1. NATIONAL INCOME ACCOUNTING

Q.No.1. Define National Income. (A)

National Income is defined as the net value of all economic goods and services produced within the domestic territory of a country in an accounting year plus the net factor income from abroad.

According to the Central Statistical Organisation (CSO) ‘National income is the sum total of factor incomes generated by the normal residents of a country in the form of wages, rent, interest and profit in an accounting year’.

Q.No.2. What function does the System of National Accounts (SNA) serve? Explain the three different sides of National Income accounts? (B)

United Nations developed UN System of National Accounts (SNA) to provide a comprehensive conceptual and accounting framework for

- Compiling and reporting macro economic statistics
- Analysing and evaluating the performance of an economy

The basic concepts and definition terms used in national accounts largely follow SNA.

MEASUREMENT OF NI ACCOUNTS

(PHASES)

Production

- (Method)
- Product Method

Distribution

- (Method)
- Income Method

Disposition

- (Method)
- Expenditure Method

National income accounts have three sides namely product side, an income side and an expenditure side.

On the product side there are two widely reported measures of overall production namely, Gross Domestic Product (GDP) and Gross National Product (GNP). The product side measures production, based on concept of value added.
The income side measures the distribution of the proceeds from sales to different factors of production.

The expenditure side looks at the final sales of goods and services.

SIMILAR QUESTIONS
1. What are the two widely reported measures on the product side based on concept of value added?
A. Refer the point “On the product side”

Q.No.3. Explain the various concepts of National Income. (A)

The basic concepts and definition terms used in national accounts largely follow SNA.

<table>
<thead>
<tr>
<th>Concepts of National Income</th>
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1. **Gross Domestic Product (GDP):**
   - The term ‘gross’ implies that GDP is measured ‘gross’ of depreciation.
   - ‘Domestic’ means domestic territory or resident production units.
   - Value added means the difference between value of output and purchase of intermediate goods. It represents the contribution of labour and capital to the production process.

   **Definition:**
   GDP is a measure of the market value of all final economic goods and services, gross of depreciation, produced within the domestic territory of a country during a given time period. (Or)
   GDP is the sum total of ‘value added’ by all producing units in the domestic territory and includes value added by current production by foreign residents or foreign-owned firms.

   **a) Gross Domestic Product at market prices (GDP<sub>MP</sub>):**
   - GDP is in fact Gross Domestic Product at market prices (GDP<sub>MP</sub>) because the value of goods and services is determined by the common measuring unit of money or it is evaluated at market prices
   - GDP<sub>MP</sub> = Value of Output in the Domestic Territory – Value of Intermediate Consumption
   - GDP<sub>MP</sub> = Σ Value Added

   **GDP includes the values of:**
   - i) Only final goods and services
   - ii) Only the value added by the production process
   - iii) Goods and services which are produced in the current period
iv) The net change in inventories of final goods
v) Production boundary of GDP i.e. production of agriculture, forestry and fishing which are used for own consumption of producers
vi) Discounting for capital consumption or depreciation of the current year

**GDP excludes the values of:**

i) Intermediate goods used to produce other goods (Ex: Producer goods).

ii) Non-economic activities e.g. services of family members that are done out of love and affection etc.

iii) Market transactions such as exchange of goods which already exist or are previously produced (Ex: Second hand goods).

iv) Transfer payments (Ex: Pensions, scholarships, unemployment allowances etc.)

v) Financial transactions and un-reported output generated through illegal transactions such as narcotics and gambling (also known as ‘bads’ as opposed to ‘goods’ which GDP accounts for).

b) **GDP at Constant prices or Real GDP:** It is the value of domestic product in terms of constant prices of a chosen base year. Real GDP changes only when production changes.

c) **GDP at Current prices or Nominal GDP:** It is the value of domestic product in terms of prevailing prices of a current year. Nominal GDP will be affected by price changes.

d) **Gross Domestic Product at Factor Cost (GDPFC):**

   The production and income approach measure the domestic product as the cost paid to the factors of production. Therefore, it is known as ‘domestic product at factor cost’.

