केंद्रीय विद्यालय संगठन क्षेत्रीय कार्यालय रायपुर

Kendriya Vidyalaya Sangathan Regional Office Raipur

ECONOMICS

Class - XII

Question Bank Term- II 2021-22

केंद्रीय विद्यालय संगठन क्षेत्रीय कार्यालय रायपुर

Kendriya Vidyalaya Sangathan Regional Office Raipur

MESSAGE FROM DUPUTY COMMISSIONER

It gives me immense pleasure to bring out the study material for 2nd Term in different subject of Classes X and XII for Raipur Region. All of us know that in the 1st Term Examination questions were objective but in 2nd Term questions will be subjective so once again to get our children acquainted and familiarized with the new scheme of examination and types of questions, it is of utmost significance that an extensive study material should be provided to our children. This question bank is in complete consonance with CBSE Circular Number 51 and 53 issued in the month of July 2021. It will help students to prepare themselves better for the examination. Sound and deeper knowledge of the Units and Chapters is must for grasping the concepts, understanding the questions. Study materials help in making suitable and effective notes for quick revision just before the examination.

Due to the unprecedented circumstances of COVID-19 pandemic the students and the teachers are getting very limited opportunity to interact face to face in the classes. In such a situation the supervised and especially prepared value points will help the students to develop their understanding and analytical skills together. The students will be benefitted immensely after going through the question bank and practice papers. The study materials will build a special bond and act as connecting link between the teachers and the students as both can undertake a guided and experiential learning simultaneously. It will help the students develop the habit of exploring and analyzing the ***Creative & Critical Thinking Skills***. The new concepts introduced in the question pattern related to case study, reasoning and ascertain will empower the students to take independent decision on different situational problems. The different study materials are designed in such a manner to help the students in their self-learning pace. It emphasizes the great pedagogical dictum that *'everything can be learnt but nothing can be taught'*. The self-motivated learning as well as supervised classes will together help them achieve the new academic heights.

I would like to extend my sincere gratitude to all the principals and the teachers who have relentlessly striven for completion of the project of preparing study materials for all the subjects. Their enormous contribution in making this project successful is praiseworthy.

Happy learning and best of luck!

Vinod Kumar
(Deputy Commissioner)

केंद्रीय विद्यालय संगठन क्षेत्रीय कार्यालय रायपुर

Kendriya Vidyalaya Sangathan Regional Office Raipur

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Economics
Class – XII (2021-22)

Theory: 40 Marks
Time: 2 Hrs

Units	Term 2 – Subjective Question Paper	Marks	Periods
Part A	**Introductory Macroeconomics**		
	National Income and Related Aggregates	10	23
	Determination of Income and Employment	12	22
	Sub Total	22	45
Part B	**Indian Economic Development**		
	Current Challenges facing Indian Economy Employment Infrastructure Sustainable Economic Development	12	18
	Development Experience of India – A Comparison with Neighbours Comparative Development Experience of India and its Neighbours	06	12
	Sub Total	18	30
	Grand Total	40	75
	Project Work	**10**	

PART-A MACROECONOMICS

NATIONAL INCOME AND RELATED AGGREGATES

MACRO ECONOMICS -deals with the decision making behaviour of economy as a whole. Examples -National income accounting, money and banking, determination of income, output and employment, government budget and the balance of payment.

NATIONAL INCOME: National Income is the sum total of the money value of all final goods and services produced in a country during a financial year. It is the income of the people of a nation during a year.

FINAL GOODS: Goods used for final consumption and not again subjected to the process of production is called final goods. Final goods itself are of two types- consumption goods and Capital goods.

CONSUMER OR CONSUMPTION GOODS: Goods are not subjected to a further process of Production and used by the Consumer directly are called consumer or consumption goods.eg. pen, pencil.

PRODUCER GOODS OR CAPITAL GOODS: Goods once produced and which can be used again for Production are called Producer or Capital Goods. Eg Machines, buildings.

INTERMEDIATE GOODS: Goods used as an input for producing other goods are called Intermediate goods. Eg wood in a paper factory, leather in a shoe factory.

INVESTMENT: Investment means Capital formation. It is the addition to the existing stock of Capital. It is a Flow variable.

GROSS INVESTMENT: Total durables or Capital goods produced during a year in an economy is called Gross Investment.

NET INVESTMENT: The addition to the existing stock of capital is Net Investment. It is the new capital formation.
NET INVESTMENT = GROSS INVESTMENT – DEPRECIATION

DEPRECIATION OR CONSUMPTION OF FIXED CAPITAL: The loss of value of fixed assets due to wear and tear is called Depreciation. It is also called Consumption of fixed capital.

STOCK VARIABLE: A Variable that can be measured at a point of time is called a STOCK. It is a static concept. It has no time limit. It is measured at a particular point of time. Eg. Wealth, Capital, Inventory.

FLOW VARIABLE: A Variable that is measured in a specific period of time is called FLOW. It is a dynamic concept. It is measured over a period of time. Eg. Consumption, income, change in inventory.

INVENTORY The quantity of output that a firm could not be sold is called Inventory. In short, it is the unsold stock. Inventory is a stock variable. It may accumulate or de cumulate.
Change in inventory = Closing stock - Opening stock.

NET INDIRECT TAX (NIT): Indirect Tax are the tax imposed by the government on goods and services. Sometimes government gives Subsidies to encourage producers. The difference between Indirect Tax and Subsidies is called Net Indirect Tax.
**NET INDIRECT TAX = INDIRECT TAX – SUBSIDIES.**

TRANSFER PAYMENT OR TRANSFER INCOME OR TRANSFER RETURNS.
It is a unilateral payment for which no services are rendered. Usually It is paid by the government. Eg. Old age pension, Scholarship, Widow pension etc.

NET FACTOR INCOME FROM ABROAD (NFIA): It is the difference between
the factor income earned by the domestic factors of production employed in the rest of the world and the factor income earned by factors of production of the rest of the world employed in the domestic country.

Leakages: - It refers to the withdrawals from the circular flow. Leakages cause contraction of the circular flow. Savings is an example of Leakage.

CIRCULAR FLOW OF INCOME IN A TWO SECTOR ECONOMY. It is a flow which shows how income of an economy circulate different sectors in an economy. The two sectors exist in an economy are Firms and Households. Firms are the Production units and they receive factors of production from the households and give rewards for the factors production. The households spent the entire income received from the forms and nothing to save. This is shown by the flow chart.
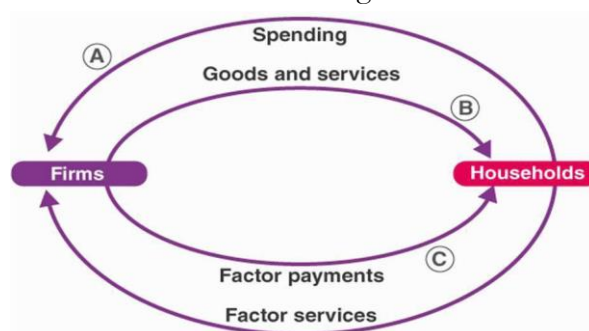
Two Types of Circular Flow
1. Real / Product / Physical Flow Real flow of income implies the flow of factors services from household sector to the producing sector in the form of land, labour, capital and organisation and Good and services to the household sector
2. Money / Monetary / Nominal Flow Money flow of income implies the flow of factors payments from producing sector to the household sector in the form of rent, labour, interest and profit and expenditure to Good and services from household sector

Gross And Net:
1. Gross means the value of product including depreciation. Net means the value of product excluding depreciation.
2. The difference between these two terms is depreciation.
3. Where depreciation is the expected decrease in the value of fixed capital assets due to its general use.
4. It is the result of production process.
Gross = Net + Depreciation Net = Gross – Depreciation
Note: Other names of depreciation are:
(a) Consumption of fixed capital (b) Capital consumption allowance (c) Current replacement cost.

National Income And Domestic Income:
1. National Income refers to net money value of all the final goods and services produced by the normal residents of a country during an accounting year.

2. Domestic Income refers to a total factor incomes earned by the factor of production within the domestic territory of a country during an accounting year.

3. The difference between these two incomes is Net Factor Income from abroad (NFIA), which is included in National Income (NY) and excluded from Domestic Income (DY).

4. Where NFIA is the difference between income earned by normal residents from rest of the world and similar payments made to Non residents within the domestic territory. NFIA = Income earned by Residents from rest of the world (ROW) – Payments to Non-Residents within Domestic territory.

$$NY = DY + NFIA \qquad DY = NY - NFIA$$

Note:

Case I: Income paid to abroad is given, then to make NFIA inverse the sign. For this put income from abroad 0.

Example, Income paid to abroad =100

NFIA = Income from Abroad – Income paid to abroad

= 0 – 100 = -100 and vice versa.

Case II: Income from abroad is given, then NFIA = Income from abroad. For this put income paid to abroad 0.

Example, Income from abroad =100

NFIA = Income from Abroad- Income paid to abroad = 100 – 0 = 100 and vice versa

Case III: If income from abroad and income paid to abroad both are given, then NFIA is the difference between them,

Example, Income from abroad =100 Income paid to abroad =120

NFIA = Income from Abroad- Income paid to abroad = 100 – 120 = (-) 20 and vice versa

Case IV: Net factor income to abroad be given, then to make NFIA inverse the sign.

Net factor income paid to abroad (NFPA) = income to abroad – income from abroad.

Example,

(i) Net Factor Income to abroad (NFPA = 100). In this NFPA is positive, which means that income to abroad is greater than income from abroad, which makes,

NFIA = (-)100

(ii) Net Factor Income to abroad [NFPA = (-)100]. In this NFPA is negative, which means that income to abroad is less than income from abroad, which makes,

NFIA = (+) 100

Factor Cost And Market Price:

1. Factor Cost (FC): It refers to amount paid to factors of production for their contribution in the production process.

2. Market Price (MP): It refers to the price at which product is actually sold in the market. The difference between these two is Net Indirect Taxes (NIT) which is included in MP and excluded from FC. Where NIT is the difference between indirect taxes and subsidies.

NIT = IT – Subsidies

Where, Indirect Taxes are the taxes which are levied by the government on production and sale of commodity. Sales tax, excise duty, custom duty, etc. are some of the indirect taxes, and subsidies are the cash grants given by the government to the enterprises to encourage production of certain commodities, to promote exports or to sell goods at prices lower than the free market Price. In India, LPG cylinder is sold at subsidized rates.

MP = FC + NIT (Indirect Taxes – Subsidies)

FC = MP – NIT (Indirect Taxes – Subsidies)

Note:

Case I: Subsidy is given, then to make NIT inverse the sign. For this put Indirect tax = 0.

Example, Subsidy = 100

NIT = Indirect Tax – subsidies = 0-100 = (-) 100 and vice versa

Case II: IT is given, then NIT = IT (For this put subsidy 0)

Example, IT = 100

NIT = Indirect Tax – subsidies = 100-0 = 100 and vice versa

Case III: If IT and subsidy both are given, then NIT is the difference.

Example, IT = 100

Subsidy = 80

NIT = Indirect Tax – subsidies = 100-80 = 20

Case IV: If sales tax and excise duty are given, then by adding both, we get indirect taxes.
Example, Sales tax = Rs. 1000
Excise duty = Rs.1000 Subsidy = Rs.500
NIT = Indirect Tax(sales tax + excise duty)-subsidies = (1000 + 1000) – 500 = 1500

Case V: If Net subsidy is given, then to convert it into Net Indirect tax, we have to inverse the sign,
Net Subsidy = Subsidy – Indirect Tax
Example,
(a) Net Subsidy = 100. In this, Net subsidy is positive, which means that indirect tax is less than subsidy which makes,
NIT = (-) 100
(b) Net Subsidy = (-) 100. In this Net subsidy is negative which means that Indirect tax is greater than subsidy which makes,
NIT = 100

Case VI: If Net subsidy and Indirect tax both are given, then we have to ignore Indirect Tax and inverse the sign of Net subsidy.
Example, Net Subsidy = 100
Indirect Tax = 20 Net Indirect Tax = (-) 100

Domestic Territory
Domestic territory or Economic territory is the geographical territory administered by a government within which persons, goods and capital circulate freely.

Domestic Territory Includes
1. Ships and aircraft owned and operated by the resident between two or more countries.

2. Fishing vessels, oil and natural gas rigs and floating platforms operated by the residents of a country in the international waters or areas where the country has exclusive rights for operation
3. Embassies, consulates and military establishments of the country located abroad.

Domestic Territory does not include.
1. Territorial enclaves (like embassies) used/ administered by foreign governments.

2. All International organizations which are physically located within geographical boundaries of a country. Their offices form a part of international territory.

Normal Resident
A normal resident is said to be a person (or an institution) who ordinarily resides in a country and whose centre of economic interest lies in that country. The period of stay should be at least one year or more

Normal Residents Includes
1. Both nationals and non-nationals residing in a country for more than a year.

2. The staffs of international bodies are treated as normal residents of the country in which the international body operates.

3. Local employees working in foreign embassies located in their country are treated as normal residents.

4. Workers from across the border who cross border in the morning to work in the other country and return in the evening are treated as normal resident of the parent country.

Normal Residents Does Not Include
1. International Bodies (like World Bank, World Health Organization or International Monetary Fund) are not considered residents of the country in which these organizations operate but are treated as residents of international territory.

2. Students and medical patients staying abroad are treated as normal residents of their home country even if their stay in the host country is for more than one year

National Income At Current Prices
If goods and services produced in 1 year are valued at current prices, i.e., prices prevailing in that particular year, we get national income at current prices. National income at current prices are called Nominal National Income

National Income At Constant Prices Or Real National Income

If goods and services produced in a year are valued at fixed prices, i.e., prices of the base year, we get national income at constant prices. A base year is carefully chosen year which is a normal year free from price fluctuations. (In India now 2011-12 is treated as base year)

Market Price

Market Price = Factor Cost + Indirect Taxes – Subsidies or Factor Cost + Net Indirect Taxes (Net Indirect Tax = Indirect Taxes - Subsidies)

Net Factor Income From Abroad (NFIA)

NFIA = factor income earned from abroad by normal residents or country - the factor income earned by non-residents (foreigners)

Value of Output

Money value of output of an enterprise is obtained by multiplying its physical output of goods and services with its market price

Symbolically: Value of Output = Quantity of Output X Price
or Value of Output = Sales + Change in stock

Value Added

It refers to the addition of value to the raw material (intermediate goods) by a firm by virtue of its productive activities. Symbolically:

Value Added = Value of output – Intermediate Consumption

MEASUREMENT OF NATIONAL INCOME OR GDP'

1. Product Method

   Net Value added in primary sector at factor cost
+ Net value added in secondary sector at factor cost
+ Net value added in tertiary sector at factor cost
+ Net Factor income from abroad
+ Net Indirect Taxes
+ Consumption of fixed capital (Depreciation)
= GNP AT MARKET PRICES

Value Added Method for calculation of National Income

Step 1 Calculate gross value added by Primary, Secondary & tertiary sectors

Formula 1	Formula2	Formula3	Formula4
$GVA_{MP} =$ +GVO_{MP}	$GVA_{MP} =$ +Sales	$GVA_{MP} =$ +Domestic Sales	$GVA_{MP} =$ +Sales to household +Salesto government +Exports +(Closing Stocks -Opening Stocks)
		+Exports	
	+Change in stocks	+(Closing Stocks -Opening Stocks)	-Domestic purchase of raw material
-Intermediate Consumption	-Intermediate Consumption	-Intermediate Consumption	-Import of Raw material

Step 2
$GDP_{MP} = GVA_{MP}$ Primary Sector + GVA_{MP} Secondary Sector + GVA_{MP} Tertiary Sector

Step 3
$NNP_{FC} = GDP_{MP} -$ Depreciation + Net factor income from abroad - Net indirect taxes

2. Income Method

Compensation of Employees
+ Operating surplus
+ Mixed income Employed
+ Net Indirect Taxes
+ Consumption of fixed capital (Depreciation)
+ Net Factor income from abroad
= GNP at MARKET PRICES

Income Method for calculation of National Income

Step 1

Formula 1	Formula 2	Formula 3
NDP_{FC} = +Mixed Income of self employed +Compensation of employees +Operating Surplus	NDP_{FC} = +Mixed Income of self employed +Wages & Salaries +Employers contribution to social security scheme +Interest +Profit +Rent +Royalty	NDP_{FC} = +Mixed Income of self employed +Wages & Salaries in cash +Wages & Salaries in kind +Employers contribution to social security scheme +Interest +Corporate taxes +Dividend +Undistributed Profit +Rent +Royalty

Step 2
$NNP_{FC} = NDP_{FC}$ + Net factor income from abroad

3. Expenditure Method
    Private final consumption expenditure
+ Govt. final consumption Expenditure
+ Gross Capital formation
+ Net Exports
+ Change in Stock
+ Net Factor income from abroad
= GNP at MARKET PRICES

Expenditure Method for calculation of National Income
Step 1

Formula 1	Formula2	Formula3	Formula4
GDP_{MP} = +P +Gross Investment	GDP_{MP} = +P +GDCF	GDP_{MP} = +P +GDFCF +Change in Stock	GDP_{MP} = +P +Gross Business fixed investment +Change in Stock +Gross residential construction investment +Gross public investment
+G +X-M	+G +X-M	+G +X-M	+G +X-M

Where, P is Private Final Consumption Expenditure

G is Government Final Consumption Expenditure

Net Exports = X- M = Exports – Imports

GDCF = Gross Domestic Capital Formation = GDFCF + Change in Stock

GDFCF is Gross Domestic Fixed Capital Formation

Step 2

$NNP_{FC} = GDP_{MP} -$ Depreciation + Net factor income from abroad - Net Indirect Taxes

NOTE: When any component of <u>investment</u> in above formula is given as <u>NET</u> value then in Step 1 we get <u>NDP_{MP}</u>

Formula 1	Formula2	Formula3	Formula4
$NDP_{MP} =$	$NDP_{MP} =$	$NDP_{MP} =$	$NDP_{MP} =$
+P	+P	+P	+P
+Net Investment	+NDCF	+NDFCF	+Net Business fixed investment
		+Change in Stock	+Change in Stock
			+Net residential construction investment
			+Net public investment
+G			+G
+X-M	+G	+G	+X-M
	+X-M	+X-M	

Step 2 will be

NNP_{FC} =NDP_{MP} + Net factor income from abroad - Net Indirect Taxes

Items to be Included
1. Rent of Owner-occupied houses
2. Production for self-consumption

Items to be Excluded
1. All transfer Payments
2. Illegal Incomes – Smuggling, black Marketing etc.
3. Corporate taxes
4. Wind fall gains from lotteries
5. Income from the sale of second hand goods.
6. Service of Housewives
7. Works done as a hobby
8. Interest on National Debt
9. Expenditure on old shares and bonds
10. All expenditure on intermediate goods and services

Difficulties of National Income Measurement
1. Problem of double counting
2. Difficulty to convert value of goods and services in terms of money
3. Problem of measuring Capital Depreciation.
4. Income earned through illegal Activities
5. Difficulty of including Transfer Payments
6. Price Change
7. Abundance of Public Services
8. Problem of inventory Adjustments Double Counting

PREVIOUS 5 YEAR CBSE QUESTION AND ANSWERS.

