Chapter 9: National Income

Question: 1

Fill in the blank with appropriate alternatives given below

National income is the subject matter of _________ Economics.

Options

- Micro
- Macro
- Managerial
- Business

Solution

National income is the subject matter of **Macro** Economics.

Explanation:
Macroeconomics focuses on how income levels are determined in the economy. Also, it studies the causes behind fluctuations in the income levels and accordingly what strategies can be adopted to accelerate growth in national income. Thus, national income is the subject matter of macroeconomics.

Question: 2

Fill in the blank with appropriate alternatives given below

GDP $_{(FC)}$ = GDP $_{(MP)}$ **–** __________

Options

- factor cost
- indirect taxes
- depreciation
- subsidy

Solution

$GDP_{FC} = GDP_{MP}$ – **Net Indirect Taxes**

Explanation:

Market price (MP) includes indirect taxes levied by the government on different goods and services and subsidies. These should be deducted from it to get the actual factor price. In other words,when the Gross Domestic Product (GDP) is expressed in terms of factor cost, the impact of subsidies and indirect taxes is not taken into consideration. Thus,

GDP_{FC} = GDP_{MP}− Net Indirect Taxes
GDP_{FC} = GDP_{MP}− (Indirect Taxes − Subsidies)

Question: 3

Fill in the blank with appropriate alternatives given below

In India, the responsibility for the calculation of national income rests with _________.

Options

- World Bank
- International Monetary Fund
- Central Statistical Organization
- International Labour Organization

Solution

In India, the responsibility for the calculation of national income rests with **Central Statistical Organization**.

Explanation:
In year 1955, the responsibility of calculation of national income was given to the Central Statistical Organisation (CSO).

Question: 4

Fill in the blank with appropriate alternatives given below

National income is __________ concept.

Options

- stock
- final
- intermediate
- flow

Solution

National income is **flow** concept.

Explanation:
National income is a flow concept. This is because it refers to the flow of final goods and services in an economy.

Question: 5

Fill in the blank with appropriate alternatives given below

Paper purchased by a publisher is __________.

Options

- intermediate good
- final good
- consumer good
- service

Solution

Paper purchased by a publisher is **intermediate good**.

Explanation:
Intermediate goods are the goods which are used as a raw material in the production of final goods Accordingly, paper purchased by a publisher is an intermediate good. This is because the publisher would then further use the paper for the books he will publish.

Question: 6

Match the following groups:

Group A		**Group B**	
1)	Income method	a)	Personal income – direct taxes
2)	Unemployment allowance	b)	Money value of goods and services
3)	Disposable Income	c)	Factor cost method
4)	National Income	d)	Personal income subsidy
5)	$NNP_{(MP)}$	e)	Transfer payment
		f)	$GNP_{(MP)}$ - Depreciation
		g)	Output method
		h)	Transfer income

Solution

Group A		Group B	
1.	Income method	c)	Factor cost method
2.	Unemployment allowance	e)	Transfer payment
3.	Disposable Income	a)	Personal income – direct taxes
4.	National Income	g)	Output method
5.	$NNP_{(MP)}$	f)	$GNP_{(MP)}$ - Depreciation

The above table can be matched as follows:

Explanations:

1) Income method is also known as factor cost method as in this method, national income is estimated by aggregating all the factor incomes (in the form of wages, rent, interest and profits) paid to the owners of these factors of production (land, labour, capital and enterprise) within the domestic territory in an accounting year.

2) Transfer payments refer to those payments in exchange of which no factor services are employed. Unemployment allowance is a kind of transfer income since no services are rendered in return for this allowance.

3) Disposable income is that part of personal income that is actually available for consumption and saving by the households after paying personal direct taxes and other miscellaneous payments (such as fees and fines) to the government.

Thus, Disposable income = Personal income – direct taxes + subsidy

4) One of the methods to calculate national income is output method. The output approach measures the national income by estimating the contribution made by each of the producing units in the economy to the total production within the domestic territory during an accounting year.

