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आज़ादी का
अमृत महोत्सव

Student Study Material
Term -2 (2021-2022)
Class- XII
Economics



केन्द्रीय विद्यालय संगठन
देहरादून



GDP



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छात्रों के लिए

प्रिय विद्यार्थियों,

वर्तमान शैक्षणिक सत्र कई मायनों में ऐतिहासिक रहा है। महामारी ने न केवल भौतिक कक्षाओं को बाधित किया बल्कि आभासी शिक्षण के माध्यम से शिक्षकों के मागदर्शन, मकक्षा गतिविधियाँ, विशेष रूप से लेखन और इसके त्वारत सुधार को प्रतिस्थापित करने के लिए बाध्य किया है। जिससे परीक्षा के तौर-तरीकों से लेकर पूरी शिक्षण व्यवस्था में क्रांतिकारी बदलाव आया। प्रश्नों के निमाण से लेकर उनके मूल्यांकन और परीक्षाओं को संख्या और परीक्षा को अवधि तक- पारवतन से कुछ भी अछूता नहीं रहा है। यह वह समय है जब हम इन पारवतनों को अपनाने के लिए खुद को तैयार करते हैं जैसा कि हमने आभासी कक्षाओं के मामले में, परीक्षा के पारदृश्य में किया है और महामारी के कारण हमारे सामने आने वाली चुनौतियों में छुपी संभावनाओं का पता लगाया है।

नई शिक्षा नीति भी हमारे ज्ञान पारदृश्य में बड़े पैमाने पर सकारात्मक पारवतन का एक माध्यम है। आइए, हम इन सभी पारवतनों का स्वागत करें और पारवतन के आह्वान का उत्तर देने वाले प्रथम व्यक्ति होने पर स्वयं को गौरवान्वित महसूस करें।

हमने अभी-अभी जो प्रथम सत्र को परीक्षा संपन्न को है, वह वस्तुनिष्ठ मूल्यांकन आधारित है। आगामी महीनों में आप जिस द्वितीय सत्र को परीक्षा में प्रतिभाग करेंगे, वह परीक्षा विषयपरक वस्तुनिष्ठ एवं बहुविकल्पीय का सम्मिलित रूप होने को संभावना है, यह सीबीएसई द्वारा दी गई सूचना पर निर्भर करता है। ब्लूप्रिंट, प्रश्न पत्र का डिज़ाइन और विनिर्देश अलग-अलग विषय में भिन्न-भिन्न होंगे और आपको सीबीएसई और विद्यालय द्वारा नियत समय में सूचित किया जाएगा। अतः पाठ को ध्यान से पढ़ना और उसे अच्छी तरह समझना अत्यधिक महत्वपूर्ण है। इसलिए कृपया पाठ्यवस्तु को पढ़ने और लिखने के अभ्यास को अपनी सभी शैक्षणिक गतिविधियों का केंद्र बनाएं। अपनी एनसीईआरटी पुस्तकों को अपनी मुख्य पुस्तकों के रूप में प्राथमिकता दें और समर्पित शिक्षकों को एक टीम द्वारा तैयार की गई अध्ययन सामग्री का भी अवलोकन अवश्य करें, जिन्होंने हमारे सभी प्रिय विद्यार्थियों को आवश्यकताओं को समझकर उसके अनुरूप सामग्री को विकसित करने में पर्याप्त समय दिया है। प्रत्येक विषय एवं पाठ को प्रासंगिकता और संक्षिप्तता पर ध्यान दिया गया है- यह सामग्री आपको एनसीईआरटी पुस्तकों को पूरक है और किसी भी तरह से इसे इसके विकल्प के रूप में नहीं लिया जाए।

मुझे यकीन है कि इस अध्ययन सामग्री में आपको द्वितीय सत्र के लिए आवश्यक सभी इकाइयाँ / अध्याय एक साथ उपलब्ध होंगे, माइंड मैप, टेबल, नमूना परीक्षण सामग्री आदि आपके लिए उपयोगी सिद्ध होंगे। यह जरूरी है कि आप स्वयं को अद्यतन रखें और अध्ययन सामग्री को प्राप्त करने के उपरांत भी भविष्य में होने वाले किसी भी अन्य बदलाव के लिए सीबीएसई को वेबसाइट का नियमित रूप से अवलोकन करते रहें। आशा है कि शिक्षकों के अथक प्रयास से निमित्त यह अध्ययन सामग्री आपको अपने दूसरे सत्र को परीक्षा में श्रेष्ठ प्रदर्शन करने में सहायक सिद्ध होगी।

शुभकामनाएँ।

A Note to the students

Dear Students,

The current academic session has been historic in a number of ways. The pandemic not only forced shutting down of onsite classes and substituting them with online, virtual mode of teaching, a number of classroom activities, esp. writing under guidance of teachers and its prompt correction too has taken a backseat. On the examination front, the entire setup has undergone a revolutionary change. From typology of questions to their evaluation and to number of examination and duration of examination- nothing has remained untouched by these winds of change. This is the time we gear up ourselves to embrace these changes in examination landscape as we have done in case of online classes and explore possibilities in the challenges thrown before us by the pandemic.

The New Education Policy too is an agent of massive changes in our knowledge landscape. Let us amalgamate all these changes and feel proud ourselves to be the first to answer the call of CHANGE.

The first term examination that you have just taken has been an objective assessment. The second term that you will take in coming months is likely to be a combination of subjective and objective, depending on situation as intimated by the CBSE. The blueprint, design of question paper and specifications will differ from subject to subject and will be intimated to you in due course of time by the CBSE. So what remains important is to read the text and understand it thoroughly. So please make reading the text and practice writing the center of all your academic activities. Treat your NCERT books as your holy books and also go through the study material prepared by a team of dedicated teachers who have devoted sufficient time in understanding and then developing the content to suit the needs of all our dear students. Focus has been on relevance and conciseness- the content strictly is a supplement to your NCERT books and in no way it should be treated as a substitute to it.

I am sure the content in study material where you will find all units / chapters for SECOND TERM at a glance, mind maps, tables, and sample test items will be useful to you. However, it is imperative you keep your self-updated and also visit CBSE website regularly for any further changes that may take place after the study material has been prepared. Hope the efforts of your teachers in preparing this material will help you perform very well in your second term examination.

All the Best.

ECONOMICS (2021-22)

CLASS XII - TERM-2 CURRICULUM

TERM 2 - SUBJECTIVE QUESTION PAPER Theory:40Marks Time: 2Hours	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
Total	40	75
Project Work: 10 Marks Students would prepare only ONE project in the entire academic session, which is divided into 2 terms i.e. Term I and Term II.	50	

Term – II

Part A: Introductory Macroeconomics

Unit 1: National Income and Related Aggregates

23Periods

What is Macroeconomics?

Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation.

Circular flow of income (two sector model); Methods of calculating National Income - Value Added or Product method, Expenditure method, Income method. Aggregates related to National Income:

Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) - at market price, at factor cost; Real and Nominal GDP. GDP and Welfare

Unit 3: Determination of Income and Employment

22Periods

Aggregate demand and its components.

Propensity to consume and propensity to save (average and marginal).

Short-run equilibrium output; investment, multiplier and its mechanism. Meaning of full employment and involuntary unemployment.

Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

Part B: Indian Economic Development

Unit 7: Current challenges facing Indian Economy

18Periods

Employment: Growth and changes in work force participation rate in formal and informal sectors; problems and policies

Infrastructure: Meaning and Types: Case Studies: Health: Problems and Policies- A critical assessment;

Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming

Unit 8: Development Experience of India:

12Periods

A comparison with neighbours India and Pakistan

India and China Issues: economic growth, population, sectoral development and other Human Development Indicators

Term II Examination/ Year-end Examination:

-) At the end of the second term, the Board would organize Term II or Yearend Examination based on the rationalized syllabus of Term II only (i.e. approximately 50% of the entire syllabus).
-) This examination would be held around March-April 2022 at the examination centres fixed by the Board.
-) **The paper will be of 2 hours duration and have questions of different formats (case-based/ situation based, open ended- short answer/ long answer type).**
-) In case the situation is not conducive for normal descriptive examination a 90 minute MCQ based exam will be conducted at the end of the Term II also.
-) Marks of the Term II Examination would contribute to the final overall score.

PART- 'A'

(UNIT-1) NATIONAL INCOME AND RELATED AGGREGATES

SOME BASIC CONCEPTS OF MACROECONOMICS CLASSIFICATION OF GOODS

FINAL GOODS:- Those goods which have crossed the boundary line of production and ready for use by their final users.

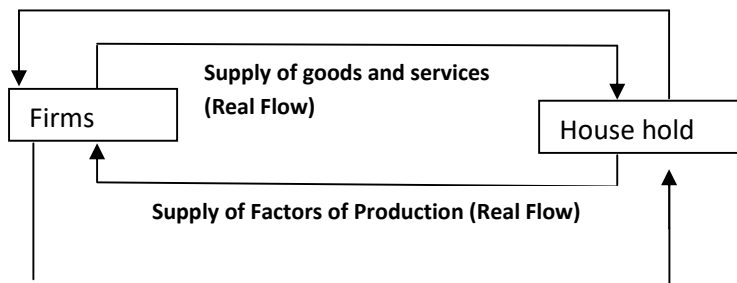
INTERMEDIATE GOODS:- Those goods which are within the boundary line of production and yet not ready for use by their final users

FINAL GOODS	INTERMEDIATE GOODS
1 Those goods which are used either for consumption or for investment.	1. Those goods which are used either for resale or for further production.
2. They have a direct demand as they satisfy the want directly.	2. They have a derived demand as their demand depends on the demand for final goods.
3. It is included in both National and Domestic Income.	3.It's neither included in National nor in Domestic Income.
4. Crossed the production boundary.	4. Still within production boundary.
5. They are ready for use by their final users i.e. no value has to be added to the final goods.	5. They are not ready for use, i.e. some value has to be added to the intermediate goods.

CONSUMPTION GOODS	CAPITAL GOODS
* These goods satisfy human wants directly.	* Such goods satisfy human wants indirectly.
* These goods have direct demand.	* Such goods have derived demand.
They do not promote production Capacity.	* They help in rising production capacity.
* Most of the consumption goods (except durable goods) have limited expected life.	* Capital goods generally have an expected life more than one year.
STOCK	FLOW
* It refers to that variable which is measured at a point of time.	* It refers to that variable which is measured over a period of time.
It does not have time dimension.	* It has a time dimension as its magnitude can be measured over a period of time
* It is a static concept.	* It is a dynamic concept.
* Examples – Population of India as on 31.3.2020, Money Supply, National Wealth	* Examples – No of birth during 2019, national income, Expenditure in money.

Circular flow in a two sector economy.

Payment for goods and services



Payment for Factor services (Money)

Producers (firms) and households are the constituents in a two sectors economy.

Households give factors of production to firm and firms in turn supply goods and services to households.

INVESTMENT: - Investment refers to increase in the stock of capital.

DEPRECIATION: - depreciation refers to fall in the value of fixed assets due to normal wear and tear, accidental damages and expected obsolescence.

Concept of domestic (economic) territory: - Domestic territory is a geographical territory administered by a government within which persons, goods and capital circulate freely. (Areas of operation generating domestic income, freedom of circulation of persons, goods and capital)

Scope identified as

*Political frontiers including territorial waters and air space.

Embassies, consulates, military bases etc. located abroad but including those located within the political frontiers.

*Ships, aircrafts etc., operated by the residents between two or more countries.

*Fishing vessels, oil and natural gas rigs etc. operated by the residents in the international waters or other areas over which the country enjoys the exclusive rights or jurisdiction.

NORMAL RESIDENTS – It refers to an individual or an institution who ordinarily resides in the country and whose centre of economic interest also lies in that country.

It's not included- 1- Foreign tourist and visitors ;

2- Foreign staff of embassies, officials, diplomats and members of the armed forces of a foreign country; 3- International Organizations; 4- Employee of international organization staying less than one year; 5- Crew members of foreign vessels. Commercial travelers and seasonal workers; 6- Boarder workers.

FACTOR INCOME	TRANSFER INCOME
* It refers to the income received by factors of production for rendering their services in the production process.	* It refers to the income received without rendering any productive services in return.
* It is included in both National and Domestic Income.	* It's neither included in National nor in Domestic Income.
* Earning Concept.	* Receipt concept.
* Received by factors of production (Land, labour, Capital and Entrepreneur)	* Generally received by household and government.

NET FACTOR INCOME FROM ABROAD (NFIA)

Net factor income from abroad is the difference between

- (1) **Factor income earned by our residents from rest of world**, and
- (2) Factor income earned by non residents in our domestic territory
- (3) $NFIA = (\text{Factor income earned by our residents from rest of world} - \text{Factor income earned by non residents in our domestic territory})$
(NDP at FC + NFIA = NATIONAL INCOME)
- (4) $NFIA = (\text{Factor income earned by our residents from rest of world} - \text{Factor income earned by non residents in our domestic territory})$
(NDP at FC + NFIA = NATIONAL INCOME)

NATIONAL INCOME AND RELATED AGGREGATES -2

) GROSS AND NET CONCEPTS OF DOMESTIC PRODUCT

-) DOMESTIC PRODUCT AT MARKET PRICE AND FACTOR COST
-) GROSS AND NET NATIONAL PRODECT AT MARKET PRICE
-) GROSS AND NET NATIONAL PRODECT AT FACTOR COST

GROSS AND NET CONCEPTS OF DOMESTIC PRODUCT

Domestic product is measured as GDP or NDP, Depreciation (Consumption of fixed capital) causes the difference between the two. While GDP includes deprecation, NDP does not.

$GDP - Depreciation = NDP$

$NDP + Depreciation = GDP$

DOMESTIC PRODUCT AT MARKET PRICE AND FACTOR COST

-) Domestic product at market price – Net indirect tax (indirect tax – subsidies) = Domestic product (gross/net) at Factor cost
-) National product at market price – Net indirect tax (indirect tax – subsidies) = National product (gross/net) at Factor cost

GROSS DOMESTIC PRODECT AT MARKET PRICE(GDP at MP)

-) GDP at MP is market value of the final goods and service product within the domestic territory of a country during the period of an accounting year (inclusive deprecation)

NET DOMESTIC PRODECT AT MARKET PRICE(NDP at MP)

-) NDP at MP is market value of the final goods and service product within the domestic territory of a country during the period of an accounting year (exclusive of depreciation)

GROSS NATIONAL PRODECT AT MARKET PRICE(GNP at MP)

-) $GDP \text{ at MP} + \text{Net factor income from abroad}$

NET NATIONAL PRODECT AT MARKET PRICE(NNP at MP)

-) $NDP \text{ at MP} + \text{Net factor income from abroad}$

GROSS DOMESTIC PRODECT AT FACTOR COST (GDP at FC)

$GDP \text{ at FC} = \text{Compensation of employees} + \text{Rent} + \text{Interest} + \text{profit} + \text{Depreciation}$

NET DOMESTIC PRODECT AT FACTOR COST (NDP at FC)

$NDP \text{ at FC} = \text{Compensation of employees} + \text{Rent} + \text{Interest} + \text{profit}$

GROSS NATIONAL PRODECT AT FACTOR (GNP at FC)

$GDP \text{ at FC} + \text{Net factor income from abroad}$

NET NATIONAL PRODECT AT FACTOR COST (NNP at FC)

-) $NDP \text{ at FC} + \text{Net factor income from abroad}$

NATIONAL INCOME AND RELATED AGGREGATES

-) NOMINAL AND REAL GDP
-) GDP AND WELFARE

NOMINAL AND REAL GDP

NOMINAL GDP:- Nominal GDP is the market value of the final goods and services (Q) produced within the domestic territory of a country during an accounting year, as estimated using the **current year price (P)**.

$$\text{Nominal GDP} = Q \times P$$

(When nominal GDP rises, the flow of goods and services in economy may or may not rise during an accounting year)

REAL GDP:- Real GDP is the market value of the final goods and services (Q) produced within the domestic territory of a country during an accounting year, as estimated using the **Base year price (*P)**.

$$\text{Nominal GDP} = Q \times *P$$

Suppose, the output of commodity- X during the year 2019 was 500 units. The market of the commodity during the same year was Rs.50 per unit while the price in the base year was Rs.40 per unit. So the Nominal GDP and Real GDP would be.

$$\text{Nominal GDP} = 500 \times \text{Rs } 50 = \text{Rs.}25,000.$$

$$\text{Real GDP} = 500 \times \text{Rs } 40 = \text{Rs.}20,000.$$

Conversion of Nominal GDP into Real GDP

$$\text{Real GDP} = \frac{\text{GDP at current price}}{\text{Price index}} \times 100$$

$$\text{Nominal GDP} = \text{Real GDP} \times \frac{\text{Price index}}{100}$$

GDP AND WELFARE

Real GDP is considered as an index of welfare of the people. Welfare of the people is measured in terms of the availability of goods and service per person. Higher the growth of GDP , greater is the flow of goods and services. Greater is the availability of goods and services per person.

LIMITATION

) **Distribution of income**:- If with every increase in the level of GDP, distribution of GDP is getting more unequal, welfare level of the society may not rise.

Composition of GDP:- Composition of GDP may not be welfare oriented even when the level of GDP tends to rise. If GDP has risen owing largely to the increase in the production of defense goods.

) **Non- monetary exchanges**:- Larger the non-monetary transactions, greater the underestimation of GDP as an index of welfare.

) **Externalities**:- GDP index does not account for externalities: the good and bad impact of economic activities without the price or penalty. Environmental pollution related to production activity is an important example of negative externalities, If maintains a beautiful garden is an important example of positive externalities . This also lowers the significance the of GDP as an index of welfare.

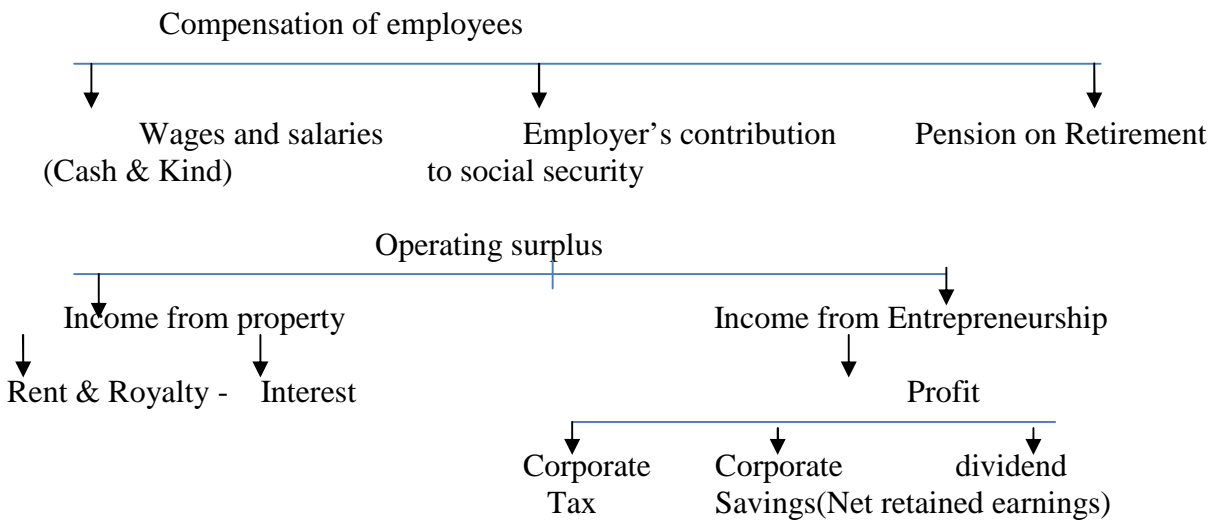
METHODS OF CALCULATING NATIONAL INCOME

INCOME METHOD

Income method:

1. Compensation of employee's
3. Mixed Income

2. Operating surplus.



Income method

It is also called Factor payment method . According to this method , national income is estimated in term of factor payments.