   GDP at factor cost is called so, because it represents the total cost of factors viz. labor, capital and entrepreneurship.

i) In addition to factor cost, the market value of the goods and services will include indirect taxes which are product taxes (excise duties, customs, sales tax, service tax etc.,) and taxes on production (factory license fee, taxes to be paid to the local authorities, pollution tax etc.)

ii) Factor cost includes subsidies (i.e. The market price will be lower by the amount of subsidies on products and production which the government pays to the producer).

iii) Hence, the market value of final expenditure would exceed the total obtained at factor cost by the amount of product and production taxes reduced by the value of subsidies (Market price includes product and production taxes and excludes subsidies).

iv) Direct taxes do not have the same effect since they do not impinge directly on transactions but are levied directly on the incomes.

v) Thus, we find that the basis of distinction between market price and factor cost is net indirect taxes (i.e., Indirect taxes - Subsidies).

\[
\text{Market Price} = \text{Factor Cost} + \text{Net Indirect Taxes} = \text{Factor Cost} + \text{Indirect Taxes} - \text{Subsidies}
\]

\[
\text{Factor Cost} = \text{Market Price} - \text{Net Indirect Taxes} = \text{Market Price} - \text{Indirect Taxes} + \text{Subsidies}
\]

\[
\text{Gross Domestic Product at Factor Cost (GDPFC)} = \text{GDP}_\text{MP} - \text{Indirect Taxes} + \text{Subsidies} = \text{Compensation of employees}
\]
2. Gross National Product (GNP):

GNP is a measure of the market value of all final economic goods and services, gross of depreciation, produced within the domestic territory of a country by normal residents during an accounting year including net factor incomes from abroad.

GNP is evaluated at market prices and therefore it is in fact Gross National Product at market prices \( \text{GNP}_{\text{MP}} \).

\[
\text{GNP}_{\text{MP}} = \text{GDP}_{\text{MP}} + \text{Net Factor Income from Abroad}
\]

\[
\text{GDP}_{\text{MP}} = \text{GNP}_{\text{MP}} - \text{Net Factor Income from Abroad}
\]

a) NFIA is the difference between the aggregate amount that a country's citizens and companies earn abroad, and the aggregate amount that foreign citizens and overseas companies earn in that country.

b) If NFIA is positive, then \( \text{GNP}_{\text{MP}} \) would be greater than \( \text{GDP}_{\text{MP}} \).

c) Thus the distinction between 'national' and 'domestic' is net factor income from abroad (NFIA).

\[
\text{National} = \text{Domestic} + \text{Net Factor Income from Abroad}
\]

3. Net Domestic Product (NDP):

a) Net Domestic Product at market prices (\( \text{NDP}_{\text{MP}} \)):

Net domestic product at market prices \( \text{NDP}_{\text{MP}} \) is a measure of the market value of all final economic goods and services, produced within the domestic territory of a country by its normal residents and non-residents during an accounting year less depreciation.

The portion of the capital stock used up in the process of production or depreciation must be subtracted from final sales because depreciation represents capital consumption and therefore a cost of production.

\[
\text{NDP}_{\text{MP}} = \text{GDP}_{\text{MP}} - \text{Depreciation}
\]

\[
\text{NDP}_{\text{MP}} = \text{NNP}_{\text{MP}} - \text{Net Factor Income from Abroad}
\]

The basis of distinction between 'gross' and 'net' is depreciation or consumption of fixed capital.

\[
\text{Gross} = \text{Net} + \text{Depreciation} \text{ (or) } \text{Net} = \text{Gross} - \text{Depreciation}
\]

b) Net Domestic Product at Factor Cost (\( \text{NDP}_{\text{FC}} \)):

\( \text{NDP}_{\text{FC}} \) is defined as the total factor incomes earned by the factors of production.

It is sum of domestic factor incomes or domestic income net of depreciation.

Deduct indirect taxes and add the subsidies to market prices in order to calculate that part of domestic product which actually accrues to the factors of production i.e. Net Domestic Product at factor cost.

\[
\text{NDP}_{\text{FC}} = \text{NDP}_{\text{MP}} - \text{Net Indirect Taxes.}
\]

\[
= \text{Compensation of employees} + \text{Operating Surplus (rent + interest + profit) + Mixed Income of Self-employed}
\]
4. **Net National Product (NNP):**
   
a) **Net National Product at Market Prices (NNP\text{MP}):**
   
   Net National Product at Market Prices (NNP\text{MP}) is a measure of the market value of all final economic goods and services, produced by normal residents within the domestic territory of a country including NFIA during an accounting year excluding depreciation.
   
   \[
   \text{NNP\text{MP}} = \text{GNP\text{MP}} - \text{Depreciation} \\
   \text{NNP\text{MP}} = \text{NDP\text{MP}} + \text{Net Factor Income from Abroad} \\
   \text{NNP\text{MP}} = \text{GDP\text{MP}} + \text{Net Factor Income from Abroad} - \text{Depreciation}
   \]

   
   b) **Net National Product at Factor Cost (NNP\text{FC}) or National Income:**
   
   National Income is defined as the factor income accruing to the normal residents of the country during a year.
   