5) Net (N) is the value that is obtained after deducting depreciation of that year from the gross (G) value. Thus, to arrive at an estimate of Net National Product at market price (NNP_{MP}), we need to deduct depreciation from the value of the Gross National Product at market price (GNP_{MP}).

That is, $NNP_{(MP)} = GNP_{(MP)}$ – depreciation

Question: 7

State whether the following statement is true or false.

National income is computed every year.

Options

- True
- False

Solution

National income is computed every year. - **True**

Explanation:
The above statement is true. National income is the net value of all the final goods and services produced by the normal residents of a country during an accounting year. It is calculated every year. The accounting period for calculating national income is from the 1st of April to the 31st of March of every year.

Question: 8

State whether the following statement is true or false.

Inclusion of value of intermediate goods leads to double counting.

Options

- True
- False

Solution

Inclusion of value of intermediate goods leads to double counting. - **True**

Explanation:
The above statement is correct. Inclusion of the value of intermediate goods leads to double counting as the value of intermediate goods is already reflected in the value of the final goods. Thus, if the value of intermediate goods is also included in the calculation of income, then it would mean that their value is included twice, first as their own value and second as a part of value of final goods. Thus, to avoid this problem only the value of final goods and services is included in the estimation of national income.

Question: 9

State whether the following statement is true or false.

GDP includes net income from abroad.

Options

- True

- False

Solution

GDP includes net income from abroad. - **False**

Explanation:
The above statement is incorrect. GDP is the value of all the goods and services produced during an accounting year within the domestic country. As GDP is limited to the domestic territory, it excludes the net factor income from abroad.

Question: 10

State whether the following statement is true or false.

Financial year in India is leap year.

Options

- True
- False

Solution

Financial year in India is leap year. - **False**

Explanation:
The above statement is incorrect. Leap year is a year containing 366 days and comes after every four years. Whereas, the financial year is from 1st April to 31st March of every year and contains either 365 or 366 days. Thus, it is not necessarily a leap year.

Question: 11

State whether the following statement is true or false.

Services of housewives are included in national income.

Options

- True
- False

Solution

Services of housewives are included in national income. - **False**

Explanation:
The above statement is incorrect. The services of the housewives are not

included in the national income. This is because it is difficult to estimate the market value of such services.

Question: 12

Define or explain the following concept:

Final goods

Solution

Final goods refer to those goods and services that are meant for final consumption by the consumers. In other words, such goods are ready for final use. This implies that they need not pass through any further stage of production i.e. no further transformation is required for these goods to make them consumable. Such goods have already crossed the boundary line of production.

Question: 13

Define or explain the following concept:

National income

Solution

National income is the total market value (in monetary terms) of all final goods and services produced by the firms during an accounting year. In other words, it can be defined as the aggregate of all factor incomes flowing from the firms to the households (i.e. by aggregating the rent, wages, interest and profit earned in the economy). There are three methods of measuring national income, namely: value-added/ product method, income method and expenditure method.

Question: 14

Define or explain the following concept:

Personal income

Solution

Personal Income refers to the total income actually received by an individual or household from all the sources i.e. factor incomes and current transfers.

Personal Income = Private Income – Corporate Savings – Corporate Tax

It excludes profits that the corporate retains and also excludes corporate taxes.

Question: 15

Define or explain the following concept:

Depreciation

Solution

Depreciation can be described as the reduction in the value of fixed assets in use due to factors such as normal wear and tear, passage of time, technological changes, deterioration due to natural forces such as rain, weather etc.

Question: 16

Give reason or explain the following statement:

Income from second hand sale of goods is excluded from national income.

Solution

Income from the second hand sale of goods is not included in the national income of that current accounting year. This is because the value of these goods was included in the national income in the accounting year in which they were produced. Thus, if the value of these goods is also included in the current year, it will lead to the problem of double counting of the value of such goods.