Q1.	**Question:** "Final goods include only those goods which are consumed by the households". Defend or refute the given statement with valid reason.	**3 (2020)**

	Answer: The given statement is refuted as final goods include those goods which are either consumed by the households or purchased by a producer for investment purposes. **(to be marked as a whole) (No marks are to be allotted if reason is not/wrongly given)** <center>**OR**</center> **Question:** "Circular flow principle is based on the assumption that one's expenditure will become other's income." Explain the given statement. **Answer-** In a two sector economy households and firms exist to run the economy. Households render factor services to the firms and earn factor incomes from them. Whereas; firms produce and sell goods and services to households and earn their income by an equal magnitude. Thus, in a circular income mode, the axiom that one's expenditure is other's income holds true. **(to be marked as a whole) (Diagram not mandatory)**	
Q2	**Question:** (a)Calculate the value of " Change in Stock" from the following data: <table><tr><th>S.N O</th><th>Items</th><th>Amount (in Rs Crores)</th></tr><tr><td>I</td><td>Sales</td><td>400</td></tr><tr><td>Ii</td><td>Net Value Added at Factor cost (NVAFC)</td><td>200</td></tr><tr><td>Iii</td><td>Subsidies</td><td>10</td></tr><tr><td>Iv</td><td>Change in Stock</td><td>?</td></tr><tr><td>V</td><td>Depreciation</td><td>40</td></tr><tr><td>vi</td><td>Intermediate Consumption</td><td>100</td></tr></table> **Answer:** Change in stock = (ii) +(vi)+(v)-(iii)-(i) = 200+100+40-10-400 = (-) Rs 70 Crores. **Question: (**b). Define Real Gross Domestic Product. **Answer:** Real Gross Domestic product is the sum total of the money value of all final goods and services produced in an economy during the year estimated at some given base year's prices. <center>**OR**</center> **Question:** (a) Discuss briefly the three components of 'Income from Property and Entrepreneurship.' **Answer:** (a) Income from property and entrepreneurship (operating surplus) includes: i. Rent/Royalties ii. Interest iii. Profit (Brief explanation of each pointer) **Question:** (b) What are 'externalities'? State its types with suitable examples. **Answer:** (b) Externalities refer to the benefits/harms caused by a firm/individual to the Society in general, without being penalised. There are two types of externalities :- (i) Positive externalities – Social benefits. E.g. saving of time/fuel with construction of better roads in a country (ii) Negative externalities - Social harms for example pollution caused by stubble burning in some states of India. **(any other suitable definition/example to be allotted marks)**	6
Q3	**Question 20.** If the Real GDP is Rs 400 and Nominal GDP is Rs 450, calculate the Price Index (base = 100). [3] Answer: We know, $$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$$ $$400 = \frac{450}{\text{Price Index}} \times 100$$ $$\text{Price Index} = \frac{450}{400} \times 100 = \mathbf{112.50}$$	2015
Q4	**Question 26.** Giving reason explain how the following should be treated in estimation of national income: [6]	

	(i) Payment of interest by a firm to a bank
	(ii) Payment of interest by a bank to an individual
	(iii) Payment of interest by an individual to a bank
	Answer:
	(i) Payment of interest by a firm to bank will be included in the national income. This is because the firm would have taken loan for productive purposes.
	(ii) Payment of interest by a bank to an individual will be included in the national income. This is because the bank would have used the savings of the individuals (on which the loan is paid) for productive purposes.
	(iii) Payment of interest by an individual to a bank will not be included in the national income. This is because the individual is expected to have taken a loan for consumption purposes rather than for productive purposes.
Q5	**Question 29.**
	Calculate the 'National Income' and 'Private Income' : [6]

		(₹ crores)
(i)	Rent	200
(ii)	Net factor income to abroad	10
(iii)	National debt interest	15
(iv)	Wages and salaries	700
(v)	Current transfers from government	10
(vi)	Undistributed profits	20
(vii)	Corporation tax	30
(viii)	Interest	150
(ix)	Social security contributions by employers	400
(x)	Net domestic product accruing to government	250
(xi)	Net current transfers to rest of the world	5
(xii)	Dividends	50

Answer:

National Income = Wages and salaries + Social security contributions by employers + Rent + Interest + Dividends + Corporation tax + Undistributed profits – Net factor income to abroad
NNP_{FC} = 700 + 100 + 200 + 150 + 50 + 30 + 20 – 10
= Rs. 1240 crore

Question 29.
Calculate 'Net National Product at Market Price' and 'Personal Income'** : [6]

		(₹ crores)
(i)	Transfer payments by government	7
(ii)	Government final consumption expenditure	50
(iii)	Net imports	(-)10
(iv)	Net domestic fixed capital formation	60
(v)	Private final consumption expenditure	300
(vi)	Private income	280
(vii)	Net factor income to abroad	(-)5
(viii)	Closing stock	8
(ix)	Opening stock	8
(x)	Depreciation	12
(xi)	Corporate tax	60
(xii)	Retained earnings of corporations	20

Answer:

NNP_{MP} = Private final consumption expenditure + Government final consumption expenditure + (Net domestic fixed capital formation + depreciation) + Change in stock – Net imports –

	depreciation – Net factor income to abroad $NNP_{MP} = 300 + 50 + 60 + 12 + (8 – 8) – (-10) – 12 – (-5)$ $NNP_{MP} = $ Rs. 425 Crore	
Q6	**Question 22.** If the Nominal GDP is Rs 600 and Price Index (base = 100) is 120, calculate the Real GDP. [3] Answer: We know, $$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index of current year}} \times 100$$ $$= \frac{600}{120} \times 100 = ₹500$$	
Q7	**Question 29.** Calculate 'Net Domestic Product at Market Price' and 'Gross National Disposable Income'**: |		(₹ crores) | (i) Private final consumption expenditure — 400 (ii) Opening stock — 10 (iii) Consumption of fixed capital — 25 (iv) Imports — 15 (v) Government final consumption expenditure — 90 (vi) Net current transfers to rest of the word — 5 (vii) Gross domestic fixed capital formation — 80 (viii) Closing stock — 20 (ix) Exports — 10 (x) Net factor income to abroad — (–) 5 **Answer:** Net Domestic Product at Market Price = Private final consumption expenditure + Government final consumption expenditure + Gross domestic fixed capital formation + change in stock + Net exports – depreciation Net Domestic Product at Market Price = $400 + 90 + 80 + (20 – 10) + (10 – 15) – 25$ Net Domestic Product at Market Price = ₹ 550 crore	
Q8	**Question 21.** Assuming real income to be Rs 200 crore and price index to be 135, calculate nominal income. [3] Answer: Real income = Rs. 200 crores Price index = 135 Let the base year's price index be 100 Nominal Income = ? Real income = (Nominal income ÷ Price index of current year) × Price index of base year. X Price Index of base year = (Nominal income ÷ 135) × 100 Nominal Income = $(200 × 135) ÷ 100$ $= 27000 ÷ 100$	**2016**
Q9	**Question 24.** Sale of petrol and diesal cars is rising particularly in big cities. Analyse its impact on gross domestic product and welfare. [4] Answer: Impact of rising sale of petrol and diesel cars pm gross domestic product- GDP will increase because there is increasing demand of petrol and diesel cars in the big cities and to fulfil this increasing demand , the companies have to produce more and have to increase their level of production which will lead to increase in GDP. Impact of rising sale of petrol and cars on the welfare – The increased sale of petrol and diesel car in big cities is continuously increasing the level of pollution in big cities and is turning out to be a life threat for the people living there. This high level of pollution is making people suffer with many	

vulnerable diseases like asthma, heart diseases, lung problems, cancer, respiratory diseases, etc. Thus reducing the welfare of the people.

Question 30.
Find Gross National Product at Market Price and (Private Income**): [6]

(₹ Crores)

(i)	Private final consumption expenditure	800
(ii)	Net current transfers to abroad	20
(iii)	Net factor income to abroad	(−) 10
(iv)	Government final consumption expenditure	300
(v)	Net indirect tax	150
(vi)	Net domestic capital formation	200
(vii)	Current trasfers from government	40
(viii)	Depreciation	100
(ix)	Net imports	30
(x)	Income accuring to government	90
(xi)	National debt interest	50

Answer:
GDPmp = Private Final Consumption Expenditure + Government Final Consumption Expenditure + (net domestic capital formation+ depreciation) -net imports
GDPmp = 800 + 300 + (200 + 100) – 30
= 1100 + (300) – 30
= 1400 – 30
= Rs. 1370 crores.
GNPmp = GDPmp – Net factor Income to abroad
= 1370 – (- 10)
= Rs. 1380 crores.

Q10 **Question 22.**
If nominal income is ₹ 500 and price index is 125, calculate real income. [3]
Answer:
Real Income = (Nominal income ÷ Price index of current year) × Price Index of base year.
Let the base year's price index be 100.
Real Income = (500 ÷ 125) × 100
= 4 × 100
= Rs 400

Q11 **Question 27.**
Calculate Net National Product at Market Price and (Private income**): [6]

(i)	Net current transfers to abroad	10
(ii)	Private final consumption expenditure	500
(iii)	Current transfers from government	30
(iv)	Net exports	(−) 20
(v)	Net indirect tax	120
(vi)	National debt interest	70
(vii)	Net domestic capital formation	80
(viii)	Income accuring to government	60
(ix)	Income accruing to government	60
(x)	Government final consumption expenditure	100

Answer:
GDP$_{MP}$ = Private Final Consumption Expenditure + Government Final Consumption Expenditure

	+ (Net Domestic Capital Formation + Depreciation) + Net Exports = 500 + 100 + (80 + 0) + (-20) = 600 + 80 – 20 = 680 – 20 = Rs 660 crores. NNP$_{MP}$ = GDPmp -Depreciation – Net Factor Income to abroad = 660 – 0 – 20 = 660 – 20 = Rs 640 crores.	
Q12	**Question 23.** If real income is Rs 400 and price index is 105, calculate nominal income. [3] Answer: Real Income = (Nominal income + Price index of current year) × price index of base year. Let base year's price index be 100 400 = (nominal income ÷ 105) × 100 Nominal Income = (400 × 105) ÷ 100 = Rs 420.	

Q13	**Question 29.**
	Calculate National Income and (Personal Disposable Income**): [6]
	
	                                           (₹Crores)
	(i) Corporation tax 100
	(ii) Private final consumption expenditure 900
	(iii) Personal Income tax 120
	(iv) Government final consumption
	
	         expenditure 200
	(v) Undistributed profits 50
	(vi) Change in stocks (–) 20
	(vii) Net domestic fixed capital formation 120
	(viii) Net imports 10
	(ix) Net indirect tax 150
	(x) Net factor income from abroad (–) 10
	(xi) Private income 1000
	Answer:
	GDPmp Private final consumption expenditure + Government final consumption expenditure +
	(net domestic fixed capital formation + depreciation + change in stock) – net imports
	= 900 + 200 + (120 + 0 + (-20) – 10)
	= 1100 + (120 – 20) – 10
	= 1100 + (100) – 10
	= 1200 – 10
	= 1190.
	NNP$_{FC}$ = GDP$_{MP}$ + Net factor income from abroad – net indirect tax – depreciation
	= 1190 + (-10) – 150 – 0
	= 1190 + (-160)
	= 1190 – 160 = 1030
	National income = Rs. 1030 crores.	

Q14	**Question 21.** Explain with the help of an example, the basis of classifying goods into final goods and intermediate goods. [3] **Answer:** The basis of classifying goods into final goods and intermediate goods is that whether the good is purchased for final use or for the use in further production. **(i) Final goods**: All goods which are meant either for consumption by consumers or for investment by firms are called final goods. They are meant for final use and the final use of a product is only for consumption or investment. In other words, final goods are acquired for own use i.e. by consumers for satisfaction of their wants and by producers for capital formation. For examples, biscuits, flour, clothes are final goods when purchased by a consumer for their personal use or for satisfaction of	2017

	their wants. Machine bought by a household is final good but machine bought by a firm for its use in production is not a final good. **(ii) Intermediate goods :** All goods which are used as raw material for further production of other goods, or for re-sale in the same year are known as intermediate goods. For example flour, milk, sugar, salt, fuel, etc., when purchased by a firm in order to prepare biscuits are intermediate goods. The cloth if purchased by a dress maker is also an intermediate good. Machine if purchased by a firm for resale in the same year is an intermediate good.	
Q15	**Question 28.** Explain the precautions that should be taken while estimating national income by expenditure method. [6] **OR** Will the following be included in the domestic product of India ? Give reasons for your answer. (a) Profits earned by foreign companies in India. (b) Salaries of Indians working in the Russian Embassy in India. (c) Profits earned by a branch of State Bank of India in Japan. **Answer:** The following precautions need to taken for correct estimation of national income by expenditure method : - To avoid double counting, expenditure on all intermediate goods and services is excluded. For example, purchase of vegetables by a restaurant, expenses on electricity by a factory. - Government expenditure on all transfer payments such as scholarship, unemployment allowance, pension, etc. - Expenditure on purchase of second-hand goods is excluded from national income because this type of expenditure is not on currently produced goods. - Expenditure on purchase of old shares/ bonds or new shares/bonds, etc., is excluded because it is not the payment done for goods and services currently produced. It shows mere transfer of property from one person to another. - Imputed expenditure on own account output (e.g.-owner occupying his house, self- consumed output by a farmer) should not be included. **OR** (a) Profit earned by foreign companies in India : Yes, it is included in domestic income of India because profits are earned by the company within India's domestic territory irrespective of ownership of the company. (b) Salaries of Indians working in Russian embassy in India : No, it is not included in domestic product of India because Russian embassy in India is not a part of domestic territory of India (but a part of domestic territory of Russia). (c) Profits earned by a branch of State Bank of India in Japan : No, it is not included in domestic income of India because it is not earned in Indian domestic territory.	

Q16	**Question 29.** Calculate (a) National Income, and (b) Net National Disposable Income : ** [6] **(₹) in crores** (i) Compensation of employees 2,000 (ii) Rent 400 (iii) Profit 900 (iv) Dividend 100 (v) Interest 500 (vi) Mixed income of self-employed 7,000 (vii) Net factor income to abroad 50 (viii)Net exports 60 (ix) Net indirect taxes 300 (x) Depreciation 150 (xi) Net current transfers to abroad 30 **Answer:** (a) $NI = NDP_{fc} + NFLA$ (Net factor income from abroad) $NDPfc = COE + Mixed\ income + operating\ surplus$ $= COE + MI + (Rent + Royalty + Interest + Profit)$ $= 2,000 + 7,000 + 400 + 500 + 900$ $=Rs.10,800\ crores$ NNP_{fc} or $NI = NDP_{fc} -$ Net factor income to abroad $= 10,800 - 50 = 10,750\ crore.$
Q17	**Question 21.** Explain the circular flow of income. [3] **Answer:** Circular flow of income refers to continuous circular flow of goods, services and income among different sectors of an economy. Flow of money is the aggregate value of goods and services either as factor payments or as expenditure on goods and services. It is circular since it has neither any beginning nor an end. It can be explained as household sector supply factor services and spend their income on consumption. The firms use these services in producing goods and other services. The households as owner of factors for production receive the payments in terms of money or reward for rendering productive services. The recipients of these incomes (i.e. households) in turn, spend their incomes on purchase of goods and services to satisfy their wants. In short, income is first generated by production units, then distributed among households for rendering productive services and ultimately • comes back to production units by way of expenditure by the households. Circular flow works on two principles : • In an exchange process, the seller (producer) receives the same amount which the buyer (or consumer) spends. • Goods and services flow in one direction and the money paid to acquire them, flow in the reverse direction giving rise to a circular flow.
Q18	**Question 28.** Explain the precautions that are taken while estimating national income by value added method. [6] **OR** Will the following be included in the national income of India ? Give reasons for your answer. (a) Financial assistance to flood victims (b) Profits earned by the branches of a foreign bank in India (c) Salaries of Indians working in the Ameri-can Embassy in India. **Answer:** Precautions that are taken while estimating national income by value added method are: • Imputed rent of owner-occupied houses be included because all houses have rental value irrespective of its use by self or tenant. • Imputed value of goods and services produced for self-consumption or for free distribution should be included.

	• Only value added and not value of output by production units should be included. • Value of own-account production of fixed assets by enterprises, government and the households should be included. • The value of sale and purchase of second¬hand goods should be excluded. • Sale of bonds by a company should also be excluded since it is merely a financial transaction which does not contribute directly to the flow of goods and services. **OR** (a) Financial assistance to flood victims: This will not be included in the national income since it is a part of transfer payment. (b) Profits earned by the branches of a foreign bank in India: This is not to be included in the national income of India since it is earned by a foreign bank. (c) Salaries of Indians working in the American Embassy in India: It is included in national income of India since Indian employees of American embassy are the normal residents of India.	
Q19	**Question 29.** Calculate the (a) Net National Product at market price, and (b) Gross National Disposable Income: ** [6] (` in crores) (i) Mixed income of self-employed 8,000 (ii) Depreciation 200 (iii) Profit 1,000 (iv) Rent 600 (v) Interest 700 (vi) Compensation of employees 3,000 (vii) Net indirect taxes 500 (viii) Net factor income to abroad 60 (ix) Net exports (–) 50 (x) Net current transfers to abroad 20 **Answer:** (a) NNP_{mp} = Net national product at market price NDP_{fc} = COE + MI + OS (Rent + interest + profit) = (vi) + (i) + (iv) + (v) + (iii) = 3,000 + 8,000 + 600 + 700 + 1,000 = Rs.13, 300 crores (b) NNP_{mp} = NDP_{fc} – (viii) + (vii) = Rs. 13,300 – 60 + 500 = Rs. 13,740 crores.	
Q20	**Question 29.** Calculate the (a) Gross National Product at market price, and (b) Net National Disposable Income: ** [6] (₹ in crores) (i) Compensation of employees 2,500 (ii) Profit 700 (iii) Mixed income of self-empolyed 7,500 (iv) Government final consumption expenditure 3,000 (v) Rent 400 (vi) Interest 350 (vii) Net factor income from abroad 50 (viii) Net current transfers to abroad 100 (ix) Net indirect taxes 150 (x) Depreciation 70 (xi) Net exports 40	

	Answer:	
	(a) $GNP_{mp} = ?$	
	$NDP_{fc} = COE + MI + OS$ (Rent + profit + interest)	
	(i) + (iii) + (v) + (ii) + (vi)	
	= 2500 + 7500 + 400 + 700 + 350	
	= Rs.11,450 crores	
	$NNP_{mp} = NDP_{FC} + NFIA + $ Net indirect tax.	
	$= NDP_{FC} + $ (vii) + (N)	
	= 11,450 + 50 + 150	
	=Rs. 11,650 crores	
	$GNP_{mp} = NNP_{mp} + $ Depreciation	
	$= NNP_{mp} + $ (x)	
	= 11,650 + 70	
	=Rs.11,720 crores.	

Q21 — **Question 18.** — **2018**

Distinguish between stock and flow variables with suitable examples. [3]

OR

What are capital goods ? How are they different from consumption goods?