   It is the sum of domestic factor income and net factor income from abroad.
   
   National income is the value of factor income generated within the country plus factor income from abroad in an accounting year.
   
   \[
   \text{NNP\text{FC}} = \text{National Income} = \text{FID (Factor income earned in domestic territory)} + \text{NFIA}.
   \]
   
   If NFIA is positive, then national income will be greater than domestic factor incomes.

5. **Personal Income:**

   Personal Income is the income received by the household sector including Non-Profit Institutions serving households.
   
   Personal income is a measure of actual current income receipts of persons from all sources which may or may not be earned from productive activities during a given period of time.
   
   Personal income is the income ‘actually paid out’ to the household sector, but not necessarily earned. (i.e. transfer payments such as social security benefits, unemployment compensation, welfare payments etc.)
   
   Individuals also contribute income which they do not actually receive (i.e. undistributed corporate profits and the contribution of employers to social security).
   
   Personal income forms the basis for consumption expenditures and is derived from national income as follows:
   
   \[
   \text{PI} = \text{NI} + \text{income received but not earned} - \text{income earned but not received}.
   \]

   **NOTE:**
   
   - NI is not the sum of personal incomes because personal income includes transfer payments (e.g. pension) which are excluded from NI.
   - Not all national income accrues to individuals as their personal income.

6. **Disposable Personal Income (DPI):**

   Disposable personal income is a measure of amount of the money in the hands of the individuals that is available for their consumption or savings.
   
   Disposable personal income is derived from personal income by subtracting the direct taxes paid by individuals and other compulsory payments made to the government.
   
   \[
   \text{DI} = \text{PI} - \text{Personal Income Taxes} = \text{Consumption} + \text{Savings}
   \]

7. **Per Capita Income:**

   The GDP per capita is a measure of a country's economic output per person.

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**CA Inter_Economics for Finance_National Income Accounting**

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It is obtained by dividing the country’s gross domestic product, adjusted by inflation, by the total population.

It serves as an indicator of the *standard of living* of a country.

\[
\text{Per capita Income} = \frac{\text{National Income}}{\text{Total Population}}
\]

**SIMILAR QUESTIONS**

1. **Define**
   1) GDP
   2) GNP
   3) NDP
   4) NNP₇₉
   5) personal income
   6) Disposable income
   7) Per capita income

A. Write only the definition part of the concerned

2. **Explain GDP₇₉**
   A. Refer point 1.a

3. **Explain Gross Domestic Product at Factor Cost**
   A. Refer point 1.d

4. **Explain Personal Income**
   A. Refer point 5

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**Q.No.4. What function does the System of National Accounts Statistics (NAS) in India serve in measuring National Income? (B)**

**MEASUREMENT OF NATIONAL INCOME IN INDIA**

National Accounts Statistics (NAS) in India

**Compiled by:**

i) National Accounts Division in the Central Statistics Office (CSO),

ii) Ministry of Statistics and Programme Implementation (MoSPI)

**Publication of estimates:** Annual as well as quarterly

**Practicality:**

i) It is the key source-material for all macro-economic data of the country.

ii) As per the mandate of the Fiscal Responsibility and Budget Management Act 2003, the Ministry of Finance uses the GDP at current prices to determine the fiscal targets.

**Amendments**

i) MoSPI has released the new series of national accounts, revising the base year from 2004-05 to 2011-12.

ii) In the revision of NAS done by CSO in January 2015, it was decided that sector-wise estimates of Gross Value Added (GVA) will now be given at basic prices instead of at factor cost.

(Basic price = Amount receivable by the producer from the purchaser for a unit of a product - Tax on the product + subsidy on the product.)