Compensation of employees + Rent + Interest + Profit + Mixed Income

= NDP at FC (Domestic income)

NDP at FC + Net Factor income from Abroad (OR) (-) Net Factor income to Abroad = NNP at FC (NATIONAL INCOME)

Calculate National Income from the following data. (F.2013)

S.No	Items	Rs. In crore
I	Net exports	(-) 300
Ii	Compensation of employees	6000
Iii	Rent	400
Iv	Dividend	200
V	Consumption of fixed capital	300
Vi	Change in stock	50
Vii	Profit	800
Viii	Net factor income to abroad	(-)80
Ix	Net indirect taxes	600
X	Interest	500

Ans. COE + OPERATING SURPLUS (Rent+ Interest + profit) + mixed income

= NDP at FC – Net factor income to abroad = National income

Ii + iii + x +vii +0 – viii

NATIONAL INCOME (NNP AT FC) =6000 +400 +500 + 800 – (-)80 = 7780

Question:- Calculate Gross National product at market price from the following data.

S.No	Items	Rs. In Crore
I	Rent	100
Ii	Net current transfers to abroad	30
Iii	Social security contribution by employers	47
Iv	Mixed income of self- employed	600
V	Gross domestic capital formation	140
Vi	Royalty	20
Vii	Interest	110
Viii	Compensation of employee	500
Ix	Consumption of fixed capital	20
X	Net factor income from abroad	(-)10
Xi	Net indirect tax	150
Xii	Profit	200

Ans. Compensation of employee (COE) + Rent + Royalty + Interest + Profit + Mixed income = NDP at FC

NDP at FC + NET FACTOR INCOME FROM ABROD = NNP at FC (National income)

viii +I +vi +vii +xii +iv (500+100+20+110+200+600 =1530)= NDP at FC

NNP at FC = NDP at FC +NET FACTOR INCOME FROM ABROD

1530 +(-)10 = 1520 crore

Gross National product at market price = NNP at FC + Consumption of fixed capital + Net indirect tax

GNP at MP =1520+20+150=1690 Crore

Gross National product at market price =1690 Crore

Question: - Calculate the value of 'Rent' from the following data.

S.No	Items	Rs. In crore
I	Gross domestic product at market price	18,000
Ii	Mixed income	7000
Iii	Subsidies	250
Iv	Interest	800
V	Rent	?
Vi	Profit	975
Vii	Compensation of employees	6,000
Viii	Consumption of fixed capital	1,000
Ix	Indirect tax	2,000

Ans. RENT = Gross domestic product at market price - Compensation of employees – Interest – Profit - Mixed income - Consumption of fixed capital- Indirect tax + Subsidies

RENT = Rs18000cr – Rs 6000 cr – Rs 800 cr – Rs 975 cr – Rs 7000cr – Rs1000 cr – Rs 2000 cr + Rs 250 cr = 475 crore

Rent = 475 crore

(OR)

(Compensation of employees + Interest + Profit + Mixed income +

Consumption of fixed capital+ Indirect tax - Subsidies)

$$\text{GDP mp} = \text{Rs } 6000 \text{ cr} + \text{Rs } 800 \text{ cr} + \text{Rs } 975 \text{ cr} + \text{Rs } 7000 \text{ cr} + \text{Rs } 1000 \text{ cr} + \text{Rs } 2000 \text{ cr} - \text{Rs } 250 \text{ cr} \\ = 17525$$

$$\text{Rent} = \text{GDP at MP} - 18000 = 17525 - 18000 = \text{Rs } 475 \text{ Crore}$$

EXPENDITURE METHOD

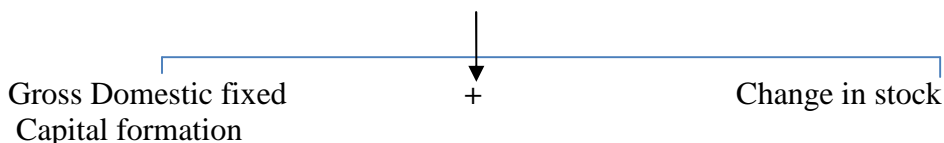
According to expenditure method, National income is estimated in term of expenditure on the purchase of final goods and services in the economy and net factor income from abroad during an accounting year. It is adjusted to find NNP at FC or national income.

CLASSIFICATION OF FINAL EXPENDITURE

1. Private final consumption expenditure. (C)
2. Government final consumption expenditure (G)
3. Gross domestic capital formation (I)
4. Net export (X-M)

Expenditure method:

1. Government final consumption expenditure.
2. Private final consumption expenditure.
3. Net Export.
4. Gross domestic capital formation.



$$\text{GDP}_{\text{Mp}} = (1) + (2) + (3) + (4)$$

$$\text{NNP}_{\text{Fc}} = \text{GDP at MP} - \text{consumption of fixed capital} + \text{NFIFA} - \text{Net indirect taxes}$$

GDP at MP = Private final consumption expenditure + Government final consumption expenditure + Gross domestic capital formation {Gross Domestic fixed Capital formation + Change in stock(Closing stock – opening stock)} + Net export (Export – Import) OR (-) Net import .

NDP at MP = Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation {Net Domestic fixed Capital formation + Change in stock(Closing stock – opening stock)} + Net export (Export – Import) OR (-) Net import .

$$NDP_{MP} = GDP_{MP} - \text{Depreciation}$$

$$NNP_{MP} = NDP_{MP} + \text{Net factor income from abroad (OR)}$$

(-) Net factor income to abroad

$$\text{NATIONAL INCOME (NNP at FC)} = \text{NNP at MP} - \text{Net indirect tax}$$

Question: Calculate Net National product at market price from the following data.

S.No	Items	Rs. In crore
I	Gross domestic fixed capital formation	400
Ii	Private final consumption expenditure	8000
Iii	Government final consumption expenditure	3000
Iv	Change in stock	50
V	Consumption of fixed capital	40
Vi	Net indirect taxes	100
Vii	Net exports	(-)60
Viii	Net factor income to abroad	(-)80
Ix	Net current transfers from abroad	100
X	Dividend	100

$$\text{Ans. II + III + I + IV + VII - V - VIII}$$

$$\text{Rs.8000+ Rs.3000+ Rs400+ Rs 50 + (-)Rs 60 - 40 - (-)80 = Rs.11430 crore}$$

$$\text{Net National product at market price} = \text{Rs.11430 crore}$$

**Question :- From the following data, calculate Gross national product at market price by
(a) Income method (b) Expenditure method**

	ITEMS	(Rs. in crore)
I	Mixed income of self employed	400
Ii	Compensation of employees	500
Iii	Private final consumption expenditure	900
Iv	Net factor income from abroad	(-)20
V	Net indirect taxes	100
Vi	Consumption of fixed capital	120
Vii	Net domestic capital formation	280
Viii	Net exports	(-)30
Ix	Profit	350
X	Rent	100
Xi	Interest	150
Xii	Govt. final consumption expenditure	450

Gross national product at market price By Income method =

$$(ii) + (x) + (xi) + (ix) + (i) + (vi) + (v) + (iv)$$

Rs.500 cr. + Rs100cr. + Rs.150cr + Rs 350cr +Rs 400cr + Rs 120cr + Rs 100cr + Rs (-) 20cr = Rs. 1700 crore

Gross national product at market price By expenditure method =

(iii)+(xii)+(vii)+(viii)+(vi)+(iv)

Rs.900cr + Rs 450cr + Rs 280cr + Rs (-) 30cr +Rs.120cr + Rs (-) 20cr

= Rs.1700 Crore

Question: - Given the following data find the missing values of ‘Gross domestic capital formation’ and ‘Wages and salaries ’.(2019)

S.No	Items	Rs. In crore
I	Mixed income	3,500
Ii	Net indirect taxes	300
Iii	Wages and salaries	?
Iv	Government final consumption expenditure	14,000
V	Net export	3000
Vi	Consumption of fixed capital	300
Vii	Net factor income from abroad	700
Viii	Operating surplus	12,000
Ix	National income	30,000
X	Profits	500
Xi	Gross domestic capital formation	?
Xii	Private final consumption expenditure	11,000

Ans Gross domestic capital formation =

National income - Private final consumption expenditure - Government final consumption expenditure - Net export + Consumption of fixed capital + Net indirect taxes - Net factor income from abroad

Rs.30, 000 cr – Rs.11, 000cr – Rs 14,000cr – Rs.3000 cr +Rs.300cr +Rs.300cr - Rs.700cr = Rs1, 900crore

Wages and salaries =

National income - Operating surplus - Mixed income - Net factor income from abroad

Rs.30, 000 cr – Rs.12, 000cr – Rs 35,00cr – Rs.700 cr = Rs.13,800 crore

Gross domestic capital formation = Rs1, 900crore

Wages and salaries = Rs.13,800 crore

VALUE ADDED METHOD (OR PRODUCT METHOD)

Value added method measures national income in term of value addition by each producing enterprise in the economy during an accounting year.

VALUE ADDED: - Value added is the difference between value of output of an enterprise and the value of its intermediate consumption.

Value added (GDP_{MP}) = Value of output (Sales + Change in stock) – Intermediate consumption
(Includes value of raw material used in the process of production)

Gross value added by the all the producing enterprises within the domestic territory of a country during an accounting year is called Gross domestic product at market price (GDP_{MP})

National income (value added method / Production method)

Gross value added (GDP_{MP}) - Depreciation + Net factor income from abroad (OR) (-) Net factor income to abroad – Net indirect tax = NNP_{FC} (NATIONAL INCOME)

(OR)

Gross value added by all producing enterprises in Primary sector + Gross value added by all producing enterprises in Secondary sector + Gross value added by all producing enterprises in Tertiary sector = (GDP_{MP}) - Depreciation + Net factor income from abroad (OR) (-) Net factor income to abroad – Net indirect tax = NNP_{FC} (NATIONAL INCOME)

PROBLEM OF DOUBLE COUNTING

It refers to the situation when the value of a good is estimated more than once. It is a problem which leads to overestimation of National income. The problem of double counting arises when the value of intermediate goods is included or the value of second hand goods is estimated.

Stages of production	Value of inputs	Value of output	Value Added
Farmer-Wheat	---	500	500
Flour Mill-Flour	500	700	200
Bakery-Bread	700	1000	300
Distributer	1000	1200	200
Total	2200	3400	1200

TWO WAYS TO AVOID IT :- (1) FINAL OUTPUT METHOD:- According to this method, only final goods and services (in terms of their end-use) are to be considered in the estimation of GDP.

(2) VALUE ADDED METHOD: - According to this method, sum total of value added by all the producing units within the domestic territory of the country are to be considered in the estimation of GDP.

QUESTION: - Calculate Net value added at factor cost from the following data.

S.No	Items	Rs. In lakh
I	Purchases of raw materials	300
Ii	Import duty	20
Iii	Excise duty	30
Iv	Net addition to stock	50
V	Value of output	500
Vi	Depreciation	10

ANS. Net value added at factor cost

= Value of output - Purchases of raw materials – Depreciation - Import duty (IT) - Excise duty (IT)

= Rs.500 lakh – Rs.300 lakh – Rs 10 lakh –Rs.20 lakh – Rs.30 lakh = 140 lakh

Net value added at factor cost = Rs. 140 lakh

Quaestion. Calculate value of output from the following data.

S.No	Items	Rs. In lakh
I	Net value added at factor cost	150
Ii	Intermediate consumption	100
Iii	Excise duty (GST)	20
Iv	Subsidy	5
V	Depreciation	10

ANS. **Value of output =**

Net value added at factor cost + Intermediate consumption + Excise duty (GST) – Subsidy + Depreciation

Rs.150 lakh +Rs.100 lakh +Rs.20 lakh – Rs.5 lakh +Rs.10 lakh = Rs.275 lakh

QUESTION:- Calculate national income by [a] product method [b] income method:

S NO.	ITEMS	
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		₹ IN CRORES
1	Value of output of [a] primary sector [b] secondary sector [c] tertiary sector	1000 800 600
2	Intermediate consumption of: [a] primary sector [b] secondary sector [c] tertiary sector/	400 300 100
3	Emoluments of employees (COE)	500
4	Rent	40
5	Consumption of fixed capital	80
6	Indirect taxes	30
7	Net factor Income from Abroad	10
8	Subsidies	10
9	Interest	50
10	Operating Surplus	200
11	Mixed Income	800

National income by production method = Value of output of ([a] primary sector + [b] secondary sector + [c] tertiary sector) - Intermediate consumption of ([a] primary sector + [b] secondary sector + [c] tertiary sector) - Consumption of fixed capital - Indirect taxes + Subsidies + Net factor Income from Abroad

$$= (1000+800+600)-(400+300+100)-80-30+10+10=1510$$

National by production method= Rs.1510 crore

National by income method = Emoluments of employees + Operating Surplus + Mixed Income + Net factor Income from Abroad

National by income method = 500+200+800+10 = Rs.1510 crore

PRECAUTIONS REGARDING VALUE ADDED METHOD

Precautions: - The following precautions are required while using this method, viz.

i) The value of intermediate goods should not be included, rather the value of only the final products to be included. Otherwise, the problem of double counting may arise.

- ii) The value of second hand goods is not to be included since the value of this goods have been already valuated in the NI of those years when these goods have been manufactured & sold.
- iii) The value of illegal goods to be excluded because these goods have no legal sanction or authority to be produced or sold.
- iv) Commission earned :- on account of sale and purchase of second-hand goods is included in the estimation of value added , Because, commission is a reward for the service rendered.
- v) The value of transfer payments are to be excluded because these transactions do not contribute in the flow of income & product, rather these are transfer of ownerships.

PRECAUTIONS REGARDING INCOME METHOD

Precautions: The following precautions have to be considered while measuring NI by this method:

- i) The transfer incomes are not to be included because these transactions do not contribute to the flow of national production. For e.g., tax, gifts, donations, scholarships etc.
- ii) The incomes derived from illegal sources are not to be included since the illegal activities are not backed by the legal sanction. For e.g., gambling, smuggling, theft & loot etc.
- iii) The incomes received after selling second hand goods are not to be included but the commission earned by the broker is to be included because it is a factor income.
- iv) The income derived from leisure time activities is not to be included because it is difficult to determine the actual price of leisure time goods.
- v) The income earned by selling shares is also not to be included since this is considered as the transfer income because these transactions are mere transfer of ownership of assets.

Commission paid :- on the sale and purchase of second-hand goods is included in the estimation of national income , Because, commission is a reward for the service rendered.

PRECAUTIONS REGARDING EXPENDITURE METHOD

- i) The expenditure on intermediate goods are not to be estimated, otherwise it may lead to problem of double counting. We must make sure that we are not including the intermediate expenditure.
 - ii) The expenditure on second hand goods & services is not to be included because it is already been included in the year when these goods have been manufactured, but the expenditure made on broker's service as commission is to be included.
 - iii) The expenditure on transfer payments is not to be included because this expenditure does not lead to production of goods & services in the economy.
 - iv) The expenditure on illegal goods is also not to be included because these goods are not been legally sanctioned.
 - v) Expenditure on Shares and bonds:- is not to be included in total expenditure, as these are paper claims and are not related to production of final goods and services. Such expenditure do not cause any value addition.
-

CBSE BOARD EXAM.01 MARKS QUESTIONS

Q1. Depreciation of fixed capital assets refers to : (2016)

- (a) Normal wear and tear (c) **Normal wear and tear and foreseen obsolescence**
 (b) foreseen obsolescence (d) Unforeseen obsolescence

Q2. Define stock. (2016) (**Stock is the quantity which is measured at a point of time**)

Q3. Define flow . (2016) (**Flow is the quantity which is measured per unit of time period**)

Q4. Define Gross investment. (2016) (**Gross investment is the sum total of expenditure on purchase of new assets and depreciation during the year**)

Q5. Give one example of negative externalities. (2018) (**negative externalities occur when smoke omitted by factories causes air pollution or water pollution**)

Q6. Give two examples of flow concept. (2019) (**Income and Investment**)

Q7. State, whether the following statement is true or false : (2020)

‘Inventory is a stock variable’ (**True**)

Q8. Which of the following is not a factor payment ? (2020)

- (a) Free uniform to defense personnel
 (b) Salaries to the member of parliament
 (c) Rent paid to the owner of a building
 (d) **Scholarship given to the students.**

Q9. Combined factor income, which can't be separated into various factor income components is known as _____ (2020) (**Mixed income of self-employed**)

Q10. Net Domestic Fixed capital formation + Change in stock = _____ (2020) (**Net domestic capital formation**)

Q11. State, whether the following statement is true or false : (2020)

‘Purchase of machinery by a producer by producer is an intermediate good’. (**False**)

Q12. When Nominal GDP is Rs. 840 crores and Price Index is 120, then the Real GDP will be _____ (2020) (Ans. $RGDP = \frac{NGDP}{PI} \times 100 = 700$)

- (a) Rs.700 crores (b) Rs.900 crores (c) Rs.800 crores (d) Rs.500 crores

Q13. Rent + Interest + Profit = _____ (2020) .(**Operating surplus**)

Q14. When Nominal GDP is Rs. 850 crores and price Index is 170, Real GDP will be _____ (2020)

(Ans. **$RGDP = \frac{NGDP}{PI} \times 100 = 500$**)

ASSERTION AND REASONING

Q1. ASSERTION (A):

The goods which are used either for resale or for further production in the same year are Intermediate Goods.

REASONING (R):

Intermediate Goods are included in National Income.

Alternatives:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is true but Reason (R) is false.
- (d) Assertion (A) is false but Reason (R) is true.

Ans: (c) Assertion (A) is true but Reason (R) is false.

Q2.ASSERTION (A):

Good that is meant for final use and will not pass through any more stages of production or transformations is called a final good.

REASONING (R):

It will not undergo any further transformation at the hands of any producer, but many such final goods are transformed during their consumption.

Alternatives:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is true but Reason (R) is false.
- (d) Assertion (A) is false but Reason (R) is true.

Ans: (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)

Q3.ASSERTION (A):

Purchase of a car always means the purchase of a final good.

REASONING (R):

It depends on the end-use of the car. If it is purchased by a household, it is a final good. It is like a consumer durable, If it is purchased by taxi.

Alternatives:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is true but Reason (R) is false.
- (d) Assertion (A) is false but Reason (R) is true.

Ans: (d) Assertion (A) is false but Reason (R) is true.

Q4. ASSERTION (A):

Intermediate goods refer to those goods which are used for resale or for further production in the same year.

REASONING (R):

These goods are purchased by firms for capital formation.

Alternatives:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is true but Reason (R) is false.
- (d) Assertion (A) is false but Reason (R) is true.

Ans: (c) Assertion (A) is true but Reason (R) is false.

Q5.ASSERTION (A):

Purchase of wheat in the wholesale market done by the traders is to be treated as the purchase of intermediate good and by the households is to be treated as the purchase of final good.

REASONING (R):

Both traders and households purchase wheat from the wholesale market in bulk but traders are not the final users of wheat.

Alternatives:

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
- (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
- (c) Assertion (A) is true but Reason (R) is false.
- (d) Assertion (A) is false but Reason (R) is true.

Ans: (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)

SHORT AND LONG ANSWER TYPE QUESTION

Q1. Distinguish between stocks and flows .Give two examples of each.

STOCK	FLOW
* It refers to that variable which is measured at a point of time.	* It refers to that variable which is measured over a period of time.
It does not have time dimension.	* It has a time dimension as its magnitude can be measured over a period of time
* It is a static concept.	* It is a dynamic concept.
* Examples – Population of India as on 31.3.2021, Money Supply, National Wealth	* Examples – No of birth during 2020, national income, Expenditure in money.

Q2. Define externalities. Give an example of negative externality. What is its impact on welfare?

Ans:- Externalities: - GDP index does not account for externalities: the good and bad impact of economic activities without the price or penalty.

Example of negative externality: Environmental pollution related to production activity is an important

example of negative externalities. .

Impact on welfare: This also lowers the significance the of GDP as an index of welfare.

Q3. Distinguish between 'real' GDP and 'nominal' GDP. Which of these is a better index of welfare of the people and why?

Ans:- NOMINAL GDP:-Nominal GDP is the market value of the final goods and services (Q) produced within the domestic territory of a country during an accounting year, as estimated using the **current year price (P)**.

$$\text{Nominal GDP} = Q \times P$$

(When nominal GDP rises, the flow of goods and services in economy may or may not rise during an accounting year)

REAL GDP:- Real GDP is the market value of the final goods and services (Q) produced within the domestic territory of a country during an accounting year, as estimated using the **Base year price (*P)**.

$$\text{Nominal GDP} = Q \times *P$$

GDP AND WELFARE:- Real GDP is considered as an index of welfare of the people. Welfare of the people is measured in terms of the availability of goods and service per person. Higher the growth of GDP , greater is the flow of goods and services. Greater is the availability of goods and services per person.