Question: 17

Give reason or explain the following statement:

National income at factor cost includes subsidy.

Solution

Factor costs are the actual payments made to the factors of production for rendering their service in the course of production. In case subsidy is provided for the same, its value must also be included to get the correct value of factor cost.

Question: 18

Give reason or explain the following statement:

National income estimates are accurate in India.

Solution

India uses a combination of the output method and the income method for the calculation of national income. Income method of calculating national income is very much accurate but the output method is not that reliable as it ignores some of the values or there are some services whose values cannot be measured in monetary terms. So, national income estimates in India are not exactly accurate but these estimations are very near to the exact value.

Question: 19

Give reason or explain the following statement:

Old age pension is transfer income.

Solution

Old age pension is a transfer income as no services are provided in return for them. The government provides such services for welfare purposes.

Question: 20

Give reason or explain the following statement:

Paid services are included in national income.

Solution

Paid services are those services for which the user of those services makes payment to the service provider. Since paid services can be measured in monetary terms, and they add to the total production of the country, they are included in the national income.

Question: 21

Distinguish between:
Gross national product and Gross domestic product

Solution

Basis	**Gross National Product(GNP)**	**Gross Domestic Product(GDP)**
1. Definition	GNP takes into account all the goods and services produced by the normal residents of a country both within the domestic territory as well as outside the country.	GDP refers to the market value of all the final goods and services produced within the domestic country during an accounting year inclusive of depreciation.
2. Net factor Income from abroad	It includes the net factor income from abroad.	It excludes the net factor income from abroad.
3. Formula	GDP = Consumption + Investment + Government expenditure + (exports	GNP = GDP + (R − P) R = Net income inflow from assets abroad P = (Net payment outflow to foreign assets).

Question: 22

Distinguish between:
Net national product and Net domestic product.

Solution

Basis	**Net National Product (NNP)**	**Net Domestic Product (NDP)**
1. Definition	Net National Product refers to the value of all the final goods and services produced by the normal residents of a country both within the domestic territory as well as outside the country.	Net Domestic Product refers to the total market value of all the final goods and services produced within the domestic territory by normal residents as well as non-residents.
2. Net factor Income from abroad	It includes the net factor income from abroad.	It excludes the net factor income from abroad.

Question: 23

Distinguish between:
Output method of measuring national income and Income method of measuring national income.

Solution

Basis	**Output method**	**Income method**
1. Definition	This method measures the national income by estimating the contribution made by each of the producing units in the economy to the total production within the domestic territory during an accounting year.	This method measures the national income by aggregating all the factor incomes (in the form of wages, rent, interest and profits) paid to the owners of the factors of production (land, labour, capital and enterprise) within the domestic territory in an accounting year.
2. Result	It gives the gross domestic product at market price (GDP_{MP}).	It gives the net domestic product at factor cost (NDP_{FC}).
3. Accuracy	It is the least accurate.	It is the most accurate.
4. Users	This method is used by	This method is used by developed

	underdeveloped and developing countries.	countries.

Question: 24

Distinguish between:
Gross National Product and Net National Product

Solution

Basis	**Gross national product**	**Net national product**
1. Definition	GNP takes into account all the goods and services produced by the normal residents of a country both within the domestic territory as well as outside the country.	NNP refers to the value of all the final goods and services produced by the normal residents of a country both within the domestic territory as well as outside the country.
2. Depreciation	It includes depreciation.	It excludes depreciation.
3. Treatment as national income	GNP cannot be treated as national income.	NNP is treated as national income only at factor cost.