Answer:

Difference between stock and flow variables is:

Stock	Flow
(i) Stock relates to a point of time, e.g. your saving as on January 1, 2014 are Rs 10,000.	Flow relates to the period of time, e.g. your pocket expenses of ₹ 20 per day.
(ii) Stock is not time dimensional.	Flow is time-dimensional as per hour, per month, per year.
(iii) Stock influences the flow, greater the stock of capital, greater is the flow of goods and services.	Flow influences the stock. For example, monthly increase in the supply of money leads to an increase in the quantity of money.
(iv) Example – Population of a country, Bank deposit etc.	Expenditure of money, interest on capital etc.

Q22 Difference between capital goods and consumption goods is:

Consumption Goods	Capital Goods
(i) Goods which are consumed for their own sake to satisfy current needs of the consumers directly are consumption goods.	Capital goods are fixed assets of producers which are repeatedly used in production of other goods and services.
(ii) These are used for achieving satisfaction.	These are used for generating income by production units.
(iii) Consumption goods meet the basic objective of an economy i.e. to sustain the consumption of entire population of the economy.	Capital goods are producer's goods which are repeatedly used in production process for generating income.
(iv) For example – Food, shoes, retailers, barbers etc.	For example – Machine, tools, technology

Q23 | **Question 24.**

Calculate (a) Operating Surplus, and (b) Domestic Income: [6]

			(₹ in crores)	

(i)	Compensation of employees	2,000
(ii)	Rent and interest	800
(iii)	Indirect taxes	120
(iv)	Corporation tax	460
(v)	Consumption of fixed capital	100
(vi)	Subsidies	20
(vii)	Dividend	940
(viii)	Undistributed profits	300
(ix)	Net factor income to abroad	150
(x)	Mixed income	200

Answer:
(a) Operating Surplus :
OS = Corporation tax + Rent and Interest + Dividend + Undistributed profits.
OS = (iv) + (ii) + (vii) + (viii)
= 460 + 800 + 940 + 300
= Rs. 2,500 crores

(b) Domestic Income:
NDPFc = Compensation of employees + Operating surplus + Mixed income
= 2000 + 2500 + 200 = 4,700 crore
Answer: OS = 2,500 crore
DI = 4,700 crore

Q24	**Question 15**. What do you mean by a direct tax? [1] OR ' What do you mean by an indirect tax? **Answer:** Direct tax refers to a compulsory payment to the government whose impact and incidence falls on same person. It is progressive in nature. Example-Income tax and Property tax. OR Indirect tax refers to a compulsory payment to the government whose impact and incidence falls on different persons. It is regressive in nature. Example- VAT, custom duty.	2019

Q25	**Question 20**. "Higher Gross Domestic Product (GDP) means greater per capita availability of goods in the economy." Do you agree with the given statement? Give valid reason in support of your answer. [4] **OR** Explain the meaning of Real Gross Domestic Product and Nominal Gross Domestic Product, using a numerical example. **Answer:** I do not agree with the statement that "Higher gross domestic product (GDP) means greater per capita availability of goods in economy" as higher GDP does not mean high per head availability of goods and services. (i) It depends upon the population of the country. If GDP is higher but population is • equally high then per head availability of goods and services will be low. (ii) It also depends on the fact that whether the income is equally distributed or unequally distributed. If income is equally distributed then share of goods and services for each individual will be equal but if it is unequally distributed, the rich will take more share in comparison to a poor. **OR** Real GDP refers to the money value of all the final goods and services calculated at a base year price produced within the domestic territory in a given time period. Nominal GDP refers to the money value of all the final goods and services calculated at a current year prices produced within the domestic territory in a given time period.	

Commodities	Quantity in 2018	Prices in 2011	Prices in 2018	Real GDP	Nominal GDP
A	TO	5	10	50	100

	B	15	7	10	105	150	
	C	20	10	15	200	300	
	D	5	12	15	60	75	
	Total				415	725	

In the above table real GDP is Rs 415 for the year 2018 while nominal GDP is Rs 725 for the same year. Such a difference in GDP is due to increase in prices from base year to current year.
Therefore, Real GDP is always considered as true indicator of economic growth.

| Q26 | **Question 24.**
Define the following : [6]
(a) Value Addition
(b) Gross Domestic Product
(c) Flow Variables
(d) Income property and entrepreneurship

OR

Given the Following data, find the value of "Gross Domestic Capital Formation" and "Operating Surplus".

S.No.	Particulars	Amount (₹ is Crores)
(i)	National Income	22,100
(ii)	Wages and Salaries	12,000
(iii)	Private Final Consumption Expenditure	7,200
(iv)	Net Indirect Taxes	700
(v)	Gross Domestic Capital Formation	?
(vi)	Depreciation	500
(vii)	Government Final Consumption Expenditure	6,100
(viii)	Mixed Income of Self-Employed	4,800
(ix)	Operating Surplus	?
(x)	Net Exports	3,400
(xi)	Rent	1,200
(xii)	Net Factor Income from Abroad	(–) 150

Answer:
(a) Value addition refers to the produced within the domestic territory of a country during a accounting year.
(b) Gross domestic product refers to the money value of all the final goods and services produced within the domestic territory of country during a accounting year.
(c) Flow variables are the measurable variables that are measured over a period of time, e.g., National income.
(d) Income from property and entrepreneurship is also called the operating surplus which is the sum up of rent, royalty, interest and profits.

OR

Gross Domestic Capital Formation = (i) – {(iii) + vii + x} + vi – xii + iv
GDCF = 22,100 – {7,200 + 6,100 + 3,400} + 500 (-150) + 700
GDCF = Rs. 6750 crores
Operating Surplus = National income – wages and Salaries – mixed income of self employed – Net factor income from abroad | |
| Q27 | **Question 5.**
Discuss briefly the concept of normative economics, with suitable example. [3]
Answer:
Normative economics focuses on the ideological, opinion-oriented, prescriptive value of judgements and "what should be" statement aimed towards economic development, investment project, and scenarios. Its goal is to summarize people's desirability (or the lack thereof) to various economic | |

developments, situations, and programs by asking or quoting what should happen or what ought to be. ' Normative economics is subjective and the value -based, originating from personal perspectives, feelings, or opinions involved in the decision making process. Normative economics statements are rigid and prescriptive in nature. They often sound political or authoritarian, which is why this economic branch is also called "what should be" or "what ought to be" economics.

An example of a normative economic statement is : "The government should provide basic healthcare to all citizens." As you can deduce from this statement, it is value-based, rooted in personal perspective, and satisfies the requirement of what "should" be.

UNIT-3 DETERMINATION OF INCOME AND EMPLOYMENT

Aggregate demand : Aggregated demand means the total demand for final goods in an economy. It also means the aggregate expenditure on final goods in an economy. (OR)

AD is the sum total of expenditure that the people plan to incur on the purchase of goods and services produced in the economy during the period of an accounting year corresponding to their different levels of income.

Components of Aggregate Demand: - AD= C+ I+ G + (X-M)

I.   C = Demand for goods and services for private consumption also called private final consumption expenditure.

2.   I = Demand for private investment

3.   G= Demand for goods and services by the government

4.   (X-M) = Net exports.

Since the determination of income and employment is to be studied in the context of two sector model, the third and fourth components of aggregate demand are not discussed in details. The two sectors taken are households and firms.

BEHAVIOUR OF AD : AD Schedule :- Since AD is measured in terms of aggregate expenditure in the economy, Behavior of AD is studied in term of the behavior of aggregate expenditure at different levels of income (Y) .

AD Schedule:- Is a table showing AD corresponding to different levels of Y in the economy. AD is positively related to Y.

Y (INCOME)	AD
0	15
10	20
20	25
30	30
40	35
50	40

OBSERVATION: - 1. There is always some minimum level of expenditure in the economy even when Y=0. Thus, AD=   15 when Y = 0 called negative saving.
2.   AD increases as Y increases. Thus, AD is positively related to Y.
3.   After a certain level of Y is reached, Ad lags behind Y. Thus, when Y = 40, AD = 35. Thus, happens because, at higher levels of Y, people start saving a part of their income.

AD Curve :- Is a diagrammatic presentation of AD schedule showing AD corresponding to different levels of Y in the economy .

CONCEPT OF AGGREGATE SUPPLY (AS)
            AS (Y) refers to flow of goods and services as planned by the producers during an accounting year. (OR) It refers to the total production of commodities in the economy at a given point of time which is measured in terms of value added or the total income generated.
It is assumed that in the short run the prices of goods do not change and the elasticity of supply is infinite. At the given price level, output can be increased till all resources are fully employed. So how much will be the aggregate output will primarily depend upon how much is the aggregate demand in the economy. Components of Aggregate Supply (AS) : - AS (Y) = C+S
C=Consumption
S=Saving
AS Schedule:- Is a table showing the behavior of AS corresponding to different levels of Y in the economy.

Diagrammatic presentation of AS
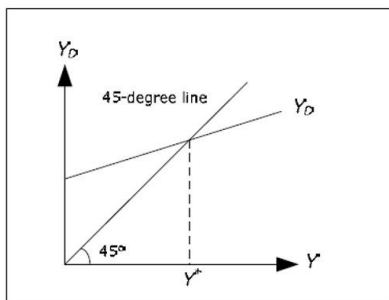
The Diagram shows that AS an Y are equal to each other. Therefore, As is indicated by a 45° line from the origin.
Significance of 45 degree line in Keynesian economics: - 45° line in Keynesian economics is a line of reference. Each point on this line shows that: AS= AD
The level of output income and employment in an economy move together in the same direction till full employment is reached. Increase in output mea ns, increase in level of employment and increase in level of income. Decrease in output means less employment and lower level of income.
Consumption Function/ Propensity to consume
It is an expression which establishes the functional relationship between consumption Expenditure(C) & the level of income(Y). It describes that how the change in the level of income influence the consumption expenditure of the households. The   rise in   income level leads to rise in the consumption expenditure, & vice versa.
Behavior of C with respect to Y.
(i)   There is always so me minimum level of C, even when Y=0 , this is called Autonomous consumption . This leads to negative saving (- S).
(ii)   Consumption is positively related to income rise in Y causes a rise in C.
(iii)   The entire increase in Y during a particular period is not converted into C. a part of saving.

Consumption Function: A Tabular presentation

Y (INCOME)	C (Consumption)
0	5
10	10
20	15
30	20
40	25
50	30

(I)) (5) is the minimum level of consumption. This is the level of C even when Y=0
(II) C rises in response to a rise in Y. Consumption is positively related to Income.
(III) The rate at which C increases is lower than the rate at which Y increases.

Diagrammatic Presentation
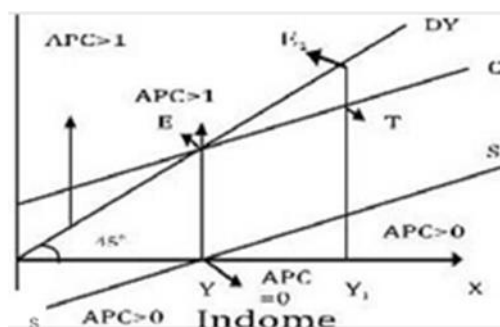
The Algebraic presentation of consumption function may be represented by the following equation.
C = C + bY   C > 0, O < b < I.
Where,
C = Consumption
C = Autonomous Consumption
b = Marginal Propensity to Consume
Y = Level of income
Average Propensity to Consume (APC) and Marginal Propensity to Consume (MPC)

Average Propensity to Consume (APC):-   APC is the ratio between total consumption and total disposable income.
APC=C/Y
Value of APC: value of APC is
(i)   It is never Zero (0)
(ii)   (ii) It is greater than Zero (0)
(iii)   (iii) It can be greater than l if C > Y
(iv)   (iv) It can be l if Y=C.
Marginal Propensity to Consume (MPC) - It refers to the ratio of change (additional) in Consumption and change (additional) in income.
MPC= $\Delta C/ \Delta Y$
Value of MPC always lies between 0 and 1 i.e. 0<MPC<l.
Saving Function or propensity to save:- It refers to the functional relationship between S and Y (saving & level of income) , S = f (Y). In other words, it is the tendency of the households to save at a given level of income.
Income that is not s p e nt on consumption is saved, that is S = Y - C
The savings function relates the level of saving to the level of income. Equation of the saving function.

S = Y - C

$\bar{}$ $\bar{}$

Y - (C + bY) (Since C =$\bar{C}$ + b Y)

=Y-$\bar{C}$ - bY

S = -$\bar{C}$ + (1 - b)Y

$\bar{C}$ = Autonomous saving

Saving Function: A Tabular presention

Y(Income)	C(Consumption)	Saving(Y-C)
0	5	-5
10	10	0
20	15	+5
30	20	+10
40	25	+15
50	30	+20

OBSERVATION:- I . S = -5 when Y = 0. This is because C= 5, this is called Autonomous Saving.

2.   S increases as Y increases. Implying that S is positively related to Y .

3.   S remains lower than Y. It is never greater than Y.

Y(Income)	C(Consumption)	Saving(Y-C)
0	100	-100
100	180	-80
200	260	-60
300	340	-40
400	420	-20
500	500	00
600	580	+20
700	660	40

Average Propensity to Save (APS) and Marginal Propensity to Save (MPS)

Average Propensity to Save (APS) :-   APC is the ratio between Aggregate Saving and Aggregate income.

APS = S/Y

Value of APS : value of APS is

 (i) It can be negative (-), If C > Y. (ii) It can be Zero (0), if Y = C.

(ii)   It can be greater than 0, if Y > C. (iv) APS never I and greater than l.

Marginal Propensity to Save (MPS) :-It refers to the ratio of change (additional) in Saving and change (additional) in income.

MPS = $\Delta S/\Delta Y$

Value of MPS always lies between 0 and 1 i.e. 0<MPS <l.

Relationship between APC and APS :- APC and APS is equal to one.

APC+APS = 1

APC= C/Y and APS = S/Y

 APC +APS = C / Y + S / Y

= C+S /Y = Y/Y = 1

Relationship between MPC and MPS :- MPC and MPS is equal to one.

MPC+MPS = I

$MPC = \Delta C/\Delta Y$ and $MPS = \Delta S/\Delta Y$

$MPC+MPS = \Delta C/\Delta Y + \Delta S/\Delta Y$

$= \Delta C + \Delta S$ I $\Delta Y = \Delta Y/\Delta Y = 1$

Derivation of Saving curve from Consumption Curve :-

Shows the Derivation of Saving curve from a given Consumption Curve.
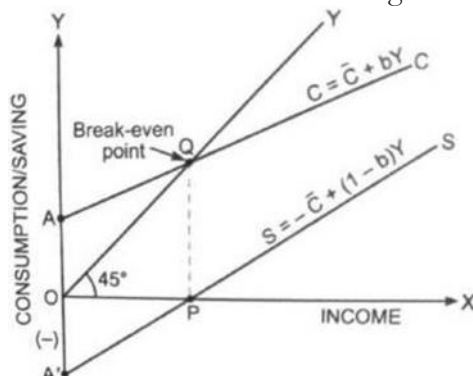
It involves the following steps.

(i)   We take OA' = OA. Because OA= consumption when Y = 0, so that, OA' is the negative saving

When Y =0. It is indicated by $\bar{c}$ in the saving function.

(ii)   Point P on the saving curve is marked corresponding to point Q on the consumption curve.

(iii)   By joining points A' and P and stretching it to from a straight Line, we get S curve. S-function linear C- function.

Derivation of Consumption curve from Saving Curve

Shows the Derivation of consumption curve fr om a given saving Curve.

I t involves the following steps.

(I)   We take OA = OA'. Because O A' = negative saving when Y = 0, and this is exactly equal to minimum consumption when Y = 0.

(II)   Po int Q on the y- line is marked co1Tesponding to point P on tbe Saving curve.

(III)   By joining points A and Q and stretching it to from a straight line , we get C cmve. C-Function is linear as it is derived from a linear S - function.

Table : Average Propensities to Consume and Save

y	C	ΔY	ΔC	MPC ($\Delta C/\Delta Y$)	s	ΔS	MPS ($\Delta S/\Delta Y$)	MPC+MPS
0								
	0	100				- 100		
	100	150		1.5		-50	-0.5	I
	200	210		1.05		-10	0.05-	1
	300	275		0.91		+25	0.09	1
	400	350		0.87		+50	0.13	
	500	430		0.86		+70	0.14	1
	600	525		0.87		+75	0.13	

	0	100				- 100		
	100	150		1.5		-50	-0.5	I
	200	210		1.05		-10	0.05-	1

300	275	0.91	+25	0.09	**1**
400	350	0.87	+50	0.13	
500	430	0.86	+70	0.14	**1**
60 0	525	0.87	+75	0.13	

Complete the following table:

Income (Rs.)	Saving	MPC	APS
20	-12		
40	-6		
60	0		
80	6		

MPC = - , 0.7,0.7, 0.7 MPS= -0.6, 0.15, 0 , 0.075
Complete the following table:
Income

Income (Rs.)	MPC	Saving	APS
0		-110	
100	0.6		
200	0.6		
300	0.6		

Saving: - 10 APS: - 0.033

70, - 30, 0.7, -0.15,

Complete the following table:

Inco me (Rs.)	Sav ing (Rs.)	APC	MPC
0	-40		
so	-20		
100	0		0.6
150	30	0.8	
200	50		

AP C: - 1.4, 1, 0.8, 0.75 MPC: - , 0.6, 0.6, 0.4, 0.6

DETERMINATION OF EQUILIBRIUM OUTPUT (GDP) OR EQUILIBRIUM INCOME
Two approaches to study the determination of equilibrium income (GDP):-
(i)   Consumption plus Investment Approach (AS=AD approach)
(ii)   Savings and Investment approach (S=I approach)
 Consumotion plus Investment Annroach (AS-AD) of Eqauilibrium level of Income
Equilibrium level of income and output is that level of income or output at which ex- ante
Aggregate demand becomes equal to ex- ante Aggregate supply'.
AS=AD

It is also called Effective demand'. Since AS=Y, therefore the economy is in equilibrium if
                    Y = AD or Y= C+I.
Effective demand: - Refers to that level of AD where AS = AD. Thus, effective demand always
corresponds to the equilibrium level of income in the economy. It is called effective as it is this level
of AD which actually determines the equilibrium between AS and AD. As just coincides with AD.
Because AS is assumed to be perfectly elastic.

INCOME
(Y)   CONSUMPTION
(C)   SAVING(Y-C)
(S)   INVESTMENT

INCOME (Y)	CONSUMPTION (C)	SAVING(Y-C) (S)	INVESTMENT (I)	AD(C+I)	AS(C+S)
0	50	-50	100	150	0
100	100	0	100	200	100
200	150	50	100	250	200
300	**200**	**100**	**100**	**300**	**300**
400	250	150	100	350	400
500	300	200	100	400	500
600	350	250	100	450	600

It is clear from the above schedule that, equilibrium is struck when AS =AD =300. Equilibrium of
income of income =300.
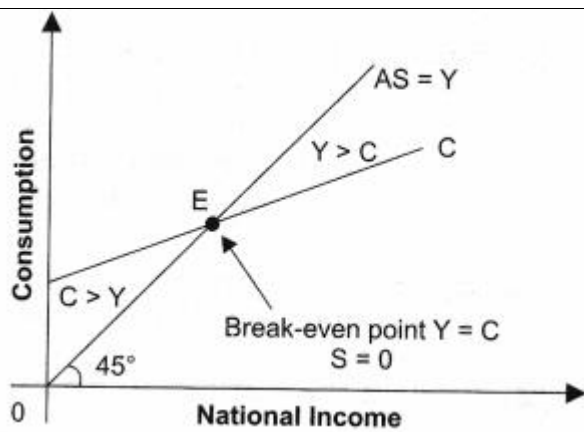
In the diagram, AD function shows different levels of AD. But it is only at point E that AS=AD.