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**Q.No.5. Outline the measurement of National Income in India and comment on it. (A)**

Circular flow of income refers to the processes of production, distribution and disposition keep going on simultaneously and enable us to look at national income from three different angles namely: as a flow of production or value added, as a flow of income and as a flow of expenditure. Each of these different ways of looking at national income suggests a different method of calculation and requires a different set of data.
Data requirements and outcomes of Different methods of National Income Calculation

<table>
<thead>
<tr>
<th>PHASE</th>
<th>METHOD</th>
<th>DATA REQUIRED</th>
<th>WHAT IS MEASURED</th>
<th>APPLICABILITY IN INDIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>Net output method (or) Value added method (or) Product method (or) Industrial origin Method</td>
<td>The sum of net values added by all the producing enterprises of the country</td>
<td>Contribution from production units</td>
<td>Agricultural sector</td>
</tr>
<tr>
<td>Distribution</td>
<td>Income Method or Factor Income Method, or Factor Payment Method or Distributed Share Method</td>
<td>Total factor incomes generated in the production of goods and services</td>
<td>Relative contribution of factor owners</td>
<td>Small scale sector.</td>
</tr>
<tr>
<td>Disposition</td>
<td>Expenditure Method (or) Income Disposal Approach (or) Outlay Method</td>
<td>Sum of expenditures of the three spending units in the economy, namely, government consumer households, and producing enterprises</td>
<td>Flow of consumption and investment expenditures</td>
<td>Construction sector</td>
</tr>
</tbody>
</table>

**Comments**

- When NI of a country is measured separately using these methods, we get a three dimensional view of the economy.
- Income method may be most suitable for developed economies where people properly file their income tax returns.
- As a matter of fact, countries like India are unable to estimate their national income wholly by one method.

**SIMILAR QUESTIONS**

1. Explain the data i.e. required as per the different methods to calculate national income

   A. Refer the (ii) and (iii) columns of tabular column

   **Q.No.6. Briefly explain Value Added Method or Product Method to calculate National Income in India. (A)**

   **Value Added Method or Product Method:**

   a) Value Added Method is also called Industrial Origin Method or Net Output Method.

   b) National income by value added method is the **sum total of net value added** at factor cost across all producing units of the economy.

   c) The value added method measures the contribution of **each producing enterprise** in the domestic territory of the country in an accounting year

   d) It considers totality of production of each industry and reduces intermediate purchases from all other industries.

   e) This method of measurement shows the unduplicated contribution by each industry to the total output.

   This method involves the following steps:

   **Step 1. Identifying the producing enterprises and classifying them in to different sectors according to the nature of their activities**

   a) All the producing enterprises are broadly classified into three **main sectors** namely: Primary sector, Secondary sector, and Tertiary sector or service sector
b) These sectors are further divided into sub-sectors and each sub-sector is further divided into commodity group or service-group.

**Step 2. Estimating the gross value added (GVA<sub>MP</sub>) by each producing enterprise**

\[
\text{Gross value added (GVA}_{\text{MP}}) = \text{Value of output} - \text{Intermediate consumption} = (\text{Sales} + \text{change in stock}) - \text{Intermediate consumption}
\]

**Step 3. Estimation of National income**

For each individual unit, net value added is found out.

\[
\sum (\text{GVA}_{\text{MP}}) - \text{Depreciation} = \text{Net value added (NVA}_{\text{MP}})
\]

a) Adding the net value-added by all the units in one sub-sector, we get the net value-added by the sub-sector.

b) By adding net value-added of all the sub-sectors of a sector, we get the value-added of that sector.

c) For the economy as a whole, we add the net products contributed by each sector to get NDP.

d) We subtract net indirect taxes and add net factor income from abroad to get national income.

\[
\text{Net value added (NVA}_{\text{MP}}) - \text{Net Indirect taxes} = \text{Net Domestic Product (NVA}_{\text{FC}})
\]

\[
\text{Net Domestic Product (NVA}_{\text{FC}}) + (\text{NFIA}) = \text{National Income (NNP}_{\text{FC}})
\]

The values of the following items are included:

i) Own account production of fixed assets by government, enterprises and households.

ii) Production for self-consumption, and

iii) Imputed rent of owner occupied houses.

**SIMILAR QUESTIONS**

1. Explain “Value Added method”
   A. Refer first four bullet points of “Value added” method side heading.

2. What are the steps involved in calculating “Value added method”?
   A. Refer the three steps explained as above.

3. Which values of items are to be included while calculating National income under value added method?
   A. Refer the last side heading.

**Q.No.7. Briefly explain Income Method in the calculation of National Income (B)**

**Income Method:**

Production is carried out by the combined effort of all factors of production. The factors are paid factor incomes for the services rendered.