Question: 25

Distinguish between:
National income at market prices and national income at factor cost

Solution

Basis	**National income at market price (NNP_{MP})**	**National income at factor cost (NNP_{FC})**
1. Definition	It refers to the total market value of all the final goods and services produced by the normal residents of a country both within the domestic territory as well as outside the country.	It refers to the aggregate of all factor incomes earned by those factors of production that are normal residents of a country both within the domestic territory as well as abroad.
2. Indirect taxes and subsidies	It takes into account the impact of indirect taxes and subsidies.	It does not take into consideration the impact of subsidies and indirect taxes.

Question: 26

Write short note on:

Value added approach

Solution

The value added approach measures the national income by estimating the contribution made by each of the producing units in the economy based on the total production within the domestic territory during an accounting year. The gross value added by all the producing units in the domestic territory during an accounting year is called Gross Domestic Product at market prices (GDP_{MP}).

Question: 27

Write short note on:

Expenditure method of measuring national income.

Solution

According to the expenditure method, national income is measured in terms of the total expenditure on final goods and services produced in an economy during an accounting year. The expenditure on the final goods and services can be broadly classified into the following four categories:
1. Private final consumption expenditure
2. Government final consumption expenditure
3. Investment expenditure
4. Net exports

The aggregate of expenditure incurred on domestically produced goods and services during an accounting year gives an estimate of GDP_{MP}.

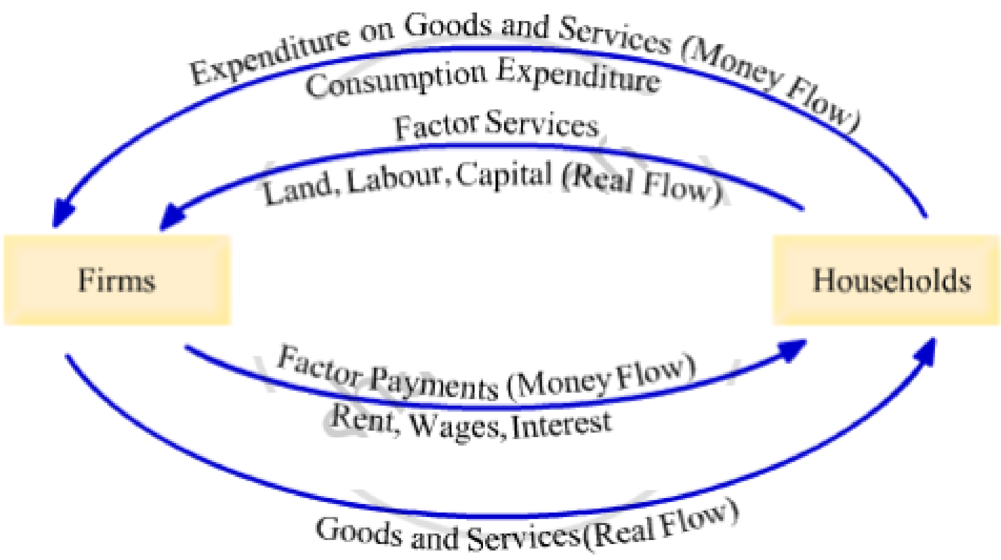
Question: 28

Write short note on:

Circular flow of national income

Solution

There is a continuous flow of expenditure and income and that of goods and services in an economy. For example, households receive income from the firms. They, in turn, spend this income on the goods and services produced by the firms. Thus, the expenditure of the households becomes the income of the firms. Such a continuous flow of income and expenditure or the flow of goods and services among different sectors of the economy is called the circular flow of national income.



Question: 29

Write short note on:

Personal disposable income

Solution

Personal disposable income refers to that part of personal income that is actually available to households for consumption or for saving. Similar to the firms, the individuals also pay taxes and other payments (such as fees and fines) to the government. Such payments are deducted from the personal income to arrive at an estimate of the personal disposable income. This is because such payments are not available to the individuals for consumption or saving.

Personal Disposable Income = Personal Income – Direct Personal Taxes – Miscellaneous Receipts of the Government (fees and fines)

Question: 30

Write short note on:

Net national product at factor cost

Solution

Net National Product at Factor Cost or National Income (NNP_{FC}) refers to the aggregate of all factor incomes earned by the factors of production (normal residents of a country both within the domestic territory as well as abroad).