Q4. If Real GDP is Rs. 200 and price index (with base = 100) is 110, calculate Nominal GDP.

Ans:- Real GDP = Nominal GDP / Price index x 100

$$\text{OR, Nominal GDP} = \text{Real GDP} \times \text{Price index} / 100$$

$$= 200 \times 110 / 100 = 220 \quad \quad \quad \text{Nominal GDP} = 220$$

Q5. If the Nominal GDP is Rs. 1,200 and price index (with base = 100) is 120, calculate Real GDP.

Ans:- Real GDP = Nominal GDP / Price index x 100

$$= 1,200 / 120 \times 100 = 1,000 \quad \quad \quad \text{Real GDP} = 1,000$$

Q6. If the Real GDP is Rs. 300 and Nominal GDP is Rs.330, calculate price index(base = 100)

Ans:- Real GDP = Nominal GDP / Price index x 100

$$\text{OR, Price index} = \text{Nominal GDP} / \text{Real GDP} \times 100$$

$$= 330 / 300 \times 100 = 110 \quad \quad \quad \text{Price Index} = 110$$

Q7. Giving reasons explain how should the following be treated in estimated GDP at market price?

- (i) Fees to a mechanic paid by a firm.
- (ii) Interest paid by an individual on a car loan taken from a bank.
- (iii) Expenditure on purchasing a car for use by a firm.

Ans. (i) Fees paid to mechanic by a firm is not included because it is an intermediate cost of the firm.

(ii) Interest paid by an individual is not included because the loan is taken to meet consumption expenditure and therefore interest paid on such a loan is not a factor payment.

(iii) Expenditure on purchase a car by a firm is included because it is investment expenditure, a final expenditure.

Q8. Giving reason, explain how the following should be treated in the estimation of National Income.

(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.

Ans. (i) Payment of interest by a firm to a bank: It will be 'included' in the estimation of National Income, as it is a factor income. Also, firms take loans for investment purposes.

(ii) Payment of interest by a bank to an individual: it will be 'included' in the estimation of National Income as it is a factor income.

(iii) Payment of interest by an individual to a bank: It will 'not be included' in the estimation of National Income as consumer takes a loan for consumption purposes.

Q9. Giving reason, explain whether the following are included in domestic product of India.

(i) Profits earned by a branch of foreign bank in India.

(ii) Payment of salaries to its staff by an embassy located in New Delhi.

(iii) Interest received by an Indian resident from its abroad firms.

Ans. (i) As the profits are earned in the domestic territory of India, the profits earned by a branch of the foreign bank in India will be 'included' in domestic income of India.

(ii) Payment of salaries to its staff by an embassy located in New Delhi will 'not be included' in the domestic income of India, as it is not a part of the domestic territory of India.

(iii) As interest received by an Indian resident from its abroad firms is factor income from abroad, it will 'not be included' in domestic income of India.

Q10. State any precautions that are taken while calculating national income by expenditure method.

Ans: i) The expenditure on intermediate goods are not to be estimated, otherwise it may lead to problem of double counting. We must make sure that we are not including the intermediate expenditure.

ii) The expenditure on second hand goods & services is not to be included because it is already been included in the year when these goods have been manufactured, but the expenditure made on broker's service as commission is to be included.

iii) The expenditure on transfer payments is not to be included because this expenditure does not lead to production of goods & services in the economy.

iv) The expenditure on illegal goods is also not to be included because these goods are not been legally sanctioned.

v) Expenditure on Shares and bonds:- is not to be included in total expenditure, as these are paper claims and are not related to production of final goods and services. Such expenditure do not cause any value addition.

Q11. Define the problem of double counting in the computation of national income. State any two approaches to correct the problem of double counting.

Ans.: DOUBLE COUNTING: It refers to the situation when the value of a good is estimated more than once. It is a problem which leads to overestimation of National income. The problem of double counting arises when the value of intermediate goods is included or the value of second hand goods is estimated.

Stages of production	Value of inputs	Value of output	Value Added
Farmer-Wheat	---	500	500
Flour Mill-Flour	500	700	200
Bakery-Bread	700	1000	300
Distributor	1000	1200	200
Total	2200	3400	1200

TWO APPROACHES TO CORRECT THE PROBLEM

(1) **FINAL OUTPUT METHOD:-** According to this method, only final goods and services (in terms of their end-use) are to be considered in the estimation of GDP.

(2) **VALUE ADDED METHOD: - According** to this method, sum total of value added by all the producing units within the domestic territory of the country are to be considered in the estimation of GDP.

Q12. Calculate National Income from the following data.

S.No	Items	Rs. In crore
I	Net current transfers to abroad	(-)15
li	Private final consumption expenditure	600
lii	Subsidies	20
Iv	Government final consumption expenditure	100
V	Indirect taxes	120
Vi	Net Imports	20
Vii	Consumption of fixed capital	35
Viii	Ne Change in stock	(-)10
Ix	Net factor income to abroad	5
X	Net domestic capital formation	110

Ans:- National income = Private final consumption expenditure + Government final consumption expenditure + Net domestic capital formation – Net export - Indirect taxes + Subsidies - Net factor income to abroad

=Rs. 600+ 100 + 110 – 20 - 120 +20 – 5 = 685 crore

National Income = 685 crore

Q13. Calculate gross National product at market price from the following data.

S.No	Items	Rs. In crore (5700)
I	Compensation of employees	2000
li	Interest	500
lii	Rent	700
Iv	Profit	800
V	Employers contribution to social security schemes	200
Vi	Dividend	300
Vii	Consumption of fixed capital	100
Viii	Net indirect taxes	250
Ix	Net exports	70
X	Net factor income to abroad	150
Xi	Mixed income of self- employed	1500

Ans:- Gross National product at market price = Compensation of employees + Interest +Rent + Profit + Mixed income of self- employed + Consumption of fixed capital + NIT - Net factor income to abroad

= Rs.2,000 + 500 + 700 + 800 + 1,500 + 100 +250 – 150 crore = 5,700 crore

Gross National product at market price = 5,700 crore

Q14. Calculate Net value added at factor cost from the following data.

S.No	Items	Rs. In lakh
I	Purchases of raw materials	300
li	Import duty	20
lii	Excise duty	30
Iv	Net addition to stock	50
V	Value of output	500
Vi	Depreciation	10

Ans:- Net value added at factor cost = Value of output - Purchases of raw materials – Depreciation - Import duty - Excise duty

= Rs. 500 – 300 - 10 – 20 – 30 lakh = Rs. 140 Laks

Net value added at factor cost = Rs. 140 Laks

Q15. Calculate 'sales' from the following data:

	ITEMS	Rs in lakh
A	Intermediate cost	240
B	consumption of fixed capital	40
C	Change in stock	(-)60

D	Indirect tax	30
E	Net value added at factor cost	300

Ans. Net value added at $_{FC}$ - changes in stock + intermediate costs + consumption of fixed capital + Net Indirect tax

$$= \text{Rs. } 300 - (-) 60 + 240 + 40 + (30 - 0) = \text{Rs. } 670 \text{ lakh}$$

Sales = Rs. 670 lakh

Q16. From the following data, calculate Net National Product at Market Price (NNP_{MP}) BY : Income method, and (ii) expenditure method:

S.No.	Items	(Rs.In Crores)
I	Mixed income of self- employed	400
Ii	Compensation of employees	500
Iii	Private final consumption expenditure	900
Iv	Net factor income from abroad	(-) 20
V	Net indirect tax	100
Vi	Consumption of fixed capital	100
Vii	Net domestic capital formation	280
Viii	Net exports	(-)30
Ix	Profits	350
X	Rent	100
Xi	Interest	150
Xii	Government final consumption expenditure	450

Ans. Income method

$$NDP_{FC} = COE + OS + \text{Mixed income}$$

$$NDP_{FC} = COE + \text{Rent} + \text{Interest} + \text{Profit} + \text{Mixed Income}$$

$$NDP_{FC} = 500 + 100 + 150 + 350 + 400$$

$$NDP_{FC} = 1500$$

$$NNP_{MP} = NDP_{FC} + NFIA + NIT$$

$$NNP_{MP} = 1500 + (-)20 + 100$$

$$NNP_{MP} = 1580 \text{ Crore}$$

Expenditure method

$$GDP_{MP} = PFCE + GFCE + NDCF + CFC + \text{NET EXPORT}$$

$$GDP_{MP} = 900 + 450 + 280 + 100 + (-)30$$

$$GDP_{MP} = 1700 \text{ Crore}$$

$$NNP_{MP} = GDP_{MP} - CFC + NFIA$$

$$NNP_{MP} = 1700 - 100 + (-)20$$

$$NNP_{MP} = 1580 \text{ Crore}$$

Q17. From the following data calculate National Income from a) Income method b) Expenditure Method

S.no	Items	Rs(in crore)
1	Private final consumption expenditure	2,000
2	Net Domestic capital formation	400
3	Change in stock	50
4	Compensation of employees	1,900
5	Rent	200
6	Interest	150
7	Operating surplus	720
8	Net indirect tax	400
9	Contribution by employers towards social security schemes	100
10	Net Exports	20
11	Net Factor income from abroad	(-)20
12	Government final consumption expenditure	600
13	Consumption of fixed capital	100

Ans: Income method

$$NNP_{FC} = \text{Compensation of employees} + \text{Operating surplus} + \text{Net Factor income from abroad}$$

$$= 1900 + 720 + (-20) = 2620 - 20 = \text{Rs } 2600 \text{ Crore}$$

Expenditure Method

$$NNP_{FC} = \text{Private final consumption expenditure} + \text{Net Domestic capital formation} + \text{Government final consumption expenditure} + \text{Net Exports} + \text{Net Factor income from abroad} - \text{Net indirect tax}$$

$$NNP_{FC} = 2000 + 400 + 600 + 20 + (-20) - 400 = \text{Rs } 2600 \text{ crores}$$

Q18. Will the following factor income be a part of domestic factor income of India? Give reasons for your answer

- Profit Earned by foreign bank from their branches in India
- Salary received by Indian residents, working in American embassy in India.
- Profit earned by an Indian company from its branch in Singapore.

Ans. i) Yes, it will be included in domestic income as the goods are produced within the domestic territory of the country.

ii) No, it will not be included in domestic income as it is factor income received from abroad

iii) No, it will not be included in domestic income as it is factor income received from abroad

Q19. Given the following data find the missing values of 'Private final consumption expenditure' and 'Operating surplus'.

S.No	Items	Rs. In crore
I	National income	50,000

li	Net indirect taxes	1,000
lii	Private final consumption expenditure	?
lv	Gross domestic capital formation	17,000
v	Profits	1,000
vi	Government final consumption expenditure	12,500
vii	Wages and salaries	20,000
viii	Consumption of fixed capital	700
ix	Mixed income	13,000
x	Operating surplus	?
xi	Net factor income from abroad	500
xii	Net exports	2,000

Ans:- Private final consumption expenditure:

National Income - Government final consumption expenditure - Gross domestic capital formation - Net exports + Consumption of fixed capital + Net indirect taxes - Net factor income from abroad

$$= \text{Rs.} 50,000 - 12,500 - 17,000 - 2,000 + 700 + 1,000 - 500 \text{ Crore} = \text{Rs.} 19,700 \text{ Crore}$$

Private final consumption expenditure = Rs.19,700 Crore

Operating surplus:- National income - Wages and salaries - Mixed income - Net factor income from abroad

$$= \text{Rs.} 50,000 - 20,000 - 13,000 - 500 \text{ Crore} = \text{Rs.} 16,500$$

Operating surplus = Rs. 16,500 Crore

Q20. Given the following data find the missing values of 'Operating surplus' and 'Net export '

S.No	Items	Rs. In crore
I	Mixed income	700
li	Net factor income from abroad	150
lii	Private final consumption expenditure	2,200
lv	Profits	200
v	Net indirect taxes	150
vi	National income	5,000
vii	Gross domestic capital formation	1,100
viii	Wages and salaries	2,200
ix	Net export	?
x	Government final consumption expenditure	1,300
xi	Consumption of fixed capital	200
xii	Operating surplus	?

Ans. Operating surplus

National income - Wages and salaries - Mixed income - Net factor income from abroad

$$= \text{Rs.} 5,000 - 2,200 - 700 - 150 \text{ crore}$$

$$= \text{Rs.} 1,950 \text{ crore}$$

Net export

National Income - Private final consumption expenditure - Government final consumption expenditure - Gross domestic capital formation + Consumption of fixed capital + Net indirect taxes - Net factor income from abroad

$$= \text{Rs. } 5,000 - 2,200 - 1,300 - 1,100 + 200 + 150 - 150$$

Net export = Rs. 600 Crore

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

3,4 & 6 MARKS QUESTIONS

Q1. Explain the circular flow of income. (F2013, D. 2013)

Q2. Give two examples of intermediate goods. (AI 2013)

Q3. Distinguish between stocks and flows. Give two examples of each. (AI 2013)

Q4. Distinguish between 'real' GDP and 'nominal' GDP. Which of these is a better index of welfare of the people and why? (AI 2013)

Q5. How will you treat the following while calculating domestic product of India? Give reasons for your answer. (F2013)

- i) Profits earned by a foreign company in India.
- ii) Salary of Indian residents working in Russian Embassy in India

Q6. Define externalities. Give an example of negative externality. What is its impact on welfare? (Delhi 2014)

Q7. Giving reason, explain how should the following be treated in estimating gross domestic product at market price. (Delhi 2014)

- i) Fees to a mechanic paid by a firm.
- ii) Interest paid by an individual on a car loan taken from a bank.
- iii) Expenditure on purchasing a car for use by a firm.

Q8. What are externalities. Give an example of positive externality. What is its impact on welfare? (Delhi 2014)

Q9. How will you treat the following while calculating national income of a country? Give reasons for your answer. (AI 2014)

- i) Taking care of aged parents.
- ii) Payment of corporate tax.
- iii) Expenditure on providing police services by the government.

Q10. What are non-monetary exchanges? Give an example. Explain their impact on use of GDP as an index of welfare of the people. (F2014)

Q11. How will you treat the following while calculating national income of a country ? Give reasons for your answer . (F 2014)

- i) Bonus paid to employees.
- ii) Additions to stocks during a year .
- iii) Purchase of taxi by a taxi driver .

Q12. If Real GDP is Rs. 200 and price index (with base = 100) is 110, calculate Nominal GDP. (D.2015)

Q13. If the Nominal GDP is Rs. 1,200 and price index (with base = 100) is 120 , calculate Real GDP. (D.2015)

Q14. If the Real GDP is Rs. 300 and Nominal GDP is Rs.330 , calculate price index(base = 100) . (D.2015)

Q15. Giving reason, explain how should the following be treated in estimating national income . (D 2015)

- I) Expenditure by firm on payment of fees to a chartered accountant .
- II) Payment of corporate tax by firm.
- III) Purchase of refrigerator by a firm for on use.

Q16. If the Real GDP is Rs. 400 and Nominal GDP is Rs.450 , calculate price index(base = 100) . (AI2015)

Q17. If Real GDP is Rs. 500 and price index (with base = 100) is 125, calculate Nominal GDP. (AI2015)

Q18. If the Nominal GDP is Rs. 600 and price index (with base = 100) is 120 , calculate Real GDP. (AI2015)

Q19. Giving reason, explain how should the following be treated in estimating national income . (F 2015)

- i) Payment of corporate tax by firm.
- ii) Purchase of machinery by a factory for own use.
- iii) Purchase of uniforms for nurses by a hospital.

Q20. Assuming Real GDP to be Rs. 200 crore and price index to be 135, calculate Nominal income. (AI.2016)

Q21. If the Nominal income is Rs. 500 and price index is 125, calculate Real income. (AI 2016)

Q22. Sale of petrol and diesel cars is rising particularly in big cities. Analyse its impact on GDP and welfare. (AI 2016)

Q23. Governments spend on child immunization programme. Analyse its impact on GDP and welfare of the people. (F 2016)

Q24. Calculate National Income from the following data. (D.2013)

S.No	Items	Rs. In crore (1360)
I	Private final consumption expenditure	900
II	Profit	100

Iii	Government final consumption expenditure	400
Iv	Net indirect taxes	100
V	Gross domestic capital formation	250
Vi	Change in stock	50
Vii	Net factor income from abroad	(-) 40
Viii	Consumption of fixed capital	20
Ix	Net imports	30

Q25. Calculate National Income from the following data. (F.2013)

S.No	Items	Rs. In crore (ANS.7780)
I	Net exports	(-) 300
Ii	Compensation of employees	6000
Iii	Rent	400
Iv	Dividend	200
V	Consumption of fixed capital	300
Vi	Change in stock	50
Vii	Profit	800
viii	Net factor income to abroad	(-)80
Ix	Net indirect taxes	600
X	Interest	500

Q26. Calculate National Income from the following data. (D2014)

S.No	Items	Rs. In crore (685)
I	Net current transfers to abroad	(-)15
Ii	Private final consumption expenditure	600
Iii	Subsidies	20
Iv	Government final consumption expenditure	100
V	Indirect taxes	120
Vi	Net Imports	20
Vii	Consumption of fixed capital	35
Viii	Ne Change in stock	(-)10
Ix	Net factor income to abroad	5
X	Net domestic capital formation	110

Q27. Calculate gross National product at market price from the following data. (AI2013)

S.No	Items	Rs. In crore (5700)
I	Compensation of employees	2000
Ii	Interest	500
Iii	Rent	700
Iv	Profit	800
V	Employers contribution to social security schemes	200
Vi	Dividend	300
Vii	Consumption of fixed capital	100
Viii	Net indirect taxes	250
Ix	Net exports	70
X	Net factor income to abroad	150
Xi	Mixed income of self- employed	1500

Q28. Calculate Net domestic product at factor cost from the following data. (AI2014)

S.No	Items	Rs. In arab (360)
I	Net current transfers to abroad	5
Ii	Government final consumption expenditure	100
Iii	Net indirect taxes	80
Iv	Private final consumption expenditure	300
V	Consumption of fixed capital	20
Vi	Gross domestic fixed capital formation	50
Vii	Net imports	(-)10
Viii	Closing stock	25
Ix	Opening stock	25
X	Net factor income to abroad	10

Q29. Calculate Net National product at market price from the following data. (AI2014)

S.No	Items	Rs. In arab (730)
I	Closing stock	10
Ii	Consumption of fixed capital	40
Iii	Private final consumption expenditure	600
Iv	Export	50
V	Opening stock	20
Vi	Government final consumption expenditure	100
Vii	Imports	60
Viii	Net domestic fixed capital formation	80
Ix	Net current transfers to abroad	(-)10
X	Net factor income to abroad	30

Q30. Calculate Gross National product at market price from the following data. (AI2014)

S.No	Items	Rs. In arab (1350)
I	Net factor income to abroad	(-)10
Ii	Net current transfers to abroad	20
Iii	Wage and salaries	400
Iv	Corporation tax	50
V	Profit after Corporation tax	150
Vi	Social security contribution by employers	50
Vii	Rent	100
Viii	Interest	70
Ix	Mixed income of self- employed	300
X	Net Indirect taxes	140
Xi	Consumption of fixed capital	80

Q31. Calculate Gross National product at market price from the following data. (Delhi 2015)

S.No	Items	Rs. In arab (1690)
I	Rent	100
Ii	Net current transfers to abroad	30
Iii	Social security contribution by employers	47
Iv	Mixed income of self- employed	600
V	Gross domestic capital formation	140
Vi	Royalty	20

Vii	Interest	110
Viii	Compensation of employee	500
Ix	Net domestic capital formation	120
X	Net factor income from abroad	(-)10
Xi	Interest	150
Xii	Profit	200

Q32. Calculate Gross National product at market price from the following data. (AI2016)

S.No	Items	Rs. In arab (1380)
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 taxes	150
Vi	Net domestic capital formation	200
Vii	Current transfers to government	40
Viii	Depreciation	100
Ix	Net Imports	30
X	Income accruing to government	90

Q33. Calculate Net value added at factor cost from the following data.

S.No	Items	Rs. In lakh (140)
I	Purchases of raw materials	300
Ii	Import duty	20
Iii	Excise duty	30
Iv	Net addition to stock	50
V	Value of output	500
Vi	Depreciation	10

Q33. Calculate value of output from the following data.