ADJUSTMENT MECHANISM:
(i)   AD> AS (Ex-ante AD > AS Ex-ante AS)
(ii)   AD< AS (Ex-ante AD< AS Ex-ante AS)

AD > AS {Ex-ante AD > AS Ex-ante AS) :- If AD> AS, flow of goods and service in the economy tends to be less than their demand. As result:
(i)   The existing stocks of the producers would be sold out and
(ii)   The producer would suffer the loss of unfulfilled demand
(iii)   To rebuild the desired stocks and avoid the loss of unfulfilled demand.
(iv)   The producer would plan greater production.
(v)   AS would increase to become equal to AD.

AD < AS {Ex-ante AD < AS Ex-ante AS) :- If AD < AS , flow of goods and service in the economy tends to exceed their demand. As result :
(i)   Some of the goods would remain unsold .
(ii)   To clear unwanted s tocks.
(iii)   The producer would plan a cut in production.
(iv)   Consequently, AS would reduce to become equal to AD.

Savings and Investment approach {S=I approach or Planned S = Planned I

An economy is in equilibrium at a point where ex- ante or planned saving is equal to planned   investment This is because in equilibrium:

AS= AD
Y= C+S   and   AD= C+I

C+S = C+I

S =I   (as C is common on both side of the equation) (Alternative Approach)

Equilibrium is struck when:
S=I=100 and equilibrium income =300 at the level AS=AD(300each)

Equilibrium is struck at point E where S and I lines intersect each. EM is the equilibrium level of income.

ADJUSTMENT MECHANISM:
(i)   S > I (Planned S > Planned I)
(ii)   S < I (Planned S < Planned I)
S > I {Planned S > Planned 1):- In such situation , the following changes wil l occur.
(i)   Stock of the producer would be in excess of desired limit.
(ii)   Profits will s ta1t shrinking.
(iii)   Planned output for the subsequent year will fall.

(iv)   Level of income and employment will tend to shrink to the point where S=I.

(v)   The economy will come back to the state of equilibrium.

S < I (Planned S < Plann ed I) :- In such situation , the following changes will occur.

(i)   Existing stock of the producers will not be enough to cope with the level of AD.

(ii)   Pro fits will not be maximum because the desired level of stock is not available.

(iii)Producers will plan higher level of output for the subsequent years.

(iv)Level of income and employment will rise to drive the economy to the point of equilibrium.

INVESTMENT MULTIPLIER AND ITS MECHANISM

Investment multiplier is the ratio of a change in income (Y) to a given change in investment (I).

$K = (\Delta Y) / (\Delta I)$

H e re : K = Multiplier

ΔY = Change income

ΔI = Change in Investment

RELATIONSHIP BETWEEN MULTIPLIER AND MPC : - There is direct relationship between investment multiplier and MPC . Higher the MPC, greater is the size of multiplier and vice versa. In fact, multiplier is often estimated with reference to MPC, as under :

K= 1 / 1-MPC (K= 1/MPS)

This equation establishes a direct relationship between MPC and K.

WORKING OF MULTIPLIER: Example: - Assuming that increase in investment is Rs. 1,000 crore and MPC is 0.9. Explain the working of multiplier.

Multiplier is the ratio of a change in income (ΔY) to a given change in investment (ΔI).

$K = (\Delta Y) I (\Delta I)$

Autonomous investment   Induced investment

1, It refers to the investment expenditure

K= 1/ 1 -MPC

= 1/ 1-0.9= 1/ 0.1 =10

Given that ΔI= 1000   K,   =10

ΔY = 10 x 1,000

= Rs 10,000 crore.

Investment

1.   Autonomous investment. 2. Induced investment

PROBLEM OF DEFICENT DEMAND AND EXCESS DEMAND

SOME ESSENTIAL CONCEPTS:-

Full Employment Equilibrium: - Refers to the situation in the economy when AS=AD or S=I along with fuller utilization of resources. There is no excess capacity or unemployed ment in the economy.

Underemployment Equilibrium:- Refers to the situation in the economy when AS=AD or S=I but without fuller utilization of resources. Accordingly, there is unutilised capacity or excess capacity in the eco nomy eve n in a state of equilibrium.
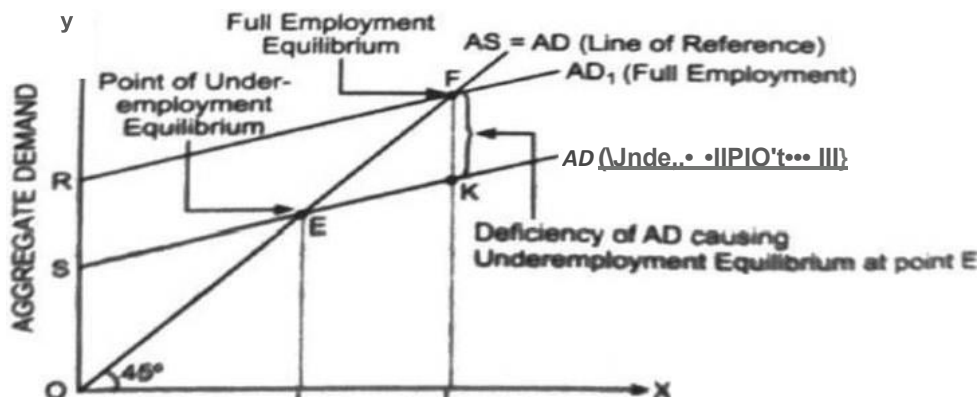
Unemployment equilibrium level of income = OL, while full employment equilibrium level of income =
OLl .
Voluntary unemployment: - When some people are not willing to work at all, or not willing to work at the existing wage rate.
Involuntary unemployment:- When some people are not getting work, even when they are willing to work at the existing wage rate. The economy fails to create enough jo bs beca use planned o utput is lower than the potential output.
Frictional Unemployment:- Frictional un employment is the unemployment associated with the changing of jobs in dynamic economy.
Structural unemployment:- Structural unemployment is the unemployment which is associated with structural changes in the economy, like change in technology.
Situation of Full Employment:- Full employment does not mean a situation of zero unemployment. Owing to constantly changing supply - demand parameters in the economy, there always exists some frictional and structural unemployment.
Problems of Deficient Demandand Deflationarv Gap

Problems of Deficient Demand and Deflationary gap :- Deficient demand (Deflationary gap) refers to situation when Aggregate Demand is less than Aggregate Supply (AD < AS) corresponding to full employment level in the economy'.
Measurement of Deficient Demand:- There is deflationary gap in the economy.

- • ADI line shows the required level of AD for full employment in the economy:.
- • AD2 line shows planned AD which is lower than the full employment AD.
- • The ve11ical difference between AD1 and AD2 = FG.
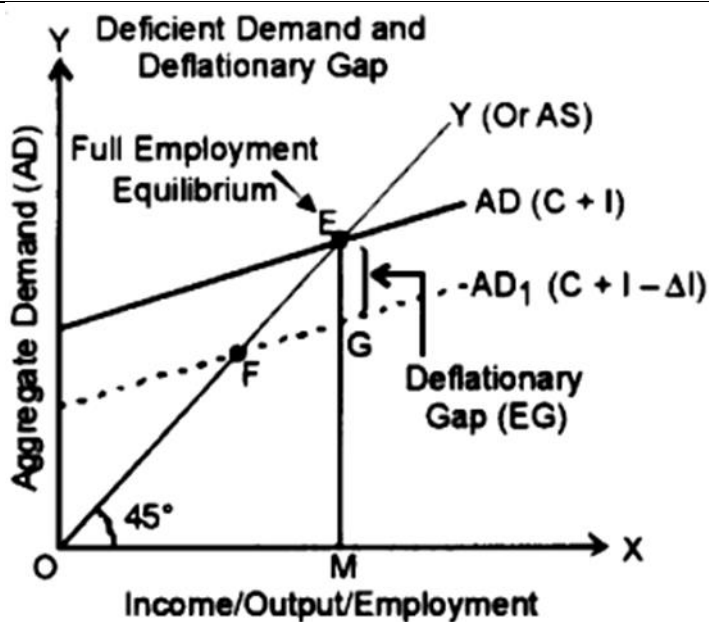
Deficient Demand and Deflationary Gap

- (C+I)l line shows the required level of AD for full employment in the economy0.
- (C+I) 0 line shows planned AD which is lower than the full employment AD.
- The vertical difference between (C+I)l and (C+I)O = FG.
- FG is Deflationary gap.

Causes of Deficient Demand (Deflationary gap): In a sector closed economy, deficiency of AD occurs largely due to:
(i) Reduction in Private Consumption Expenditure(C).
(ii) Reduction in Private Investment Expenditure (I).
(iii) Reduction in Government Expenditure (G).
(iv) Decline in Exports (X).
(v) Rise in Import (M).
(vi) Increase in Tax Rates.

Consequences of Deficient Demand:- Deficient AD leads to four critical situations in the economy , as under.
(i) Underemployment Equilibrium
(ii) Deflationary Gap
(iii) Loss of Profits
(iv) Undesired stocks

PROBLEM OF EXCESS DEMAND (INFLATIONARY GAP)

Excess demand Inflationary gap) refers to situation when Aggregate Demand is mor e than Aggregate Supply (AD > AS) corresponding to full employment level in the economy' .

Measurement of Excess Demand Diagrammatic illustration:- There is Inflationary gap in the economy.
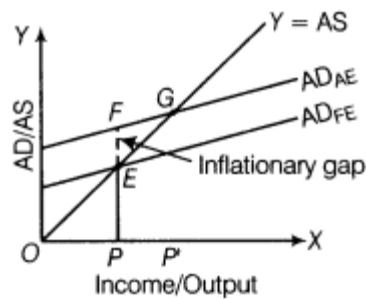
Where, AD_{FE} = AD at full employment

AD_{AE} = AD above beyond full employment

EF = Excess demand

• AD (Full employment) line shows the required level AD for full employment in the economy.

• ADl line shows planned AD which is higher than the full employment AD.

• The vertical difference between AD1 and AD =EF =Excess Demand.

Inflation Gap = Excess Demand
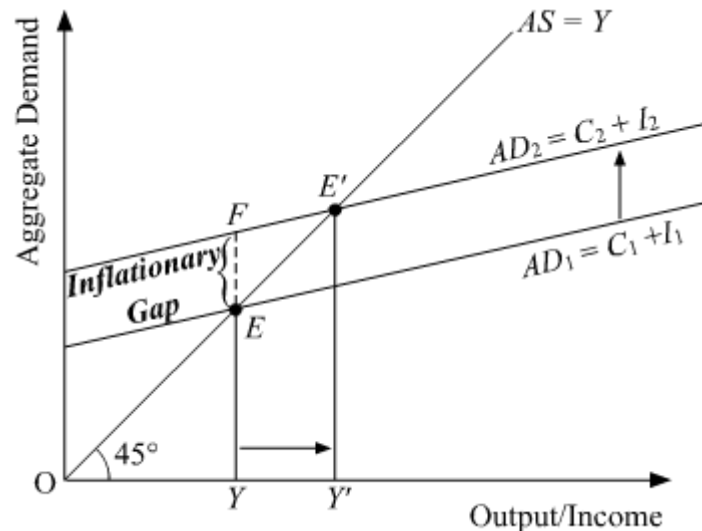
• AD1(C_1+I_1 (Full employment) line shows the required level AD for full employment in the economy.

• AD2 (C_2+I_2) line shows planned AD2 which is higher than the full employment AD.

• The vertical difference between $(C+I)_1$ and $(C+l)_2$ =GF =Inflationary gap

• Inflation Gap = Excess Demand

Causes of Excess Demand (Inflationary gap): In a sector closed economy, excess of AD occurs la rge ly due to :

(i) Increase in Private Consumption Expenditure(C).

(ii) Increase in Private Investment Expenditure (I).

(iii) Increase in Government Expenditure (G).

(iv) Increase in Exports (X).

(v) Decrease in Import (M).

(vi) A cut in tax rates leaving higher disposable income .

Consequences of Excess Demand: - Excess AD leads to three critical situation s in the economy, as under.

(i) Inflationary Gap

(ii) Static GDP

(iii) Excess demand and Wage- Price Spiral

Measures to correct Excess (Inflationary gap) & Deficient demand (Deflationary gap).
The measures can be classified into two measures viz.
I.   Fiscal measures/policy; 2. Monetary measures/policy

Fiscal Measures to correct   Excess (Inflationary 2ap)   Deficient   demand (Deflationary2ap)
1.Government Expenditure   Reduce Increase
2.Taxes Increase   Reduce
3.Public borrowing(Public Deb t)   Increased(steps up)   Reduced its borrowing
4.Borrowing from RBI Reduce Increase

Monetary Measures to correct Excess (Inflationary2ap)   Deficient   demand (Deflationary 2ap)
Quantitative Methods
1.   Bank rate and Repo rate   Increase   Decrease
2.Reverse Repo rate   Increase   Decrease
3.Open Market Operation   Selling securities   Purchase of securities
4. Cash Reserve Ratio(CRR)   Increase   Decrease
5.Statutory Liquidity Ratio (S LR)   Increase   Decrease
Qualitative Measures:
6. Margin Requirements   Raised (Increased)   Reduce
7. Moral Suasion & Direct Action   Selective and strict lending   Liberal in lending
8. Rationing of Credit Restricts the availability of credit.   Enhance the availability of credit.

Fiscal Measures to correct	Excess (Inflationary 2ap)	Deficient demand(Deflationary2ap)
1.Government Expenditure	Reduce	Increase
2.Taxes	Increase	Reduce
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Quantitative Methods		
1. Bank rate and Repo rate	Increase	Decrease
2.Reverse Repo rate	Increase	Decrease
3.Open Market Operation	Selling securities	Purchase of securities
4. Cash Reserve Ratio(CRR)	Increase	Decrease
5.Statutory Liquidity Ratio (SLR)	Increase	Decrease
Qualitative Measures:		
6. Margin Requirements	Raised (Increased)	Reduce
7. Moral Suasion & Direct Action	Selective and strict lending	Liberal in lending
8. Rationing of Credit	Restricts the availability ofcredit.	Enhance the availability ofcredit.

Measures to correct Excess inflationary gap)

Fiscal measures: These measures are formulated & implemented by the Government to control Excess demand/ inflationary gap . The following tools are used to control & combat the Excess demand/ inflationary situation.

(1)   Public (Government) Expenditure: Excess demand / inflationary situation When AD> AS corresponding to full employment level in the economy. During this situation genera l price level to rise , causing a rise in the rate of interest ,fall in investment and fall GDP. Correction of Excess demand / inflationary situation: (i) Cut (Reduce) government expenditure (ii) Cause an overall cut in aggregate demand.(iii) So that excess aggregate demand is corrected.
(iv)   Excess demand/ inflationary gap situation eliminated.

(2)   Taxes: - Taxes are a compulsory payment made to government by the household. Correction of Excess demand/ inflationary situation: (i) By increasing the tax burden on households. (ii) The government reduces their disposable income. (iii) Accordingly, AD is reduced and Excess demand/inflationary situation managed.
(3)   Public borrowing (Public Debt):- By borrowing from the public, the government steps up public
borrowing. In the situation of Excess demand / inflationary gap AD needs to be reduced. Correction of Excess demand / inflationary situation: (i) The government steps up public borrowing by offering attractive rate of interest. (ii) This reduces liquidity with the people. (iii) Accordingly, aggregate expenditure also reduces and Excess demand / inflationary situation managed.
(4)   Borrowing from RBI{ The Central Bank): Borrowing by the government from the RBI . Correction of Excess demand / inflationary situation: (i) Reduced amount of borrowing by government.
(ii) The amount of liquidity in the economy also reduced (iii) As desired to correct and Excess demand / inflationary situation.
Monetary Measnres:
These measures are adopted by the Central Bank of a country in   order to control   Excess demand / inflationary gap. There are two methods or instruments of monetary policy.
Quantitative Methods or General methods:- which refer to the control of quantity of Money supply through credit control. The following instruments are used in   Quantitative method:

(1)   Bank Rate and Repo Rate Policy: It refers to the rate of interest charged by the Central Bank
on the loan s & advances given to the Commercial Banks. The Bank Rate and Repo rate is determined by the Central Bank itself. Correction of Excess demand / inflationary situation: (i) The RBI (CB) Raised the bank rate and Repo rate. (ii) Which lead s to rise in rate of interest.(i ii) This leads to raise the savings & reduce the demand for loans (iv) There is a fall in purchasing power & further fall in AD and correct and Excess demand / inflationary situation.
(2)   Reverse repo rate: This induces the commercial bank to park their surplus funds with the RBI for short period of time. To Correction situation of Excess demand / inflationary gap : (i)Re verse repo rate is increased. (ii) As a follow-up action, the commercial bank will be increase their deposits with the RBI (CB) (iii) This, in tum, will reduce their ability to land money. (iv) Consequently , consumption and investment expenditure will be reduced. (v) Implying a reduction in AD correct and Excess demand I inflationary situation.
(3)   Open Market Operations: It refers to the process to sale & purchase of securities by the RBI (CB) in the economy. Correction of Excess demand / inflationary situation (i) The RBI sells the bonds & securities in the market which is purchased by the banks, individuals and other financial institution s of the economy. (ii) This helps in wiping out the excess of money supply from the society (iii) There is a fall in purchasing power of the people.(iv) Consequently , the AD falls, this helps in reducing the price level and correct and Excess demand/ inflationary situation
(4)   ) Cash Reserve Ratio: It is indicating some percentage of demand deposits of the commercial banks to be kept as cash reserves with RBI. The CRR is an important tool which is used to correct the Excess demand / inflationary situation : (i) As the rise in CRR lea ds to fall in the lending capacity of the banks.
(ii) Leads to fall in the lending capacity of the banks. (iii) This results in fall in money supply & further

fall in AD. (iv) The fall in AD leads to fall in price level and correct and Excess demand / inflationary situation.

(5)   Statutory Liquidity Ratio (SLR) :- SLR refers to liquid assets of the commercial banks which they are

required to maintain as a minimum percentage of their total deposits. The SLR is an important tool which is used to correct the Excess demand / inflationary situation : (i) As the rise in SLR leads to fall in the lending capacity of the banks. (ii) Leads to fall in the lending capacity of the banks. (iii) This results in fall in money supply & further fall in AD. (iv) The fall in AD leads to fall in price level and correct and Excess demand/ inflationary situation.

OUAL IT AVTIVE METHOD

(1)   Margin Requirements :- The margin requirements refers to the difference between current value of the security offered for loans and the value of

Loans granted. In case the Excess demand/ inflationary situation: (j) As the 1ise in the

margin requirement (ii) Leads to restrict the availability of credit. (iii) This results in fall in money supply & further fall in AD. (iv) The fall in AD leads to fall in price level and correct and Excess demand/ inflationary situation.