Under Factor Income Method, also called Factor Payment Method or Distributed Share Method, national income is calculated by summation of factor incomes paid out by all production units within the domestic territory of a country as wages and salaries, rent, interest, and profit.

By definition, it includes factor payments to both residents and non-residents.

Thus, \(\text{NDP}_{\text{FC}}\) = Sum of factor incomes paid out by all production units within the domestic territory of a country.

\[
\text{NNP}_{\text{FC}} \text{ or National Income} = \text{Compensation of employees}
\]
The values of the following items are Included:

a) Only incomes earned by owners of primary factors of production (EX: Wages of labourers)

b) Labour income (wages and salaries, bonus, commission, employers' contribution to provident fund and compensations in kind.)

c) Non-labour income (EX: Dividends, undistributed profits of corporations before taxes, interest, rent, royalties and profits of unincorporated enterprises and of government enterprises.)

d) Mixed income includes all those incomes which are difficult to separate labour income from capital income (EX: agriculture, trade, transport etc. in underdeveloped countries including India)

The values of the following items are excluded:

a) Transfer incomes (EX: pensions of retired workers)

b) Income from the sale of second hand goods

c) Illegal Incomes

SIMILAR QUESTIONS

1. Which values of items are to be included while calculating National income under Income method?
   A. Refer “The values of the following items are Included”

2. Which values of items are to be excluded while calculating National income under Income method?
   A. Refer “The values of the following items are excluded”

Q.No.8. Briefly explain Expenditure method in the calculation of National Income. (B)

Expenditure Method

In the expenditure approach, also called Income Disposal Approach, national income is the aggregate final expenditure in an economy during an accounting year. In the expenditure approach to measuring GDP, we add up the value of the goods and services purchased by each type of final user mentioned below.

\[
\text{GDP}\text{_{MP}} = \text{Final consumption expenditure} + \text{Gross domestic capital formation} + \text{Net exports.}
\]

1. Final Consumption Expenditure:
   a) Private Final Consumption Expenditure (PFCE):

   To measure this, the volume of final sales of goods and services to consumer households and nonprofit institutions serving households acquired for consumption (not for use in production) are multiplied by market prices and then summation is done.

   It includes:
   i) Only expenditure on final goods and services produced in the accounting period.
   ii) The value of primary products (produced for own consumption by the households).
   iii) Payments for domestic services which one household renders to another,
   iv) The net expenditure on foreign financial assets or net foreign investment.
   v) Net foreign investment
It excludes:
   i) Land and residential buildings purchased or constructed by households

b) Government Final Consumption Expenditure:
   i) Since the collective services provided by the governments such as defence, education, health care etc. are not sold in the market, the only way they can be valued in money terms is by adding up the money spent by the government in the production of these services. This total expenditure is treated as consumption expenditure of the government.
   ii) Government expenditure on pensions, scholarships, unemployment allowance etc. should be excluded because these are transfer payments.

2. Gross Domestic Capital formation:
   Gross domestic fixed capital formation includes
   i) Final expenditure on machinery and equipment
   ii) Own account production of machinery and equipment,
   iii) Expenditure on construction (Land and residential buildings constructed by households),
   iv) Expenditure on changes in inventories,
   v) Expenditure on the acquisition of valuables such as, jewelry and works of art.

3. Net Exports:
   i) Net exports are the difference between exports and imports of a country during an accounting year.
   ii) It can be positive or negative.

   National income or NNP<sub>FC</sub> using expenditure method:

   \[
   \text{GDP}_{\text{MP}} = \text{Final consumption expenditure} + \text{Gross domestic capital formation} + \text{Net exports.}
   \]
   \[
   \text{GNP}_{\text{MP}} = \text{GDP}_{\text{MP}} + \text{NFIA}
   \]
   \[
   \text{GNP}_{\text{FC}} = \text{GNP}_{\text{MP}} - \text{Net indirect taxes}
   \]
   National income or NNP<sub>FC</sub> = GNP<sub>FC</sub> - Depreciation

SIMILAR QUESTIONS
1. Define Expenditure method and what are the topics included in calculation of national income under this method?
A. Refer introduction up to formula
2. Which values of items are to be included while calculating Private Final Consumption Expenditure
A. Refer point 1. a only “it includes”
3. Which values of items are to be excluded while calculating Private Final Consumption Expenditure
A. Refer point 1. a only “it excludes”
4. Which values of items are to be included and excluded while calculating Government Final Consumption Expenditure
A. Refer point 1.b
5. Which values of items are to be included while calculating Gross Domestic Capital formation
A. Refer point 2
Q.No.9. Define national income. Explain the usefulness and significance of national income estimates. (A)

National Income is defined as the net value of all economic goods and services produced within the domestic territory of a country in an accounting year plus the net factor income from abroad.

