7) Write the source of data of unemployment .

8) Discuss about the direct and indirect employment , generated by Government.

9) Write different measures of unemployment.

10) Must follow Text Book Exercise ,Question Number- 3,4,8,10,13,14,16,17,and 18

Answer the following questions : 6 Marks

1) Analyse the recent trends in sectoral distribution of workforce in India.

2) Write major differences between organized sector and unorganized sector in India.

3) Give some suggestions to solve the unemployment problem in India.

4) Discuss about different employment generation schemes implemented by Government of India.

Answer Key

MCQ

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

True /False

(1) True , (2) True , (3) True , (4) True , (5) False ,(6) False, (7) False , (8) True , (9) True , (10) False.

Fill up the gaps

(1) GDP/GNP , (2) Resources , (3) Unemployed person,

(4) Wage Employment and self- employment, (5) Primary, (6) Service, (7) Tertiary ,

(8) Social security ,(9) One third (10) Illegal.

Short answer type : 1 mark.

1) The works done by human resources contibute to national income, and hence the development of a country. It is the real meaning of earning a living.
2) Workforce includes all persons who are employed at a particular point of time, that is, who are engaged in economic activities.
3) It helps to analyse the employment situation in the country.
4) Jobless growth is a situation when there is an increase in the growth of GDP without corresponding increase in level of employment.
5) The employment growth has declined in the organised sector and it has increase in the unorganized sector. This situation is called information of workforce.
6) The process of moving from self - employment and regular salaried employment to casual wage work is called casualisation of workforce.
7) Disguized unemployment is that part of population that is not employed at full capacity and withdrawl of that part of population from production process does no effect the aggregate output .
8) Structural unemployment is unemployment that creates due to shifts in an economy.
9) When the initiatives done by govt. enterprises effects to increase the employment opportunities in private sector is called the indirect employment
10) i. Reports of census of India.
    ii. NSSO's Reports of employment and unemployment situation.

CHAPTER-8

Infrastructure

Infrastructure plays an important role in the economic development and production capactiy formation of a country.

In India, some states are performing much better than others in certain areas like punjab in agriculture, Maharastra in industrial sector, Karnataka in informational technology industry etc. It is because these states have better infrastructure in the areas they excel than other states of India.

Infrastructure refers to all such facilities, services, activities and informational platforms which are needed to provide different kinds of services and benefits in an economy.

Infrastructural services and benefits includes:-

- Roads , Railways, ports, airports, dams, power stations, oil and gas pipelines, telecommunication facilities etc.
- The country's educational facilities like schools, colleges and vocational centres.
- Health systems including hospitals, diagonostic centres along with doctors and technical staffs.
- Sanitary system including clean drinking water facilities and drainage facilities.
- Monetary system including banks, insurance and other financial institutions.
- Infrastructure provides supporting services in the main areas of industrial and agricultural production, domestic and foreign trade and commerce.

Infrasrtructure can be divided into two categories-

1) **Economic infrastructure:-** Infrastructure associated with energy(power), transportation and communication are included in the economic infrastructure.

   It is important to extend economic activities like consumption, production and trade of commodities along with services.

2) **Social infrastructure:-** Infrastructure associated with education, health and housing are included in the social infrastructure.

It is important to provide such facilities to improve quality of human resource and to build social sector of the economy.

Both of these infrastructures are supplementary and compulsory to each other.

Importance of infrastructure:-

(i) To raise productivity.

(ii) Provides better scope of employment.

(iii) Improves functioning of the economy.

(iv) Raise economic development .

(v) For better quality of life.

(vi) Increases foreign investment.

(vii) Increases scope for earning through outsourcing.

The State of Infrastructure in India:-

1) Rural people have to walk long distances to fetch fuel, water and other basic needs.

2) The Census 2001 shows that in rural india only 56% households had an electricity connection and 43% house hold still use kerosene.

3) Tap water availability is limited to only 24% rural households and remaining people use open sources of water

4) Access to improved sanitation in rural areas was only 20%

5) India invests only 34% of its GDP on infrastructure which is below that of China and Indonesia.

6) Now public private partnerships has started playing vital role in the infrastructure development.

Energy:- Energy plays a vital role in the development of an economy as it influence the production process and consumption activities.

Sources of energy:-

1) Commercial energy:- Those sources of energy for which the user have to pay price (ex:- petrol, diseal, Coal, and electricity)

2) Non- commercial energy:- It consists of those sources of energy which generally do not command a price .(Ex- Fire wood, dried dung, agricultural waste.)

3) Conventional sources of energy:- Such sources are non- renewable resources of energy which are in use since long. Ex Coal, petrolium, gas.

4) Non- conventional sources of energy:- These are the newly launched sources of energy and most of them are renewable resources of energy. Ex:- Biomass, Solar energy, Wind energy.

Consumption pattern of energy in India:-

In India, commercial energy consumption makes up about 74% of total energy consumed. This includes Coal with the largest share of 54% , followed by oil at 32% , natural gas 10% and hydro energy at 2%. Non-commercial energy accounts for 26% of total energy consumption in India.

Industrial sector has the largest share of 44% of total consumption of commercial energy in India (2014-15). Agricultural sector consumes only 18% of commercial energy in India.

Power (Electricity):- Power or electricity is an important element of infrastructure and modern civilization.

In order to have 8% GDP growth per annum, power supply needs to grow arround 12%.

Sources of Power (India) 2016

Thermal Power Power (67%)	New and Renewable Power (17.30%)	Hydro-electric Power (Cheapest source) 13.60%	Nuclear power (2.10%)

8.2.3 Emerging challenges in power sector:-

1) Inadequate generation of energy (electricity) is major problem in India. Electricity generation capacity is not enough to meet up the need of development process (7-8% growth) .
2) Low plant load factor is another cause of electricity problem in India. The installed capacity is underutilised as plants are not maintained properly.
3) Most of the State Electricity Boards incur losses (more than 500 billion) due to transmission and distribution losses etc.
4) Thermal power plants are facing shortage of raw materials and coal supplies.
5) Private sector and foreign investors are not participating power sector properly.

8.2.4 Suggested measures to meet power crisis:-

(i) Improvement in plant load factor should be attained .

(ii) Steps should be taken to increase production capacity.

