

**STATE COUNCIL OF EDUCATIONAL RESEARCH & TRAINING**

**VARUN MARG, DEFENCE COLONY, NEW DELHI**

## **Teaching- Learning Material**

**(On the basis of weekly syllabus for the Month of August' 2011)**

**For**

**Class XII  
PGT (Economics)**

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**Support Material**  
**For**  
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**In**  
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## Class – XII

### Teaching -Learning Material for PGT (Economics)

*Based on “Week- Wise Distribution of Syllabus 2011 -2012”*

*For the Month of August: Unit- 6*

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## PART-B

### INTRODUCTION MACROECONOMICS

#### Abstract

*After completing the units on Micro-Economics in Part 'A' of the syllabus, the present unit deals with the contents of Macro-Economics. A brief introduction to Macroeconomics and comparison of Micro and Macro has also been explained. Some basic concepts like Consumption goods, Capital goods, Final goods, Intermediate goods, Stock and Flow, Gross Investment and Depreciation has also been explained in simple words and examples wherever necessary, are given for better comprehension. The Circular Flow of Income method of calculating National Income - Value Added or Product Method has been explained. Several terms like 'Injections' to the flow and 'Leakage' from the flow and its impact on Circular Flow has also been taken up. Brief concept of National Income, its calculation under Value Added Method is also given. An attempt has been made to simplify it so that you can also explain to students accordingly.*

#### Teaching Points

- National Income and Related Aggregates.
- Some Basic Concepts: Consumption goods, Capital goods, Final goods, Intermediate goods, Stocks & Flow, Gross Investment and Depreciation.
- Circular Flow of Income method of calculating National Income - Value Added or Product method.

## 1. *Introduction to Macro economics*

Friends before you begin with Part-B Introduction to Macro Economics, it is essential that you, yourself develop an understanding of what **Macroeconomics** is and how it is different from Microeconomics. You must have noticed that these terms are invariably used by all; but as Economics Teacher you must have a deeper insight about what these terms connote and make students understand in simpler words how Macroeconomics is different from Microeconomics and also how both are important for understanding *Individual Behaviour* and *Aggregated Indicators* i.e. GDP, Unemployment Rate, Price Indices etc.

### **Macroeconomics**

Microeconomics is derived from *Greek Prefix "macr(o)" meaning "large" + economics*) is a branch of economics dealing with the performance, structure, behavior, and decision making of the entire economy. This includes a national, regional, or global economy. *Microeconomics* and *Macroeconomics* are two most general fields in Economics. (From *Wikipedia, the free encyclopedia*).

### 1.1 *What is the difference between Microeconomics and Macroeconomics?*

*Microeconomics* is primarily focused on the *Individual Agents* i.e. Firms and Consumers and how their behaviors determine Price and Quantities in specific markets.

*Macroeconomics* is a broad field of study. It studies *Aggregated Indicators* such as GDP, Unemployment Rates, and Price Indices to understand how the whole economy functions. Macroeconomists develop models that explain relationship between factors such as *National Income, Output, Consumption, Unemployment, Inflation, Saving, Investment, International Trade and International Finance*.

Macroeconomics models and their forecasts are used by both Governments and large corporations to assist in the development and evaluation of economic policy and business strategies.

*Fiscal Policy* and *Monetary Policies* are good examples of how economic management is achieved through these government strategies.

It is also vital to point out here that to avoid major Economic Shocks, such as Great Depression, Recession, Melt down etc., Government makes adjustments through policy changes, they hope, will stabilize the economy.

## 2. *Same Basic Concepts*

Computation of National Income is important as it reflects the leveled growth & development of any country. But before you introduce children with the concept, meaning and definition of National Income/GDP and other related terms, introduce and explain the basic concepts/terms which will invariably be used in the computation of National Income. These concepts are explained briefly as under:

## 2.1 Consumption Goods

Consumption refers to the act or a process to consume which means using up of goods and services by consumers for satisfaction of their wants. Consumption good or service is that which is used (*without further transformation in production*) by Households or Government units for the direct satisfaction of individual needs or wants or the collective needs of members of community.

It can also be defined as any commodities that are used by the household for their personal use.

Consumer goods are final goods specifically intended for mass market. These goods do not include investment, for example Bread, butter, milk, tea, coffee, etc. which are directly used by consumers for satisfaction of their needs. These are example of *One Time Consumption goods (also known as single use consumer goods)* but there can be examples like machine, furniture, readymade clothes which are repeatedly used but they are used directly and hence fall in the category of *Durable Consumption Goods*. Hence consumer goods are the end result of the production.