Question: 31

Answer the following question:

What is double counting of national income?

Solution

One of the major problems involved in the estimation of national income by the value added method is the problem of double counting. Double counting refers to a situation where the value of a good is taken into account (counted) more than once. This is particularly so for intermediate goods. Such a problem occurs because, for every producer, the commodity he sells is the final commodity. Thus, if the value of the intermediate good is taken into account every single time, it leads to its estimation more than once, one when it was produced and second as a part of final good. This leads to overestimation of the value of final good.

Question: 32

Answer the following question:

What are the features of national income?

Solution

National income is the sum of the values of all the final goods and services produced during an accounting period by the normal residents of a country. It can be calculated by three different methods, namely:
a) Output method
b) Income method
c) Expenditure method

Some of the important features of national income are as follows: -

i. Macroeconomic concept: Macroeconomics studies how an economy operates as a whole and focuses on the aggregate measures. Since national income is an aggregate term, it can be regarded as a macroeconomic concept.

ii. Flow concept: National income is measured over (during) a period of time. In other words, it can be said that the national income has an element of time attached to it. Thus, it is a flow concept.

iii. Money valuation of goods: Since national income is the total market value of all the final goods and services in terms of money produced within the domestic territory during an accounting year, it can be concluded that national income is the money valuation of goods.

iv. Includes the value of final goods and services: National income includes only the value of final goods. The value of intermediate goods is not included in the estimation of national income. This is to avoid the problem of double counting.

v. Net aggregate value: National income is the net aggregate value. In the sense, it includes goods and services produced by the firms during an accounting year. It does not include depreciation or consumption of the fixed capital.

vi. Inclusion of Net factor Income from Abroad (NFIA): National income includes the net factor income from abroad. That is, it includes the net export value and net receipts.

Question: 33

Answer the following question:

Explain the concept of Gross domestic product at market prices.

Solution

Gross Domestic Product at Market Prices (GDP_{MP}) refers to the market value of all the final goods and services produced within the domestic country during an accounting year inclusive of depreciation. It is a gross concept as depreciation is not taken into account in its estimation. Also, GDP is limited to the domestic territory and excludes the Net Factor Income from Abroad (NFIA).

Question: 34

Answer the following question:

State the precautions while using expenditure method to measure national income.

Solution

Precautions regarding calculation of national income by the expenditure method are:

i. National income estimation should include only the final goods and services. Intermediate consumption expenditure should not be included.

ii. Expenditure on the purchase of second hand goods should not be included in the national income estimation of the current accounting year. This is because it has already been included in the national income of the accounting year in which these goods were originally purchased.

iii. Expenditure on shares and bonds is not included. This is because these shares and bonds are mere financial assets and do not reflect any production activity of the goods or services.

iv. Imputed value of the goods and services produced for self consumption are included.

v. Expenditure on transfer payments by the government should not be included. This is because such payments are not related to any production activity in an economy.

vi. The value of subsidies should be included.

Question: 35

Answer the following question:

Explain the income method of measuring national income.

Solution

According to the income method, national income is estimated by aggregating all the factor incomes (in the form of wages, rent, interest and profits) paid to the owners of these factors of production (land, labour, capital and enterprise) within the domestic territory in an accounting year.

That is,
NNP_{FC} or National Income (NI) = Compensation of employees (COE) + Operating surplus + Mixed income +Net Factor Income from Abroad (NFIA)

Where:
Compensation of Employees (COE) includes
a. Wages and salaries paid in cash.
b. Compensation paid in kind
c. Employer's contribution to the social security schemes such as pension fund, provident fund etc.

Operating surplus includes rent, interest, royalty and profit.

Question: 36

State with reason whether you agree or disagree with the following statement:

There are many conceptual or theoretical difficulties in the measurement of national income.