(iii) Proper management system should be applied for control of transmission and distribution losses.

(iv) Encourage privatisation and FDI in power generation.

(v) Encourage the uses of renewable resources.

8.3 Health :-

Health is not only absence of disease but also the ability to realise one's potential . Health is the holistic process related to the overall growth and development of nation.

Some important indicators of health scenario are infant mortality, maternal mortality rates , life expectancy, nutritional levels, incidence of communicable and non-communicable diseases etc.

Health facilities improve the efficiency and productivity of the people and increase production of goods and services.

Health infrastructure includes hospitals, doctors, nurses and other paramedical staffs, beds, equipments and a well developed pharmaceutical industry.

Status and expansion of health infrastructure in India :-

The government has constitutional obligation to guide and regulate all health related issues such as medical education, adulteration of food, drugs and poisons, medical profession, vital statistics , mental deficiency and lunacy.

The Union Government initiates policy and plans through the central council of health and family welfare. This organisation takes steps to implement important health programmes like data collection, financial assistance along with technical supports .

At the village level , a variety of public health centres (PHCs) have been set up by the government . More over, voluntary agencies and private sectors also run large number of hospitals.

During 1951-2013, the number of government hospitals and dispensaries increased from 9300 to 44,000 and hospital beds from 1.2 to 6.3 lakh. Nursing personnel increased from 0.18 to 23.44 lakh and allopathic doctors from 0.62 to 9.2 lakh.

Public Health infrastructure in India -1951-2015

Items	1951	1981	2000	2014-15
Hospital (Govt.)	2,694	6,805	15,888	19,653
Bed (Govt.)	1,17,000	5,04,538	7,19,861	7,54,724
Dispensaries	6,600	16,745	23,065	26,325
PHCs	725	9,115	22,842	25,308
Subcentres	-	84,736	1,37,311	1,53,655
CHCs	-	761	3,043	5,396

Source :- www.cbhidghs.nic.in

8.3.1 India's health infrastructure and health care is made up of a three-tier system

1) **Primary health care:-** It includes education concerning prevailing health problems and methods of identifying, preventing and controlling them, promotion of food supply and nutrition and basic sanitation, meternal and child health care, promotion mental health and drugs etc. In order to provide primary health care, hospitals have been set up in villages and small towns. Auxiliary Nursing Midwife (ANM) is the first person who provides primary health care in rural areas. Hospitals(PHC, CHC, Sub-centres) are generally manned by a single doctor, a nurse and a limited quantity of medicines.

2) **Secondary health care :-** Hospitals which have better facilities for surgery, X-ray, Electro

Cardio Gram (ECG) are called secondary health care institutions. They are mostly located in district headquarters and in big towns.

3) **Tertiary Health care:-** All those hospitals which have advanced level equipment and medicines and under take all the complicated health problems along with medical education institutes and research centres come under the tertiary sector. Ex:- AIIMS, New Delhi; Post graduate institute , chandigarh.

8.3.2 Role of private sector:-

1) More than 70% of the hospitals in India are run by the private sector.
2) Nearly 60% of dispensaries are run by the private sector.
3) Private sectors control two- fifth of beds available in the hospitals.
4) Private sector provides health care of 80% out-patients and 46% of in-patients.
5) In 2001-02, there were more than 13 lakh medical enterprises employing 22 lakh people .
6) Since the 1990s, Many NRIs and pharmaceutical companies have set up hospital in India.

8.3.3 Indian system of medicine (ISM) :-

It includes six systems (AYUSH) :- (1) Ayurveda (2) YOGA , (3) UNANI, (4) SIDDHA, (5) NATUROPATHY, (6) HOMEOPATHY.

At present there are 3167 ISM hospitals, 26000 dispensaries and as many as 7 lakh registered practitioners in India.

8.3.4 Indicators of health infrastructure :

- Health infrastructure have expanded in India but still not so satisfactory .
- Expenditure on health sector is just 4.7% of total GDP in India.
- India has about 17% of the World's population but it bears 20% of global burden of diseases(GBD).
- Every year, around 5 Lakh children die of water-borne diseases.
- Malnutrition and inadequate supply of vaccines lead to the death of 2.2 million children every year.
- At present, less than 20% of the population utilises public health facilities only.
- Only 30% of the PHCs have sufficient stock of medicines.

8.3.5 Rural-urban divide :

- India's 70% population live in rural areas, but only 20% of hospitals and 50% of total dispensaries are located in rural areas.
- Rural and urban areas have 0.36 and 3.6 hospitals for every one lakh people respectively.

- The PHCs located in rural areas do not even offer X-ray or blood testing facilities.
- The poorest 20% of Indians living in both urban and rural areas spend 12% of their income on health care while the rich spend only 2%.

8.3.6 Women Health:- Women play an important role in economic and social development. But in India, Women suffer many disadvantages as compared to men in the areas of education, economic activities and health care. Different indicators shows the miserable scenario of women in India.

- The deterrioration in the child sex ratio in the country from 927 in 2001 to 914 in 2011, points to the growing incidence of female foeticide in the country.
- More than 50% of married women between the age group of 15 and 49 have anaemia and nutritional anemia which has contributed 19% of maternal deaths.

8.3.7 Health care and Human right :-

- Health is a vital public good and a basic human right .
- Public- private partnership can effectively ensure reliability, quality, and affodibility of both drugs and medicine
- Proper steps should be taken to create awareness on health and hygiene.
- Strong steps should be taken to improve primary healthcare as it is the most important section of healthcare programmes.
- Both Telecom and IT sector may play an important role to improve health care process and to spread knowledge also .
- But we should also protect our environment from bad effects of infrastrutural expansion.

Exercise

1.1 Are the following statements : True/False? (1 mark)

1) At present , India is able to add only 20,000 MW a year.(write True/False)
2) In India, commercial energy consumption makes up about 90% of the total energy consumption.(write True/False)
3) Agricultural waste is the main item of commercial source of energy. (write True/False)
4) Solar energy is the example of Non- conventional energy. (write True/ False)
5) India invests about 60% of its GDP on infrastructure. (write True/ False)
6) The transport sector was the largest consumer of commercial energy in 1953-54. (write True/ False)
7) In order to have 8% GDP growth per annum, power supply needs to grow arround 20% annually. (write True/ False)

8) At present , nuclear energy accounts for only 2% of total energy consumption in India. (write True/False)

9) More than half of GBD is accounted for by communicable diseases such diarrhoea, malaria, and tuberculosis . (write True/False)

10) Abortions are also a major cause of maternal morbidity and mortality in India. (write True/False).