S.No	Items	Rs. In lakh (275)
I	Net value added at factor cost	150
Ii	Intermediate consumption	100
Iii	Excise duty (GST)	20
Iv	Subsidy	5
V	Depreciation	10

Q34. How will you treat the following while estimating domestic product of a country? Give reasons for your answer. (2017)

- (a) Profit earned by branches of country's bank in other countries.
- (b) Gifts given by an employer to his employees on Independence Day.
- (c) Purchase of goods by foreign tourists

Q35. Calculate Net National product at market price from the following data. (Delhi 2017)

S.No	Items	Rs. In crore (11430)
I	Gross domestic fixed capital formation	400
Ii	Private final consumption expenditure	8000
Iii	Government final consumption expenditure	3000
Iv	Change in stock	50
V	Consumption of fixed capital	40

Vi	Net indirect taxes	100
Vii	Net exports	(-)60
Viii	Net factor income to abroad	(-)80
Ix	Net current transfers from abroad	100
X	Dividend	100

Q36. Explain with the help of an example, the basis of classifying goods into final goods and intermediate goods. (20017)

Q37. Explain the precautions that should be taken estimating national income by expenditure method (by value added method). (2017)

Q38. Explain mixed income of self- employed and give an example. (2017)

Q39. Distinguish between domestic product and national product. (2017)

Q40. What are capital goods ? How are they different from consumption goods? (2018)

Q41. Calculate (a) Operating surplus, and (b) Domestic Income . (2018)

S.No	Items	Rs. In crore (2500,4700cr.)
I	Compensation of employeece	2000
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 of self- employed	200

Q42. Define the problem of double counting in the computation of the national income. State any Two approaches to correct the problem of double counting. (2019)

Q43. “Gross domestic product does not give us a clear indication of economic welfare of a country”. Defend or refute the given statement the given statement with valid reason. (2019)

Q44.”higher 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. (2019)

Q45. Explain the meaning of Real GDP and Nominal GDP product, using a numerical example.(2019)

Q46. Define the following : (2019)

- (a) Value addition (b) Gross Domestic Product (c) Flow variables (d) Income from property and entrepreneurship .

Q47. What is non-monetary exchanges? Discuss with suitable example. (2019)

Q48. Given the following data find the missing values of ‘Private final consumption expenditure’ and ‘Operating surplus’.(2019)

S.No	Items	Rs. In crore (19700, 16500 cr)
i	National income	50,000

ii	Net indirect taxes	1,000
iii	Private final consumption expenditure	?
iv	Gross domestic capital formation	17,000
v	Profits	1,000
vi	Government final consumption expenditure	12,500
vii	Wages and salaries	20,000
viii	Consumption of fixed capital	700
ix	Mixed income	13,000
X	Operating surplus	?
Xi	Net factor income from abroad	500
xii	Net exports	2,000

Q49. Given the following data find the missing values of 'Gross domestic capital formation' and 'Wages and salaries'. (2019)

S.No	Items	Rs. In crore (19000, 13800 cr)
i	Mixed income	3,500
ii	Net indirect taxes	300
iii	Wages and salaries	?
iv	Government final consumption expenditure	14,000
v	Net export	3000
vi	Consumption of fixed capital	300
vii	Net factor income from abroad	700
viii	Operating surplus	12,000
ix	National income	30,000
X	Profits	500
Xi	Gross domestic capital formation	?
xii	Private final consumption expenditure	11,000

Q50. Given the following data find the missing values of 'Operating surplus' and 'Net export'. (2019)

S.No	Items	Rs. In crore (cr)
i	Mixed income	700
ii	Net factor income from abroad	150
iii	Private final consumption expenditure	2,200
iv	Profits	200
v	Net indirect taxes	150
vi	National income	5,000
vii	Gross domestic capital formation	1,100
viii	Wages and salaries	2,200
ix	Net export	?
X	Government final consumption expenditure	1,300
Xi	Consumption of fixed capital	200
xii	Operating surplus	?

Q51.(a) Define Net factor income from abroad. How is it different from net exports? (2019)

(b) Calculate the value of 'Rent' from the following data.

S.No	Items	Rs. In crore (475 cr)
I	Gross domestic product at market price	18,000
Ii	Mixed income	7000
Iii	Subsidies	250
Iv	Interest	800

V	Rent	?
Vi	Profit	975
vii	Compensation of employees	6,000
viii	Consumption of fixed capital	1,000
Ix	Indirect tax	2,000

Q52. (a) Define value of output. How is it different from value addition (2019)

(b) Calculate the value of 'Mixed income of self- employed' from the following data.

S.No	Items	Rs. In crore (2750 cr)
I	Compensation of employees	17,300
Ii	Interest	12,00
Iii	Consumption of fixed capital	1,100
Iv	Mixed income of self- employed	?
V	Subsidies	750
Vi	Gross domestic product at market price	27,500
vii	Indirect tax	21,00
viii	Profit	1,800
Ix	Rent	2,000

Q53. 'Subsidies to the producers, should be treated as transfer payments'. Defined or refute the given statement with valid reason. (2020)

OR

Explain Circular Flow of income in a two sector economy.

Q54. Calculate Gross Value Added at Market Price. (2020)

S.No	Items	Rs. In Lakh (80 lakh)
I	Depreciation	20
Ii	Domestic sales	200
Iii	Change in stock	(-)10
Iv	Export	10
V	Single use producer goods	120

Q55. Calculate Net Value Added at Factor cost from the following data. (2020)

S.No	Items	Rs. In Lakh (20 lakh)
I	Durable producer goods (with a life span of 10 year	10
Ii	Single use product goods	5
Iii	Sales	20
Iv	Unsold goods (Stock)	2
V	Goods & service Tax (GST)	1

Q56. Calculate Net Domestic product at Factor cost. (2020)

S.No	Items	Rs. In Crores (4200) Crores
I	Interest	700
Ii	Compensation of Employees	3,000
Iii	Net indirect taxes	500
Iv	Rent and Profit	700
V	Transfer payment by government	10

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: - $AD = C + I + G + (X - M)$

1. 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.

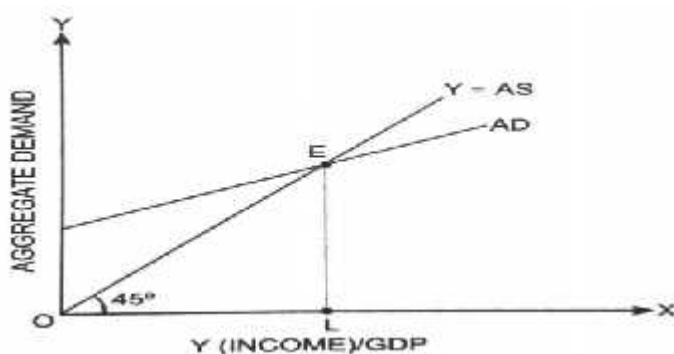
Y (INCOME)	AD
0	15
10	20
20	25
30	30
40	35
50	40

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

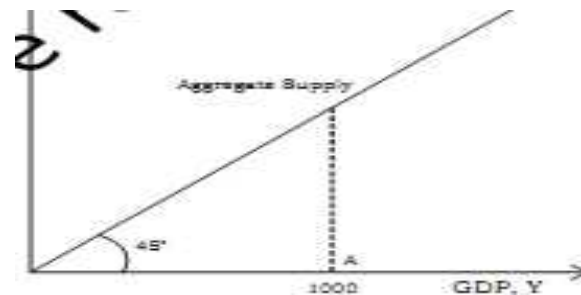
S= Saving

AS Schedule:- Is a table showing the behavior of AS corresponding to different levels of Y in the economy.

Y (INCOME)	AS
0	0
10	10
20	20
30	30
40	40
50	50

Diagrammatic

Presentation of AS



The Diagram shows that AS and 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 means, 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 some 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.

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

(ii) C rises in response to a rise in Y. Consumption is positively

(iii) The rate at which C increases is lower than the rate at which Y increases.

$$C = \bar{C} + bY \quad \bar{C} > 0, \quad 0 < b < 1.$$

Y = Level of income

$$\text{APC} = \text{C/Y}$$
$$\text{MPC} = \frac{C}{Y}$$

Value of MPC always lies between 0 and 1 i.e. $0 < \text{MPC} < 1$.

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 spent 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.

$$S = Y - C$$

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

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

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

$-\bar{C}$ = Autonomous saving

Saving Function: A Tabular presentation

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

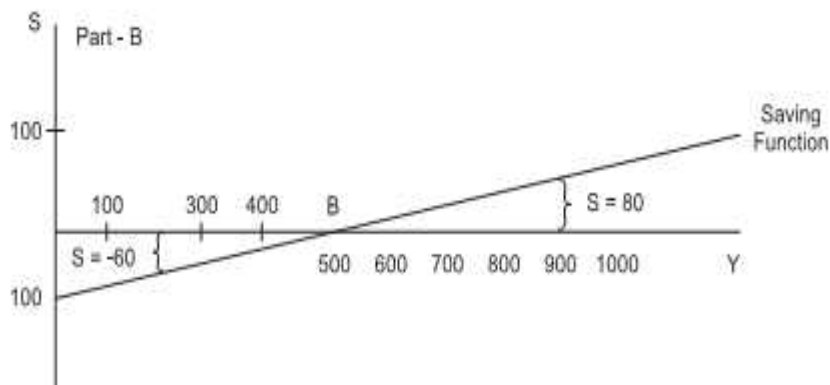
OBSERVATION:- 1. $S = -5$ when $Y = 0$. This is because $C = 5$, this is called Autonomous Saving.

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

Diagrammatically Presentation



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 $Y = C$.

(iv) It can be greater than 0, if $Y > C$. (iv) APS never 1 and greater than 1.

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

$$MPS = S/Y$$

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

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

$$APC + APS = 1$$

$$APC = C/Y \text{ and } APS = S/Y$$

$$APC + APS = C/Y + S/Y$$

$$= (C+S)/Y = Y/Y = 1$$

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

$$MPC + MPS = 1$$

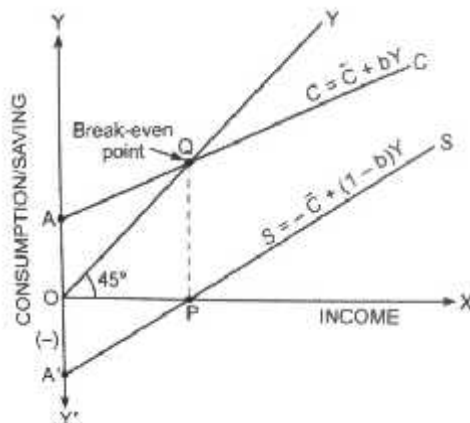
$$MPC = C/Y \text{ and } MPS = S/Y$$

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

$$= (C+S)/Y = Y/Y = 1$$

Derivation of Saving curve from Consumption Curve :-

Shows the Derivation of Saving curve from a given Consumption Curve.

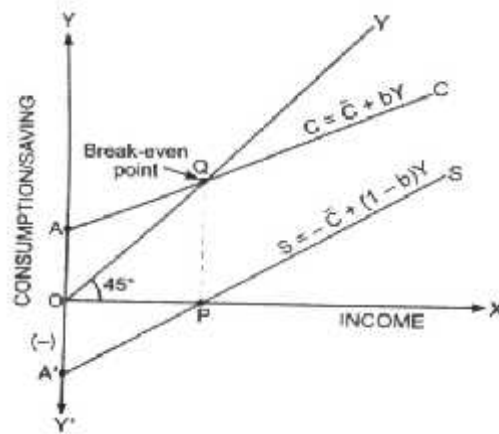


It involves the following steps.

- (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 form 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 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 form a straight line, we get C curve. C-Function is linear as it is derived from a linear S - function.

Table : Average Propensities to Consume and Save

Y	C	APC (C/Y)	S (Y-C)	APS (S/Y)	APC+APS
0	100	-	- 100	-	-
100	150	1.5	-50	-0.5	1
200	210	1.05	-10	0.05	1
300	275	0.91	+25	0.09	1
400	350	0.87	+50	0.13	1
500	430	0.86	+70	0.14	1
600	525	0.87	+75	0.13	1

Table : MPC AND MPS

Y	C	Y	C	MPC (C/ Y)	S	S	MPS (S/ Y)	MPC+MPS
0	100	-	-	-	-100	-	-	-
100	150	100	50	0.5	-50	50	0.5	1
200	210	100	60	0.6	- 10	40	0.4	1
300	275	100	65	0.65	+25	35	0.35	1
400	350	100	75	0.75	+50	25	0.25	1
500	430	100	80	0.80	+70	20	0.20	1
600	525	100	95	0.95	+75	5	0.5	1

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

Q10. Complete the following table: Saving: -70, -30, 10 APS: -0.7, -0.15, 0.033

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

Complete the following table: APC: - , 1.4, 1, 0.8, 0.75 MPC: - , 0.6, 0.6, 0.4, 0.6

Income (Rs.)	Saving (Rs.)	APC	MPC
0	-40	-	-
50	-20	-	-
100	0	-	0.6
150	30	0.8	-
200	50	-	-

DETERMINATION OF EQUILIBRIUM OUTPUT (GDP) OR EQUILIBRIUM INCOME

Two approaches to study the determination of equilibrium income (GDP):-

- Consumption plus Investment Approach (AS=AD approach)
- Savings and Investment approach (S=I approach)

Consumption plus Investment Approach (AS=AD) of Equilibrium 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’.

$$AS=AD$$

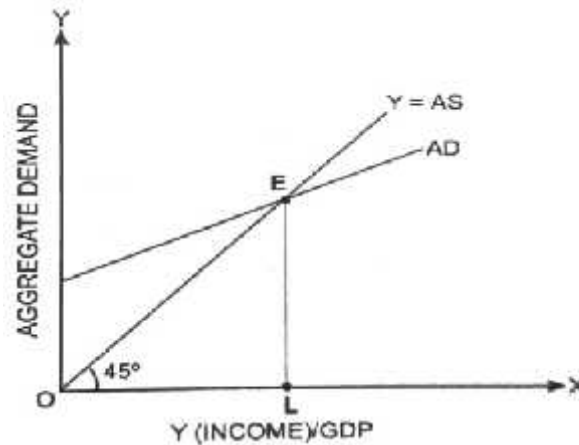
It is also called ‘Effective demand’. Since $AS=Y$, therefore the economy is in equilibrium if $Y = AD$ or $Y = C+I$.

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 (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 stocks.
- (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:

$$AS = AD \quad Y = C + S \text{ and}$$

$$AD = C + I$$

$$C + S = C + I$$

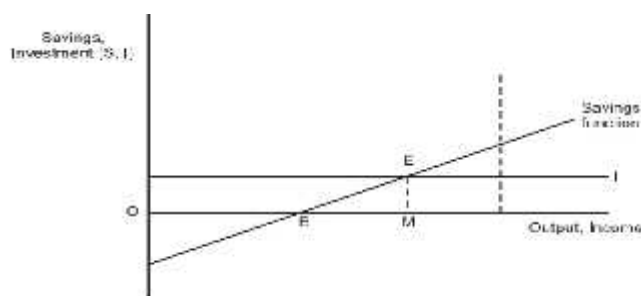
$$S = I$$

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

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 $AS = AD(300\text{each})$



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 $S > \text{Planned } I$)

(ii) $S < I$ (Planned $S < \text{Planned } I$)

$S > I$ (Planned $S > \text{Planned } I$): In such situation, the following changes will occur.

(i) Stock of the producer would be in excess of desired limit.

(ii) Profits will start 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 $S < \text{Planned } I$): 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) Profits 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 (ΔY) to a given change in investment (ΔI).

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

Here :

K = Multiplier

ΔY = Change in 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 :

$$K = 1 / 1 - \text{MPC} \quad (K = 1/\text{MPS})$$

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).

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

Round	ΔI	ΔY	Change in consumption [$\text{MPC}(\Delta Y)$]	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			656.1 (0.9 x 729)	72.9
And so On				
	$\Delta I = 1,000$	$\Delta Y = 10,000$	9,000	1,000

$$K = 1 / 1 - \text{MPC}$$

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

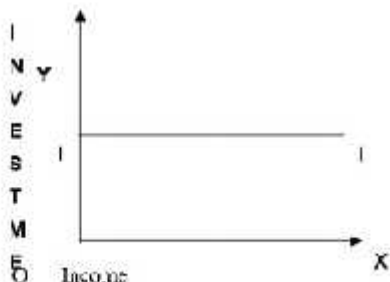
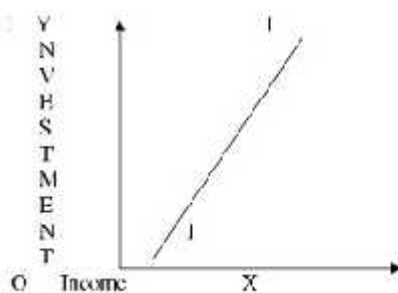
Given that $\Delta I = 1,000$, $K = 10$

$$Y = 10 \times 1,000$$

$$= \text{Rs } 10,000 \text{ crore.}$$

Investment

1. Autonomous investment. 2. Induced investment.

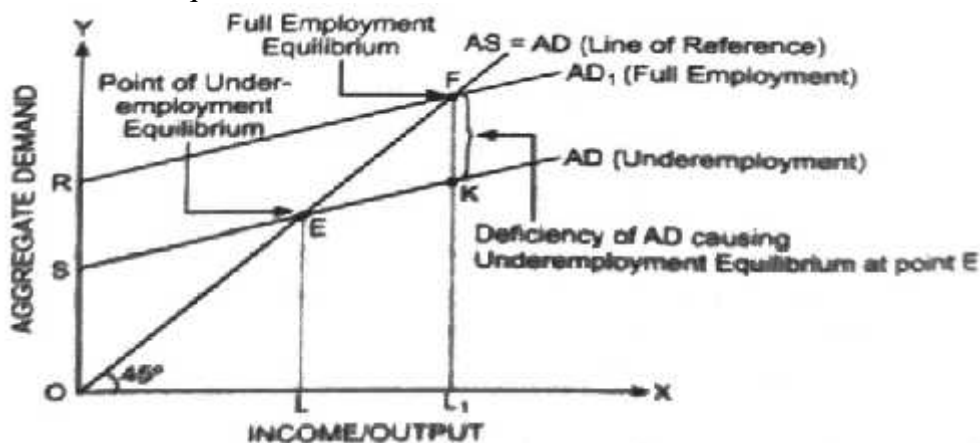
Autonomous investment (I ₀)	Induced investment (I ₁)
<p>1. It refers to the investment expenditure which is incurred by the Government with the motive to promote the level of growth & development. It is not influenced by the level of profits or income of an economy.</p> <p>2. It is influenced by the change in population structure, natural calamities, change in technology & institution, war etc.</p> <p>3. The I₀ curve is straight line parallel to income axis which shows that it remains same at all levels of income & output, & not influenced by change in income.</p>	<p>It refers to the investment expenditure which is incurred by the enterprises with the motive to make greater investments & receive higher returns. It is positively related to level of income.</p> <p>It is influenced by the level of income of an economy. Higher the income, greater is the induced investments, & vice versa.</p> <p>The I₁ curve is a positive slope which shows the positive relation between induced investment & level of income.</p>
 <p>The graph shows a horizontal line labeled I₀ on a coordinate system where the vertical axis is labeled 'INVESTMENT' and the horizontal axis is labeled 'Income'. The line is parallel to the horizontal axis, indicating that autonomous investment is constant regardless of the level of income.</p>	 <p>The graph shows a line labeled I₁ on a coordinate system where the vertical axis is labeled 'INVESTMENT' and the horizontal axis is labeled 'Income'. The line starts from the origin and slopes upwards, indicating that induced investment is directly proportional to the level of income.</p>

PROBLEM OF DEFICIENT 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 unemployment 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 economy even in a state of equilibrium.



Unemployment equilibrium level of income = OL , while full employment equilibrium level of income = OL_1 .

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 jobs because planned output is lower than the potential output.

Frictional Unemployment:- Frictional unemployment is the unemployment associated with the changing of jobs in dynamic economy.