According to the Central Statistical Organisation (CSO) ‘National income is the sum total of factor incomes generated by the normal residents of a country in the form of wages, rent, interest and profit in an accounting year’.

Usefulness and significance of National Income estimates: National income accounts are fundamental aggregate statistics in macro-economic analysis and are extremely useful, especially for the emerging and transition economies.

1. NI accounts provide a comprehensive, conceptual and accounting framework for analyzing and evaluating the short-run performance of an economy.

2. The level of NI indicates the level of economic activity and economic development as well as aggregate demand for goods and services of a country.

3. The distribution pattern of NI determines the pattern of demand for goods and services and enables businesses to forecast the future demand for their products.

4. With the help of NI estimates the governments can fix various sector-specific development targets for different sectors of the economy and formulate suitable development plans and policies to increase growth rates.

5. NI statistics (quantitative basis) often influence popular and political judgments about the relative success of economic programs.

6. NI data along with financial and monetary data provide a guide to make policies for growth and inflation.

7. NI estimates are considered in economic forecasting and to make projections about the future development trends of the economy.

8. The magnitude and distribution of NI, size of per capita income and the growth of these overtime decides economic welfare.

9. NI estimates throw light on income distribution and the possible inequality in the distribution among different categories of income earners.

10. NI estimates are used in comparison of structural statistics, such as ratios of investment, taxes, or government expenditures to GDP.

11. The NI data are also useful to determine the share of nation’s contributions to various international bodies.

The estimates of national income show the composition and structure of national income in terms of different sectors of the economy, the periodical variations in them and the broad sectorial shifts in economy overtime. It is also possible to make temporal and spatial comparisons of the trend and speed of economic progress and development.

Q.NO.10. Mention the conceptual difficulties related to measurement of National Income which are difficult to resolve. (B)

There are many conceptual difficulties related to measurement which are difficult to resolve, such as:

a) lack of an agreed definition of national income,

b) Accurate distinction between final goods and intermediate goods,

c) Issue of transfer payments,
d) Services of durable goods,  
e) Difficulty of incorporating distribution of income  
f) Valuation of a new good at constant prices, and  
g) Valuation of government services

Q.No.11. What are the challenges of National Income computation? (B)

Challenges in the computation of national income related to:  
a) Inadequacy of data and lack of reliability of available data,  
b) Presence of non-monetised sector,  
c) Production for self-consumption,  
d) Absence of recording of incomes due to illiteracy and ignorance,  
e) Lack of proper occupational classification, and  
f) Accurate estimation of consumption of fixed capital.

QUESTIONS FOR ACADEMIC INTEREST – FOR STUDENT SELF STUDY

Q.No.12. Illustrate the circular flow of income and describe its relevance for measurement of national income

The Circular Flow of Income:
Circular flow of income refers to the continuous circulation of production, income generation and expenditure involving different sectors of the economy. There are three different interlinked phases in a circular flow of income, namely: production, distribution and disposition.

![Circular Flow Diagram]

i) In the production phase, firms produce goods and services with the help of factor services.  
ii) In the income or distribution phase, the flow of factor incomes in the form of rent, wages, interest and profits from firms to the households occurs.  
iii) In the expenditure or disposition phase, the income received by different factors of production is spent on consumption goods and services and investment goods. This expenditure leads to further production of goods and services and sustains the circular flow.  
iv) These processes of production, distribution and disposition keep going on simultaneously and enable us to look at national income from three different angles namely: as a flow of production or value added, as a flow of income and as a flow of expenditure.
Q.No.13. How does Personal Income differ from Disposable Personal Income? (B)

**Personal Income:**
It is a measure of actual current income receipts of persons from all sources which may or may not be earned from productive activities during a given period of time.

\[ PI = NI + \text{income received but not earned} - \text{Income earned but not received}. \]

**Disposable Personal Income (DPI):**
Disposable personal income is what is available for their consumption or savings and is derived from personal income by subtracting the direct taxes paid by individuals and other compulsory payments made to the government.