11) Indian system of Medicine includes four systems.(True/False).

12) CFLs consume 80% less power as compared to ordinary bulbs. (Write True/ False).

1.2 Multiple choice questions (MCQs) :

1) Power generation from water is called.

   (a) Thermal power (b) Hydro electric power.

   (c) Atomic power (d) Tidal power.

2) Which of the following is a renewable resource of energy?

   (a) Solar Energy (b) Wind energy.

   (c) Both (a) & (b) (d) None of these.

3) What percent of GBD does India bear?

   (a) 14% (b) 50% (c) 20% (d) 70%

4) The poorest 20% of Indians spend______of their income on health care.

   (a) 12% (b) 20% (c) 40% (d) 5%

5) Only ——— of the PHCs have sufficient stock of medicine.

   (a) 20% (b) 30% (c) 80% (d) 10%

(6) Which sector has the largest share in total consumption of commercial energy?

   (a) Industrial sector. (b) Household (c) Transport sector (d) None of these.

7) Which of the following is not a non conventional source of energy?

   (a) Solar power (b) Thermal power. (c) Wind power energy (d) Tidal power.

8) Which of the following facilities is included in social infrastructure?

   (a) Roads (b) Housing (c) Internet (d) Electricity.

9) Which of the following system is not included in Indian system of medicines?

   (a) Allopathy (b) Homeopathy (c) Naturopathy (d) Ayurveda.

10) Education and health related to–

(a) Social infrastructure (b) Economic infrastructure.(c) Both (a) and (b) (d) None of these.

11) More than ——— of the hospitals are run by the private sector.

(a) 61% (b) 70% (c) 50% (d) 19%

12) At present , less than —— of population utilise public health and facilities in India.

(a) 30% (b) 20% (c) 14% (d) 2%

13) The census 2001 shows that in rural India only ——— households have an electricity connection.

(a) 56% (b) 43% (c) 70% (d) 90%

14) About ------ of the rural households use bio-fuels for cooking.

(a) 50% (b) 90% (c) 10% (d) None of these.

15) Energy and transportation are

(a)Social infrastructure (b) Economic infrastructure (c) Both (a) & (b) (d) None of these.

1.3 Fill in the gaps:-

1) Only —— of the PHCs have sufficient stock of medicines.

2) Malnutrition and inadequate supply of vaccines lead to the death of —— million children every year.

3) ECG means Electro —— gram .

4) —— focuses on human resource development.

5) —— is a state of complete physical, mental and social well- being.

6) —— are the sources, which have a long history of their knowledge and use.

7) In India, about —— of the population drinks water from open sources.

8) In India, A majority of our people live in —— area.

9) —— is the first person who provides primary health care in rural areas.

10) —— is a vital public good and basic human right.

1.4 Very short questions:-

1) Name any two sources of renewable energy.

2) Mention any one advantage of infrastructure .

3) Write the full form of GBD.

4) What does PLF measures?

5) Name the states lagging behind in health care system.

6) Give any two examples of commercial sources of energy.

7) What is social infrastructure ?

8) Give any two example of non- commercial sources of energy.

9) Define economic infrastructure.

10) What type of fuels are used by the most of the rural women in India ?

11) When did the Delhi State Electricity Board set up?

12) What is morbidity?

2. Answer the following questions (3/4 marks)

1) Distinguish between conventional and non- conventional sources of energy.

2) How does infrastructure help in generating employment?

3) What do you understand by global burden of diseases?

4) Write a short note on "Medical Tourism in India".

5) Name some premier institutes which give specialised health care in India.

6) Distinguish between commercial and non- commercial sources of energy.

7) Mention the emerging challenges of health services in India.

8) Mention the measures undertaken to meet the challenges of power generation in India.

3. Answer the following questios (6marks)

1) Explain the three tier system of health infrstructure in India.

2) Discuss energy crisis in India.

3) Discuss the reforms recently initiated to meet the infrastructural crisis in India.

4) "People living in rural areas do not have sufficient health infrastructure"- Comment.

5) Discuss the importance of Infrastructure.

6) Briefly discuss the concept of social and economic infrastructure.

Answer Key

1.1 Answer to the True/ False questions:-

(1) True, (2) False, (3) False, (4) True, (5) False, (6) True, (7) False, (8) True (9) True, (10) True (11) False. (12) True

1.2 MCQs Answers:-

1. (a), 2. (c), 3. (c) 4. (a) , 5.(b), 6. (a) , 7. (b), 8. (b), 9. (a), 10. (a) , 11. (b) , 12. (b), 13. (a), 14. (b) , 15. (b)

1.3 Answer to the filling the gap:-

(1) 30% , (2) 2.2 million, (3) Cardio, (4) Social infrastructure (5) Health,

(6) Conventional sources of energy (7) Rural . (8) 76%,

(9) ANM(Auxiliary nursing Midwife), (10) Health.

1.4 Answer to thle very short questions :

1) Solar Energy and wind energy.
2) It increases productivity and efficiency of the factors of production.
3) Global Burden of Diseases.
4) Plant load factoar (PLF) which measures the operational efficiency of a thermal plant.
5) Bihar, Madhyapradesh, Rajasthan and U.P.
6) Coal and petroleum
7) The infrastructure which builds the social sector of the economy like education, health and housing etc. is called social infrastructure.
8) Agriculture waste and firewood.
9) The infrastucture which has a direct impact on production of goods and services like Roads, communication and energy etc. is called ‘economic infrastructure.’
10) Bio-fuels(crop residual, dung and fuel wood).
11) 1951.
12) Proneness to fall ill.

CHAPTER-9

Environment and sustainable development

The environment plays vital role in economic activities and growth of a country through providing the resources to produce goods and services. To attain fast economic development, generally environmental resouces are overutilised in the economy. As a result, environmental quality had go down. Moreover, Environment has the major impact on human civilization and health.

9.1. Definition:- Environment is defined as the total planetary inheritance and to totality of all resources. Environment includes all biotic and abiotic factors.