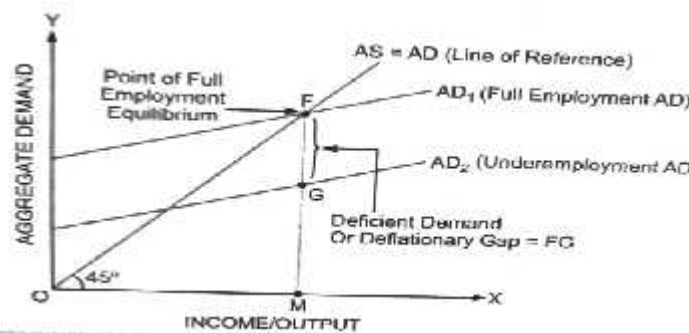
Structural unemployment:- Structural unemployment is the unemployment which is associated with structural changes in the economy, like change in technology.

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.

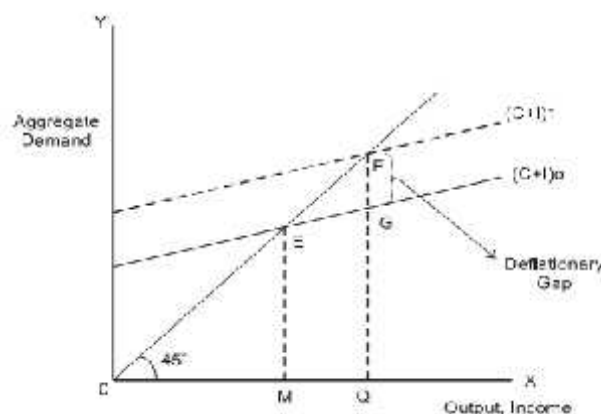
Problems of Deficient Demand and Deflationary Gap

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.



-) AD_1 line shows the required level of AD for full employment in the economy.
-) AD_2 line shows planned AD which is lower than the full employment AD.
-) The vertical difference between AD_1 and $AD_2 = FG$.



-) $(C+I)_1$ line shows the required level of AD for full employment in the economy.
-) $(C+I)_0$ line shows planned AD which is lower than the full employment AD.
-) The vertical difference between $(C+I)_1$ and $(C+I)_0 = FG$.
-) 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.

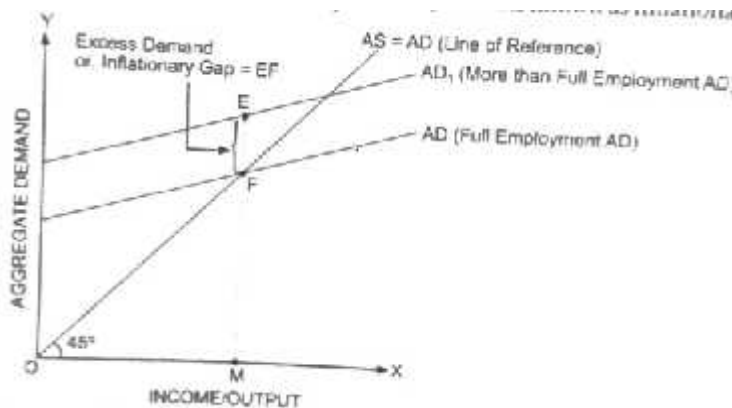
Consequences of Deficient Demand :- Deficient AD leads to four critical situations in the economy, as under.

- (i) Underemployment Equilibrium
- (ii) Deflationary Gap
- (iii) Loss of Profits
- (iv) Undesired stocks

PROBLEM OF EXCESS DEMAND (INFLATIONARY GAP)

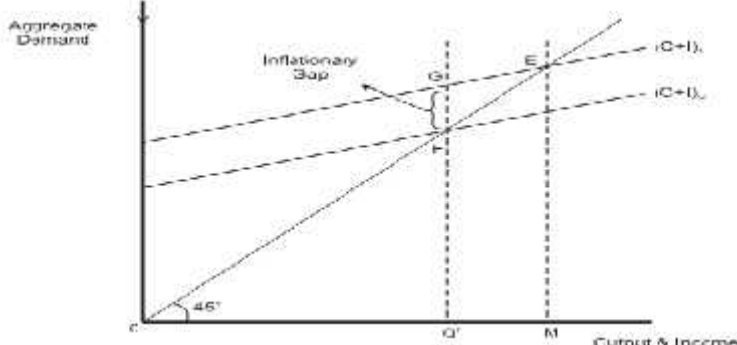
Excess demand (Inflationary gap) refers to a situation when Aggregate Demand is more than Aggregate Supply ($AD > AS$) corresponding to the full employment level in the economy.

Measurement of Excess Demand Diagrammatic illustration:- There is an inflationary gap in the economy.



-) AD (Full employment) line shows the required level AD for full employment in the economy.
-) AD1 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



- $(C+I)_0$ (Full employment) line shows the required level AD for full employment in the economy.
- $(C+I)_1$ line shows planned AD which is higher than the full employment AD.
- The vertical difference between $(C+I)_0$ and $(C+I)_1$ = GF = Inflationary gap
- Inflation Gap = Excess Demand

Causes of Excess Demand (Inflationary gap): In a sector closed economy, excess of AD occurs largely 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 situations 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.

1. Fiscal measures/policy; 2. Monetary measures/policy

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

Monetary Measures to correct	Excess (Inflationary gap)	Deficient demand (Deflationary gap)
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 of credit.	Enhance the availability of credit.

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 general 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 Measures:

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.

i) 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 loans & 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 leads to rise in rate of interest.(iii) 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)Reverse 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 turn, 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 / 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 institutions 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 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.

(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.

QUALITATIVE 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: (i) As the rise 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 Excess demand / inflationary situation.

(2) Moral Suasion & Direct Action :- It refers to pressure exercised by the central bank on the commercial bank. In case the Excess demand / inflationary situation :

(i) Restricts 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 correct Excess demand / inflationary situation.

(3) **Rationing of Credit:** It refers to fixation of credit quotas for different business activities. 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 Deficient demand (Deflationary gap)

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

(1) 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 corrected. (iv) Deficient demand (Deflationary gap) situation eliminated.

(2) **Taxes:-** Taxes are a compulsory payment made to government by the household. 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 in 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 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 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 & 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 short 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 RBI (CB) (iii) This, in turn, will increase their ability to land money. (iv) Consequently, consumption and investment expenditure will be increased . (v) Implying a increased in AD correct and Deficient demand (Deflationary gap) situation.

(3) Open Market Operations: It refers to the process to sale & purchase of securities by the RBI (CB) in the economy. **Correction Deficient demand (Deflationary gap) situation** (i) The RBI purchase the bonds & securities in the market which is sale by the banks, individuals and other financial institutions of the economy. (ii) This helps to inject liquidity into the system (iii) There is a increased in purchasing power of the people. (iv) Consequently, the AD increased , this helps in Deficient demand (Deflationary gap) 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 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.

(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 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.

QUALITATIVE 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 raised 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 leads to correct (iv) The rise 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.

CBSE BOARD EXAM . 1 MARKS QUESTION FROM 2015 TO 2020

Q1. What is aggregate supply .(2015,2018) (**Aggregate supply refers to the flow of goods and services in an economy during one year. This is ex-ante output during the year**)

Q3. What is aggregate demand in macroeconomics? (2015) (**Aggregate demand is the total demand for goods and services in an economy, measured in term of total expenditure**)

(a) 0 (b) 1 (c) between 0 and 1 **(d) infinity**

Q6. If $MPC = 0$, the value of multiplier is : (2015)

(b) Q7. Give the mining of involuntary unemployment.(2016,2019) (involuntary unemployment refers to a situation when people are willing to work at the existing wage rate , but are not getting work owing to lack of demand in the market)

(a) Increasing bank rate
(b) Increasing cash reserve ratio
(c) Selling government securities by RBI
(d) **None of the above**

(a) **Fall** (b) Rise (c) Do not change (d) First fall and then rise

Q10. Give the mining of under-employment equilibrium. (2017) (**under-employment equilibrium is the situation in the economy when planned AS = planned AD but full employment is not achieved**)

Q11. Suppose in a hypothetical economy, the income rise from Rs.5000 crore to 6000 crore. As a result, the consumption expenditure rises from Rs. 4000 crore to 4600 crore. MPC in such a case would _____.(2019)

(b) Q12. Which of two, APC or APS, can be negative and why ? (2019) (APS can be negative. It happens in situations when saving is negative or when $APC > 1$.)

(a) Aggregate demand is equal to aggregate supply

- (b) There exist excess production capacity in the economy
- (c) Resources are not fully and efficiently utilized
- (d) **Resources are fully and efficiently utilized**

Q14. If MPS is 0.25 and initial change in investment is RS.250 crore, then the final change in income would be _____. (2020)

- Rs.1,000 crores** (b) Rs.1,200 crores (c) Rs.500 crores (d) Rs.3,500 crores

SHORT AND LONG ANSWER TYPE QUESTION

Q1. $C = 100 + 0.4 Y$ 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:- $Y = C + I$

$$Y = 100 + 0.4Y + 1100$$

$$Y = 1200 + 0.4Y$$

$$Y - 0.4Y = 1200$$

$$0.6Y = 1200$$

$$Y = 1200 / 0.6 = 2000$$

$$C = 100 + 0.4Y$$

$$= 100 + 0.4(2000) = 100 + 800 = 900$$

- (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 in 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'.

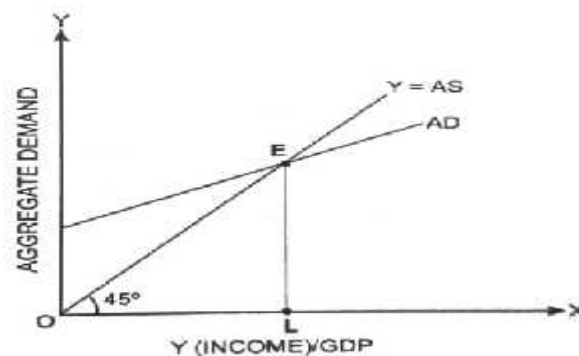
$$AS = AD$$

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(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 :

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

$$AS = AD \quad Y = C + S \text{ and}$$

$$AD = C + I$$

$$C + S = C + I$$

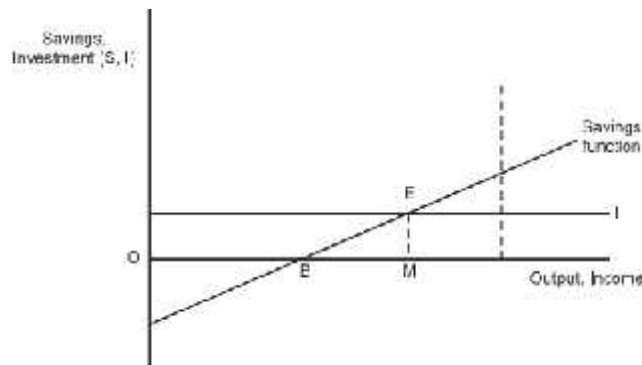
$$S = I$$

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

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 $AS = AD(300\text{each})$



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

ADJUSTMENT MECHANISM:

(iii) $S > I$ (Planned S > Planned I)

(iv) $S < I$ (Planned S < Planned I)

$S > I$ (Planned S > Planned I):- In such situation, the following changes will occur.

(vi) Stock of the producer would be in excess of desired limit.

(vii) Profits will start shrinking.

(viii) Planned output for the subsequent year will fall.

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

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

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

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

(vi) Profits will not be maximum because the desired level of stock is not available.

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

(viii) Level of income and employment will rise to drive the economy 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 , $Y = C + I$

$$Y = C + MPC(Y) + I$$

$$1000 = 100 + MPC(1000) + 120$$

$$1000 = 220 + 1000(MPC)$$

$$1000(MPC) = 780$$

$$MPC = 780 / 1000 = 0.78$$

$$MPS = 1 - MPC, \text{ MPS} = 1 - 0.78 = 0.22$$

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 equilibrium level , $Y = C + I$

$$MPC = 1 - MPS = 1 - 0.2 = 0.8$$

$$Y = C + MPC(Y) + I$$

$$1250 = C + 0.8(1250) + 150$$

$$1250 = C + 1000 + 150$$

$$1250 = C + 1150$$

$$C = 1250 - 1150 = 100$$

Autonomous consumption = 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 $b = MPC$

$$Y = C + I$$

$$500 = C + 0.70(500) + 100$$

$$500 = C + 350 + 100$$

$$500 = C + 450$$

$$C = 50$$

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 , $Y = C + I$

$$MPC = 1 - MPS = 1 - 0.2 = 0.8$$

$$Y = C + MPC(Y) + I$$

$$Y = 100 + 0.8Y + 200$$

$$Y = 300 + 0.8Y$$

$$Y - 0.8Y = 300$$

$$0.2Y = 300$$

$$Y = 300 / 0.2 = 1500$$

$$\text{NATIONAL INCOME} = 1500$$

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 & further 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 gap) refers to situation when Aggregate Demand is more than Aggregate Supply ($AD > AS$) corresponding to full employment level in the economy'.

Reverse repo rate: This induces the commercial bank to park their surplus funds with the RBI for short 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 RBI (CB) (iii) This, in turn, will increase their ability to land money. (iv) Consequently, consumption and investment expenditure will be increased. (v) Implying a increased in AD correct and Deficient demand (Deflationary gap) 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: :- 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).

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

Round	I	Y	Change in consumption [MPC(ΔY)]	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			656.1 (0.9 x 720)	72.9
And so On				
	I=1,000	Y=10,000	9,000	1,000

$$K = 1 / 1 - \text{MPC}$$

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

$$\text{Given that } I = 1,000, K = 10$$

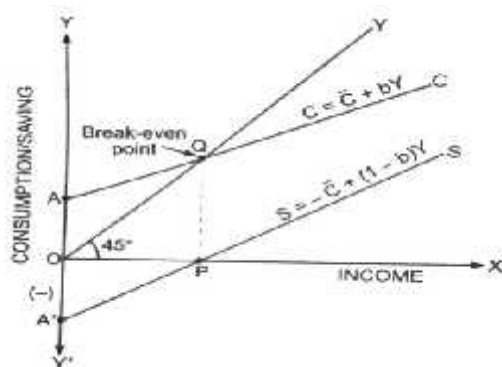
$$Y = 10 \times 1,000$$

$$= \text{Rs } 10,000 \text{ crore.}$$

Q12. 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 consumption 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 form a straight line, we get C curve. C-Function is linear as it is derived from a linear S - function.

Q13. In an economy the saving function, $S = (-) 50 + 0.5Y$ 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 equilibrium $S = I$

$$-50 + 0.5Y = 7000 \quad (\text{Substituting the value of saving and Investment})$$

$$0.5 Y = 7000 + 50$$

$$0.5 Y = 7050$$

$$Y = 7050 \times 2 = \text{Rs } 14100 \quad (\text{Equilibrium level of National Income})$$

b) Consumption expenditure at equilibrium level of income

$$\text{as we know } Y = C + I$$

So $Y = 14100$. $I = 7000$ therefore

$$C = Y - I = 14100 - 7000 = \text{Rs } 7100 \quad (\text{at equilibrium level of Income})$$

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 saving and consumption expenditure at equilibrium level of income.

Ans. (a) Equilibrium level of income : $Y = C + I$

$$Y = (100 + 0.8Y) + 200$$

$$= 300 + 0.8 Y$$

$$Y - 0.8 Y = 300$$

$$0.2 Y = 300$$

$$Y = 300 / 0.2 = \text{Rs. } 1500 \text{ crores}$$

(b) Consumption expenditure:- $C = C + 0.8 Y$

Substitute the value of $Y = 1500$

$$= 100 + 0.8(1500)$$

$$= 100 + 1200 = \text{Rs. } 1300 \text{ crores}$$

Savings = Income (Y) - Consumption (C)

$$= 1500 - 1300$$

$$= \text{Rs. } 200 \text{ crores}$$

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

Q1. $C = 100 + 0.4 Y$ 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)
- (I) Q3. In an economy, $S = -100 + 0.6 Y$ is the saving function, where S is saving and Y is national income . If Investment expenditure is 1,100. Calculate : . (Delhi 2013)
- (II) Equilibrium level of national income.
- (III) 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 . (AI 2013)

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. (AI 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 .

(AI 2013)

Q7. Explain all the changes that will take place in an economy when aggregate demand is not equal to aggregate supply.

(AI 2013; F 2013)

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

(AI 2013)

Q9. Complete the following table:

(Delhi 2013)

Income (Rs.)	Consumption expenditure	MPS	APS
0	80	-	-
100	140	0.4	-
200	-	-	0
-	240	-	0.20
-	260	0.8	0.35

Q10. Complete the following table:

(Delhi 2013)

Income (Rs.)	Saving (Rs.)	APC	MPC
0	-40	-	-
50	-20	-	-
100	0	-	0.6
150	30	0.8	-
200	50	-	-

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

(AI 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.50

National income = 1,000 .

Marginal propensity to save = 0.25 .

Autonomous consumption expenditure = 200 .

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 c 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. (AI 2014 , 2016)

Q19. Calculate Marginal propensity to consumption c from the following data about an economy which is in equilibrium : (AI 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 : (AI 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 : (AI 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 functions. Also explain the changes that place in an economy when the economy is not in equilibrium. Use diagram. (AI 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 : (Delhi 2015)

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. (Delhi 2015)

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: (AI 2015)

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 : (AI 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. (AI 2015)

Q31. What is 'excess demand'? Explain the role of 'reverse repo rate' in removing it. (AI 2015)

Q32. An economy is in equilibrium. Calculate Marginal propensity to save from the following (F 2015)

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. (F15)

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. 300 crore. If marginal propensity to consume is $\frac{2}{3}$, 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. (Delhi 2016)

Q40. Explain the role of taxation in reducing excess demand. (Delhi 2016)

Q41. What is aggregate demand? State its components. (AI 2016)

Q42. An economy is in equilibrium. Calculate Marginal propensity to consume. (AI 2016) ans.0.7

National income = 1,000

Autonomous consumption = 200

Investment expenditure = 100

Q43. An economy is in equilibrium. Calculate investment expenditure. (AI 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. (AI 2016)

Q45. Derive the two alternative conditions of expressing national income equilibrium. Show these equilibrium conditions on single diagram. (F 2016)

Q46. Explain how government spending can be helpful in removing deficient demand. (F 2016)

Q47. An economy is in equilibrium. Calculate Marginal propensity to consume. (F 2016)

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 : (F 2016) ans.20

National income = 1,600 .

Marginal propensity to consume = 0.8 .

Investment expenditure = 300.

Q49. Find equilibrium national income: (F 2016)

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. (Delhi 2017)

Q51. Assuming that increase in investment is Rs. 900 crore and MPC is 0.6, explain the working of multiplier. (Delhi 2017)

Q52. Calculate Autonomous consumption expenditure from the following data about an economy which is in equilibrium : (Delhi 2017)ans.200

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. (AI2017)ans 0.25

National income = 10,000

Autonomous consumption = 500 .

Consumption expenditure = 8,000.

Q53. In 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 ? (F 2017)

Q54. What is ex-ante consumption? Distinguish between autonomous consumption and induced consumption (cbse 2018)

Q55. What are two alternative ways of determining equilibrium level of income? How are these related? (CBSE 2018)

Q56. Define investment multiplier. How is it related to MPC ? (CBSE 2018)

Q57. Define full employment in an economy. Discuss the situation when aggregate demand is more than aggregate supply at full employment income level. (CBSE 2018)

Q59. State and discuss the components of aggregate demand in a two sector economy. (2019)

Q60. Discuss the working of adjustment mechanism in the following situations (2019)

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

Q61. State the meaning of following (2019)

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

Q62. In an economy : (ans . 5 and 2,500 (2019)

Change in initial investment (ΔI) = Rs.500 crore.

MPS = 0.2. Find the value of the following :

- (a) Investment multiplier (K)
- (b) Change in final income (ΔY)

Q63. In an economy : (ans . 5 and 6,000) (2019)

Change in initial investment (ΔI) = Rs.1,200 crore.