(2)   Moral Suas ion & Direct Action :- It is refers to pressure exercised by the central bank on the

commercial bank . In case the Excess demand / inflationary situation:

(i)   Restrict s and selective availability of credit. (ii) This results in fall in money supply & further fall in AD.

(iii) The fall in AD leads to fall in price level and con-ect Excess demand I inflationary situation.

(3)   Rationing of Credit: It is refers to fixation of credit quotas for different business activates. In case the Excess demand/ .inflationary situation : (i) restrict the availability of credit. (ii) Accordingly , AD is lowered

(iii) Correct Excess demand / inflationary situation.

Measures to correct Deficientdemand (Deflationary gap)

Fiscal measures: These measures are formula ted & implemented by the Government to control
        Deficient demand (Deflationary gap). The following tools are use d to control & combat
Deficient demand (Deflationary gap)situation.

(I)Public (Government) Expenditure: Deficient demand (Deflationary gap) situation When AD< AS corresponding to full employment level in the economy. Correction of Deficient demand / Deflationary situation: (i) Government expenditure is Increased (ii) Cause an overall Increased in aggregate demand.(iii) So that less aggregate demand is co1Tected.(iv) Deficient demand (Deflationary gap) situation eliminated.

(2)   Taxes:- Taxes are a compulsory payment made to government by the house hold. Correction of Deficient demand (Deflationary gap)situation: (i) By Lowering (Reduced) the tax burden on households.
(ii) The government increases their disposable income. (iii) Accordingly, AD is raised and Deficient demand (Deflationary gap) situation managed.

(3)   Public borrowing (Public Debt):- By borrowing from the public, the government create public debt In the situation of Deficient demand (Deflationary gap) AD needs to be increased. Correction of Deficient demand (Deflationary gap) situation: (i) The government reduces its borrowing from the public. (ii) So that people with greater liquidity . (iii) Accordingly, aggregate expenditure remains high and Deficient demand (Deflationary gap) situation managed.

(4)   Borrowing from RBI(The Central Bank): Borrowing by the government from the RBI . Correction of Deficient demand (Deflationary gap situation: (i) Increased amount of borrowing by government. (ii) Higher borrowing releases greater liquidity in the economy (iii) As required to correct Deficient demand (Deflationary gap) situation.

Monetary Measures:

These measures are adopted by the Central Bank of a country m order to control Deficient demand (Deflationary gap. There are two methods or instruments of monetary policy.

i) Quantitative Methods or General methods:- which refer to the control of quantity of Money supply through credit control. The following instrument s are use d in

Quantitative method:

1.Bank Rate and Repo Rate Policy: It refers to the rate of interest charged by the Central Bank on the loan s & advances given to the Commercial Banks. The Bank Rate and Repo rate is determined by the Central Bank itself. Correction of Deficient demand (Deflationary gap situation: (i) The RBI (CB) Reduced the bank rate and Repo rate. (ii) Which leads to reduced in rate of interest.(iii) This lead s to reduced the savings & Raised the demand for loans (iv) There is a increase in pw-chasing power & further raised in AD and correct and Deficient demand (Deflationary gap) situation.

(2) Reverse repo rate: This induces the commercial bank to park their surplus funds with the RBI for sh01t period of time. To Correction situation Deficient demand (Deflationary gap) : (i)Reverse repo rate is Decrease . (ii) As a follow-up action, the commercial bank will be reduce their deposits with the RB I (CB) (iii) This, in turn, will increase their ability to land money. (iv) Consequently, consumption and investment expenditure will be increase d . (v) Implying a increase d in AD correct and deficient demand (Deflationary gap) situation.

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(4) Cash Reserve Ratio: It is indicating some percentage of demand deposits of the commercial banks to be kept as cash reserves with RBI. The CRR is an important tool which is used to correct the Deficient demand (Deflationary gap) situation : (i) As the Decrease in CRR leads to rise (ii) Leads to rise in the lending capacity of the banks. (iii) This results in rise in money supply & further rise in AD.

(iv) The rise in AD leads correct and Deficient demand (Deflationary gap) situation.
Statutory Liquidity Ratio (SLR) :- SLR refers to liquid assets of the commercial banks which they are required to maintain as a minimum percentage of their total deposits. The SLR is an important tool which is used to correct the Excess demand/ inflationary situation : (i) As the Decrease in SLR leads to rise (ii) Leads to rise in the lending capacity of the banks. (iii) This results in rise in money supply & further rise in AD. (iv) The rise in AD leads correct and Deficient demand (Deflationary gap) situation.

QUALITAVTIVE METHOD
(1) Margin Requirements:- The margin requirements refers to the difference between current value
of the security offered for loans and the value of
Loans granted. In case the Deficient demand/ deflationary situation: (i) As the fall (lowered) in the margin requirement (ii) Leads to raise the availability of credit. (iii) This results in rise in money supply & further rise in AD. (iv)The rise in AD leads to correct and Deficient demand (Deflationary gap) situation.
(2) Moral Suasion & Direct Action:- It is refers to pressure exercised by the central bank on the commercial bank. In case the Deficient demand/ deflationary situation:
(i) Liberal availability of credit. (ii) This results in rise in money supply & further rise in AD.
(iii) The rise in AD lea d s to correct (iv) The 1i se in AD .leads correct and Deficient demand (Deflationary gap) situation.
(3) Rationing of Credit: It is refers to fixation of credit quotas for different business activates. In case the
Deficient demand / deflationary situation: (i) enhance the availability of credit. (ii) Accordingly, AD is increased (iii) This results in rise in money supply & further rise in AD. (iv)The rise in AD leads correct and deficient demand (Deflationary gap) situation.

SHORT AND LONG ANSWER TYPE QUESTION

Ql. C= 100 + 0.4 Y is the consumption function of an economy where C is consumption expenditure and Y is national income. Investment expenditure is 1,100. Calculate:

(I} Equilibrium level of national income.

(II} Consumption expenditure at equilibrium level of national income. Ans:-At equilibrium: - Y=C+I
Y=l00+0.4Y+ll00 Y= 1 200+0.4Y

Y-0.4=1200 0.6Y=1200 Y=1200/0.6=20   C=100+0.4Y
= 100+0.4(2000) =100+800 =900

(I)   Equilibrium level of national income= 2000
(II)   Consumption expenditure at equilibrium level of national income =900

Q2. Explain national income equilibrium through aggregate demand and aggregate supply. Use diagram. Also explain the change that takes place an economy when the economy is not in equilibrium.

Ans:- ' Equilibrium level of income and output is that level of income or output at which ex- ante Aggregate demand becomes equal to ex- ante Aggregate supply' .

AS=AD

It is also called 'Effective demand'. Since AS=Y, therefore the economy is in equilibrium if Y = AD or Y= C+I.

Effective demand:- Refers to that level of AD where AS = AD . Thus, effective demand always corresponds to the equilibrium level of income in the economy. It is called effective as it is this level of AD which actually determines the equilibrium between AS and AD. As just coincides with AD. Because AS is assumed to be perfectly elastic.

INCOME (Y)	CONSUMPTION (C)	SAVING(Y-C) (S)	INVESTMENT (I)	AD(C+I)	AS
0	50	-50	100	150	
100	100	0	100	200	
200	150	50	100	250	
300	**200**	**100**	**100**	**300**	
400	250	150	100	350	
500	300	200	100	400	
600	350	250	100	450	

It is clear from the above schedule that, equilibrium is struck when AS =AD =300.

Equilibrium of income of income =300.
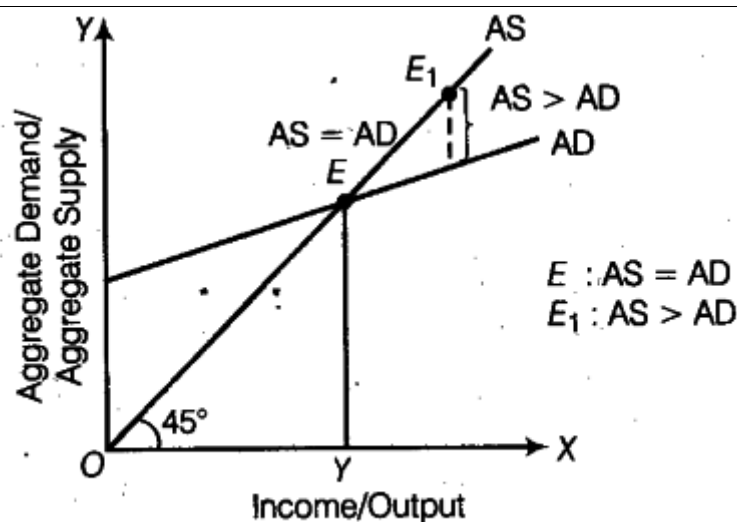
In the diagram, AD function shows different levels of AD. But it is only at point E that AS = AD.

ADJUSTMENT MECHANISM:

(iii)   AD > AS (Ex-ante AD > AS Ex-ante AS)

(iv)   AD < AS (Ex-ante AD < AS Ex-ante AS)

AD > AS (Ex-ante AD > AS Ex-ante AS) :- If AD> AS , flow of goods and service in the economy tends to be less than their demand. As result :

(vi)   The existing stocks of the producers would be sold out and

(vii)   The producer would suffer the loss of unfulfilled demand

(viii)   To rebuild the desired stocks and avoid the loss of u11fulfilled demand.

(ix)   The producer would plan greater production.

(x)   AS would increase to become equal to AD.

AD < AS {Ex-ante AD < AS Ex-ante AS) :- If AD < AS , flow of goods and service in the economy tends to exceed their demand. As result:

(v)   Some of the goods would remain unsold.

(vi)   To clear unwant stocks.

(vii)   The producer would plan a cut in production.

(viii)   Consequently, AS would reduce to become equal to AD.

Q3. When is an economy in equilibrium? Explain with the help of saving and investment functions. Also explain the changes that place in an economy when the economy is not in equilibrium. Use diagram .

An eco nomy is in equili brium at a point where ex- ante or planned saving is equal to planned investment. This is because in equilib rium :

AS= AD   Y= C+S and AD= C+I

C+S =C+I S=I

(as C is common on both side of the equati on) (Alternative Approach)

INCOME

(Y)   CONSUMPTION

(C)   SAVING(Y-C)

(S)   INVESTMENT

(I)

INCOME (Y)	CONSUMPTION (C)	SAVING(Y-C) (S)	INVESTMENT (I)
0	50	-50	100
100	100	0	100
200	150	50	100
300	**200**	**100**	**100**
400	250	150	100
500	300	200	100

600	350	250	100

Equilibrium is struck when :
S =I= 100 and equilibrium income = 300 at the level AS =AD(300each)
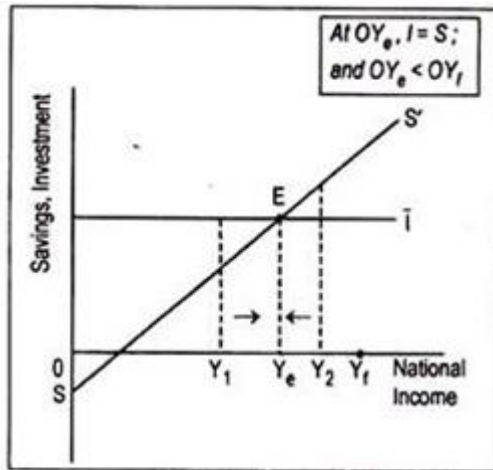
Fig. 10.12: Equilibrium Income: Saving-Investment Approach

Eq uilibrium is stru ck at point E whe re S and I lines intersect each. EM is the equilibrium le veJ of income .

ADJUSTMENT MECHANISM:
(iii)   S > I (Planned S > Planned I)
(iv)   S < I (Pl anned S < Planned I)
S > I (Planned S > Planned 1):- In such situation , the following changes will occur.
(vi)   Stock of the prod uce r wo uld be in excess of desired lim it.
(vii)   P rofits will sta1t s hrinking.
(viii)   Pl anned output fo r the subsequent year will faU.
(i x)   Level of inco me and employmen t will tend to shrink to the point where S =l
(x)   The economy will come back to the state of equili brium.
S < I (Planned S < Planned I) :- In suc h situatio n , the followi ng changes wiJJ occm.
(v)   Existing stock of the producers will not be eno ugh to cope with the level of AD.
(vi)   Profits will not be maximum because the desired level of stock is not availab le. (v ii) P roduce rs will plan higher level of output for the subseque nt years.
(viii)   Level of inco me and employment will rise to drive the econom y to the point of equilibrium.

Q4. An economy is in equilibrium. Calculate investment expenditure from the following .

National income = 800
Marginal propensity to save = 0.3
Autonomous consumption expenditure =100
Ans:- At the equilibrium level , Y = C + I MPC= 1- MPS = 1- 0.3 = 0.7
Y = C-+ MPC(Y) +I 800 = 100+0.7 (800) + I
800 = 100 + 560 +I = 800 +660 + I
I= 800 -660 =140
Investment expenditure = 140
Q5. Calculate Marginal propensity to save from the following data about an economy which is in equilibrium:
National income = 1,000
Autonomous consumption expenditure = 100 Investment = 120
Ans:- At the equilibrium level , Y = C + I Y = C-+ MPC(Y) +I
1000 = 100+ MPC (1000) + 120
1000 = 220 + lO00(MPC)

1000 (MPC) = 780

MPC = 780 / 1000 = 0.78

MPS = 1 - MPC , MPS = 1 - 0.78 = 0.22

Q 6.Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium :

National income = 1, 250 . Marginal propensity to save= 0.2 .

Investment expenditure= 150.

Ans:- At the equil ibriumle vel , Y = C + I MPC = 1- MPS = 1 - 0.2 = 0.8

Y = C-+ MPC (Y) + I

1250 = C+ 0.8 (1250) + 150

1250 = C+ 1000 + 150

1250 = C+ 1150

C-= 1250- 1150 = 100

Auto nomo us co nsumption = 100

Q7. Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium :

National income= 500

Marginal propensity to save= 0.30 Investment expenditure= 100

Ans.: Now, we know that Y = C + I MPC = 1-MPS = 1 - 0.30 = 0.70

Here , C = C-+ by, where b;:: MPC

Y;::C+l

500 ;:: C + o.7 0 (500) + 100

500;:: C-+ 350 + I 00

500 = C+450

C=50

Q8. An economy is in equilibrium. Calculate national income from the following :

Autonomous consumption expenditure= 100 Marginal propensity to save= 0.2

Investment expenditure= 200.

Ans:- At the equilibrium level , Y = C + I MPC = I - MPS = 1 - 0.2 = 0.8

Y = C+ MPC 9Y 0 + I Y = I 00 + 0.8 Y + 200 Y = 300 + 0.8Y

Y - 0.8 = 300

0.2Y = 300

Y = 300 I 0.2 = 1500

NAT.LONAAL INC OME = 1500

Q9. What is 'deficient demand'? Explain the role of 'bank rate' in removing it.

Ans:- Deficient Demand :- ' Deficient demand (Deflationary gap) refers to situation when Aggregate Demand is less than Aggregate Supply (AD < AS) corresponding to full employment level in the economy'.

Bank Rate: It refers to the rate of interest charged by the Central Bank on the loans & advances given to the Commercial Banks. The Bank Rate and Repo rate is determined by the Central Bank itself. Correction of Deficient demand (Deflationary gap situation: (i) The RBI (CB) reduced the bank rate and Repo rate. (ii) Which leads to reduced in rate of interest.(iii) This leads to reduced the savings & Raised the demand for loans (iv) There is a increase in purchasing power & fu1tber raised in AD and correct and Deficient demand (Deflationary gap) situation.

Q10. What is 'excess demand'? Explain the role of 'reverse repo rate' in removing it.

EXCESS DEMAND: Excess demand Inflationary ga p) refe rs to sit uation when Aggregate Demand is more than Aggregate Supp ly (AD > AS) corresponding to full employment level in the economy'.

Reverse repo rate: T his induc es the co mme rcia l bank to park their surplu s funds with the RBI for sho1t perio d of time. To Correction situation Deficient demand (Deflationary gap) : (i)Reverse repo rate is Decrease. (ii) As a follow-up action, the commercial bank will be reduce their depo s its with the RBI (CB) (iii) This, in turn, will increase their ability to la nd money. (iv) Conseq uently, cons umption and investment expenditure will be increased . (v) Implying a increased in AD correct and Deficient demand (Deflationary ga p) situation .

Q11. Assuming that increase in investment is Rs. 1,000 crore and MPC is 0.9, explain the working of multiplier.

Ans:- WORKING OF MULTIPLIER: :- Ass uming that inc rease in inve s tment is Rs. l,000 crore and

MPC is 0.9. Explain the working of multip lier.

Multiplier is the ratio of a change in inco me (.6.Y) to a g iv e n change in investment (.6.1).

K = (.6.Y) I (Af)

Round	I	y	Change in consump tion [MPC(Y)]	Saving
1	1,000	1,000	**900 (0.9 x 1,000)**	100
2			**810 (0.9 x 900)**	90
3			**729 (0.9 x 810)**	81
4			656.l (0.9 x 720)	72.9
	And so	On		
	1=1,000	**Y=10,000**	**9,000**	**1,000**

And   so   On

1=1,000   Y=l 0,000   9,000   1,000

K= 1 / 1 -M PC

= 1/   l-0.9 = 1/ 0.1 =10

Given that $\Delta l = 1,000$, K= 10

ΔY = 10 X 1,0 00

= Rs 10,000 crore.
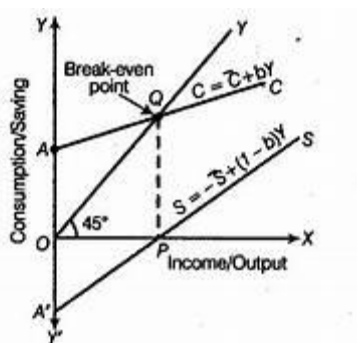
Ql2. Outline the steps required to be taken in deriving the consumption curve from the given saving curve. Use diagram.

Ans:- Derivation of Consumption curve from Saving Curve

Shows the Derivation of co nsumpt ion curve from a given saving Curve.

It involves the following steps.

(i)   We take OA = OA'. Because OA' = negative saving when Y = 0, and this is exactly equal to minimum consumption when Y = 0.

(ii)   Point Q on the y- line is marked corresponding to point P on the Saving curve.

(iii)   By joining points A and Q and stretching it to from a straight line, we get C curve. C-Function is linear as it is de rived from a linear S - function.

Q13. In an economy the saving function , S = (-) 50 + 0.SY here (S= Saving and Y = National Income)

and Investment= Rs 7000 . From the following data calculate

a)   Equilibrium level of National Income

b)   Consumption Expenditure at equilibrium level of Income Ans. S = -50 + 0.5Y , I = 7000
a)   For equil ibrium S = I

-50 + 0.5Y = 7000 (Subs titutin g the value of saving and In vestment) 0.5 Y = 7000 +50
0.5 Y = 7050

Y = 7050 x 2 = Rs 14100 (Equilibrium leve l of Nationa l Inco me)

b)   Consumption expenditur e at eq uilib rium leve l of income as we know Y = C + I
So Y = 14100. I = 7000 therefore

C = Y - I= 14100- 7000 = Rs 7100 (at equilibrium level of Income)

Q14. Answer the following questions based on the data given below:
(i) Planned level of investment = Rs.200 crores
(ii) C = 100 + 0·8 Y
(a)   Determine the equilibrium level of income.