\[ DPI = PI - \text{Personal Income Taxes (or)} \]
\[ DPI = \text{Consumption + Savings} \]

Q.No.14. Distinguish between Nominal GDP and Real GDP (or) Draw the basis of distinction between GDP at current and constant prices (or) Distinguish between GDP current and constant prices. What purpose does Real GDP serve? (B)

<table>
<thead>
<tr>
<th>Nominal GDP</th>
<th>Real GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) GDP in terms of current market prices is termed as ‘Nominal GDP’ or ‘GDP at current prices’.</td>
<td>i) GDP in terms of constant prices of a chosen base year is termed as ‘real GDP’ or ‘GDP at constant prices’.</td>
</tr>
<tr>
<td>ii) Nominal GDP which is essentially a quantity measure is sensitive to changes in the average price level.</td>
<td>ii) Real GDP changes only when production changes.</td>
</tr>
<tr>
<td>iii) Nominal GDP rise without any real increase in physical output.</td>
<td>iii) The real GDP when available by industry of origin, give a measure of the structural changes in the pattern of production in the country is vital for economic analysis.</td>
</tr>
</tbody>
</table>

**Inference:**
If prices rise, GDP measured at market prices will also rise without any real increase in physical output. This is misleading because it does not reflect the changes in the actual volume of output. To correct this i.e. to eliminate the effect of prices, in addition to ‘Nominal GDP’, ‘Real GDP’ is introduced.

- When prices are changing drastically, nominal GDP and real GDP diverge substantially.
- The converse is true when prices are more or less constant.
- For example, the GDP of 2015-16 may be expressed either at prices of that year or at prices that prevailed in 2011-12. In the former case, GDP will be affected by price changes, but in the latter case GDP will change only when there has been a change in physical output.

Q.No.15. What is the difference between GDP and GNP. (B)

The two concepts GNP and GDP differ in their treatment of international transactions.

<table>
<thead>
<tr>
<th>GROSS NATIONAL PRODUCT</th>
<th>GROSS DOMESTIC PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) The term ‘national’ refers to normal residents of a country who may be within or outside the domestic territory</td>
<td>i) The term ‘domestic’ refers to the domestic territory of the country.</td>
</tr>
</tbody>
</table>
Q.No.16. Define ‘Economic bads’. Distinguish between production that makes us better off and production that only prevents us from becoming worse off with an example. (B)

GDP excludes transfer payments, financial transactions and non-reported output generated through illegal transactions such as narcotics and gambling. These are also known as ‘bads’ as opposed to goods which GDP accounts for.

Economic ‘bads’ for example: crime, pollution, traffic congestion etc. which make us worse off.

The distinction between production that makes us better off and production that only prevents us from becoming worse off.

E.g.1. Increased expenditure on police due to increase in crimes may increase GDP but these expenses only prevent us from becoming worse off. However, no reflection is made in national income of the negative impacts of higher crime rates.

E.g.2. Automobile accidents result in production of repairs, output of medical services, insurance, and legal services all of which are production included in GDP just as any other production.

TEST YOUR KNOWLEDGE

1. Which concept of national income is generally treated as national income?
2. Draw the basis of distinction between GDP current and constant prices
3. What is the difference between ‘national’ and ‘domestic’?
4. What is the difference between Market price and Factor cost?
5. How does Personal Income differ from Disposable Personal Income?
6. Differentiate between ‘taxes on production’ and ‘product taxes’
7. What is Value Added?
8. What is Gross Value Added?
9. What is Net Value Added?
10. If Net Factor Income from Abroad is negative then which concept will be greater? Either NDP or NNP.
11. Which term differentiates the terms ‘exports’ and ‘net exports’?
13. Distinguish between non-economic activities and economic activities.
14. Do all the three methods of national income computation will arrive at the same figure in Indian economy?
15. In India by whom the state level estimates of national income are prepared?
16. Give some examples to ‘Supra-regional sectors’ of Indian economy.
17. Give some examples to transfer payments?
18. How does the estimates of supra regional activities are compiled to the nation?
19. How does the estimates of supra regional activities are allocated to the states?
20. Do land and residential buildings purchased or constructed by households forms a part of PFCE? If not under which topic it must be included?
21. In which concepts of national income includes transfer payments?
22. In which concepts of national income excludes transfer payments?
23. When it is difficult to separate labour income from capital income which term should be used to find the income? Will it be included in national income? If so under which method
24. In India by whom will be the National Accounts Statistics (NAS) are compiled?
25. Usually which periodical estimates are published by NAS?
26. As per the mandate of the FRBM Act 2003, the Ministry of Finance uses which concept of national income to determine the fiscal targets?
27. What is the present revised base year according to MoPSI?
28. By January 2015, instead of at factor cost sector-wise estimates of Gross Value Added (GVA) will now be given at which concept?
29. In which method national income calculation both the raw materials and intermediary goods are included?
30. Give some examples of income received but not earned in terms of personal income.
31. Give some examples of income earned but not received in terms of personal income.
32. Write at least five formulae of NNP.
33. Compute National income.