Biotic elements:- Birds, animals and plants, forests, fisheries, etc. (Basically living elements).

Abiotic elements:- Air, Water, land, Rocks and sunlights, (Basically non- living elements.)

9.2 Functions of the Environment:- Environment performs four vital functions:-

(i) It provides resources for production activities - such as trees in the forests, air, fishes in the ocean, water etc(Renewable resources) and fossil fuel, coal, etc (non- Renewable resources.)

(ii) It assimilates wastes. It absorbs garbage.

(iii) It sustains life by providing genetic and bio-diversity etc.

(iv) It provides aesthetic services like flowers, mountains, water, river, etc.

Here, carrying capacity is the important factor for the growth of civiliztion. The carrying capacity of the environment implies that the resouce extraction should not above the rate of regeneration of the resources and the waste generated are within the assimilating capacity of the environment.

Carrying Capacity of the environment helps to sustain life. Now a days , Many resources have become extinct and the wastes generated are beyond the absorptive capaciy of the environment. Absorptive capacity means the ability of the environment to absorb degradation. The process of development increased the level of pollution and over extraction of resources has exhausted some of the vital resources. It has increased both health related cost and expenditure on technology and research to explore new resources.

9.3 Some issues of environment :- At present, some of the important global environmental issues are:- (1) Global warming (2) Ozone Depletion (3) Rise in opportunity cost of negative environmental impact (4) Massive overuse and misuse of environmental Resources.

1) Global Warming :- Global warming is a gradual increase in the average temperature of the earths's lower atmosphere as a result of the increase in greenhouse gases since the industrial Revolution in recent times.

It is caused by increases in carbon dioxide and other green house gases through the burning of fossil fuels (petrol, coal) and deforestation. Increase of methane gas from different sources causes such problems.

The major effects of global warming .

i) Melting of polar ice with a resulting rise in sea level and coastal flooding.

ii) Extinction of species as ecological niches disappear .

iii) More frequent tropical stroms.

iv) Problems of drinking water supplies and an increase incidence of tropical diseases.

In 1997, a UN conference on climate change (specially on global warming) had organised in Kyoto, Japan.

2) Ozone depletion :- Ozone depletion refers to the phenomenon of reduction in the amount of ozone in stratosphere.

The problem of ozone depletion is caused by high level of choloflurocarbons (CFC) used as cooling susbstances in air conditioners and refrigerators, halons used in fire extinguishers.

As a result of depletion of the ozone layer, more ultra violate (UV) radiation comes to earth and causes damage to living organisism and causes skin cancer in humans. It reduces the production of phytoplankton and acquatic organism. Moreover, it effects the growth of terrestrial plnats.To protect the ozone layer, an international treaty (Montreal protocol) was signed which banned the use of CFC compounds, Methyl chloroform and bromine compounds .

9.4 The state of India's Environment:-

India has abundant natural resources in terms of rich quality of soil, hundreds of rivers and tributaries, lush green forests, plenty of mineral deposits beneath the land surface.

The black soil of the Decean plateau is particularly suitable for cultivation of cotton, leading to concentration of textile industries in this region.

The Indo-gangetic plains are one of the most fertile, intensively cultivated and densely populated regions in the world. Large deposits of iron- ore, coal and natural gas are found in the country.(20% of world's total iron- ore). Moreover, precious minerals like Bauxite, copper, chromite, diamonds, gold, lead, lignite, Zine, urnium etc. are also available in India.

But the developmental activities creating multiple adverse effects on natural resources, health and well- being.

India's environmental problem pose a 'Dichotomy' which shows a difference between two completely opposite ideas or things.

1) Threat of severe poverty induced environmental degradation by excessive use of natural sources.

2) Threat of pollution from affluence and rapidly growing industrial sector. To meet the higher demand for goods and services, expansion of industrial sector is essential but it raises the pollution which is not deserved.

9.5 **Some of the major environmental problems (issues) in India are–**

i) Land degradation

ii) Loss of Bio- diversity .

iii) Air pollution.

iv) Management of fresh water.

v) Solid waste management.

Land degradation refers to deteriaration or loss of the productivity of the soils for present and future commonly caused by human being. It causes due to–

(i) Loss of vegetation due to deforestation

(ii) Encroaching into forest land.

(iii) Improper crop rotation.

(iv) Unsustainable fuel wood and fodder extraction.

(v) Extraction of ground water in excess of the recharge capacity.

(vi) Non- adoption of adequate soil conservation measures.

(vii) Poverty of the agro- based people and shifting cultivation.

(viii) Forest fires and over grazing.

Bio diversity refers to every living thing including plants , bacteria , animals, birds and humans. Biodiversity loss includes the extinction of species world wide, as well as the total reduction or loss of species in a certain habitat, resulting in a loss of biological diversity.

India has approximately, 20% of livestock population on a mere 2.5% of the world's geographical area and has 17% of total population of the world.

The high density of population and livestock have made enormous pressure on the country's finite land resources.

The per- capita forest land in the country is only 0.08 hector against the requirement of 0.47 hector to meet the basic need.

Soil is being eroded at a rate of 5.3 billion tonnes a year which is excess of the recharge capacity.

The quantity of nutrients lost due to erosion each year ranges from 5.8 to 8.4 million tonnes.

Air pollution refers to the release of pollutants into the air that are detrimental to human health and the planet as a whole.

In India, the major cause of air pollution in urban areas is huge number of vehicles and industries along with that thermal power plants also cause pollution in other areas.

The number of motor vehicles increased from 3 lakh in 1951 to 67 croses in 2003 .

In 2003 personal transport vehicles contributed about 80% of the total number of registered vehicles and bear air pollution load.

India is one of the ten most industrialised nations of the world which has increased risk of pollution.

Central pollution control Board (1974) (CPCB) has identified 17 categories of industries which are significant pollutors. There are also some state level boards.

They investigate, collect and disseminate information relating to water, air and land pollution.

These boards provide technical assistance to government in promoting cleanliness, prevention and control of rivers, wells, and to control water and air pollution.

They also organise (through mass media) a comprehensive mass awareness programme on air and water pollution.