(b)   Calculate the savi ng and consumption expenditure at equilibrium level of income.

Ans. (a) Equilibrium level of income : Y= C + I Y= (100+ 0. 8Y) +200
= 300+0.8 Y
Y-0.8 Y= 300
0.2 Y =300
Y= 300/0.2 =Rs.1500crores
(b)   Consumption expenditure:- C= C + 0.8 Y Substitute the value of Y = 1500
= 100+ 0.8(1500)
= 100 + 1200 = Rs.1300 crores
Savings = Income (Y)- Consumption (C)
= 1500- 1300
= Rs.200 crores

CBSE BOARD EXAM. QUESATIONS (Short answer/ Long   answer type)   FROM 2013
TO 2020.

Ql. C= 100 + 0.4 Y is the consumption function of an economy where C is consumption
expenditure and Y is national income. Investment expenditure is 1,100. Calculate :
(I)   Equilibrium level of national income.
{II)Consumption expenditure at equilibrium level of national income. (Delhi 2013)

Q2. C= 50 + 0.5 Y is the consumption function of an economy where C is consumption expenditure
and Y is national income. Investment expenditure is 2,000 in an economy . Calculate:-
(I)   Equilibrium level of national income.
(II)   Consumption expenditure at equilibrium level of national income. (Delhi 2013)
Q3. In an economy, S= - 100+0.GY is the saving function, where Sis saving and Y is national
income
(I). If Investment expenditure is 1,100. Calculate: . (Delhi 2013)
{II)Equilibrium level of national income.
{Ill Equilibrium level of national income at equilibrium level of national income.
Q4. From the data given below about an economy, calculate
(a) Investment expenditure, and
b)   Consumption expenditure.
     (i)Equilibrium level of income= 5,000
   (II) Autonomous consumption = 500 .
(III)   Marginal propensity to consume= 0.4
Q5. In an economy C= 200 + 0.75 Y is the consumption function of an economy where C is
consumption expenditure and Y is national income. Investment expenditure is 4,000. Calculate
equilibrium level of income and Equilibrium level of national income.   (Al 2013)

Q6. From the following data about an economy, calculate (a) equilibrium level of national income, and (b) Consumption expenditure at equilibrium level of national income.

(i)   C= 200 + 0.5 Y is the consumption function where C is consumption expenditure and Y is national income.

Investment expenditure is 1,500.   (Al 2013

Q7. Explain all the changes that will take place in an economy when aggregate demand is not equal to aggregate supply.   (Al 2013; F 2013)

Q8. Explain the meaning of underemployment equilibrium. Explain two measures by which full employment equilibrium can be reached.   (Al 2013)

Q9. Complete the following table:

Q10. Complete the following table

Income (Rs.)	Saving (Rs.)	APC	MPC
0	-40	-	-
so	-20	-	-
100	0	-	0.6
150	30	0.8	-
200	so	-	-

Q11. Distinguish between inflationary gap and deflationary gap. State two measures by which these can be corrected.   (Al 2013)

Q12. Explain the working of investment multiplier with the help of a numerical example. (F2013)

Q13. Outline the steps required to be taken in deriving saving curve from the given consumption curve. Use diagram.   (Delhi 2014, 2016; F 2014)

Q14. Calculate investment expenditure from the following data about an economy which is in equilibrium :

(Delhi 2014)ans.S0

National income= 1,000 .

Marginal propensity to save= 0.25 .

Q15. Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium :   (Delhi 2014)ans.140

National income= 1,200.

Marginal propensity to save= 0.20 . Investment expenditure= 100.

Q16. Calculate Marginal propensity to consumption e from the following data about an economy which is in equilibrium :   (Delhi 2014) ans.0.6

National income= 1,500 .

Autonomous consumption expenditure= 300. Investment expenditure= 300 .

Q17. Explain national income equilibrium through aggregate demand and aggregate supply. Use diagram. Also explain the change that take place an economy when the economy is not in equilibrium.   Delhi 2014)

Q18. Outline the steps required to be taken in deriving the consumption curve from the given saving curve. Use diagram. OR given saving curve, derive consumption curve and state the steps in doing so. Use diagram (Al 2014, 2016)

Q19. Calculate Marginal propensity to consumption e from the following data about an economy which is in equilibrium :   (Al 2014)

National income= 2,000.

Autonomous consumption expenditure= 200. Investment expenditure= 100.

Q20. Calculate investment expenditure from the following data about an economy which is in equilibrium :

(Al 2014)

National income = 1,000 .

Marginal propensity to save= 0.20 . Autonomous consumption expenditure= 100 .

Q21. Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium :   (Al 2014)

National income = 500

Marginal propensity to save= 0.30 Investment expenditure= 100

Q22. When is an economy in equilibrium? Explain with the help of saving and investment fun ctions. Also explain the changes that place in an economy when the economy is not in equilibrium. Use diagram. (Al 2014

Q23. An economy is in equilibrium. Calculate national income from the following: (Delhi2015)

Autonomous consumption expenditure= 100

Marginal propensity to save= 0.2 Investment expenditure= 200

Q25. Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium :

National income= 1,000 Marginal propensity to save= 0.8

Investment expenditure= 100.

Q26. Explain the concept of inflationary gap. Explain the role of repo rate in reducing this gap. (Delhi2015)

Q27. Explain the concept of deflationary gap and the role of 'open market operation' in reducing this gap.

Q28. An economy is in equilibrium. Calculate investment expenditure from the following: (Al2015)

National income= 800 .

Marginal propensity to save= 0.3 . Autonomous consumption expenditure=100 .

Q29. Calculate Marginal propensity to save from the following data about an economy which is in equilibrium :   (Al 2015)

National income= 1,000

Autonomous consumption expenditure= 100. Investment= 120

Q30. What is 'deficient demand'? Explain the role of 'bank rate' in removing it. (Al 2015) Q31. What is 'excess demand'? Explain the role of 'reverse repo rate' in removing it. (Al2015)

Q32. An economy is in equilibrium. Calculate Marginal propensity to save from the following(F2015)

National income= 1,000

Autonomous consumption expenditure= 100 Investment expenditure= 200.

Q33. Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium: (F 2015)

National income= 1,250. Marginal propensity to save= 0.2 . Investment expenditure= 150.

Q34. What is inflationary gap. Explain the role of cash reserve ratio in removing this gap. (F 2015)

Q35.What is 'deficient demand'? Explain the role of 'margin requirements' in removing this gap.(F1 5)

Q36. Distinguish between marginal propensity to consume and average propensity to consume. Give a numerical example.   (Delhi 2016; F2016)

Q37. In an economy investment is increased by Rs. 300crore. If marginal propensity to consume is 2/3, calculate increase in national income.   (Delhi 2016)

Q38.Suppose marginal propensity to consume is 0.8. How much increase in investment is required to increase national income by Rs. 2000 crore? Calculate. (Delhi 2016)

Q39. In an economy investment is increased by Rs. 100 crore led to 'increase' national income by Rs. 1000 crore. Find marginal propensity to consume.

Q40. Explain the role of taxation in reducing excess demand.

Q41. What is aggregate demand? State its components.

Q42. An economy is in equilibrium. Calculate Marginal propensity to consume.

National income = 1,000 Autonomous consumption = 200 Investment expenditure= 100
Q43. An economy is in equilibrium. Calculate investment expenditure. (Al 2016) ans.100

National income = 1,000 .
Marginal propensity to consume= 0.8 . Autonomous consumption = 100.
Q44. Explain how controlling money supply is helpful in reducing excess demand. (Al 2016)

Q45. Derive the two alternative conditions of expressing national income equilibrium. Show these equilibrium conditions on single diagram.
Q46. Explain how government spending can be helpful in removing deficient demand. Q47. An economy is in equilibrium. Calculate Marginal propensity to consume.
 National income= 2,000 .
Autonomous consumption expenditure= 100 . Investment expenditure = 100 .
Q48. Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium :
National income= 1,600.
Marginal propensity to consume= 0.8 . Investment expenditure= 300.
Q49. Find equilibrium national income:
Autonomous consumption expenditure= 120
Marginal propensity to save= 0.9 .
Investment expenditure= 1,100 .
Q50. Assuming that increase in investment is Rs. 1,000 crore and MPC is 0.9, explain the working of multiplier.

Q51. Assuming that increase in investment is Rs. 900 crore and MPC is 0.6, explain the working of multiplier.
Q52. Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium :
National income = 5,000 .
Marginal propensity to save= 0.20 . Investment expenditure= 800.
Q 53.An economy is in equilibrium. Calculate Marginal propensity to save.

National income= 10,000
 Autonomous consumption = 500 .
Consumption expenditure = 8,000.

Q53.ln an economy, investment increased by 1,100 and as a result of it income increased by 5,500. Had the MPS been 25 per cent, what would have been increase in income?

Q54. What is ex-ante consumption? Distinguish between autonomous consumption and induced consumption.

Q55. What is two alternative ways of determining equilibrium level of income? How are these related?

Q56. Define investment multiplier. How is it related to MPC?

Q57. Define full employment in an economy. Discuss the situation when aggregate demand is more than aggregate supply at full employment income level.

Q59. State and discuss the components of aggregate demand in a two sector economy.

Q60. Discuss the working of adjustment mechanism in the following situations

(a)   Aggregate demand is greater than aggregate supply
(b)   Ex-ant investment are lesser than Ex-ant saving.

Q61. State the meaning of following

(a)   Ex-ant saving
(b)   Full employment
(c)   Autonomous consumption.

PART-B INDIA ECONOMY

EMPLOYMENT
KEY-POINTS

:

Worker : Worker is an individual who is in some employment to earn a living.

Labour Supply: It refers to amount of labour that the people are willing to supply corresponding to a given wage rate. Labour supply changes in response to change in wage rate.

Labour Force: It refers to the number of people who are able to work and willing to work at the existing wage rate.

Work Force: it refers to number of people actually in employment.

Participation Rate: Total Workforce×100/Total Population

(worker population ratio is calculated by dividing the total number of workers in India by the population in India and multiplying it by 100 higher ratio indicates that higher proportion of its population is involved in economic activities)

Employment: It is a situation when people are willing to work at the existing wage rate, and are able to work, but are not getting work.

Casual Workers: workers who are casually engaged and, in return, get remuneration for the work done, are termed as casual workers.

Jobless Growth: Jobless grow refers to a situation when the economy is able to produce more goods and services without a proportionate increase in employment opportunities. **Casualization of Workforce:** The process of moving from self-employment and regular salaried employment to casual wage work is known as casualization of workforce.

Informalization of Workforce: It refers to a situation whereby the proportion of workforce in the informal sector to total workforce increases.

Formal or Organized Sector: All the public enterprises and private establishments which employ 10 or more hired workers, are called formal sector establishments.

Informal or Unorganized Sector: it includes all those private enterprises which hire less than 10 workers.

Unemployment: It refers to a situation in which people are willing and able to work at the existing wage rate but to not get work.

Causes of Unemployment:

(1) Slow economic growth

(2) Rapid growth of population

(3) Agriculture- a seasonal occupation

(4) Lack of irrigation facilities

(5) Joint family system

(6) Decay of Cottage and small industries

(7) Low Savings and investment

(8) Limited mobility of labor .

Government policies and Employment generation programmes:

National Rural Employment Guarantee Act 2005 Prime Minister's Rozgar Yojana Swarna Jayanti Shahari Rozgar Yojana etc.

(2- marks Questions)

1. **What is unemployment?**

Ans. It is a situation when people are willing to work at the existing wage rate, and are able to work, but are not getting work.

2. What is meant by underemployment?

Ans. Underemployment is a situation in which a worker does not get a full time job.

3. **Define occupational structure**.

 Ans. Distribution of workforce across Primary, secondary and tertiary sectors is called occupational distribution.

4. What is casualisation of workforce?

Ans. Casualisation of workforce refers to a situation when the percentage of casually- hired workers in the total workforce tends to rise over time.

5. What is informalisation of workforce?

Ans. Informalisation of workforce refers to a situation where percentage of workforce in the formal sector trends to decline and that in the informal sector tends to rise.

6. What is jobless growth?

Ans. jobless growth is a situation when the level of output in the economy tends to rise owing to innovative technology without any meaningful rise in the level of employment. So that unemployment stays as a serious problem, even when there is a rise in GDP.

7. Define the worker population ratio.

Ans. Worker population ratio is an indicator which is used to analyse the employment situation in the country. It is measured as a ratio of workforce to total population of the country.

Worker Population Ratio=Total Number of Workers×100/Total Population

8. **Unemployment and poverty are reflections of each other. Give reason**.

Ans. It is true because unemployed people do not earn wages and salaries. Thus, poverty is the obvious consequence of unemployment.

(3- marks Questions)

1. Women in rural areas are ready to work even at low wage rate why?

Ans. This is because of two reasons:

(I) There is widespread poverty in rural areas. poverty compels the women in rural areas to accept low- wage occupations.

(ii) Women in rural areas are averse to migration. They are reluctant / willing to migrate to urban areas for jobs. Owing to the lack of education, they are not even capable of finding jobs outside rural areas. Accordingly, they prefer to be engaged in farm and non-farm activities, but in the rural areas only.

2. **How do you evaluate Start-ups in India as a solution to the problem of unemployment? Write two observations.**

   Ans .(i) Start-up are expected to generate opportunities of self- employment, and are therefore, solution to the problem of unemployment. (ii) Start-ups are to be aided with technical and financial support by the government. Accordingly, these are expected to encourage the use of latent resources (particularly entrepreneur skill and small savings) . When latent resources are used, employment opportunities are bound to arise.

3. **"The gap between the growth of GDP and Employment is widening." State the trend which highlight this phenomenon**.

   Ans. This trend is termed as 'Jobless growth'. Jobless growth refers to a situation when the economy is able to produce more goods and services without a proportionate increase in employment opportunities. There is a situation when there is an overall acceleration in the growth rate of GDP in the economy without corresponding expansion in employment opportunities.

4. **'Labour- force' and 'Work-force' are one and the same thing. Comment.**

   Ans. The given statement is incorrect. Labour- force includes all those who are working and though not working, are seeking and are available for work, I.e. Labour -force = Persons working + persons seeking and/ or available for work. On the other hand, Work-Force includes all those who are actually employed at a particular time.

5. **Analyse the recent trends in sectoral distribution of workforce in India.**

   Ans. The distribution of workforce in India in different sectors is as follows:

   (I) Primary sector is the main source of employment (60.4%), for majority of workers in India.

   (ii) Secondary sector provides employment to only 15.8% of workforce.

   (iii) 23.8 percent of workers are engaged in the service sector.

6. **You are residing in a village. If you are asked to advise the village panchayat, what kinds of activities would you suggest for the improvement of your village which would also generate employment.**

   Ans. The following two activities can be suggested to improve the village and to generate employment:

   (I)   Setting up of small- scale and cottage industries: Small -scale and cottage industries will not only generate new employment opportunities but will also act as subsidiaries to the industrial sector by providing them raw material.

   (II)   Encourage non-farm employment: Disguised and seasonal unemployment is a common feature of Indian economy. So, it is necessary to engage these people in non- agricultural sectors like pottery, handicrafts etc.

7. **How will you know whether a worker is working in the informal sector?**

   Ans. A worker is working in the informal sector if:

   (I) Such worker works in a private enterprise, which employ less than 10 workers. For example, farmers, agricultural labourers, owners of a small Enterprises, etc.

   (ii) Such worker does not get regular income and does not have any protection or regulation from the government.

   (iii) Such worker has the risk of being dismissed without any compensation.

8. **The following table shows the population and worker population ratio for India in 1999 -2000. Can you estimate the workforce (rural and urban) for India?**

Region	Estimates of Population (in crores)	Worker Population Ratio	Estimated No.of Workers(in crores)
Rural	**71.88**	**41.9**	**71.88×41.9/100=30.12**
Urban	**28.52**	**33.7**	**?**
Total	**100.49**	**75.6**	**?**

   Ans. Worker Population Ratio=Total Number of Workers×100/Total Population

   So Number of Workers= Total Population×Worker Population Ratio/100

Region	Estimates of Population (in crores)	Worker Population Ratio	Estimated No.of Workers(in crores)
Rural	71.88	41.9	71.88×41.9/100=30.12
Urban	28.52	33.7	28.5×33.7/100=9.611
Total	100.49	75.6	100.40×75.6/100=75.90

9. **"It is necessary to create employment in the formal sector rather than in the informal sector". Defend or refute the given statement with valid arguments.**

Ans. "It is necessary to create employment in the formal sector rather than in the informal sector". The statement is defended because workers of the formal sector enjoy social security benefits and job security which remain protected by the labour laws. On the other hand people engaged in the informal sector do not enjoy any social security benefits and do not have job security. As a result, informal workers are generally very poor and live in slums.

10**. Empowerment of women related to employment of women. Comment.**

Ans. It is since ages that the women have suffered gender- discrimination. Men have been getting priority in matters relating to education, health, inheritance, marriage and policies. Empowerment of women aims at achieving gender equality. Of all the measures related to empowerment of women, employment of women is of central significance. Employment makes the women economically independent. This enhances their ability as decision- makers in all of walk of life. Once the women are independent decision- makers, they can always strive for gender equality. It is, therefore, required that the participation of women is raised, particularly in secondary and tertiary sectors of the economy.

(5 marks Questions)

1. **There is a mismatch between GDP growth and employment growth in India. How do you justify this statement?**

Ans. GDP growth in India happens to be faster than employment growth. In other words, even when production activity is expanding, job opportunities continue to be low. This is a situation of 'jobless growth'. This occurs when we rely more and more on labour- saving Western Technology. Such a technology (using more of capital and less of labour) does not suit the needs and means of a country where unemployment is an alarming social challenge. But, given the fact that the country lacks investment capital, we are forced to depend more and more on FDI. Foreign investment in India is linked with foreign technology which is efficient but the one which uses less and less of labour.

Reliance on FDI cannot be minimized. Implying that the reliance on labour-saving western technology cannot be minimized. Accordingly, a mismatch between 'GDP growth' and' employment growth' cannot be so easily corrected.

2. **GDP in India is growing but unemployment stays to be a serious issue. How do you reconcile this facts?**

Ans. Despite a rise in GDP, unmployment continues to stay as a serious issue owing to the following reasons:

(I) Owing to rising population, labour force continues to rise at an alarming rate.

(ii) Education and Employment of women in India is no longer a social taboo. This has led to a significant rise in the labour force.

(iii) Strategy of growth is such that we are relying more on the western technology which is labour saving.

Briefly, a significant rise in the supply of labour on the one hand and a significant reliance on the eestern technology, on the other hand, has led to GDP growth without significant conversion of labour force into workforce. Hence, unemployment stays to be a serious issue.

3. **The following table shows the distribution of workforce in India for the year 1972-73, analyse it and give reasons for the nature of work force distribution.**

Place of Residence	Workforce (in millions)		
	Male	Female	Total
Rural	125	69	195
Urban	32	7	39

Ans. The following points can be analyzed with the help of given data:

(I) **More proportion of rural population:** The total workforce in India in the year 1972 -73 was 234 million, out of which major portion 83% (195 million) belonged to rural population. and the rest 17% (39 million) belonged to the Urban population. It happened because a majority of rural population was engaged in agricultural and allied sectors.