## 2.2 Capital Goods

Goods that are used in producing other goods, rather than being bought by consumers directly for satisfaction of their needs are called Capital Goods. These are *tangible* Explain to students that final goods may be divided in to two categories i.e. *Consumer goods & Producers goods*. Assets of an organization which are used to produce goods and services *are called Capital goods*. These goods include items such *as Buildings, Equipments, and Machinery* etc. Capital goods are not used up by producer in a single year of production. These exist for many years and are repeatedly used over a period of time.

Capital goods may undergo capital improvement which typically extend their life and increases their productivity.

These are also known as producer's goods as they are being used to create other goods.

## 2.3 Final Goods

Final goods are goods that are ultimately consumed rather than used in the production of other goods. It refers to finished goods which are sold in the market for consumption & investment purpose. *These goods satisfy the wants of ultimate producers or consumers or both*. Buying of furniture by a household consumer for his house is final good for him whereas the same when bought by a producer for his office is producer's final goods. *Another example can be flour used by the household are final good whereas the same flour used by the baker is a producer's goods*.

**Here make a distinction between Consumer goods & Producers goods under the category of Final Goods**

On the lines of examples given above, ask students to think of different examples with justification as to which category of final goods they fall in. i.e. <i>Consumer goods or Producer goods</i> .
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## 2.4 Intermediate Goods

All those goods which are used by the producers for producing other goods are known as Intermediate goods.

These goods are used as inputs in the production of other goods such as *partially finished* goods. These goods are demanded for producing other goods. Thus intermediate goods are those goods which are sold by one industry to another either for resale or for producing other goods. *Stocks of Raw Materials and Semi finished goods* fall under the category of intermediate goods. Another example can be of *raw cotton* used for the production of *yarn* is an Intermediate good and when the same yarn is sold to the owner of the textile mill for the production of *cloth* then the same *yarn* becomes intermediate good for the owner.

## 2.5 Stocks & Flows

Stocks & Flows have natural meaning in many contexts outside of business and its related fields. Let us define/give meaning to both the terms 'Stock' & 'Flow' and then show the relatedness of the two and how these are impacting on an economy/business.

### *Stock*

A 'Stock' refers to the value of goods & services at a particular point of time. It is an entity that is accumulated over by inflows and/or depleted by outflows. *Therefore, we can say that the 'stock' can only be changed by a 'flow'.*

'Stocks' typically have a certain value of each moment of time, *for example the size of population at a certain moment. i.e.*

As per census 2001, the population of India stood at **102 billion**, whereas according to 1991 census the population of India 'stood at **84.6 billion**. The change/Increase in the figure at two census i.e. 1991 & 2001 is because of the *additional population (flow) in 10 years.*

### *Flow*

It is *change* in *stock* over period of time. *Change* refers to inflows (*adding to the stock*) and outflows (*subtracting from the stock*). Flows typically are measured over a certain *interval of time*. For example the increase in population census 1991 to census 2001 is due to increase in number of births in a period of **10 Years**. *To conclude we may say that 'Stock' is a Static concept whereas 'Flows' represents Dynamic concept.*

## 2.6 Depreciation

To explain the meaning of depreciation, ask students to recall the meaning of Capital Goods (i.e. *fixed assets like Machinery, Building, Equipment, Furniture etc.*). And also elaborate upon the nature and usage of such capital goods for repeated use for production of goods, and then state that these Capital goods diminish in *value & efficiency* when they are repeatedly used. Now explain that *this fall* in the *value of assets (Fixed Assets)* occur due to wear & tear, obsolescence, efflux of time, is termed as Depreciation

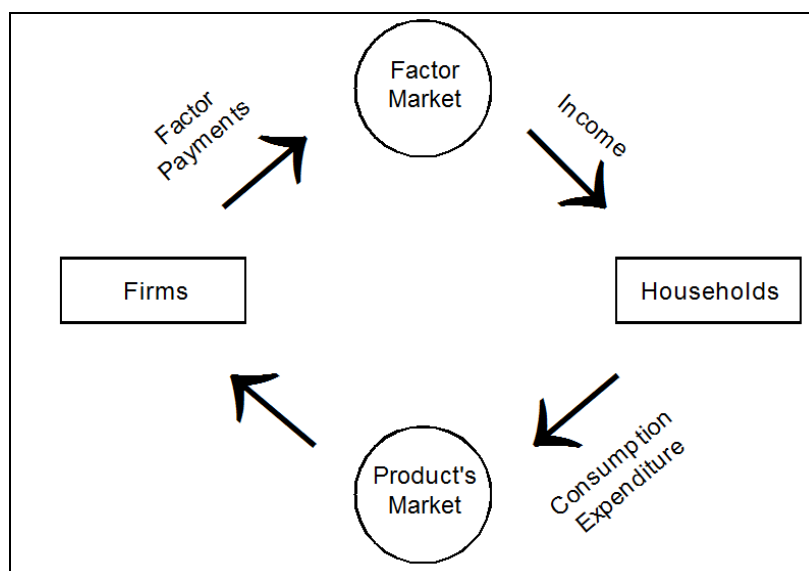
'**Depreciation**' also stands for the measure of the decrease in value of an asset over a specific period of time. It can also be defined as the decrease in the *economic potential* of an asset over its *productive & useful life*.