Moreover, the common people have tried to prevent the pollution and to control bio- diversity. The people have tried to prevent indiscriminate cutting of trees through silent movements. Chipko in Himalayan region and Appiko in western ghats(Karnataka) are two such movements.

9.6 Sustainable Development : In 1980, the "International union for the conservation of Nature" introduced the term "Sustainable Development".

In 1987, the United Nations 'World Commission on Environment and Development' (The Brundt Vand commission) released the report "Our Common future" (Brundtland report). According to this report, Sustainable development is the development that meets the need of the present without compromising the ability of future generation to meet their own needs.

The concept of sustainable development was emphasised by "United Nations Conference on Environment and Development" (UNCED) in 1992.

Edward Barbier defined sustainable development as one which is directly concerned with increasing the material standard of living of the poor at the grass root level.

Sustainable development suggests that we should leave to the next generation a stock of 'quality of life' assests no less than what we have inherited .

The present generation should follow :

(i) Conservation and Rational use of Natural Resources.

(ii) Preservation of the Regenerative Capacity of World's Natural Ecological System.

(iii) Avoiding the imposition of added Costs or Risks on Future generations.

According to Herman Daly (Environmental Economist) following steps should be taken to achieve sustainable development -

(i) Limiting the human population to a level within the carrying capacity of the environment.

(ii) Technological progress should be input efficient and not input consuming.

(iii) Renewable resources should be extracted on a sustainable level.

(iv) For non- renewable resources , the rate of depletion should not exceed the rate of creation of renewable substitutes.

(v) Inefficiencies arising from the pollution should be corrected.

9.7 Strategies for sustainable Development :-

(i) Use of Non-conventional sources of Energy:- India depends on thermal and hydro power plants for power need but both of these have adverse effect on environment. So, proper technologies should be developed to use solar rays and wind power to meet up power needs.

(ii) Use of LPG, Gobar gas in Rural Areas:- Generally households in rural areas use wood, dungcake and other biomass as fuel which have adverse effect on environment. To rectify the situation, proper arrangements should be done to provide LPG and to establishe Gobar gas plants in the rural areas.

(iii) Use of CNG in Urban Areas:- Compressed natural gas (CNG) as fuel should be introduced in urban areas to control air pollution.

(iv) Use of wind power:- Wind turbines move with the wind power and electricity is generated. So, it is a better option to meet up the lack of power.

(v) Use of solar power through photo voltaic cell:- India is naturally endowed with a large quantity of solar engery in the form of sunlight. Solar engery can be conveted into electricity.

This technology is extremely useful for remote areas and it is totally free from pollution.

(vi) Use of mini hydel plants:- Mini hydel plants can be introduced to generate power in mountainous regions by using energy of mountain streams. They generate enough power to meet local demands.

(vii) Use of Bio composting :- To increase agricultural production, chemical fertilizers have been used for years which adversely affected land quality, ground water system and common health of the people. Now, farmers have again started using biocompost made from dung and other organic wastes.

(viii) Use of Biopest control:- In india, Excessive use of chemical pesticides adversely affected the food items, water bodies, soil and ground water systems. Efforts are made to overcome such problems. Neem based pesticides are enviornmental friendly product. Various animals and birds can be used to control pests (ex:- snakes, owl). Mixed cropping and alternative farming helped the farmers.

Exercises

1.1 Whether the following statements true/False :

1) The Indo- gangetic plains spread from the Arabian sea to the Bay of Bengal .
(Write True/False.)
2) Abiotic elements includes air, water, land etc. (Write True/ False)
3) The concept of sustainable development does not consider the need of future generation.
(Write True/ False)
4) India is one of the ten most industrialised nations of the World. (Write True/ False)
5) The term "needs" in the definition of sustainable development is linked to distribution of resources. (Write True/ False).
6) Thermal power plants emit large quantities of carbon dioxide which is a green house gas.
(Write True/ False)
7) Environment includes all the biotic and abiotic factors that influence each other.
(Write True/False.)
8) Ozone layer prevents most harmful wavelengths of ultraviolet light passing through the earth's atmosphere. (Write True/ False)
9) About 27% of the world's human population live in India. (Write True/ False)
10) Chemical fertilizers improves quality of soil in the long run.(Write True/False).

1.2 Multiple choic Questions (MCQ) : 1 marks.

1) Which of the following is a biotic component of environment ?
(a) Plant (b) Soil (c) Water. (d) Light.
2) In 1997, a UN conference on climate change was held in (a) Japan (b) India, (c) Srilanka. (d) USA.
3) Which of the following is abiotic component of environment?
(a) Bacteria (b) Animal (c) Humans (d) Minerals.

4) ——— is the observed and projected increase in the average temperature of earth's atmosphere and oceans.

(a) Global warming (b) Biodiversity loss. (c) Ozone depletion (d) Deforestation.

5) ——— is the main cause for soil erosion.

(a) Ozone depletion (b) Air pollution (c) Deforestation. (d) None of these.

6) Which one of the following is a measure to control air pollution in vehicles?

(a) Promotion of CNG instead of petrol (b) Promotion of public transport .(c) Strengthening of emission standard .(d) All of these.

7) Which animals /birds help in bio- composting ?

(a) Cattles (b) earthworms (c) Lion (d) Both (a) and (b)

8) Name animals/birds which help in biopest control?

(a) Peacocks (b) Snakes (c) Owls (d) All of these

9) Cost of alternative opportunity given up is called: (a) Marginal cost . (b) Variable cost. (c) Fixed cost (d) Opportunity cost

10) In which of the following layers of the atmosphere is ozone shield found?

(a) Troposphere (b) Exosphere (c) Stratosphere. (d) Mesosphere.

11) When was the central pollution control Board (CPCB) set up?

(a) 1964 (b) 1974 (c) 1984 (d) 1994.

12) ——— Number of industrial categories have been identified as significantly pollutant by the CPCB.

(a) 17 (b) 25 (c) 28 (d) 29.

13) Use of which of the following has reduced Delhi's pollution significantly?

(a) LPG at home (b) Dung at home (c) Solar power (d) CNG in public transport.

14) Which of the following is a renewable resource?

(a) Water (b) Coal (d) Petrolium (d) Iron- ore.

15) The word "sustainable Development" came into existence in the year?