MPS = 0.2. Find the value of the following :

- (a) Investment multiplier (K)
- (b) Change in final income (ΔY)

Q64. Calculate change in final income, if MPC is 0.8 and change initial investment is Rs.1,000 crore. (2019) (ans. 5000 crore)

Q65. Estimate the change initial investment if MPS is 0.10 and change in final income is Rs. 15,000 crore. (2019) (ans. 1500 crore)

Q66. State the impact of excess demand under the Keynesian theory on employment, in an economy. (2019)

Q67. If MPS is 80% and content of all levels of income, and the autonomous consumption is Rs. 100 crore, construct consumption function of the given hypothetical economy. (2019)
(ans. $100 + 0.8Y$)

Q68. . If MPC is 20% and content of all levels of income, and the autonomous consumption is Rs. 400 crore, construct consumption function of the given hypothetical economy. (2019)
(ans. $400 + 0.8Y$)

Q69. what is meant by the 'Effective demand principal' in Keynesian theory of employment? Discuss using a schedule or a diagram. (2019)

Q70. The consumption function of an economy is : $C = 40 + 0.8Y$. Determinate that level of income where APC will be one. (2019) (ans. 200)

Q71. State the meaning of the following: (2019)

- (a) Full employment (b) Involuntary unemployment

Q72. The saving function in an economy is given as : (2019) (ans. 900 and 600)

$S = -25 + 0.25Y$ and planned investment is Rs. 200 crore, calculate the following :

- (i) Equilibrium level of in the economy (ii) Aggregate demand is Rs. 500 crore.

Q73. The saving function in an economy is given as : (2019) (ans. 5000 and 300)

$S = -25 + 0.10Y$ and Ex-ante investment is Rs. 450 crore, calculate the following :

- (i) Equilibrium level of in the economy
(ii) Additional investment which will be needed to gain an additional income level of Rs. 3,000 crore.

Q74. Explain, how the Reverse repo rate helps in correcting excess demand in an economy. (2020) 73.

Q75. Answer the following question based on the data given : (2020) ans. 300, 100, 200 crore

- (i) Planned investments = Rs. 100 crore.
(ii) $C = 50 + 0.50Y$
(a) Determine the equilibrium level of income
(b) Calculate the value of savings at the equilibrium level of national income
(c) Calculate the value of investment multiplier

Q76. Discuss the working of the adjustment mechanism in the following situations : (2020)

- (a) If Aggregate demand is greater than aggregate supply.
(b) If Ex-Ante investment are less than Ex-Ante savings.
-

PART- B

INDIAN ECONOMIC DEVELOPMENT

CURRENT CHALLENGES FACING INDIAN ECONOMY

EMPLOMENT AND UNEMPLOYMENT

UNEMPLOYMENT:- Situation when people are willing to work at the existing wage rate, and are able to work, but are not getting work.

WORKER: - All those who are engaged in economic activities, in whatever capacity — high or low, are workers (Those activities which contribute to the gross national product are called economic activities).

SELF-EMPLOYED WORKERS: - Those workers who are engaged in their own business or own profession.

HIRED WORKER: - Those workers who work for others and get wages and salaries as a reward for their services.

CASUAL WORKERS:- Casual workers are like daily wagers, not on permanent rolls of the employer, and not entitled to social security benefits.

REGULAR WORKERS:- Workers are hired on regular basis and are on permanent pay-roll of their employees and are entitled to social security benefits.

LABOR SUPPLY: - amount of labor that the workers are willing to offer corresponding to different wage rates.

LABOR FORCE:- Number of persons actually working, or willing to work at the existing wage rate.

WORK FORCE: - Number of persons actually working, and does not account for those who are willing to work.

JOBLESS GROWTH:- Jobless growth is a situation when the level of output in the economy tends to rise owing to innovative technology without any perceptible rise in the level of employment.

SIZE OF WORK FORCE IN INDIA:- 1. India has a workforce of nearly 47.3 crore of persons. 2. About 70% of the workforce of the male workers and only 30% are female workers. 3. Nearly 75% of the workforce found in rural areas and urban workforce is only 25% of the total. 4. Female workforce in rural areas is nearly 25% , while it is only 20% in urban areas

RATE OF PARTICIPATION IN INDIA (RURAL- URBAN, MALE- FEMALE RATE OF PARTICIPATION):- (i) Rate of participation for the urban areas is about 33.9 % in 2017-18 (ii) Rate of participation for the rural areas is about 35% in 2017-18 (iii) In urban areas, rate of participation is

about 53% for man and 14.2% for women. (iv) In rural areas, rate of participation is about 51.7% for man and 17.5% for women.

SELF- EMPLOYMENT AND HIRED WORKERS IN INDIA:- URBAN WORKERS:- Hired worker 61% and self-employed 38% (2017-18). **RURAL WORKERS:-** Hired worker 42% and self-employed worker 58% (2017-18)

MALE WORKFORS:- Hired male worker 48% and self-employed 52% (2017-18). **FEMALE WORKFORS:-** Hired female worker 48% and self-employed female worker 52% (2017-18).

CAUSES OF LOWER WOMEN PARTICIPATION IN WORK: - 1.women education in India is still lagging behind implies low employment opportunities for women 2.In urban areas, most families do not like women to do work 3.Women , by and large, undertake productive work only under compulsion 4. Many activities performed by women of India are not recognized as economic activities.

EMPLOYMENT IN FIRMS, FACTORIES AND OFFICES :- In the course of economic development of a country, labour flows from agriculture and other related activities to industry and services. Generally, we divide all economic activities into eight different industrial divisions. They are (i) Agriculture (ii) Mining and Quarrying (iii) Manufacturing (iv) Electricity, Gas and Water Supply (v) Construction (vi) Trade (vii) Transport and Storage and (viii) Services.

For simplicity, all the working persons engaged in these divisions can be clubbed into three major sectors viz., (a) primary sector which includes (i) , (b) secondary sector which includes (ii), (iii), (iv) and (v) and (c) service sector which includes divisions (vi), (vii) and (viii).

DISTRIBUTION OF WORKFORCE IN DIFFERENT SECTORS (OCCUPATIONAL STRUCTURE):-Percentage distribution of our workforce across primary, secondary tertiary sectors of the economy during the year 2017-18 - (i) **Primary sector-** primary sector is the main source of employment in India, which provides employment to about 44.6% of the workforce. (ii) **Secondary sector** – In this sector provides employment only about 24.4% of workforce. (iii) **Tertiary sector-** Nearly 31.0% of the workforce are employed in the service sector. **DISTRIBUTION OF RURAL-**

URBAN WORKFORCE ACROSS DIFFERENT SECTORS:- (I) About 59.8% in rural areas and 6.6% in urban workforce depends upon agriculture and allied activities (2017-18). (ii) About 20.4% rural workforce and 34.3% urban workers are working in secondary sector (2017-18). (iii) Nearly 19.8% rural workforce and 59.1% % urban workers are working in tertiary sector (2017-18). **DISTRIBUTION**

OF MALE-FEMALE WORKFORCE ACROSS DIFFERENT SECTORS:- 1. Male and female workers are heavily employed in the primary sector 2. A huge percentage of female workforce is engaged in primary sector that is 57.1% and about 40.7% male are employed in that sector (2017-18). 3. About 17.7% female workforce and 26.5% male workers are working in secondary sector (2017-18) 4. Nearly 25.2% female workforce and 32.8% male workers are working in tertiary sector (2017-18).

JOBLESS GROWTH:-“ Jobless growth is a situation when the level of output in the economy tends to rise owing to innovative technology without any perceptible rise in the level of employment”.

- (i) Jobless growth leads to chronic unemployment, even when there is a rise in GDP(ii) During the recent past, GDP of India grew positive and higher than the employment growth

Why are we relying more on technology and less on employment? :- 1.Our growth process is being increasingly hijacked by MNCs 2.MNCs achieving high growth through efficient use of technology rather than through greater use of manpower 3.Result growth is moving faster than the opportunities of employment.

CASUALISATION OF WORKFORCE:-“It is refers to a situation when the percentage of casually-hired workers in the total workforce tends to rise over time” The distribution of workforce in different status indicates that over the last four decades (1972 -2012), people have moved from self-employment and regular salaried employment to casual wage work. Yet self-employment continues to be the major employment provider. Scholars call the process of moving from self-employment and regular salaried employment to casual wage work as casualisation of workforce. **Distribution of workers by category of employment**: - 1.Self- employment 2.Regular workers 3. Casual workers

INFOALISATION OF WORKFORCE:- “Situation where percentage of workforce in the formal sector tends to decline and that in the informal sector tends to rise”. Classify the workforce into two categories:

FORMAL WORKERS: - 1.Work in organized sector of the economy 2. Are entitled to social security benefits 3.Can form trade unions 4.Are protected by various labor laws.

INFORMAL WORKERS: - 1.Work in unorganized sector of the economy 2. Are not entitled to social security benefits 3.Cannot form trade unions 4.Are not protected by various labor laws.

RURAL AND URBAN UNEMPLOYMENT (NATURE OF UNEMPLOYMENT IN INDIA)

RURAL UNEMPLOYMENT: - 1.**Disguised unemployment**:- “When the number of workers engaged in a job much more than actually required” for example If three persons are required to cultivate a farm measuring one hectare but actually six persons are engaged there, then three persons are disguisedly unemployed. disguised unemployment is a feature of Indian agriculture because:- (i) On account of joint family system (ii) Per person holding size continues to shrink (iii) Lack of job opportunities outside agriculture. **2. SEASONAL UNEMPLOYMENT**:- It occurs simply because agriculture is a seasonal occupation . During the off- season, often the farm workers are out of job. They have no work to do . Workers engaged for few month in a year rest of period, they remain unemployed. There are three sources of data on unemployment (i) Reports of Census of India, (ii)National Sample Survey Organisation’s (NSSO) Reports (iii) Employment Exchanges.

URBAN UNEMPLOYMENT:- **1.Industrial unemployment** :-“ Industrial unemployment refers to the unemployment among the illiterates who wish to work in industries, mining, transport, trade and construction activities, but are not getting jobs because of insufficient demand for labor” . The principal causes of Industrial unemployment are :- (i) Rapid rise in population overtime (ii) Concentration of industry in the urban areas (iii) Labor- saving western Technology . **2. Educated unemployment**: -

“Among the educated people which include matriculates to higher educated” educated unemployment arises due to :- (i) On account of expansion of educational institutions (ii) Education system in India is not job-oriented (iii) Increase in the size of educated labor force.

COMMON TYPES OF UNEMPLOYMENT ACROSS RURAL AND URBAN AREAS:-

1. Open unemployment :- “When worker is willing to work, and has the necessary ability to work, yet he does not get work”(found among agricultural and educated persons) **2. Structural unemployment:-** “Structural unemployment occurs due to structural change in the economy.” Structural changes are broadly of two types: (i) Changes in technology (ii) Changes in pattern of demand. **3. Under unemployment:-** - “Situation in which a worker does not get a full time job”. He remains unemployed for some month in a year or some hours every day Under unemployment is of two kinds: (i) Visible unemployment (ii) Invisible unemployment **4. Frictional unemployment:-**“It occurs due to imperfections in the mobility of labor across different occupations”. One wishes to move from one job to the other, but in the process of change may remain unemployed for some time. **5. Cyclical unemployment:-** - It occurs owing to cyclical fluctuations in the economy: Phases of boom, recession, depression and recovery in the market economy.

CAUSES OF UNEMPLOYMENT IN INDIA:- 1.High population growth 2.Slow economic growth 3.Joint family system 4.Agriculture is a seasonal occupation 5.Faulty education system 6.Decay of cottage and small industries 7.Limited mobility of labor.

ECONOMIC AND SOCIAL CONSEQUENCES OF UNEMPLOYMENT

ECONOMIC CONSEQUENCES:- 1.Non-utilisation of manpower 2.Loss of output 3.Low capital formation 4. Low productivity **SOCIAL CONSEQUENCES:-** 1.Low quality of life 2.Social unrest 3.Class struggle 4.Greater inequality.

SUGGESTIONS TO SOLVE THE PROBLEM OF UNEMPLOYMENT:- 1. Increase in production 2.High rate of capital formation 3.Increase in productivity 4. Employment exchanges 5.Educational reforms 6.Help to self-employed persons 7.Technique of production 8. Importance to employment programmes .

GOVERNMENT POLICY AND PROGRAMMES:- Most poverty alleviation programmes implemented are based on the perspective of the Five Year Plans. Expanding self-employment programmes and wage employment programmes are being considered as

the major ways of addressing poverty . **Self-employment programmes :-** (i)Rural Employment Generation Programme (REGP),(ii) Prime Minister’s Rozgar Yojana (PMRY) and Swar na Jayanti Shahari Rozgar Yojana (SJSRY) (iii) Swarnajayanti Gram Swarozgar Yojana (SGSY) (iv) National Rural Livelihoods Mission (NRLM). **Wage employment programmes :-** (i) Mahatma Gandhi National Rural Employment Guarantee Act 2005. (MGNREGA):- The Parliament passed a new Act to provide guaranteed wage employment to every rural household whose adult volunteer is to do unskilled manual work for a minimum of 100 days in a year. (ii) Pradhan Mantri Gram Sadak Yojana,(iii) Pradhan Mantri

Gramodaya Yojana, (iv) Valmiki Ambedkar Awas Yojana (v) Development of small and cottage industries (vi) Minimum needs programme (vii) Twenty- point programme (viii) Micro Units Development Refinance Agency Bank (MUDRA BANK) Government has set up MUDRA Bank in April 2015. Its objective is to meet credit needs of micro enterprise and self- employed persons. Under MUDRA yojna , a micro enterprise is entitled for a loan up to Rs. 10 lakh per unit.

MCQ

1. What is the female worker's participation rate in rural areas in India?

- (A) Lower **(B) Higher** (C) Equal (D) Earlier higher but lower now

Q2. In which sector workers enjoy job security? (choose the correct option)

- (A) Unorganized Sector **(B) Organized Sector**
(C) Agriculture sector (D) Private Sector

Q3. Which type of unemployment is not found in rural India?

- (A) Disguised Unemployment **(B) Frictional Unemployment**
(C) Seasonal Unemployment (D) Structural Unemployment

Q4. An establishment with four hired workers is known as which sector establishment.

- (A) Informal** (B) Formal (C) Both (D) None

Q5. Which of the following is false regarding disguised unemployment?

- (A) The mounting pressure of population in rural areas with no alternative employment
(B) The marginal productivity of a worker is high
(C) A feature of the agrarian economy
(D) Worker works less than its potential

SHORT AND LONG ANSWER TYPE QUESTION

Q.1. "Since the late 1970s, many developing countries, including India started paying attention to enterprises and workers in the informal sector." Comment.

Ans. The given statement is correct. The reason is that employment in the formal sector is not growing. The percentage of people employed in the formal sectors in India is only 6 per cent. The rest 94 per cent are in the informal sector. However, workers and

enterprises in the informal sector do not get regular income; they do not have any protection from the Government.

Workers are dismissed without any compensation. Technology used in the informal sector enterprises is outdated. Workers of the informal sector live in slums and are squatters.

Of late, owing to the efforts of the International Labour organisation (ILO), the Indian government has initiated the modernisation of informal sector enterprises and provision of social security measures to informal sector workers.

Q.2. Define unemployment, its types and reason behind the unemployment in India.

Ans. Unemployment refers to a situation in which a person is willing and able to work but fail to find work at the existing wage rate.

Types of Unemployment in India: 1. **Open unemployment** – In many cities, people look for jobs in factories and offices, give their bio-data and ask for any vacancy in their factory or office. Many people standing in some select areas look for people to employ them for that day's work. Such type of unemployment is called 'open unemployment'.

2. **Disguised unemployment** – It is kinds of unemployment prevailing in Indian farms, where more labour are working on a farm than actually required. Thus, Marginal product gained by employing one additional unit of labour is zero.

3. **Seasonal unemployment** – Work in agriculture is seasonal: there is no employment opportunities in the village for all months in the year. When there is no work to do on farms, people go to urban areas and look for jobs. This kind of unemployment is known as seasonal unemployment.

Reasons behind unemployment

- i) Rapid increase in population ii) Slow pace of economic growth iii) Inequality in income and wealth iv) Seasonal nature of agricultural v) Paucity of entrepreneur vi) Shortage of capital vii) Low level of savings and low capital formation viii) Orthodox social factors ix) lack of education

Q.3. What measures/steps have been taken by the government of India in generating employment or creating opportunities for employment generation in India?

Ans. The Union and State governments have played an important role in generating employment or creating opportunities for employment generation in India. Their efforts can be broadly categorised into two — direct and indirect.

- Direct employment generation – The government employs people in various departments for administrative purposes. It also runs industries, hotels and transport companies, and hence provides employment directly to workers.
- Indirect employment generation opportunities – When the output of goods and services from government enterprises increases, the private enterprises will also raise their output and hence increase the number of employment opportunities in the country.

For example, when a government owned steel company increases its output, it will result in direct increase in employment in that government company. Simultaneously, private companies, which purchase steel from it will also increase their output and thus employment. This is the indirect generation of employment opportunities by the government in the country.

Moreover, many programmes that the governments implement, aimed at alleviating poverty, are through employment generation. They are also known as employment generation programmes. For example, Mahatma Gandhi National Rural Employment Guarantee Act 2005,

Pradhan Mantri Jan-Dhan Yojna 2014, Swarna Jayanti Gram Swarozgar Yojna (SGSY), Pradhan Mantri Gramodaya Yojna, Valmiki Ambedkar Awas Yojna etc. All these programmes aimed at providing not only employment but also services in areas such as primary health, primary education, rural drinking water, nutrition, assistance for people to buy income and employment generating assets, construction of houses and sanitation, assistance for constructing houses, etc.

Q 4: Why are less women found in regular salaried employment?

Answer: There are many reasons for low representation of women in regular salaried employment.

- i) Division of work: Deep rooted social beliefs are the main reason which segregate women's work as homemakers who are not supposed to venture out of their homes. Even though women are educated they prefer work at fewer wage.

ii) Low female literacy: Female literacy level is still below the male literacy level which means a less number of women are properly qualified and skilled to get a regular salaried job.

iii) Patriarchal System of Society: On the other hand, a male is expected to earn a livelihood so that he can support his family and thus a boy is mentally conditioned since his childhood to do something. A regular salaried job usually ensures a better social recognition and hence most of the unemployed first try to land a regular salaried job.

Q5. Is it necessary to generate employment in the formal sector rather than in the informal sector? Why?

Answer: The formal sector not only provides employment but also several social security benefits. A worker in the formal sector gets higher salary and social security benefits. Various social security benefits that the worker can be assured of better quality of life when he becomes old or physically disabled. After the life of a worker, his family members can be assured of a decent life. The situation is totally opposite in the informal sector where even regular salary is a dream for most of the workers.

Hence, it is necessary to generate employment in the formal sector rather than in the informal sector.

Q6. Concept of Labour force and workforce .

Labour force includes all those who are working and those not working but is seeking work. In other words it includes employed and unemployed workers.

The labour force includes all persons in the age group between 15 to 60 years who are employed or available to work.

Workforce includes all those who are employed at a particular point of time. In other words this refers to those persons who are working.

It includes all persons who are engaged in economy activities so,

Labour force = Workforce + Unemployed persons

Workforce = No. of persons working

Q7. Explain the various types of workers .

The workers can be classified as

a) Self employed workers –An arrangement in which a worker uses his own resources to make a living is known as self employed. He owns and operates an enterprise to earn his livelihood.

b) Hired workers – Those people who are hired by others on paid wages or salaries as a reward for their services are called as hired workers they are of two types:-

i) Regular worker- These are hired on permanent basis by their employers who get all social security benefits by the employers.

ii) Casual worker- These are not hired on regular basis by the employers. They do not get any social security benefits by the employers.

Q8. Explain the following :

a) Casualisation of Work force b) Jobless growth c) Formal sector and informal sector d) Informalisation of workforce.

a) Casualisation of Work force- It refers to a situation when the percentage of casual fired workers in the total workforce tends to rise over time.

b) Jobless growth- If economic growth is driven by better technology but it fails to improve the rate of participation in economy, such a growth is called 'Jobless Growth'. It leads to chronic unemployment even when GDP is rising.

c) Formal sector – It includes all government departments, public enterprises and private enterprises which hire 10 or more workers.

Informal Sector- It includes such private enterprises which hire less than 10 workers.

d) Informalisation of workforce – A situation when percentage of workforce in the formal sector tends to decline and that in informal sector tends to rise.

Q9. What are the measures that can be taken to eradicate the unemployment problem.