### 3 MEASURING THE CIRCULAR FLOW OF INCOME

The Circular Flow of Income is a simple model of economy showing flows of goods & services and factors of production between firms and households. In the absence of government and international trade, this simple model shows that households provide the factors of production for firms who produce goods and services, *in return the factors of production receive factor payments* i.e. *Land* receives **rent**, *Labour* receives **wages**, *Capital* receives **interest**, *Organization* earns **profits (losses)**. *These factor incomes - wages, rent, interest and profits are spent on the output of firms. The basic flow is shown in the diagram below:*

Diagram-1 (Circular Flow of Income)



In reality the households do not spend all their current income. The '*savings*' by them represents a leakage from the circular flow. Firms also have, besides, consumer spending, *investment spending*. This is injected to the circular flow of income, as it does not originate from consumer's current income.

Additional leakage and injections are also there in the circular flow in real world. i.e. *Government's spending are injected and taxation will leak from it*. Similarly Export flows will be injected and import flows leaked.) But for class XII students simple circular flow of Income is sufficient. Once children understand how and what transactions result in *injections* to the flow and what results in *leakage*, the examples can be given as they very well understand what Export means and what Import results in, where Govt. spends and how and why people pay taxation which is revenue for Government.



### **Any Economic Activity is flow**

Flow can be of two types:

- (i) Flow of goods & Services.
- (ii) Flow of money.

*How these flows are measured and also the volume and magnitude of flow indicates the amount of economic activity.*

Economists maintain that there are three possible ways of measuring this flow. The computation under all methods of measurement remains same. The three methods of measuring flow of income are as under:

- I The output Method** Total amount of goods and services produced in one year.
- II. The Expenditure Method** The total amount of spending: Domestic, consumers, Firms, Government and Foreigners.
- III. The Income Method:** The total incomes earned by factors of production involved in the production of goods & services in the period of one year.

## **4 What is National Income Accounting?**

N.I.A. is the process where by countries measures these flows. The process of calculating National Income (Domestic Income + Net Factor Incomes earned from Abroad) is different under all three methods but the Gross Domestic Income/Gross Domestic Product remains the same. *The National Income is a major important yardstick and has variety of uses like-*

- Determining the extent of **Economic Growth**.
- Measuring changes in **Living Standards** overtime.
- In making **comparisons** of **Economic Performance** and **Living Standards** between countries.
- Examine and judge the **Performance of different Sectors of Economy**.

### **4.1 Measuring National Income**

To measure how much output, spending and income has been generated in a given time period, we use National Income Accounts. **These accounts measure three things:**

1. Output
2. Spending
3. Income

Before computing the National Income the meaning of term 'National Income' should be taken up.

*\*It is taken up in detail in the next week syllabus.*

### **National Income**

National Income is the money value of final flow of output of goods & services produced within an economy over a period of time, usually one year and net factor income earned from abroad.

**National Income (NI) = NNP at Factor Cost**

**\*\* (will be taken up in detail in the next module)**

Now explain these terms:

#### **1. Gross Domestic Product**

Gross Domestic Product (GDP) is the total market value of the final goods & services produced within the domestic territorial limits of country over a period of time (1 Year). There are three ways of calculating GDP which is based on the different methods of calculating Nation Income i.e. Income method, Expenditure method & Value Added method; however the computed value of GDP remains the same under all methods.

- **Expenditure Approach** It measures GDP as the sum of expenditures of\*\* final goods and services.
- **Final Goods** Those goods and services that are not purchased for the purpose of producing other goods and services or for resale.
- **Income Approach** It measures GDP as the sum of incomes of factors of production (wages, salary, rent, Interests etc.)
- **Value Added Approach** It measures GDP as the sum of value added at each stage of production (from initial to final stage) In Product Method the aggregate value of goods and services produced in a year is calculated, The term that is used to denote the net contribution made by a firm is called its *value added*.

#### **2. Net Factor Income From rest of world / (Net Factor Income Earned from abroad (NFIA))**

Net Factor Income from rest of world comprises of net income receipts from rest of the world such as (i) Investment incomes including Interests, Dividends and Branch Periods.