(a) 1992, (b) 1978 (c)1980, (d) 1987

1.3 Fill in the gaps :

1) India alone accounts for nearly ——— the world's total iron- ore resources.

2) During the past century, the atmospheric temperature has risen by ———

3) Montreal protocol baning the use of ——— compunds

4) "APPIKO", which means to ———

5) Chipko movement aimed at protecting forests in the ———.

6) India is very much privileged to have about ——— species of plants which have medicinal properties.

7) The two major environmental issues facing the world today are ——— and ———

8) With the help of ——— cells, solar energy can be converted into electricity.

9) In India, the ——— of the Decean plateau is particularly suitable for the cultivation of cotton.

10) ——— Plants use the energy of mountanious streams to move small turbines.

1.4 Very short Questions :-

1) What is included under abiotic elements ?

2) Name two movements to prevent cutting of trees in India.

3) What are renewable resources?

4) What is Montreal protocol?

5) What is carrying capacity of environment?

6) Define environment .

7) State one function of environment

8) What is absorptive capacity of the environment ?

9) What is land degradation?

10) What is the cause of Asthama?

11) What is the required amount of forest in a country?

12) What is rate of soil erosion in India?

2) Answer the following question. (3/4 marks)

1) Write the four vital function of Environment .

2) Write some results of global warming .

3) Give the Reasons for environmental crisis.

4) What has been the result of ozone depletion?

5) State the functions of pollution control boards.

6) How does poverty lead to degradation of environment?

7) What do you mean by sustainable development ?

8) What are the objectives/aims of sustainable development ?

9) What are the functions of present generation to attain sustainable development ?

10) What are the 'biocomposting' and 'biopest' control?

3) Answer the following questions: (6 marks)

1) Discuss steps and strategies to achieve sustainable development .

2) Explain causes of environmental degradation .

3) Write short notes : (i) Global warming.

(ii) Ozone depletion.

(iii) Pollution control boards.

Answer Key

1.1 Answers of the True/False questions :

(1) True, (2) True, (3) False (4) True (5) True, (6) True (7) True, (8) True, (9) False, (10) False.

1.2 Answers of the MCQS.

1. (a) , 2. (a), 3. (d), 4. (a) , 5. (c) , 6. (d) , 7(d) , 8(d) , 9. (d), 10. (c) , 11. (b) , 12. (a) , 13. (d) , 14. (a) , 15.(c)

1.3 Answer of the fill in the gaps:-

1) 20% , 2) 1.1 3) CFC 4) Hug 5) Himalayas 6) 15000

7) global warming, ozone depletion, 8) Photovoltaic 9) Black soil,

10) Mini-hydal.

1.4 Answer of the very short questions :

1) Non- living elements like air, water, soil etc.
2) Chipko and Appiko Movements.
3) Renewable resources are those resources which can be used without the possibility of the resources becoming depleted or exhausted like trees and fish.
4) The Montreal Protocol is an international treaty designed to protect ozone layer by barning the use of CFCs.
5) Carrying capacity implies that resources extraction should not above the rate of regeneration of the resources and wastes generated are within the assimilating capacity of the environment .
6) Environment is defined as the total planetary inheritence and the totality of all elements (biotic and abiotic).
7) Environment assimilates waste or Environment sustains life.
8) Absorptive capacity means ability of the environment to absorb degradation
9) Land degradation refers to a fall in quality of soil , fertility of land, water or vegetation condition which is created by mainly human activities .
10) Air pollution .
11) 0.47 hector per Capita forest.
12) 5.3 billion tonnes a year.

CHAPTER-10

Comparative Development Experiences of India and Its Neighbours

Since past three decades, the economic transformation is taking place in different countries across the world , partly because of the process of globalisation. It has both short as well as long term implications for each country, including India

In the unholding process of globalisation, the developing countries like India are facing competition not only from developed nations but also amongst themselves, the relatively small countries of the developing world. In this situation, there is an increasing eagerness by every nation to learn development process, activities and strategies pursued by neighbouring countries. It helps to strengthen their own domestic economies and also helps to improve the overall human development in a shared environment. For this, they are forming regional and global economic grouping , much as preferential trade areas, free trade areas, customs unions, common market, monetary unions and economic unions.

In this chapter comparisons among the development strategies of India, China, and Pakistan has been discussed.

10.1 Development Experience of India, Pakistan and China :

(i) All the three countries started their development path at the same time. India and Pakistan got independence in 1947 and people's Republic of China was established in 1949.

(ii) All the three countries adopted planning as their development strategies almost at the same time- India announced its first Five year plan in 1951, Pakistan in 1956 and China in 1953.

(iii) Both India and Pakistan had adopted, 'mixed economy'model but china had adopted 'command economy' model of economic growth.

(iv) Both India and China were initially depend on public sector to develop strong industrial base for economic development of the nation. But like India, China also realised the need of private participation and liberalised their economy. In the late of 1950s and 1960s, Pakistan introduced a variety of regulated policy framework for growth of domestic industries. Later, in the late 1970s and 1980s they change their policy orientation and denationalised major sectors to encourage private sector.

(v) Till 1980s, all the three countries had similar growth rates and per capita incomes

(vi) Economic Reforms were implemented in China in 1978, in Pakistan in 1988 and in India in 1991.

10.2 Development strategy:-

10.2.1 A. China

(i) After the establishement of people's Republic of China in 1949 under one party rule , all the critical sectors of the economy , land and enterprises owned and operated by individuals were brought under Government control.

(ii) A programme named 'The Great Leap Forward' (GLF) campaign was initiated in 1958, aiming at the industrialisation of the country on a very large scale and people were encouraged to set up industries in the backyard.

(iii) In rural areas, commune system was started, under which people collectively cultivated lands. In the year 1958 there were 26000 communes covering almost all the farm population.

(iv) In 1965, Mao Tse Tung , introduced the 'Great Proletarian Cultural Revolution (1966-67)', under which students and professionals were sent to work and learn from the rural areas.

(v) Reforms were introduced in China in phases since1978.

(vi) In the initial phase, reforms were initiated in agriculture, foreign trade and investment sectors. In the later phase, reforms were initiated in industrial sector.

(vii) Under reforms process, a dual pricing system was initiated , Under which the Government fixed a price against fixed quantities of farmers and industrial units production and rest were traded at market price.