(ii) **More Proportion of Males:** Males used to dominate the workforce, in both rural and urban areas. The rural workforce comprises of 125 million males (around 64%) as compared to just 69 million females (around 36%). On the contrast, the urban workforce comprises of about 82% of male workforce and 18% of female workforce. The participation of males was higher due to lack of opportunities available to women for acquiring education and female members were often confined to household work only.

(iii) **More Proportion of Rural Females:** Females in the rural areas formed 36% of the workforce as compared to just 18% females in the urban workforce.

4. **Analyze the recent trends in sectoral distribution of workforce in India. Trends in Employment pattern (sector wise) 1993- 2012(in percentage)**

Sector	1993-94	1999-2000	2011-2012
Primary	64	60.4	48.9
Secondary	16	15.8	24.3
Service	20	23.8	26.8

Ans. The given data indicates that over the given period, the proportion of workforce in primary sector has gone down significantly. Whereas, the employment share of both secondary sector and the service sector has increased gradually.

While the share of secondary sector has gone up by approximately 9% recently, the corresponding figure for service sector has gone up by approximately 7.1 %. This also shows that dependency on agriculture remained high as secondary and service sector was not created in of employment.

5. **What is seasonal unemployment? Suggest measures for reducing this kind of unemployment in India.**

Ans. It refers to a situation where a number of persons are not able to find job in a particular season. It occurs in case of agriculture, ice cream factories, woolen Factories etc. Following measures may be suggested to reduce seasonal unemployment:

(I) promotion of multiple cropping i.e.,
 raising more than one crop on the same piece of land in a year.

(ii) Development of activities allied to agriculture as animal husbandry, dairy farming, horticulture etc. to provide extra employment throughout the year

(iii) Public investment in rural areas in such fields as irrigation, drainage, flood control, land and environment, improvement of rural roads, schools, hospitals,etc.

(iv) Mechanisation of peak season activities so that a proportion of the labour force is permanently shifted from agriculture to non- seasonal activities and surplus labour in the slack season is reduced.

(v) Establishment of a variety of industries which operate at different times of the year so that labour may be kept employed almost throughout the year by shifting from one seasonal industry to another.

INFRASTRUCTURE
KEY-POINTS

¬ **Infrastructure** It refers to such core elements of economic & social change which serve as a support system to production activity in the economy.

• **Types of Infrastructure**

1) Economic Infrastructure: It refers to all such elements of economic change like- power, transport, communication etc. which serve as a support system to the process of economic growth. It fosters economic growth which results in increase in the standards of living of the people.

2) Social Infrastructure: It refers to core elements of social change like- schools, colleges, hospitals, banking etc. which serve as a support system to the process of social development of a country. Social infrastructure focuses on human resource development, implying the development of skilled personal as well as healthy & efficient human beings. It accelerates the process of human development.

• **Difference between Economic Infrastructure and Social Infrastructure**

Social Infrastructure	Economic Infrastructure
1) It helps the economic system from outside(indirectly).	1) It helps the economic system from inside(directly).
2) It improves quality of human resource.	2) It improves the quality of economic resource
3) For example - Health, Education	3) For ex- Energy, Transport and housing communication

• **Importance of Infrastructure**

1) Raises on Productivity: Infrastructure plays an important role in raising productivity with improved roadways, warehouses etc. Farmers can easily sell their products in different markets.

2) Raises Size of the Market: Infrastructure enhances the size of the market as large scale of production can capture more market.

3) Raises Ability to Work: Social Infrastructure increases the quality of life of workers, thereby increasing their efficiency. Health care centres, educational institution and other such facilities inherit skills which increases ability and efficiency to work.

4) Facilitates Outsourcing: India is emerging as a global destination for all kinds of Outsourcing. For example- Call centres, Study centres etc.

5) Generates Linkages in Production: Better means of transport and education, robust system of banking and finance generates better inter-industrial linkages.

¬ **Health**

It is a state of complete physical, mental & social well-being. A person's ability to work depends largely on his good health. It enhances the quality of life.

• **State of Health Infrastructure**

1) There has been significant expansion in physical provision of health services and improvements in health indicators since independence, but it is insufficient for rapidly increasing population in India.

2) Public health system and facilities are not sufficient for bulk of the population.

3) There is a wide gap between rural urban areas and between poor and rich in utilising health care facilities.

4) Woman's health across the country has become a matter of great concern with reports of increasing cases of female foeticide and mortality.

5) Regulated private sector health services can improve the situation and at the same time, NGOs and community participation is very important in providing health care facilities and reading health awareness.

• **India's Health Infrastructure and Healthcare is made up of a three-tier system:**

1) Primary Healthcare: It includes: a. Maternal and child health care b. Promotion of health and provision of essential drug. c. Immunisation d. Educating the people about identifying, preventing and controlling diseases

2) Secondary Healthcare: Health care institute having better facilities for surgery, x-ray, ECG are called Secondary Healthcare institutes. Patients are referred here when their condition is not managed by PHC.

3) Tertiary Healthcare: In this sector, there are the hospitals which have advanced level equipment and medicines and undertake all the complicated health problems. Which could not be managed by primary and secondary hospitals. Expansion of health infrastructure has resulted in the eradication of small pox, guinea worms and the near eradication of polio and leprosy.

• **Development of health Services in India:**
1) Decline in Death Rate
2) Rise in expectancy of life
3) Decline in Infant Mortality Rate
4) Control over Deadly Diseases.
 • **Health as an Emerging Challenge**
 1) Unequal distribution of health services
2) Control of communicable diseases.
3) Poor management of health care.
 4) Privatization of health care services.
 5) Poor upkeep & maintenance.

(2 Marks Questions)

1.What is meant by infrastructure?
Ans. Infrastructure refers to support system of economic and social development of a country.
2. What is meant by economic infrastructure?
Ans. Economic infrastructure refers to such elements of support system (like power, transport and communication) which serve as a driving force for production activity in the economy.
3. What is meant by social infrastructure?
Ans. Social infrastructure refers to such elements of support system (like schools, colleges, hospitals and nursing homes) which serve as a driving force for social development of a country
4. Define outsourcing in the context of infrastructure.
Ans. Outsourcing refers to obtain some goods and services from outside the enterprise in order to run the enterprise successfully and in cost effective manner.
5. What is medical tourism?
Ans. Medical tourism is travelling outside your country for medical services.
6. What are Indian Systems of Medicine?
Ans. Indian systems of medicine are the systems of medicine which are considered to be Indian. Origin or which have come to India from outside and got assimilated into Indian culture
7. What are primary healthcare centres in India?
Ans. Primary health care centres are small hospitals set-up mostly in small towns and rural areas am managed by a single doctor.
8. What are secondary healthcare centres in India?
Ans. Secondary healthcare centres are upgraded health care centres (compared to PHC) and have facilities for surgery, ECG and X-rays. They are located in big towns and district headquarters
 9. What are tertiary healthcare centres in India?
Ans. Tertiary healthcare centres are high-end and fully equipped medical centres, offering specialise medical facilities.
10. What is rural-urban divide?
Ans. Rural-urban divide refers to the disparity between rural and urban areas of the country.
11. What is rich-poor divide?
Ans. Rich-poor divide refers to the disparity (relating to the level of income) between rich and the poor people of a region or the country as a whole.

Read the following statements carefully. Write 'True' or 'False' with a reason.

12. Economic and social infrastructure are not complementary to each other.

Ans. False. Economic and social infrastructure are complementary to each other, one reinforces the impact of the other.

13. Infrastructure induces investment.

Ans. True. Infrastructure induces investment, because it represents essential pre-requisites of production activity.

14. Infrastructure enhances size of the market.

Ans. True. It is owing to support system for investment and infrastructural facilities (transport and communication & others) that the size of the market tends to expand.

15. Child mortality rate and infant mortality rate are identical concepts.

Ans. False. Child mortality rate is different from infant mortality rate. Child mortality rate refers to death of the children up to 4 years of age whereas infant mortality rate refers to death of the infants up to 1 year of age.

16. Poor people spend higher percentage of their income on healthcare.

Ans. True. Because poor people suffer from health diseases more than the rich (due to the inability to get healthier and nutritious food) while their income level is extremely low.

17. Infrastructure serves as a support system to all production activity in the economy.

Ans. True. Infrastructure refers to such core elements of economic and social change which serve as a support system to all production activities in the economy.

(3 Marks Questions)

18. Infrastructure contributes to the economic development of a country. Do you agree? Explain.

Answer: Yes. The development of infrastructure and economic development go hand in hand.
(i) Agriculture depends on the adequate expansion and development of irrigation facilities.
(ii) Industrial progress depends on the development of power and electricity generation, transport and communications.

19. Explain the term 'infrastructure'.

Answer. Infrastructure refers to the basic supporting structure which is built to provide different kinds of services in an economy. Infrastructural installations do not directly produce goods but help in promoting production activities in an economy. Examples of infrastructure are: transport, communication, banking, power etc.

20. Explain the two categories into which infrastructure is divided. How are both interdependent?

Answer. There are two types of infrastructure: (a) economic infrastructure, (b) social infrastructure.

Economic infrastructure directly supports the economic system from inside. Examples are energy, transport and communication. Social infrastructure indirectly supports the economic system from outside. Examples are health, education and housing.

Economic and social infrastructure are complementary to each other. Economic infrastructure improves the quality of economic resources and raises the production, but it cannot be possible until population is literate to use them efficiently. Thus, both of them are needed for the growth and development of the country.

21. How do infrastructure facilities boost production?

Answer. The prosperity of a country depends directly upon the development of agricultural and industrial production. Agricultural production requires power, credit, transport facilities, etc.; the deficiency of which leads to fall in productivity. Industrial production requires machinery and equipment, energy, banking and insurance facilities, marketing facilities, transport services which include railways, roads and shipping and communication facilities etc. All these facilities help in raising agricultural and industrial productivity.

22. Infrastructure contributes to the economic development of a country. Do you agree? Explain.

Answer. Infrastructure contributes to the economic development of a country and it is an important determinant of its growth and development. It raises productivity, induces investment in different areas of economic activity, raises size of the market, facilitates

outsourcing and employment. Thus, it is an essential support system for the economic development of the country.

23. What is the significance of 'energy'? Differentiate between commercial and non-commercial sources of energy.

Answer. Energy is a critical aspect of development process of a nation. It is essential for industries, agriculture and related areas like transportation of finished goods. It is also used for domestic purposes like cooking, lighting, heating, etc.

Difference between Commercial and Non-commercial Sources of Energy

24. What are the three basic sources of generating power?

Answer. Sources of generating power are:

1. water—it gives hydroelectricity.
2. oil, gas, coal—they give thermal electricity.
3. radioactive elements like uranium, plutonium—they give atomic power or nuclear power.

25. What do you mean by transmission and distribution losses? How can they be reduced?

Answer. Transmission and Distribution (T&D) losses refer to theft of power which has not been controlled.

Nation's average loss is 23%.

T&D losses can be reduced by having:

1. Appropriate size of conductors
2. Proper load management
3. Meter supply
4. Privatisation of distribution work
5. Introduction of energy audits. Some steps have already been initiated in this direction.

(5 Marks Questions)

26. Discuss the main drawbacks of our health care system.

Answer: The main drawbacks of our health care system are:

(i) Inequitable distribution of health services: About 70% of India's population live in rural areas, but only 20% of total hospitals are located in rural areas.

(ii) Communicable diseases: There need to more attention given for prevention of communicable diseases like AIDS, HIV, SARS and Covid19 through effective control measures and vaccination.

(iii) Poor Sanitation Facilities: |Sanitation facilities are extremely poor in both rural and urban areas.

(iv) Lack of Manpower: Even though, India produces 12,000 medical graduates every year, still there is huge shortage of manpower.

(v) Malnutrition: Widespread malnutrition poses a major threat to the lives, especially in case of children.

(vi) Role of Private sector: There is a need to increase collaboration of public sector with private sector to meet health care needs of people.

27. What is the state of rural infrastructure in India?

Answer. A majority of people live in rural areas. The state of rural infrastructure in India is as follows:

1. Rural women are still using bio-fuels such as crop residues, dung and fuel wood to meet their energy requirement.
2. They walk long distances to fetch fuel, water and other basic needs.

3. The census 2001 shows that in rural India only 56 per cent households have an electricity connection and 43 per cent still use kerosene. About 90 per cent of the rural households use bio-fuels for cooking.

4. Tap water availability is limited to only 24 per cent of rural households. About 76 per cent of the population drinks water from open sources such as wells, tanks, ponds, lakes, rivers, canals, etc.

5. Another study conducted by the National Sample Survey Organisation noted that by 1996, access to improved sanitation in rural areas was only 6 per cent.

28. Justify that energy crisis can be overcome with the use of renewable sources of energy.

Answer. There is energy crises in the country. The demand for all commercial fuels is more than its supply.

Government is encouraging the use of hydel and wind energy.

Bio-gas generation programmes have been boosted up. For a tropical country like India, where sun is an abundant source, solar energy should be given highest priority.

29. How has the consumption pattern of energy changed over the years?

Answer. Pattern of energy consumption in India is as follows:

1. In India, different sources of energy are converted into a common unit 'million tonne of oil equivalent' (MTOE).

2. At present, commercial energy consumption is 65 per cent of total energy consumed in India.

3. Goal has the largest share of 55 per cent, followed by oil at 31 per cent, natural gas at 11 per cent and hydro energy at 3 per cent.

4. Non-commercial energy sources account for over 30 per cent of the total energy consumption.

5. There is import dependence on crude and petroleum products, which is likely to grow to more than 100 per cent in the near future.

6. Atomic energy is an important source of electric power. At present nuclear/atomic energy accounts for only 2.4 per cent of total primary energy consumption.

30. What problems are being faced by the power sector in India?

Answer. Emerging Challenges in the Power Sector:

1. Insufficient Installed Capacity
2. Underutilisation of Capacity
3. Losses Incurred by SEBs
4. Uncertain Role of Private Players
5. Public Unrest
6. Shortage of Raw Materials
7. Unable to Cover up the Transmission and Distribution (T&D) Losses
8. Operational Inefficiency
9. Incomplete Electrification
10. Need to Conserve Energy.

ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

Question 1. What is meant by environment?
Answer. Environment is defined as the total planetary inheritance and the totality of all resources. It includes all the biotic and abiotic factors that influence each other. Biotic elements are all living elements — the birds, animals and plants, forests, fisheries, etc. Abiotic elements are like air, water, land, rocks, sunlight, etc.

Question 2. What happens when the rate of resource extraction exceeds that of their regeneration?
Answer. Environment includes sun, soil, water and air which are essential ingredients for the sustenance of human life. The carrying capacity of the environment implies that the resource extraction is 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. Absence of carrying capacity of environment means absence of life.

Question 3. Classify the following into renewable and non-renewable resources (i) trees (ii) fish
(iii) petroleum (iv) coal (v) iron-ore (vi) water.
Answer. Trees and fish are renewable resources.
Petroleum, coal, iron-ore and water are non-renewable resources.

Question 4. Two major environmental issues facing the world today are and .
Answer. Global warming and Ozone depletion.

Question 5. How do the following factors contribute to the environmental crisis in India? What problem do they pose for the government?
1. **Rising population**
2. **Air pollution**
3. **Water contamination**
4. **Affluent consumption standards.**
5. **Illiteracy**
6. **Industrialisation**
7. **Urbanisation**
8. **Reduction of forest coverage**
9. **Poaching**
10. **Global warming.**

Answer.
1. The high rate of growth of population adversely affects the environment. It certainly leads to soil and water pollution.
2. India is one of the ten most industrialised nations of the world. It has led to unplanned urbanisation, pollution and the risk of accidents. The CPCB (Central Pollution Control Board) has identified 17 categories of industries which are significant pollutors.
3. Many states in India are on the edge of famine. Whatever water is available, it is polluted or contaminated. It causes diseases like diarrhoea and hepatitis.
4. With affluent consumption standards, people Use more air conditioners. CFCs are used as cooling agents in air condition which leads to ozone depletion.
5. Illiteracy and ignorance about the use of non-renewable resources, alternative energy sources, lead to environmental crisis.
6. With rise in national income or economic activity, there is rise in industrialisation and urbanisation. This raises pollution of air, water and noise. There are accidents, shortage of water, housing problems, etc. In other words, with rise in national income there is ecological degradation which reduces welfare of the people.
7. Whenever there is large migration of population from rural to urban areas, it leads to fast growth of slum areas. There is excess of load on the existing infrastructural facilities. It causes environmental degradation and ill health.
8. The per capita forestland in the country is only 0.08 hectare. There is an excess felling of about 15 million cubic metre forests over the permissible limit. Indiscriminate felling of trees has led to destruction of forest cover.

Once forests Have been cut down, essential nutrients are washed out of the soil all-together. This leads to soil erosion. It leads to disastrous flooding since there is no soil to soak up the rain.

9. Poaching leads to extinction of wildlife.
   The long-term results of global warming are:
   (a) Melting of polar ice caps with a resulting rise in the sea level and coastal flooding.
   (b) Disruption of drinking water supplies as snow melts.
   (c) Extinction of species.
   (d) Frequent tropical storms and tropical diseases.

Question 6. What are the functions of the environment?

Answer. The environment performs four vital functions:

1. Environment Supplies Resources. Resources include both renewable and non-renewable resources. Renewable resources are those which can be used without the possibility of the resource becoming depleted or exhausted. In other words, a continuous supply of the resource remains available. Examples of renewable resources are trees in the forest and fish in the ocean. Non-renewable resources are those which get exhausted with extraction and use. Example, fossil fuels.

2. Environment Sustains Life. Environment includes sun, soil, water and air which are essential ingredients for the sustenance of human life. The carrying capacity of the environment implies that the resource extraction is 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. Absence of carrying capacity of environments means absence of life.

3. Environment Assimilates Waste. Production and consumption activities generate waste. This occur mostly in the form of garbage. Environment absorbs garbage.

4. Environment Enhances Quality of Life. Environment includes oceans, mountains, deserts, etc. Man enjoys these surroundings, adding to the quality of life.

Question 7. Identify six factors contributing to land degradation in India.

Answer. Some of the factors responsible for land degradation are:

1. Loss of vegetation occurring due to deforestation
2. Unsustainable fuel wood and fodder extraction.
3. Shifting cultivation
4. Encroachment into forest lands
5. Forest fires and over grazing
6. Non-adoption of adequate soil conservation measures.

Question 8. Explain how the opportunity costs of negative environmental impact are high.

Answer. Opportunity cost is the cost of alternative opportunity given up. The country has to pay huge amount for damages done to human health. The health cost due to degraded environmental quality have resulted in diseases like asthma, cholera, etc. Huge expenditure is incurred in treating the diseases.

Question 9. Outline the steps involved in attaining sustainable development in India.

Answer. Steps and Strategies to Achieve Sustainable Development in India:

1. Use of Non-Conventional Sources of Energy
2. LPG, Gobar Gas in Rural Areas
3. CNG in Urban Areas
4. Wind Power
5. Solar Power through Photovoltaic Cells
6. Mini-Hydel Plants
7. Traditional Knowledge and Practices
8. Biocomposting
9. Biopest Control.