(ii) Earnings of residents working of road.

(iii) Other factor income of normal residents.

*This item therefore represents the difference between factor incomes of residents from abroad and income accruing to foreign.*

## Suppliers of Factor services

### NFIA includes:

- (i) **Net\*** compensation of employee.
- (ii) **Net** Income from property and entrepreneurship (Interest, Rent, Dividends & Profits) including reinvested earnings of foreign companies.

Here:

**Net** stands for receipts of current income by residents abroad - Disbursement of current incomes to Non - residents in India.

Here teachers can introduce the term Gross National Product where G.N.P. presents the total income earned by the domestic citizens regardless of the country in which their factors of production are located.

Since '**Depreciation**' has already been explained even calculation and Impact of this on GDP can also be taken up i.e. GDP includes the element of depreciation (Gross (G) in GDP represents inclusion of depreciation and when depreciation is deducted from GDP, It becomes Net Domestic Product.

$NDP = GDP - Depreciation$

*\*National Income - Meaning and Computation will be taken up in next unit. Methods of calculating National Income-Value Added and Expenditure Method will be covered in detail in next Module.*

## Technical Terms

1. **Macroeconomics** *Macroeconomics* is a broad field of study. It studies **Aggregated Indicators** such as GDP, Unemployment Rates, and Price Indices to understand how the whole economy functions. Macroeconomists develop models that explain relationship between factors such as **National Income, Output, Consumption, Unemployment, Inflation, Saving, Investment, International Trade and International Finance.**
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year of production. These exist for many years and are repeatedly used over a period of time.

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5. **Intermediate Goods** All those goods which are used by the producers for producing other goods are known as Intermediate goods. These goods are used as inputs in the production of other goods such as *partially finished* goods. These goods are demanded for producing other goods. Thus intermediate goods are those goods which are sold by one industry to another either for resale or for producing other goods. *Stocks of Raw Materials and Semi finished goods* fall under the category of intermediate goods

## 6. Stocks and Flow

Stocks & Flows have natural meaning in many contexts outside of business and its related fields.

### *Stock*

A 'Stock' refers to the value of goods & services at a particular point of time. It is an entity that is accumulated over by inflows and/or depleted by outflows. *Therefore, we can say that the 'stock' can only be changed by a 'flow'.* 'Stocks' typically have a certain value of each moment of time, *for example the size of population at a certain moment or a particular point of time.*

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7. **Gross Investment** It is a measure of additions to the capital stock that does not subtract the depreciation from the existing capital. These may be machine, tools & equipments, buildings, office spaces, store houses and infrastructure etc.
8. **Depreciation** It stands for the measure of the decrease in value of an asset over a specific period of time. It can also be defined as the decrease in the *economic potential* of an asset over its *productive & useful life*. *This fall in the value of assets (Fixed Assets)* occur due to wear & tear, obsolescence, efflux of time, is termed as Depreciation

Depreciation is in fact a *non-cash expense* or a provision which is created against the value of an asset spread over its useful life and is set aside, so that there are sufficient funds for its repair/maintenance or replacement. Most assets lose their value over time & have to be replaced once the end of their useful life is reached.

- 9. Circular Flow of Income** The Circular Flow of Income is a simple model of economy showing flows of goods & services and factors of production between firms and households. In the absence of government and international trade, simple model shows that households provide the factors of production for firms who produce goods and services, *in return the factors of production receive factor payments* i.e. *Land* receives **rent**, *Labour* receives **wages**, *Capital* receives **interest**, *Organization* earns **profits (losses)**. *These factor incomes - wages, rent, interest and profits are spent on the output of firms.*
- 10. National Income** is the money value of final flow of output of goods & services produced within an economy over a period of time, usually one year and net factor income earned from abroad.
- 11. Gross Domestic Product (GDP)** is the total market value of the final goods & services produced within the domestic territorial limits of country over a period of time, usually one year.
- 13. GNP** is the total market value of the final goods & services produced within the domestic territorial limits of country over a period of time (1 Year).
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### ***Check Your Progress***

1. State the difference between Micro and Macro-economics.
2. Distinguish between 'Stock' and 'Flow' give two examples of each.
3. State what represents 'Stock' and what represents 'Flow', give two examples each.
4. What are Intermediate goods'? Explain with example.
5. Define 'Depreciation'. State the causes of fall in the value of fixed assets.
6. Give meaning of 'Gross Domestic Product. How GDP is different form GNP?
7. Define Net Factor Income from abroad (NFIA). List the components of NFIA.