(viii) In order to attract foreign investors, special Economic Zones(SEZ) were set up. SEZ is a geographical area that has economic laws different from a country's typical economic laws.

10.2.2 B. Pakistan

(i) Pakistan followed the mixed economic system with co-existence of public and private sectors.

(ii) In the late 1950s and 1960s Pakistan introduced a variety of regulated policy framework for growth of domestic industries.

(iii) In agicultural sector, the introduction of Green Revolution and increase in public investment led to rise in the production of food grains.

(iv) Capital goods industries were nationalised in 1970s

(v) Then Pakistan shifted its policy orientation in the late 1970s and 1980s and denationalised their industries to encourage private sector.

(vi) During this period , Pakistan received financial support from western nations, which helped the country in motivating economic growth.

10.3 Comparative study: India, Pakistan and China:-

10.3.1 Demographic Indicators:

(a) Population:- China and India are the most populated country in the world whereas population of pakistan is only one- tenth of them.

(b) Growth Rate of population:- Though China is the most populated country, but its annual growth rate of population is the lowest (0.5%) as compared to India(1.2%) and Pakistan(2.1%).

(c) Density of Population:- Density of population of China is the lowest as compare to India and Pakistan.

(d) Sex Ratio:- Due to preference of son, sex ratio is low and biased against females in all the three nations. Sex ratio is lowest in India(929) as compare to Pakistan (947) and China(941)

(e) Fertililty Rate:- Fertility rate is low in China and very high in Pakistan.

(f) Urbanisation:- Urbanisation is high in both China and Pakistan compare to India.

(g) One child policy:- This norm has successfully reduced the growth rate of population in china. But it has other implication , like after a few decades there will be more elderly population in proportion to young people.

10.3.2 GDP and sector:-

(a) GDP:- China has the second largest GDP of $19.8 trillion whereas India's and Pakistan's GDP is $8.07 trillion and $0.94 trillion respectively .

(b) Growth Rate :- On this path of development China's average growth rate is about 7.9% while India's and Pakistan's average growth rate is 6.7% and 4.0% respectively (2011-2015)

(c) The slow growth and re-emergence of poverty in Pakistan was the result of the reform process introduced in 1988 and political instability in Pakistan.

(d) Agriculture:- In China, engagement of workforce in agricultural sector is less as compare to India and Pakistan. The contribution of agriculture in GDP in China, India and Pakistan is 9%, 17%, and 25% respectively in 2014-15.

(e) Manufacture:- The contribution of manufacturing in GDP is highest in China (43%) compare to India(30%) and Pakistan(21%) in 2014-15.

(f) Service :- It is the service which contributes highest to GDP in all the three countries. Workforce engagement is highest in China(43%) in service sector.

(g) Sectoral Transformation:- Though China has followed the classical development pattern of gradual shift from agriculture to manufacturing and then to services , India and Pakistan's shift has been directly from agriculture to service sector.

(h) Major sector:- China's growth is mainly contribued by the manufacturing sector whereas in both India and Pakistan, the service sector is emerging as a major player of development.

Human Development Indicator:-

(a) In most areas of human development, China has performed better than India and Pakistan. This is true for many indicators such as, Income indicators - GDP per capita, proportion of people below poverty line etc. or health indicators - mortality rate, access to sanitation, life expectancy, malnourishment etc.

(b) Pakistan is ahead of India in regarding proportion of people below poverty line and using improved sanitation.

(c) Contrary to it, India is ahead of Pakistan in educaiton sector and providing health services.

(d) Proportin of people below poverty line is highest is India.

(e) All the three countries report providing improved drinking water sources for most of its population.

(f) In HDI ranking China's rank is far better which was 91 (in 2016) compare to India (131th) and Pakistan (148th)

10.3.4 Liberty Indicators : 'Liberty indicators are those indicators which represent the degree of civil and political freedom to individuals in a country. Without including such indicaotrs and giving them adequate weightage, the construction of a human development index (HDI) remains incomplete and its usefullness remains limited. One such indictor has actually been added as a measure of the extent of democratic participation in social and political decision - making but it has not been given any extra weight. The extent of 'Constitutional protection given, to right of citizens' and 'the extent of consitutional protection of the Independence of judiciary and the rule of law etc. are some more example of liberty indicators.

10.4 Development Strategies- An appraisal

The success and failures of development strategies pursued by China and Pakistan have been discussed below :

10.4.1 China's Success story:-

(i) China initiated to implement the economic reforms in 1978 without any compulsion by the world bank and IMF that ensured growth and alleviate poverty.

(ii) China established infrastructure in the field of health and education that helped effectively in improving the social and economic indicators.

(iii) China implemented land reforms that incresed the productivity and ensured social security in rural areas.

(iv) There was long existence of decentralised planning which ensured rural industrialisation.

(v) Through the commune system, there was more equitable distribution of food grains.

(vi) There was extension of basic health services in rural areas.

(vii) The size of individaul enterprises was kept small which brought prosperity to a large number of poor people.

Failures:-

(i) In China, the lack of political freedom and its implications for human rughts are major concerns.

(ii) There was slow pace of growth and lack of modernisation under thel Maoist rule.

(iii) The per capita gain in output in 1978 was the same as it was in the mid 1950s

10.5.2 Pakistan's Success story:-

(i) Pakistan has succeeded in more than doubling the per capita income inspite of high growth rate of population.

(ii) Pakistan has achieved self-suffieciency in the production of food.

(iii) Pakistan has succeeded in developing its service and industry sectors at a fast rate.

(iv) The use of modern technology is improved in Pakistan.

Failures-

(i) Growth rate of GDP and its sectoral constituents have fallen in 1990s.

(ii) There is volatile performance of agriculture sector.

(iii) Poverty and unemployment are still areas of major concerns due to political instability.

(iv) There is over dependence on remittances in Pakistan.

(v) Growing dependence on foreign loans on the one hand and increasing difficulty in paying back the loans on the other is creating extra pressure.

Exercise

True/ False

(1) China's economy is a command economy that has only recently started moving towards a democratic system.

(2) First Five Year plan of China commenced in the year 1956.

(3) A severe drought caused havoc in China killing about 100 million people.

(4) In China reforms introduced in 1988, whereas in Pakistan in 1978.