Measures that can be taken to eradicate the problem of unemployment are

- (i) By controlling population ii) Creating alternative source of employment for agricultural workers / farmers iii) Development of villages and small scale industries iv) By introducing social reforms and bringing modernisation v) Employment oriented education and planning vi) Developing institutional credit facilities vi) Increase in investment and capital formation

(UNIT-7) INFRASTRUCTURE

“Infrastructure refers to support system of economic and social development of a country.” Infrastructure provides supporting services in the main areas of industrial and agricultural production, domestic and foreign trade and commerce. These services include roads, railways, ports, airports, dams, power stations, oil and gas pipelines, telecommunication facilities, the country's educational system including schools and colleges, health system including hospitals, sanitary system including clean drinking water facilities and the monetary system including banks, insurance and other financial institutions.

Types of infrastructure:- 1. **Economic infrastructure :-** (i) Transport (ii) Communications (iii) Energy

Social infrastructure:- (i) Education and research (ii) Health and family welfare (iii) Other civil amenities: (a) Water supply (b) sanitation

INFRASTRUCTURE AND DEVELOPMENT (Significance of infrastructure/Contributes to the process of growth and development) :- 1. Increases productivity (productivity in primary, Secondary and Tertiary sector) 2. Encourages investments 3. Generates linkages in production 4. Better quality of life 5. Helps in market expansion 6. Enhances size of market

THE STATE OF INFRASTRUCTURE IN INDIA :- Traditionally, the government has been solely responsible for developing the country's infrastructure. But it was found that the government's investment in infrastructure was inadequate. Today, the private sector by itself and also in joint partnership with the public sector has started playing a very important role in infrastructure development. Infrastructure is the foundation of development; India is yet to wake up to the call. India invests only 34 per cent of its GDP on infrastructure.

HEALTH (COMPONENT OF SOCIAL INFRASTRUCTURE)

“Health means a sound physical and mental state of the individual”. Health is the holistic process related to the overall growth and development of the nation. Development of health infrastructure ensures a country of healthy manpower for the production of goods and services. Good health implies the :- (i) Increase in overall efficiency (ii) Increase in productivity of labor (iii) Increase in mental abilities.

DEVELOPMENT OF HEALTH SERVICES (After independence) IN INDIA: - 1. **Decline in death rate:** - 27 per thousand in 1951 to 6.4 per thousand in 2016. 2. **Reduction in infant mortality rate :-** death of the infants up to one year of age has reduced from 146 per thousand in 1951 to 34 per thousand in 2016. 3. **Rise in expectancy of life:** 32 year in 1951 to 68.3 year in 2016. 4 **Reduction of child (under- five) mortality rate:** 57 per thousand in 1951 to 11 per thousand in 2012. 5. Control over deadly diseases: Like malaria, TB, cholera and smallpox.

HEALTH SYSTEM IN INDIA:- India has a three- tier healthcare system : **Tier- 1**:- Includes Primary health centers (PHC), Community health centers (CHC), and Sub-center **Tier- 2**:- Upgraded compared to PHC and facilities for surgery, ECG and X-rays. **Tier- 3**:- These are high-end and fully equipped medical center – AIIMS, PGI.

PRIVATE SECTOR HEALTH INFRASTRUCTURE: - Observations:- (i) The private sector accounts for more than 80% of total healthcare spending in India (ii) 58% rural and 62% urban are going to private hospitals. (iii) Today's India 93% of hospitals, 64% of beds and 80-85% of Doctors belong to private sector health infrastructure. **Indian Systems of Medicine (ISM): -** It includes six systems — Ayurveda, Yoga, Unani, Siddha, Naturopathy and Homeopathy (AYUSH). ISMs have huge potential and can solve a large part of our healthcare problems because they are effective, safe and inexpensive.

Indicators of Health and Health Infrastructure—A Critical Appraisal: - The health status of a country can be assessed through indicators, such as infant mortality and maternal mortality rates, life expectancy and nutrition levels, along with the incidence of communicable and non-communicable diseases.

Scholars argue that there is greater scope for the role of government in the health sector. In India, Expenditure on health sector as 4.7 per cent of the total GDP. This is abysmally low as compared to other countries. One study points out that India has about 17 per cent of the world's population but it bears a frightening 20 per cent of the global burden of diseases (GBD).

GBD is an indicator used by experts to gauge the number of people dying prematurely due to a particular disease, as well as, the number of years spent by them in a state of 'disability' owing to the disease. In India, more than half of GBD is accounted for by communicable diseases such as diarrhea, malaria and tuberculosis.

Urban-Rural and Poor-Rich Divide:- Though 70 per cent of India's population lives in rural areas, only

one-fifth of its hospitals (including private hospitals) are located in rural areas. People living in rural areas do not have sufficient medical infrastructure. This has led to differences in the health status of people. As far as hospitals are concerned, there are only 0.36 hospitals for every one lakh people in rural areas, while urban areas have 3.6 hospitals for the same number of people. The PHCs located in rural areas do not even offer X-ray or blood testing facilities.

The poorest 20 per cent of Indians living in both urban and rural areas spend 12 per cent of their income on healthcare, while the rich spend only 2 per cent.

Women's Health: - 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 ratio in the country from 927 in 2001 to 914 in 2011 points to the growing incidence of female foeticide. More than 50 per cent of married women in the age group of 15–49 years 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. Health is basic human right. All citizens can get better health facilities if public health services are decentralised. The effectiveness of healthcare programmes also rests on primary healthcare. The ultimate goal should be to help people move towards a better quality of life.

CAUSES OF LOW LEVEL OF HEALTH IN INDIA:- 1.High birth rate 2.Lack of safe drinking water and sanitation 3.Water pollution 4.Lack of adequate housing 5.Inadequate medical facility.

PROBLEMS OF HEALTH SECTOR IN INDIA (HEALTH IS AN EMERGING CHALLENGE)

1.Unequal distribution of healthcare services 2.Communicable diseases 3.Poor management 4.Poor up-keep and maintenance 5.Poor sanitation facilities 6. Privatisation 7. Poor diet

RECENTLY LAUNCHED GOVERNMENT SCHEMES/ PROGRAMMES:- AYUSHMAN**Bharat Programme or Pradhan mantra jan arogya yojana or National health protection scheme :-**

This scheme launched on September 23, 2018 (Ranchi). It is the biggest government scheme in the world . Two components of this programme :- 1. **Health and wellness center**:- Under this, 1.5 lakh centers will bring health care system

(2) **National health protection scheme** :- Which will cover 10 crore poor people and vulnerable families (total 50 crore beneficiaries approximately) It also provides a health assurance cover of Rs. 5 lakh per family per year for secondary and tertiary care for serious illnesses.

Swachh Bharat Abhiyan :- This scheme launched on October 2, 2014.

Pradhan mantra Ujjwala yojana :- This scheme launched on May 1, 2016. To distribution free LPG connections to the women to 5 crore BPL families across the country.

MCQ

Q 1: National Rural Health Mission was launched in which year?

- a) 2006 **b) 2005**
 c) 2000 d) 2009

Q 2: The word 'Health' does not only mean absence of disease. It is known as _____, _____ and _____. (Fill up the blank with correct answer)

Answer: Physical, mental and social wellbeing

Q 3: Identify the correct sequence of alternatives given in Column II by matching them with respective terms in Column I:

COLUMN I

- a. Six Indian System of Medicine
 b. Proneness to fall ill
 c. number of people dying prematurely due to a particular disease,
 d. A herbal mosquito repellent

COLUMN II

- i)MORBIDITY
 ii)AYUSH
 iii)JAG
 iv)GLOBAL BURDEN OF DISEASE

Choose the correct sequence.

- a)ii, i, iv, iii** b)iii, iv, ii, I
 c)iv, ii, i, iii d)ii, iv, iii, i

Q 4: An indicator used by experts to gauge the number of people dying prematurely, due to particular diseases as well as the numbers of years spent by them in a state of disability owing to the disease is called as _____ (Morbidity/ **Global Burden of disease**)

Choose the correct option):

Q 5: What per cent of GDB does India bear?

- (a)4% (b) 50%
(c) 20% (d)74%

Q 6: How does infrastructure contributed economic development of a country?

- (a) By increase the productivity of factors of production
- (b) By improving the quality of life of its people.
- (c) Both (a) and (b)**
- (d) None of these

SHORT AND LONG ANSWER TYPE QUESTION

Q1. a) Define Infrastructure

b) Explain social infrastructure and economic infrastructure

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

Economic infrastructure	Social 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.	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

Q2. Explain about healthcare system / health infrastructure of India.

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

1. Primary Healthcare:- At the village level, a variety of hospitals known as Primary Health Centres(PHCs) have been set up. Auxiliary Nursing Midwife (ANM) is the first person who provides primary healthcare. It includes: •**Maternal and child health care** •**Promotion of health and provision of essential drugs** •**Immunisation** •**Educating the people about identifying, preventing and controlling diseases.**

2. Secondary Healthcare:- Health care institutions having better facilities for surgery, x-ray, ECG are called Secondary Healthcare institutions. 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 equipments and medicines and undertake all the complicated health problems, which could not be managed by primary and secondary hospitals.

Q3. what is health? Mention the development of health services in India after independence.

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.

Development of Health services in India after Independence:-

1. Decline in death rate from 27.4 per thousand in 1951 to 7.2 per thousand in 2018.
2. Reduction in Infant mortality rate from 146 per thousand in 1951 to 30 per thousand in 2018.
3. Rise in expectancy of life from 32 years in 1951 to 69.4 years in 2018.
4. Deadly diseases like malaria, TB, cholera & small pox have been brought under control.
5. Decline in under- five mortality rate from 248 per thousand in 1960 to 37 per thousand in 2018.

ENVIRONMENT AND SUSTAINABLE ECONOMIC DEVELOPMENT

ENVIRONMENT — DEFINITION:-‘ It includes all the biotic and abiotic factors that influence each Other’. While all living elements — the birds, animals and plants, forests, fisheries etc.— are biotic elements, abiotic elements include air, water, land etc. Rocks and sunlight are all examples of abiotic elements of the environment.

Function (Importance/ Significance) of environment:- 1.Environment offers resource for production:- resources here 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. That is, a continuous supply of the resource remains available. 2.Enhances quality of life 3. Environment sustains life by providing genetic and bio diversity 4.Environment assimilates waste:- This implies that the resource extraction is not above the rate of regeneration of the resource and the wastes generated are within the assimilating capacity of the environment.

Problems related to Environment:- 1.Problem of pollution 2.Problem of excessive exploitation of natural resources. **1. Problem of pollution:-** The intensive and extensive extraction of both renewable and non-renewable resources has exhausted some of these vital resources and we are compelled to spend huge amounts on technology and research to explore new resources. Added to these are the health costs of degraded environmental quality — decline in air and water quality (seventy per cent of water in India is polluted) have resulted in increased incidence of respiratory and water-borne diseases. Hence the expenditure on health is also rising. To make matters worse, global environmental issues such as global warming and ozone depletion also contribute to increased financial commitments for the government. Thus, it is clear that the opportunity costs of negative environmental impacts are high. (i) Air pollution (ii) Water pollution (iii) Noise pollution

2.Excessive exploitation of natural resources:- **Deforestation :-** “Deforestation refers to the removal or destruction of the forest cover of an area”. **Causes of Deforestation :-**(i) It is caused by growing demand for wood other forest products by the industries (ii)Increasing pressure of population (iii) Industrialization leads to urbanization and urbanization induces deforestation (iv) Construction of dams is another factor for deforestation.

Degradation of land: - “Degradation of land means loss of fertility of land”. Degradation of land is caused by the following factors. (i)Soil erosion (ii) Water logging (iii) Deforestation (iv) Excessive use of fertilizers.

Cause of environmental degradation:- 1.Population explosion 2.Poverty 3.Increasing urbanization 4.Rapid industrialization 5.Increasing use of insecticides, pesticides and chemical fertilizers 6.Disregard to the civic norms 7.Multiplicity of transport vehicles 8. Improper crop rotation 9.Poverty of the agriculture-dependent people.

State of environment in India:- India supports approximately 17 per cent of the world’s human and 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 country as a result of which the country loses 0.8 million tonnes of nitrogen, 1.8 million tonnes of phosphorus and 26.3 million tones of potassium every year. Our challenging issues are : (i) Land degradation (ii)Loss of biodiversity (iii) Air pollution an urban areas (iv) Management of fresh water and (v) Management of solid waste .

Principal factors contributing to land degradation in India :- (i) Loss of vegetation due to deforestation (ii) Multiple cropping along with subsistence farming by small and marginal holders (iii)Excessive use of chemical fertilizers, insecticides and pesticides (iv) Low water- table (v) Soil erosion occurring due to floods, strong winds and other factor .

HOW TO SAVE ENVIRONMENT? :- 1.Social awareness 2.Population control 3.Afforestation campaign 4.Enforcement of environment conservation Act 5.Water management 6.Management of solid waste 7.Control over industrial and agricultural pollution 8.Improvement in housing .

Government measures for environment protection:- 1.The environment protection Act.1986 2.The Forests (protection) Act 1980 3. Pollution control boards 4. Clean development mechanism 5.National Green Tribunal Act, 2010.

Global warming:- “Global warming refers to the phenomenon of sustained increase in global temperature due to environmental pollution and deforestation.” **Causes of Global warming:-** (i) Burning of coal and petroleum products are sources of carbon dioxide (ii) Deforestation (increases the amount of carbon dioxide) Release of methane gas from animal waste .

SUSTAINABLE DEVELOPMENT:- “Sustainable development is that process of economic development which aims at raising the quality of life of both present and future generations, without harming natural resources and environment”. The concept of sustainable development was emphasised by the United Nations Conference on Environment and Development (UNCED), which defined it as:

‘Development that meets the need of the present generation without compromising the ability of the future generation to meet their own needs’.

The Brundtland Commission emphasises on protecting the future generation. This is in line with the argument of the environmentalists who emphasise that we have a moral obligation to hand over the planet earth in good order to the future generation; that is, the present generation should bequeath a better environment to the future generation.

The present generation can promote development that enhances the natural and built environment in ways that are compatible with (i) conservation of natural assets (ii) preservation of the regenerative capacity of the world’s natural ecological system (iii) avoiding the imposition of added costs or risks on future generations. **Features of sustainable development** :- 1. Increase in per capita income and welfare over time 2. Rational use of natural resources 3. Check on pollution 4. Ability of future generations to fulfill their need.

STRATEGIES FOR SUSTAINABLE DEVELOPMENT:- 1. **Use of Non-conventional Sources of Energy**: India, as you know, is hugely dependent on thermal and hydro power plants to meet its power needs. Both of these have adverse environmental impacts. Wind power and solar rays are good examples of conventional but cleaner and greener energy sources but are not yet been explored on a large scale due to lack of technological devices. 2. **LPG, Gobar Gas in Rural Areas**: Households in rural areas generally use wood, dung cake or other biomass as fuel. This practice has several adverse implications like deforestation, reduction in green cover, wastage of cattle dung and air pollution. To rectify the situation, subsidised LPG is being provided. In addition, gobar gas plants are being provided through easy loans and subsidy. As far as liquefied petroleum gas (LPG) is concerned, it is a clean fuel — it reduces household pollution to a large extent. Also, energy wastage is minimised. 3. **CNG in Urban Areas**:- In Delhi, the use of Compressed Natural Gas (CNG) as fuel in public transport system has significantly lowered air pollution and the air has become cleaner in the last few years. 4. **Solar Power through Photovoltaic Cells**: India is naturally endowed with a large quantity of solar energy in the form of sunlight. Plants use solar energy to perform photosynthesis. Now, with the help of photovoltaic cells, solar energy can be converted into electricity. 5. **Mini-hydel Plants**: In mountainous regions, streams can be found almost everywhere. A large percentage of such streams are perennial. Mini-hydel plants use the energy of such streams to move small turbines. 6. Input efficient technology 7. Integrated rural development 8. Use of environment friendly sources of energy 9. Manage the wastes 10. Shift to organic farming 11. Public means of transport 12. Awareness to conserve natural assets for inter-generational equity.

SHORT AND LONG ANSWER TYPE QUESTION

Q1. Meaning of environment and its functions.

Environment is defined as all those conditions and their effects which influence human life It

includes

- a) The physical (or abiotic) as well as living (or biotic) elements of environment
- b) Physical elements includes land, water, air , soil , climate , mountains , minerals and all other resources which nature has provided to us a free gift
- c) Living elements includes all kinds of living creatures like plants and animals which impact human life.

Functions of Environment

- i) It supplies renewable and non renewable resources ii) It assimilates waste
- iii) It sustain life by providing genetic and bio diversity
- iv) It also provide aesthetic services like scenery etc

Q2. Define the following a) Carrying capacity b) Absorptive capacity c) Global warming d) Ozone depletion.

- a) Carrying capacity of the environment implies that the resources extraction is not above the rate of regeneration of the resources and the wastes generated are within the assimilating capacity of the environment.
- b) Absorptive capacity means the ability of the environment to absorb degradation.
- c) The Global warming is due to increase in the Green-house gas concentrations, like water vapour, carbon-dioxide, methane and ozone in the atmosphere.
- d) It refers to destruction of ozone in the ozone layer, due to presence of chlorine from manmade chlorofluorocarbons and other forces

Q 3. What are basic problems related to environment?**Problem related to environment are: -**

- i) **Problem of pollution** – Pollution refers to those activities of production and consumption which change purity of air and water and thereby pollute the environment like air pollution, Water pollution, And Noise pollution etc
- ii) **Excessive exploitation of natural resources** –Due to human activities the natural resources like forests, minerals , soil etc are used in excess of their regeneration rate which result in imbalance in environment and may lead to extinction of such resources in future. **Q43 what are the causes of environment degradation**

Causes of Environment degradation are:-

- i) Population explosion ii) Widespread poverty iii) Increasing urbanisation iv) Excess use of insecticides and pesticides v) Rapid industrialisation vi) Disregard for civic norms

Q4. Compare and contrast the concept of Economic growth, Economic development and Sustainable Development.

Economic Growth	Economic Development	Sustainable Development
i) It refers to long term increase in real per capita income	i) It refers to long term increase in real per capita income along with equitable distribution for the present generation	i) It refers to increase in real per capita income along with equitable distribution, both for the present and future generation
ii) This concept is generally used with reference to developed	ii) It is generally used in the context of underdeveloped economies	ii) It is used for both developed and underdeveloped economies
iii) It ignores distribution of income	iii) It accounts for the distribution of income	iii) It accounts for the distribution of income
iv) It ignores protection of environment	iv) It lays no special emphasis on environmental protection	iv) It lays special emphasis on environmental protection
v) It does not account for the exploitation of natural capital	v) It does not account for the exploitation of natural capital	v) It emphasizes rational utilization of natural capital to safeguard the interest of future generations.

(UNIT-8) DEVELOPMENT EXPERIENCE OF INDIA:

A COMPARISON WITH NEIGHBOURS

Development Strategies of India, Pakistan and China:- Similarities: 1. All the three nations have started towards their development path at the same time. 2. India and Pakistan became independent nations in 1947 and Republic of China was established in 1949. 3. All these nations started their planning in similar ways. 4. India commenced its five year plans in 1951, China started its plans in 1953 and Pakistan in 1956. 5. China introduced economic reform since 1978, India 1991 and Pakistan from the beginning of 1988.

SAARC:- The South Asian Association for Regional Cooperation was established on December 08, 1985 (8 countries of south)

They are forming regional and global economic groupings such as the **SAARC** (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) **ASEAN** (Association of Southeast Asian Nations - founded on 08/1967 – Indonesia, Singapore, Malaysia, Philippines, Thailand-

Brunei, Cambodia, Laos, Myanmar, Vietnam, Timor-leste), **G-20, BRICS**(Brazil, Russia, India, China, South Africa) etc.

China: After the establishment of People's Republic of China under one-party rule, all critical sectors of the economy, enterprises and lands owned and operated by individuals were brought under government control.

Great Leap Forward (GLF 1958) campaign of China:- 1. GLF was started in 1958 with a view to propelling the pace of economic and industrial development 2. Which aimed at Country's industrialization and agriculture on a large scale 3. China resorted to "**Commune System of Production**" Under which people cultivated land collectively 4. Mao (Chinese communist revolutionary) believed that both had to grow to allow the other to grow Mao introduced the Great Proletarian Cultural Revolution (1966–76) under which students and professionals were sent to work and learn from the countryside. 5. It focused on widespread industrialization of the economy 6. People to set-up household industry in their backyard.