Question 10. India has abundant natural resources—substantiate the statement.

Answer. India has rich quality of natural resources in plenty. It is clear from the following points:

1. India has rich quality of soil, hundreds of rivers and tributaries, lush green forests, abundant mineral deposits under the land surface, vast stretch of the Indian Ocean, mountain ranges, etc.

2. The black soil of the Deccan Plateau is particularly suitable for cultivation of cotton. It has lead to concentration of textile industries in this region.
3. The Indo-Gangetic plains — spread from the Arabian Sea to the Bay of Bengal — are one of the most fertile, intensively cultivated and densely populated regions in the world.
4. India's forests provide green cover for a majority of its population and natural cover for its wildlife.
5. Large deposits of iron-ore, coal and natural gas are found in the country. India alone accounts for nearly 20 per cent of the world's total iron-ore reserves.
6. Bauxite, copper, chromate, diamonds, gold, lead, lignite, manganese, zinc, uranium, etc. are also available in different parts of the country.

Question 11. Is environmental crisis a recent phenomenon? If so, why?

Answer. Yes, because India is suffering from population explosion.

1. India has approximately 20 per cent of livestock population on a mere 2.5 per cent of the world's geographical area. The high density of population and livestock and the competing uses of land for forestry, agriculture, pastures, human settlements and industries exert an enormous pressure on the country's finite land resources.
2. The per capita forestland in the country is only 0.08 hectare. There is an excess felling of about 15 million cubic metre forests over the permissible limit. Indiscriminate felling of trees has led to destruction of forest cover.

(COMPATATIVE DEVELOPMENT EXPERIENCES OF INDIA AND ITS NEIGHBOURS)
KEY-POINTS

Development Path of India, Pakistan and China

1) 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.

2) All the three countries had started planning their development strategies in similar ways. India announced its First Five Year Plan in 1951, Pakistan announced in 1956 and China in 1953.

3) India and Pakistan adopted similar strategies, such as creating a large public sector and raising public expenditure on social development.

4) Both India and Pakistan had adopted 'mixed economy' model but China had adopted 'Command Economy' model of economic growth.

5) Till 1980s, all the three countries had similar growth rates and per capita incomes.

6) Economic Reforms were implemented in China in 1978, in Pakistan in 1988 and in India in 1991.

¬ **Development Strategies of India**

1) Sound Trade System: India was the country which had the history of closed trade. Because of this historical background; there is a critical challenge for India in order to make a new policy which can support the new trade system. This new reform has been introduced in the economy of India and accelerates the growth of India.

2) Reduction in Poverty: India has adopted several poverty alleviation programmes to reduce poverty in India. This would help in increasing per capita income, rise in nutrition levels and reduction of poor in some states.

3) Rural Development: Under this strategy, India adopted various measures of development of areas that are lagging behind in the overall development of village economy.

4) Employment Generation: Several economic reforms were initiated to generate employment in the country and their aim is to provide gainful self-employment and skilled wage employment opportunities.

¬ **Development Strategies of China**

1) Great Leap Forward: This Campaign was started in 1958 aimed at industrializing the country on a massive scale. People were encouraged to set up massive industries in their backyards.

2) Great Proletarian Cultural Revolution (1966-1976): In 1965, Mao Se Tung started a cultural revolution on a large scale. In this revolution students and professionals were sent to work and learn from the country side.

3) 1978 Reforms: In 1978, China began to introduce many reforms in phases. These reforms were initiated in agricultural, foreign trade and investment sector. The goal of Chinese economic reforms was to generate sufficient surplus the finance the modernisation of mainland Chinese economy.

¬ **Development Strategies of Pakistan**

1) Mixed Economy: Pakistan follows a mixed economy system were both public and private sector co-exist.

2) Import Substitution: Pakistan adopted a regulatory frame work in the late 1950s and 1960s for import industrialization. The policy combined tariff protection for manufacturing of consumer goods together with direct import controls on competing imports.

3) Green Revolution: This was introduced to increase the productivity and self-sufficiency in food. This increased the output of food grains. This changed the agrarian system dramatically.

¬ **Economic Development Strategy after Independence**

1) Both public and private sectors were allotted to carry business activities. Public sector was allotted activities like coal, mining, steel, power, roads etc. Private sector was allotted to establish industries subject to control and regulations in the form of law.

2) Public sector was given major push by the Government. Maximum revenues in this sector was invested which increased from Rs. 81.1 crore in First Five-Year Plan (1951-56) to Rs 34,206 crores in Ninth Five-Year Plan (1992-97).

3) Public sector was given importance in order to eliminate poverty, unemployment etc.

4) Public sector contributed to the industrialisation of the economy. It also helped Indian economy to achieve a considerable degree of self-sufficiency.

¬ **Comparative Study – India, Pakistan and China:**

1) The population of Pakistan is very small and accounts for roughly about one-tenth of China and India.

2) Though China is the largest nation geographically among the three, its density is the Lowest.

3) Population growth is highest in Pakistan followed by India and China. One child norm which was introduced in China in the late 1970s is the major reason for low population growth. But this measure led to a decline in the sex ratio, that is the proportion of females per 1000 males.

4) The sex ratio is low and biased against females in all the three countries. There is strong son-preference prevailing in all these countries.

5) The Fertility rate is low in China and very high in Pakistan.

6) Urbanisation is high in both China and Pakistan- with India having 28 percent of its people living in Urban areas.

¬ **Gross Domestic Product (GDP) and Sectors**

1) China has the second largest GDP (PPP) of 10.1 trillion in 2013 whereas India's GDP (PPP) 1.86 trillion and Pakistan's GDP (PPP) 0.47 trillion respectively.

2) On this path of Development china's average growth rate is about 9.5% while India's and Pakistan's average growth rate is about 5.8% and 4.1% respectively.

3) In China, in the year 2011. with 37 percent of its workforce engaged in agriculture, its contribution to GDP is 9 percent (approx). While in India and Pakistan the contribution of agricultural sector in GDP is about 19% and 21% respectively. In India about 56% are engaged in agricultural sector, while in Pakistan this figure is about 45%.

4) In china, manufacturing contributes the highest to GDP at 47 percent whereas in India and Pakistan, it is the service sector which contributes the highest (more than 50 percent of GDP).

5) 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.

6) In the 1980s, India, China and Pakistan employed 17, 12 and 27 percent of its workforce in the service sector respectively. In 2011, It reached the level of 25, 33 and 35 percent respectively (approx.). 7) China's growth is mainly contributed by the manufacturing sector where as in both India and Pakistan, the service sector is emerging as a major player of development.

¬ **Human Development Indicators**

1) In most areas of human development, China has performed better than India and Pakistan. This is true for many indicators-per Capita GDP or proportion of population below poverty line, health indicators such as mortality rates, access to sanitation, literacy, life expectancy or malnourishment etc.

2) Pakistan is ahead of India in reducing proportion of people below the poverty line and also its performance in transferring labour force from agricultural sector to industrial sector and access to water is better than India.

3) Contrary to it, India is ahead of Pakistan is education sector and providing health services.

4) India and Pakistan are ahead of China in providing improved water sources.

¬ **Conclusion**

• **India performed moderately as is clear from**

1) A majority of its people still depend on agriculture.

2) Infrastructure is lacking in many parts of the country.

3) It is yet to raise the level of living of more than 22% of its population that lives below the poverty line.

• **Pakistan has performed poorly.**

The reasons for the slowdown of growth and re-emergence of poverty in Pakistan's economy are

1) Political instability.

2) Volatile performance of agriculture sector.

3) Over dependence on remittances.

4) Growing dependence on foreign loans on the one hand and increasing difficulty in paying back the loans on the other.

• **China has performed comparatively the best as is clear from**
1) Success in raising the level of growth along with alleviation of poverty.
2) It used the market mechanism to create additional social and economic opportunities without political commitment.
3) By retaining collective ownership of land and allowing individuals to cultivate lands, China has ensured social security in rural areas.
4) Public intervention in providing social infrastructure has brought about positive results in human development indicators in China.

(COMPATATIVE DEVELOPMENT EXPERIENCES OF INDIA AND ITS NEIGHBOURS)
(2 Marks Questions)

1. What do you mean by structure of growth?
Ans: Structure of growth refers to relative significance (in terms of output and employment) of different sectors of the economy.

2.What do you mean by demographic profile?
Ans. Demographic profile means study of population on the basis of its some parameters such as its growth rate and density.

3. What is meant by human development?
Ans. Human development includes such elements of change as per capita GDP, life expectancy, literacy rate, access to safe drinking water, etc.

4. What is meant by human development index?
Ans. Human development index is a composite index prepared by United Nations Development Programmes (UNDP) on the basis of some parameters such as longevity, knowledge or educational attainment, per capita real GDP.

5. What do you mean by GDP growth rate?
Ans. GDP growth rate refers to increase in the flow of goods and services produced in the economy during an accounting year.

6. What is meant by infant mortality rate?
Ans. Infant mortality rate refers to the death rate of children (per thousand) below the age of one year.

7. What is meant by maternal mortality rate?
Ans. Maternal mortality rate refers to the death rate of women (per thousand) after giving birth to a new born.

8. What is commune system of farming?
Ans. Commune system of farming means collective cultivation of land by the farmers.

(3 Marks Questions)

9. Analyse the role assigned to public sector in the process of development in India and Pakistan in comparison to that in China.
Ans: India, Pakistan and China relied on planned development programmes as their basic strategy of growth and development. But, whereas in India and Pakistan, mixed economy served as the basic premise of the growth model, in China, all critical areas of production were brought under state ownership, and command economy served as the basic premise of the growth model. Thus, China adopted 'statism' as the model of growth.

10. How do you view the opposition to FDI in retail in India? Compare it with the situation of smooth operation of FDI in retail in China.
Ans: It is an undisputed fact that FDI is growth-friendly. After all, it is an investment and increases production capacity of the nation. The opposition to FDI in retail in India is not because it may be a roadblock in the process of growth. It is because it may generate unwarranted competition for the retail traders in India who may be marginalised and finally driven out of the market. Such a situation may erode the opportunities of self-employment in the country, and may also lead to concentration of economic power with the foreign investors. On the other hand, China was liberal in allowing FDI in retail. China allowed foreign investors 100 per cent equity investment.

11. The complementarity between the structure of growth and the GDP growth appears quite different from that shown by the historical experience of the developed countries. Comment.

Ans. Historical experience of the developed countries shows that in terms of the percentage share in GDP, it was first the secondary sector and later the tertiary sector which emerged as the leading sectors of the economy. However, in the Indian context, what was witnessed was that a major shift directly from primary sector to the tertiary sector. Primary sector on the eve of independence was the largest contributor to GDP. Now, tertiary sector has the lead in terms of contribution to GDP. Thus, a major shift directly from primary sector to tertiary sector has been observed in India. This implies a lesser emphasis has been accorded to industrial expansion in India.

12. Write three observations on the structure of growth in India, Pakistan and China.

Ans. Following observations highlight the structure of growth in India, Pakistan and China:

(i) Indian and Pakistan adopted a 'mixed-economy' model of growth. While, China adopted 'Statism' as a model of growth.

(ii) India and Pakistan have relied more on tertiary sector while the economy of China has relied more on secondary sector for the GDP growth.

(iii) In China, contribution of secondary sector to GDP is much more than in India and Pakistan.

13. Write three observations highlighting global exposure of the economy of China.

Ans. Following observations highlight the global exposure of the economy of China:

I. Inward looking policy of self-sufficiency and protection of domestic industry from foreign competition has gradually been replaced by the policy of growth through competition.

II. It allowed the foreign investors the freedom to 'hire and fire' the workers. It also offered them a lucrative infrastructure.

III. China allowed foreign investors 100 per cent equity investment across most sectors of the economy.

14. Write three observations pointing to growth story of India, China and Pakistan. Ans. Following observations highlight the growth story of India, China and Pakistan:

I. China has outpaced both India and Pakistan with regard to GDP growth.

II. India has performed better than Pakistan. But compared with China, India is way behind.

III. The relative success of China is credited to political stability in China. China has proved that the more relevant factor in the context of GDP growth is not the availability of resources but good governance by the state and 'good compliance' by the citizens.

15. Write three observations pointing to re-emergence of poverty in Pakistan.

Ans. Following observations pointing to re-emergence of poverty in Pakistan:

I. Lack of institutional reforms in agriculture because of which this sector has remained volatile (devoid of stability).

II. Lack of political stability in Pakistan, leading to huge public expenditure on the maintenance of law and order.

III. Allocation of huge funds to build a strong defence-system at the cost of developmental expenditure.

(5 Marks Questions)

16. What are the basic components of New Economic Policy of India? Ans. The basic components of New Economic Policy of India are:

I. A massive shift towards privatisation.

II. A transformation towards liberalisation (doing away with controls and quotas).

III. Greater reliance on export-promotion rather than import substitution.

IV. Greater reliance on FDI rather than the domestic investment.

17. Write four observations on the demographic profile of India, Pakistan and China.

Ans. Following observations highlight the demographic profile of India, Pakistan and China:

I. Growth rate of population in China has shown a much deeper decline than the growth rate of population in India and Pakistan.

II. Density of population is much lower in China as compared with India and Pakistan.

III. Both China and Pakistan are showing brighter signs of urbanisation than India.

IV.   Sex ratio is found to be biased against females in all the three countries.

18. State the principal features of strategy of growth adopted by India and Pakistan.

Ans. The principal features of strategy of growth adopted by India and Pakistan are as under:
  I.   It was a mixed-economy model of growth.
  II.   The strategy of growth underlined the significance of both private and public sectors.
  III.   Percentage of population having access to improved water sources- higher the better.
  IV.   Percentage of undernourished population-lower the better.

19. Write your observations describing the growth story of China. Ans. Following observations describe the growth story of China:
  I.   In distinction 2019, GDP of 2nd in China largest was economy estimated in the world will be 14.2 trillion USD (US dollars). It achieved the China achieved a breakthrough in GDP growth in the early 1980's. The jump has indeed been very substantial.
  II.   Quantum Zones), by jump allowing in FDI hundred was achieved per cent through equity to the establishment foreign investors of SEZ and free (Special flow Economic of FDI in the retail sector.
  III.   A jump in GDP growth was achieved also through domestic investment which was induced through Great Leap Forward campaign.
  IV.   Relying basically on external demand, China achieved a record growth in exports and by 2010 it emerged as the largest exporter in the global market.

20. Write your observations describing the growth story of India and Pakistan.

Ans. Following observations describe the growth story of India:
  I.   The GDP growth in India showed a substantial rise only after 1991, the year when New Economic Policy was launched.
  II.   NEP has focused on greater integration of the domestic economy with the global economies on the basis of free play of the market forces.
  III.   It was because of New Economic Policy that between the period 1991-2019, GDP growth rate in India increased to around 6 per cent per annum.

Following observations describe the growth story of Pakistan:
  I.   Pakistan achieved a breakthrough in GDP growth in the mid-80's. It was as a consequence of economic reforms, focusing on FDI and greater participation of the private sector in the process of growth.
  II.   The average annual growth rate of GDP has slumped to 3.75 per cent between the period 2008-2016. In 2017, economy of Pakistan grew at the rate of 5.3 per cent. In 2019, it further slumped to 3.3 per cent.
  III.   Owing to slow GDP growth, and consequently the low level of income, Pakistan economy has almost sunk into a 'low income-low growth' trap.

21. Write your observations pointing to areas where India has an edge over Pakistan.

Ans. Following observations highlight the areas where India has an edge over Pakistan:
  I.   Skilled manpower and research & development institutions in India are far more superior than in Pakistan.
  II.   India has shown a remarkable breakthrough in the export of software, while Pakistan is far behind.
  III.   Human capital formation in India has emerged as a much more significant determinant of growth than in Pakistan.
  IV.   India also has a better record of investment in education.
  V.   Owing to rapid decline in fertility rate, growth of population in India has been better managed than Pakistan.
  VI.   Healthcare facilities in general and infant mortality in particular are better addressed in India than in Pakistan.

22. Mention the salient demographic indicators of China, Pakistan and India.

Ans. Following observations highlight the salient demographic indicators of China, Pakistan and India:
  I.   Growth rate of population has been cut to half in China, following strict enforcement of its policy of 'one child norm'. India and Pakistan are still wrestling with the problem of

high growth rate of population, which is about 1.03 per cent in India and 2.05 per cent in Pakistan.

II. The size of population is comparatively very small in Pakistan, just about 1/10th of China or India.

III. Density of population is low in China, thanks to its large geographical area compared with India and Pakistan. It is estimated to be 148 persons per square kilometre in China compared to 455 and 275 persons (per square kilometre) in India and Pakistan, respectively.

IV. Both China and Pakistan are showing brighter signs of urbanisation than India.

V. Sex ratio is found to be low in all the three countries pointing to social backwardness where people hold high preference for a son in the family.

23. Compare and contrast India and China's sectoral contribution towards GVA/GDP. What does it indicate?

I. Choosing 2018-19 as the year of comparison, following points may be noted to compare and contrast India and China's sectoral contribution towards GVA/GDP:

II. Agricultural sector contributed 16 per cent to GDP in India, contrasting with just 7 per cent in China.

III. Industrial sector contributed 30 per cent to GDP in India contrasting with 41 per cent in China.

IV. Services sector contributed 54 per cent to GDP in India contrasting with 52 percent in China.

V. The crux that flows from these points that China has achieved a much higher degree of industrialisation compared to India. Their service sector has expanded proportionate to the industrial sector, which is not the case in India.

Thus, China has achieved a much more robust growth process than India.

24. Case A: Read the following case and answer the following:

Women constitute about half of the total population in India. They suffer many disadvantages as compared to men in the areas of education, participation in economic activities and healthcare. The deterioration in the child sex ration in country from 927 in 2001 to 914 in 2011 point to growing incident of foeticide. Close to 3,00,000 girl children aged below 15 years are not only married but have already borne children at least once. More than 50 per cent of married women in age group of 15-49 year have anaemia and nutritional anaemia caused by iron deficiency, which has contributed to 19 per cent of maternal deaths. Abortions are also a major cause of maternal morbidity and mortality in India.

I. Why in India women suffer from many disadvantages as compare to men?
II. What is the reason for low child sex ratio in India during 2001 to 2011?
III. What is the reason for maternal death in India?
IV. What steps should be taken to improve health system in India?

25. Describe the path of developmental initiatives taken by Pakistan for its economic development.

Answer: The path of developmental initiatives taken by Pakistan for its economic development can be described as under:

(i) Mixed economic system: Pakistan adopted the pattern of mixed economy to achieve the aim of economic development.

(ii) Introduction of Various Policies: In the late 1950s and 1960s. The policy combined tariff protection for manufacturing of consumer goods.

(iii) Green Revolution: The introduction of Green Revolution and increase in public investment in infrastructure led to a rise in the production of food grains.

(iv) Role of Public Sector: In the early 1970s, nationalisation of capital goods industries took place.

(v) Role of Private sector: In the late 1970s, there was a shift in government policy, it adopted the policy of denationalisation and encouraged the private sector and also offered various incentives to them.

(vi) Financial Support: During late 1970s Pakistan received financial support form (A) Western nation, (B) Remittances from emigrants to the Middle-east.

(vii) Reforms: In 1988, reforms were initiated in the country.