(5) Dual pricing during reforms period was introduced in India.

(6) The fertility rate is low in China.

(7) Proportion of people below poverty line is more in India.

(8) India has lowest maternal mortality rate compare to China and Pakistan.

(9) China introduced structural reforms on its own initiative .

(10) In China 26,000 communes covered the entire village population.

MCQ :

1) Pakistan witness a–

(a) Secular and deeply liberal constitution, (b) Militarist political power structure.

(c) Command economy, (d) All of these.

2) Which nation is not included in BRICS–

(a) Russia, (b) Brazil, (c) China, (d) Pakistan.

3) All the three countries had similar growth rate and per capita income, till –

(a) 1980s, (b) 1970s, (c) 1960s, (d) 1990s,

4) In China Great Leap Forward (GLF) campaign was initiated in 1958, aimed at–

(a) massive cultivation , (b) massive industrialisation. (c) Spread services, (d) All of these.

5) Great Protetarion Cultural Revolution was started in China in the year.

(a) 1960, (b) 1966, (c)1976, (d) 1978

6) In the later phase, china introduced reforms in–

(a) Agriculture , (b) Foreign trade, (c) Investment, (d) Industry.

7) China has the ----- largest economy.

(a) 2nd , (b) 3rd , (c) 5th , (d) 4th

8) In service sector, workforce engagement is highest in ------.

(a) China, (b) India, (c) Pakistan, (d) None of these.

9) In 2016, India's HDI ranking is -

(a) 91 (b) 131 (c) 148 (d) 121

10) Which country has followed the classical development pattern of gradual shift from agriculure to manufacturing and then to services---.

(a) China, (b) Pakistan, (c) India, (d) None of these,

Fill up the gaps:-

1) People's Republic of China was established in ———.

2) NITI Aayog in India was established in ———.

3) Commune system of farming was implemented in ———.

4) During GLF campaign, due to political conflict ——— withdrew its professionals from China.

5) In the 1970s, nationalisation of capital goods industries took place in ———.

6) Population of Pakistan is roughly about ———of China and India.

7) Population density is lowest in ——— but population growth is highest in ----.

8) The contribution of agriculture in GDP is lowest in ———.

9) ——— has the lowest infant mortality rate, whereas ——— has the highest .

10) Sex Ratio is the proportion of females per ——— males.

Short question:- **(1 Marks)**

1) What is regional economic groupings ?

2) Write the full name of ASEAN and SAARC.

3) What is commune system?

4) What is Great Proletarian Cultural Revolution.?

5) What do you meant by Special Economic Zone(SEZ)?

6) Write a implication of one- child norm.

7) State two indicators of human development.

8) What is Human Development Index?

9) What is meant by IMR?

10) What is liberty indicators?

11) What is mixed economy ?

12) What w\ere the initiatives taken under a variety of regualted policy framework in the late 1950s and 1960s in Pakistan?

Short Answer type Questions: **(4 marks)**

1) Why are regional and economic grouping formed?

2) What are the various means adopted by countries to strengthen their own domestic economy?

3) What similar developmental strategies have India, Pakistan and China followed for their development path?

4) Mention the common success story and failures of India and Pakistan?

5) Write the objectives of Great Leap Forward Campaign and Great Protetaian Cultural Revolution initiated by China?

6) China’s rapid industrial growth can be traced back to its reforms in 1978. Explain.

7) Describe the path of developmental initiatives taken by China for its economic development.
8) What are special Economic Zone? Why do they attract foreign investors?
9) What is Dual pricing ?Write its importance in the development of China.
10) Describe the path of developmental initiatives taken by Pakistan for its economic development.
11) Write the initiatives taken by Pakistan to change the agrarian structure dramatically.
12) Mention the salient demographic indicators of China, Pakistan and India.
13) What is the importance of implication of 'one child norm' in china.
14) Compare and contrast India, China and Pakistan's sectoral contribution towards GDP in 2014-
15. What does it indicate?
15) Comment on the growth rate trends witnessed in China and India in the last two decades.
16) Compare and contrast the development of India, China, and Pakistan with respect to some silent human development indicators.
17) Define liberty indicators. Write its importance in the respect of the construction of human development index.
18) Evaluate the various factors that led to the rapid growth in economic as well as human development in China.
19) Give reasons for the slow growth and re-emergence of poverty in Pakistan.
20) Enumerate the areas in which India has an edge over pakistan?
21) Enumerate the areas in which Pakistan has edge over India?
22) Enumerate the areas in which China has an edge over India and Pakistan?
23) Compare India, China and Pakistan in their development in the area of structural reforms.

Answer Key

True / False :

(1) True, (2) False, (3) False (4) False, (5) False, (6) True, (7) True, (8) False , (9) True , (10) True,

MCQ :

(1) b, (2) d, (3) a, (4) b, (5) b, (6) d, (7) a (8) a, (9) b, (10) a,

Fill up the gaps :

(1) 1949, (2) 2015, (3) China, (4) Russia , (5) Pakistan, (6) One- tenth ,

(7) China, Pakistan (8) China , (9) China, Pakistan, (10) 1000

Short Question :

1) Regional economic grouping is one of the major instrument of promoting international trade activities among countries.

2) ASEAN = Association of southeast Asian Nations .

SAARC= South Asian Association of Regional cooperation .

3) Commune system is a process of collective farming introduced in China when land is divided into small plots that are allocated to the individual households.

4) In 1965, Mao introduced the Great Proletarian Cultural Revolution (1966-76) under which students and professionals were sent to work and learn from the countryside.

5) SEZ is a geographical region that has economic laws different from a country's typical economic laws.

6) A major implication of one child norm of China was the low rate of population growth.

7) Two indicators of human development are life expectancy at birth (years) and GDP per capita.

8) HDI is a composite index of life expentency, education and per capita income indicators, developed by UNDP as an indicator of human development of a nation.

9) Infant morality rate (IMR) is the number of deaths per 1000 live births of children under one year of age.

10) Libarty indicators are those indicators which represent the degree of civil and political freedom to individuals in a country.

11) A mixed economy is a system that combines aspects of both private sector and public sector.

12) (i) Teriff protection for manufacturing of consumer goods.

(ii) Direct import controls.

NOTE

NOTE