One Child policy in China:- OCP adopted by China in 1979 has been very successfully pursued . Consequently, 1. Growth rate of population has reduced to nearly half, from 1.33 per cent in 1979 to 0.47 per cent in recent past 2. With a check on population growth, China focus on raising the quality of life .

DEVELOPMENT EXPERIENCE – A COMPARATIVE STUDY

(1) GDP Growth :- **Growth story of China :-** (i) In 2017, GDP in China was estimated to be 12.40 trillion

US Dollars (ii) China was achieved the distinction of 2nd largest economy in the world (iii) China achieved a breakthrough in GDP growth in early 1980's it was from 4% per annum to 10% per annum due to :- (a) Shift from a centrally planned economy to a market economy (b) Focus on export-related domestic production (c) Great leap forward (GLF) campaign (d) Influx of GDP (e) Availability of cheap labor force . (iv) quantum jump in FDI was achieved through :- (a) China established SEZ (special economic zones) (b) 100% FDI (c) Increase domestic investment through GLF (v) Largest exporter in the global market .

Reasons for recent past GDP growth in China has slowed down:- (a) Slowdown in the global economy (b) Growth of domestic demand of China is Slowdown (c) Corruption and economic crimes have tended to rise over time (d) Chinese government is battling with the problem of environmental degradation.

Growth story of India:- (i) In 2017, GDP of India was estimated to be 2.43 trillion US Dollars (ii) India was achieved the distinction of 5th largest economy in the world (iii) The GDP growth in India showed a substantial rise only after 1991, the year when new economic policy was launched, The basic components of NEP are : (a) A massive shift towards privatization (b) A transformation towards liberalization (c) Greater reliance on export promotion rather than import substitution (d) Greater reliance on FDI rather than domestic investment (iv) The period 1991-2017, GDP growth rate of India

increased to around 7% per annum. **Reasons for recent past GDP growth in India has slowed down: -**

(a) High rate of inflation (b) Corruption and economic crimes have tended to rise over time Policy (c) paralysis of the government, owing to political instability (d) Drought of FDI, owing to poor credit rating of Indian economy.

Pakistan: That Pakistan adopted various economic policies and these many Similarities with India. Pakistan also follows the mixed economy model with co-existence of public and private sectors.

Growth story of Pakistan:- (i) In the late 1950s and 1960s, Pakistan introduced a variety of regulated policy framework (for import substitution-based industrialisation). (ii) In the 1970s, nationalisation of capital goods industries took place. (III) Pakistan then shifted its policy orientation in the late 1970s and 1980s when the major thrust areas were denationalization and encouragement of private sector. (IV) In 1988, reforms were initiated in the country. (V) In 2017, GDP of Pakistan was estimated to be 27.1 billion US Dollars (VI) Pakistan achieved a breakthrough in GDP growth in the mid-80's it was as a consequence of economic reforms, focusing on FDI.

Reasons for economic outlook in Pakistan turned to disappointing:- (a) Pakistan has been gripped by the war of terror (b) Corruption and political instability are the other factors .

Conclusion:- (i) China has outpaced both India and Pakistan with regard to GDP (ii) India has performed better than Pakistan (iii) The relative success of China is credited to political stability in China.

(2) DEMOGRAPHIC INDICATORS:- If we look at the global population, out of every six persons living in this world, one is an Indian and another a Chinese. We shall compare some demographic indicators of India, China and Pakistan.

Table

shows:-

Select Demographic Indicators

Country	Estimated Population (in million) (2015)	Annual Growth of Population (2015)	Density (per sq. km)	Sex Ratio (2015)	Fertility Rate (2015)	Urbanisation (2015)
India	1311	1.2	441	929	2.3	33
China	1371	0.5	146	941	1.6	56
Pakistan	188	2.1	245	947	3.7	39

Source: World Development Indicators 2017, www.worldbank.org

(i) Size of population :- (a) the population growth as being the highest in Pakistan, followed by India and China. (b) India and China together are a habitat for 38% of the world's population (c) China with nearly 1371 million people (in 2015) is a habitat for nearly 20% of world population (d) India with

nearly 1311 million people (in 2015) is a habitat for nearly 18% of world population(e) Scholars point out the one-child norm introduced in China in the late 1970s as the major reason for low population growth.

(ii) Growth rate of population: -Annual growth rate of population in 2015 - India 1.2, Pakistan 2.1 and China 0.5%, population size in India may soon exceed in China. **(iii) Density of population:** - It is estimated to be 146 persons per square kilometer in China, 245 persons per square kilometer in Pakistan, 441 persons per square kilometer in India. **(iv) Sex Ratio:-** It is estimated to be 929 per thousand in India, 941 per thousand in China and 947 per thousand in Pakistan. **(v) Urbanisation :-** In India, 33 % of population is urbanized compared with 39 % in Pakistan and 56% in China.

(3)SECTORAL DISTRIBUTION OF OUTPUT (GROSS DOMESTIC PRODUCT AND SECTORS):-

Observations of the sectoral distribution of output and employment in these nations:-

Table shows

Sectoral Share of Employment and GDP (%) in 2015-2017

Sector	Contribution to GDP			Distribution of Workforce		
	India	China	Pakistan	India	China	Pakistan
Agriculture	17	9	25	42.7	17.5	42
Industry	30	43	21	23.8	26.5	3.7
Services	53	48	54	33.5	56	54.3
Total	100	100	100	100	100	100

Source: Human Development Report 2018 ; Key Indicators of Asia and Pacific 2016.

1. In both India and Pakistan, the contribution of agriculture to GDP was 17 and 25 per cent, respectively, but the proportion of workforce that works in this sector is more in India. In Pakistan, about 42 per cent of people work in agriculture, whereas, in India, it is 43 per cent.
2. The sectoral share of output and employment also shows that in all three economies, the industry and service sectors have less proportion of workforce but contribute more in terms of output.
3. In China, manufacturing and service sectors contribute the highest to GDP at 43 and 48 per cent, respectively whereas in India and Pakistan, it is the service sector which contributes the highest by more than 50 per cent of GDP.
4. The contribution of industries to GDP is at 30 per cent in India and 21 per cent in Pakistan.

(4) INDICATORS OF HUMAN DEVELOPMENT: - Important indicators of human development are as : (a)Life expectancy -higher the better (b)Adult literacy rate - higher the better (c)Percentage of population below poverty line – lower the better (d)Infant mortality rate - lower the better (e)Maternal mortality rate - lower the better (f) Percentage of population having access to improved sanitation - higher the better (g) Percentage of population having access to improved water sources - higher the better(h) Per capita GDP - higher the better. Based on indicators, a composite index is constructed, called Human Development Index – Higher value of HDI points to a higher rank and higher level of growth and development for a country. **Table shows**

Some Selected Indicators of Human Development, 2016-2017

Item	India	China	Pakistan
Human Development Index (Value)	0.640	0.752	0.562
Rank (based on HDI)	130	86	150
Life Expectancy at Birth (years)	68.8	76.4	66.6
Mean years of Schooling (% aged 15 and above)	6.4	7.8	8.6
GDP per capita (PPP US\$)	6,427	15,309	5,035
People Below Poverty Line (at \$3.20 a day ppp) (%) (2011)	60.4	23.5	46.4
Infant Mortality Rate (per 1000 live births)	34.6	8.5	64.2
Maternal Mortality Rate (per 1 lakh births)	174	27	178
Population using Improved Sanitation (%)	44.2	75	58.3
Population with Sustainable Access to improved Water Source (%)	94	96	91
Percentage of Undernourished Children	37.9	8.1	46.4

Source: Human Development Report 2018 and World Development Indicators (www.worldbank.org).

China is moving ahead of India and Pakistan. This is true for many indicators —

1. income indicator such as GDP per capita, or proportion of population below poverty line or health
Indicators such as mortality rates, access to sanitation, literacy, life expectancy or malnourishment.
2. Pakistan is ahead of India in reducing proportion of people below the poverty line and also its performance in sanitation.
3. Maternal mortality: In China, for one lakh births, only 27 women die whereas in India and Pakistan, about 174 and 178 women die respectively.
4. The proportion of people below the international poverty rate of \$ 3.20 a day, India has the largest share of poor among the three countries.

5. Surprisingly all the three countries report providing improved drinking water sources for most of its population.
6. Higher HDI ranking of China has performed better than India and Pakistan .HDI rank 2016-17 in China was 86 ranks, India was – 130rank and Pakistan was 150 ranks out of 189 countries in the world.

DEVELOPMENT STRATEGIES — AN APPRAISAL

COMMON SUCCESS STORY OF INDIA AND PAKISTAN:- (i) Both India and Pakistan have succeeded in more than doubling their per capita incomes (ii) Food production has successfully kept pace with the rise in population (iii) Food self- sufficiency has been accompanied with improved nutritional status (iv) A well-developed modern sector (v) Absolute poverty has been reduced.

COMMON FAILURES STORY OF INDIA AND PAKISTAN:- (i) The relatively inward- looking economic policies (ii) The mind-set of the politicians and bureaucrats has not shown a progressive change (iii) Fiscal management is grossly disappointing (iv) Large proportion of tax revenue is spent to meet defense expenditures (v) Deficient urban service (water, electricity and transport) (vi) A wide lag between the formulation of policies on the one hand and their implementation.

Areas where India has an edge over Pakistan:- (i) In the area of skilled manpower ,research and development institutions, India is better placed than Pakistan (ii) Human capital formation (iii) India has shown a remarkable breakthrough in the export of software (iv) India also has a better record of investment in education (v) Owing to rapid decline in population growth rate (fertility rate)(vi) Issues of health facilities in general India better than Pakistan .

Areas where Pakistan has an edge over India:- (i) Pakistan has achieved better results with regards to migration of workforce from agriculture to industry (ii) Pakistan growth strategy has a better than Pakistan (iii) External trade has expanded much faster in Pakistan than India (iv) Pakistan has achieved better results as regards access to improved water resources.

Comparison Between Indian Economy and Pakistan's Economy:- (i) Both the countries have mixed economy (ii) Economic reforms were interdicted in 1988 in Pakistan and India introduced reforms since 1991 (iii) India is ahead of Pakistan in the areas of telecommunication, information, technology, human capital formation (iv) Pakistan is ahead of India in the areas of urbanization and sanitation facilities.

CHINA'S EDGE OVER INDIA:- We know that reforms were initiated in China in 1978.

(i) The Chinese reform process began more comprehensively during the 80s (ii) Global exposure of the economy has far more wider in China than in India , Thus :- (a) china was liberal in allowing FDI in retail (b) China allowed forging investors 100% equity investment (c) Establishing SEZ (iv) China has emerged as the 2nd largest economy in the world (v) Chinese agriculture is a commune system (collective cultivation) of farming .

CONCLUSION:- India, China and Pakistan Till the late 1970s, all of them were maintaining the same level of low development.

India : (i) India, with democratic institutions, performed moderately, but a majority of its people still depend on agriculture. (ii) Infrastructure is lacking in many parts of the country. (iii) It is yet to raise the level of living of more than one-fourth of its population that lives below the poverty line.

Pakistan:- Scholars are of the opinion that political instability, over-dependence on remittances and foreign aid along with volatile performance of agriculture sector are the reasons for the slowdown of the Pakistan economy.

China:- (i) China has used the market mechanism to 'create additional social and economic opportunities'.

- (ii) By retaining collective ownership of land and allowing individuals to cultivate lands, China has ensured social security in rural areas. (iii) Public intervention in providing social infrastructure even prior to reforms has brought about positive results in human development indicators in China.

MCO

Question 1: Arrange the following events in chronological order and choose the correct answer from the given alternatives: /

- (i) Establishment of People's Republic of China
 (ii) Creation of Pakistan
 (iii) First Five-Year Plan of India (iv) First Five-Year Plan of China **Alternatives :**
 (A) (i), (iv), (ii), (iii)
 (B) (iii), (ii), (i), (iv)
 (C) (ii), (i), (iii), (iv)
 (D) (iv), (iii), (ii), (i)

Answer: (C) (ii), (i), (iii), (iv)

Q2. The main aim of 'Great Leap Forward' was to ensure rapid increase in (primary/secondary/tertiary) sector in China. (Choose the correct alternative)

Secondary

Q3- Mao initiated the 'Great Leap Forward' in the year .

- (A) 1951 (B) 1955 (C) **1958** (D) 1962

Q4. The system in which people collectively cultivated land in China is known as. **Answer: Commune System**

Q5. Which of the following countries has the highest population growth rate?

- (A) India (B) China (C) **Pakistan** (D) All of these:

Q6. in which year, China announced its first five-year plan?

- (A) 1950
- (B) 1951
- (C) 1953**
- (D) 1954

7) India introduced economic reforms in _____ .

- (A) 1990
- (B) 1991**
- (C) 1992
- (D) 1995

Q8. Chinas great leap forward was in the year _____ .

- (A) 1953
- (B) 1955
- (C) 1958**
- (D) 1990

Q9. Commune system is the feature of

- (A) India
- (B) China
- (C) Pakistan
- (D) All the above

Q10. Reforms in were introduced in 1978.

- (A) **China,**
- (B) Pakistan,
- (C) India)
- (D) None of these:

SHORT ANSWER TYPE QUESTION

Q1. What similar development strategies have India and Pakistan followed for their respective developmental paths?

Answer. Similar developmental strategies of India and Pakistan are:

1. India has the largest democracy of the world. Pakistan has authoritarian militarist political power structure.
2. Both India and Pakistan followed a mixed economy approach. Both countries created a large public sector and planned to raise public expenditure on social development.

Q2. What is the important implication of 'one child norm' in China?

Answer. One-child norm introduced in China in the late 1970s is the major reason for

low population growth. It is stated that this measure led to a decline in the sex ratio, that is, the proportion of females per 1000 males.

Q3. “India, China and Pakistan have travelled more than seven decades of developmental path with varied results.” Explain the given statement with valid arguments.

Answers- (i) Till the late 1970s, all the three countries were maintaining the same level of low development.

(ii) Over the last three decades, the three countries have taken different levels of development

India has performed moderately over the years. Majority of its people still depend on agriculture. Infrastructure is lacking and more than one fourth of its population live below poverty line.

Pakistan performed low because of political instability, overdependence on remittances and foreign aid along with volatile performance of agriculture.

China has used the market system to succeed in raising the rate of growth in economy with stress on alleviation of poverty.

Q4. What similar developmental strategies have India and Pakistan followed for their respective developmental paths?

ANSWER:

India and Pakistan both have followed a similar developmental strategy. The main similarities between the developmental strategies can be summed up as:

(i) India and Pakistan both have started their developmental programmes based on economic planning soon after their independence in 1947.

(ii) Both the countries relied on the public sector for initiating the process of growth and development.

(iii) Both of them have followed the path of mixed economic structure involving the participation of both the state as well as the private sector.

(iv) Both of them introduced economic reforms at the same time to strengthen their economies.

LONG ANSWER TYPE QUESTION

Q1. Explain the Great Leap Forward campaign of China as initiated in 1958.

Answer. Communist China or the People’s Republic of China, as it is formally known, came into being in 1949. There is only one party, i.e., the Communist Party of China that holds the power there. All the sectors of economy including various enterprises and all land owned by individuals was brought under governmental control. A programme called

‘The Great Leap Forward’ was launched in 1958. Its aim was to industrialise the country on a large scale and in as short a time as possible. For this, people were encouraged to set up industries in their backyards. In villages, village Communes or cooperatives were set up. Communes mean collective cultivation of land. Around 26000 communes covered almost all the farm population in 1958. The Great Leap Forward programme faced many problems. These were:

- (i) In the earlier phase, a severe drought occurred in China and it killed some 3 crore people.
- (ii) Soviet Russia was a comrade to communist China, but they had border dispute. As a result, Russia withdrew its professionals who had been helping China in its industrialisation bid.

Q 2. Compare and contrast India and China’s sectoral contribution towards GDP.

What does it indicate?

Answer. Sectoral Distribution of Output and Employment:

- (i) Agriculture Sector. China has more proportion of urban people than India. In China in the year 2009, with 54 per cent of its workforce engaged in agriculture, its contribution to GDP is 10 per cent. In India’s contribution of agriculture to GDP is at 17 per cent.
- (ii) Industry and Service Sectors. In both India and China, the industry and service sectors have less proportion of workforce but contribute more in terms of output. In China, manufacturing contributes the highest to GDP at 46 per cent whereas in India it is the service sector which contributes the highest. Thus, China’s growth is mainly contributed by the manufacturing sector and India’s growth by service sector.

Q3. Mention the various indicators of human development.

Answer. Parameters of human development are:

1. HDI— (a) Value—higher the better. (b) Rank—lower the better.
2. Life expectancy—higher the better.
3. Adult literacy rate—higher the better.
4. GDP per capita (PPP US \$)—higher the better –
5. Percentage of population below poverty line (on \$1 a day)—lower the better.
6. Infant mortality rate (per 1000 live births)—lower the better.

7. Maternal mortality rate (per 100,000 live births)—lower the better.
8. Percentage of population having access to improved sanitation—higher the better.
9. Percentage of population having access to improved water source—higher the better.
10. Percentage of population which is undernourished (% of total) – lower the better

Q4. China's rapid industrial growth can be traced back to its reforms in 1978. Do you agree? Elucidate.

ANSWER: Yes, it cannot be denied that China's rapid industrial growth is an aggregate outcome of the various economic reforms that were introduced in phases since 1978.

In the initial phase, reforms were initiated in agriculture, foreign trade and investment sectors.

The system of collective farming known as Commune System was implemented. Under this system, land was divided into small plots that were allocated to the individual households.

These households were allowed to keep the remaining income from land after paying the taxes to the government.

In the later phase, reforms were initiated in the industrial sector. During this phase, the private firms and village and township enterprises were allowed to produce goods and services and to compete with the State Owned Enterprises. The reforms also included dual pricing.

The dual pricing implies that the farmers and the industrial units were required to buy and sell a fixed quantity of inputs and output at the price fixed by the government and the remaining quantities were traded at the market price.

Gradually, with the rapid increase in the aggregate production in the later years, the quantities traded in the market increased by many folds.

The reforms also included setting up of Special Economic Zones to attract foreign investors. Therefore, China's rapid industrial growth is attributable to the success of different phases of its economic reforms.

Q 5. Briefly explain the development strategies followed by china for its development

Policies followed by china are:-

- a) Great leap forward (GLF) – The campaign initiated in 1958 aimed at industrialising the country on a massive scale. People were encouraged to setup industries in their backyards. There were no restrictions which provide momentum for economic growth.
- b) Commune system – In rural areas, people collectively cultivate lands, In 1958, there were 26,000 communes covering almost all the farm population
- c) Great Proletarian Cultural Revolution (1966-1976) – Under this revolution, students and professionals were sent to work and learn from the countryside.
- d) One child policy – One child policy norm introduced in china to control its population growth.
- e) Setting up of Special economic zones and opening up of economy in 1978

Q 6. Describe the path of developmental initiatives taken by Pakistan for its economic development.

The developmental initiatives taken by Pakistan were:

- i) Mixed Economy: Pakistan followed the mixed economy model with co-existence of public and private sectors.
- ii) Import controls policy: Pakistan introduced tariff protection for manufacturing of consumer goods, together with direct import controls on competing imports.
- iii) Increase in Public Investment: The introduction of Green Revolution and increase in public investment in infrastructure in select areas, led to a rise in the production of food grains.
- iv) Nationalism of Industries-In 1970's, Capital goods industries were nationalised.

Q7. Mention the salient demographic indicators of China, Pakistan and India.

. Following are the salient demographic indicators of China, Pakistan and India:

- i) Population: The population of Pakistan is very small and accounts for roughly about one- tenth of China and India.
- ii) Population Density: Though China is the largest nation geographically among the three, but its density is the lowest.

iii) Population Growth: Population growth is highest in Pakistan followed by India and China. One-child norm 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.

iv) Sex Ratio: The sex ratio low and biased against females in all the three countries. There is strong son-preference prevailing in all these countries as the reason.

Q49 Define the liberty indicator. Give some examples of liberty indicators.

Liberty Indicator may be defined as the measure of the extent of demographic participation in the social and political decision making.

Examples of liberty indicators: (i) Measures of the extent of the Constitutional Protection Rights given to the citizens; (ii) Extent of the Constitutional Protection of the independence of the Judiciary and Rule of Law.