<table>
<thead>
<tr>
<th>Consumption</th>
<th>750</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>250</td>
</tr>
<tr>
<td>Government Purchases</td>
<td>100</td>
</tr>
<tr>
<td>Exports</td>
<td>100</td>
</tr>
<tr>
<td>Imports</td>
<td>200</td>
</tr>
</tbody>
</table>

34. Calculate Gross Domestic Product at market Prices (GDP<sub>MP</sub>) and derive national income from the following data (in Crores of Rupees).

<table>
<thead>
<tr>
<th>Inventory Investment</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports</td>
<td>200</td>
</tr>
<tr>
<td>Indirect taxes</td>
<td>100</td>
</tr>
<tr>
<td>Net factor income from abroad</td>
<td>50</td>
</tr>
<tr>
<td>Personal consumption expenditure</td>
<td>3500</td>
</tr>
<tr>
<td>Gross residential construction investment</td>
<td>300</td>
</tr>
<tr>
<td>Depreciation</td>
<td>50</td>
</tr>
<tr>
<td>Imports</td>
<td>100</td>
</tr>
<tr>
<td>Government purchases of goods and services</td>
<td>1000</td>
</tr>
<tr>
<td>Gross public investment</td>
<td>200</td>
</tr>
<tr>
<td>Gross business fixed investment</td>
<td>300</td>
</tr>
</tbody>
</table>

35. Find GDP<sub>MP</sub> and GNP<sub>MP</sub> from the following data (in Crores of Rs.) using income method. Show that it is the same as that obtained by expenditure method.

<table>
<thead>
<tr>
<th>Personal Consumption</th>
<th>7,314</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation</td>
<td>800</td>
</tr>
</tbody>
</table>
### Table of National Income Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Value (Rs. in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>6,508</td>
</tr>
<tr>
<td>Indirect Business Taxes</td>
<td>1,000</td>
</tr>
<tr>
<td>Interest</td>
<td>1,060</td>
</tr>
<tr>
<td>Domestic Investment</td>
<td>1,482</td>
</tr>
<tr>
<td>Government Expenditures</td>
<td>2,196</td>
</tr>
<tr>
<td>Rental Income</td>
<td>34</td>
</tr>
<tr>
<td>Corporate Profits</td>
<td>682</td>
</tr>
<tr>
<td>Exports</td>
<td>1,346</td>
</tr>
<tr>
<td>Net Factor Income from Abroad</td>
<td>40</td>
</tr>
<tr>
<td>Mixed Income</td>
<td>806</td>
</tr>
<tr>
<td>Imports</td>
<td>1,408</td>
</tr>
</tbody>
</table>

### Question 36

From the following data calculate the Gross National Product at Market Price using Value Added method:

<table>
<thead>
<tr>
<th>Component</th>
<th>Value (Rs. in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of output in primary sector</td>
<td>500</td>
</tr>
<tr>
<td>Net factor income from abroad</td>
<td>-20</td>
</tr>
<tr>
<td>Value of output in tertiary sector</td>
<td>400</td>
</tr>
<tr>
<td>Intermediate consumption in secondary sector</td>
<td>300</td>
</tr>
<tr>
<td>Value of output in secondary sector</td>
<td>900</td>
</tr>
<tr>
<td>Government Transfer Payments</td>
<td>600</td>
</tr>
<tr>
<td>Intermediate consumption in tertiary sector</td>
<td>250</td>
</tr>
<tr>
<td>Intermediate consumption in primary sector</td>
<td>700</td>
</tr>
<tr>
<td>Value of output in secondary sector</td>
<td>900</td>
</tr>
<tr>
<td>Intermediate consumption in secondary sector</td>
<td>300</td>
</tr>
</tbody>
</table>