Solution

Yes, I agree with the above statement. There are many conceptual or theoretical difficulties in the measurement of national income. The following are the theoretical difficulties in the measurement of national income:

i. Transfer earnings: There is a problem regarding the inclusion of transfer earnings such as old age pensions, unemployment allowance etc in the national income. On one hand, these earnings form a part of the individual income and are also the expenditure of the government. On the other, these earnings are not related to any production activity in an economy.

ii. Income from illegal activities: National income is underestimated if income from illegal activities such as theft, gambling etc. is not included in the estimation of national income. Such services also command a value and satisfy consumer needs.

iii. Production for self consumption: At times, the producer/ firm keeps a certain portion of the output for self consumption. Such a portion of production that is retained for self consumption should also be included in the estimation of the national income. But it is very difficult to ascertain the value of these goods, as these goods do not enter the market.

iv. Unpaid services: Some of the services, like services of housewives, mercy, etc., cannot be measured in monetary terms. For the same reason, these are not included in national income. But these services very much affect the productivity of the country, thus posing theoretical difficulties.

v. Income earned by foreign firms: There is a problem regarding the inclusion of the income earned by foreign firms in the national income. For instance, an MNC operates in different countries of the world. It affects the GDP of all those countries in which it is present. So its production is included in the GDP of the respective countries. But any profit earned by that country is credited to the parent country.

Question: 37

State with reason whether you agree or disagree with the following statement:

Many precautions are to be taken while estimating national income by income method.

Solution

Yes,we agree with the given statement that many precautions are to be taken while estimating national income by the income method. Precautions regarding the calculation of national Income by the income method are:

i. Transfer earnings, such as old age pensions, unemployment allowances etc. are excluded from the estimation of the national income. While estimating the national income, only earned income is included and unearned income in the form of transfer earnings is excluded.

ii. Income from illegal activities such as theft, gambling etc. should not be included in the estimation of national income.

iii. Income from the sale and purchase of second hand goods is not included in the national income. However, commission/ brokerage paid on the sale and purchase of second hand goods should be included in the national income estimation.

iv. Similarly, commission/ brokerage paid on the sale and purchase of shares and bonds should also be included in the national income.

v. Windfall gains such as lotteries and capital gains are unearned income and thus, are not included in the estimation of the national income.

vi. If profit as a whole is included in the national income estimation, any of the individual components of profits should not be included separately. Similarly, if the compensation of employees as a whole is included, any of the individual components of the compensation of employees should not be included separately.

vii. Duties such as gift tax, death duties, wealth tax etc. should not be included in the national income estimation in the current accounting year. This is because such duties are paid out of the tax payer's past savings or wealth and hence, should not be included in the national income estimation in the current accounting year.

Question: 38

State with reason whether you agree or disagree with the following statement:

Gross National product and Gross Domestic product are same concepts.

Solution

No, I disagree with the statement given above. Gross National Product (GNP) and Gross Domestic Product (GDP) are two different concepts. GNP is the money value of all the final goods and services produced by the normal residents of a country both within the domestic territory as well as outside of the country during an accounting year. It includes all the factor incomes from abroad and excludes all the factor payments made abroad.

On the other hand, GDP is the money value of all the final goods and services produced within the geographical boundaries of a country during an accounting year. As GDP is limited to the domestic territory, it does not consider factor incomes from abroad or factor payments made abroad.
Thus, to conclude the basis of difference between GDP and GNP is that while the former does not include net factor income from abroad, the latter includes this component.

GNP = GDP + NFIA

Question: 39

State with reason whether you agree or disagree with the following statement:

The money value of intermediate goods is not included in the estimation of national income.

Solution

We agree with the above statement. Only the value of final goods and services are included in the estimation of national income and the value of intermediate goods is not included in the national income. This is because the value of intermediate goods is already reflected in the value of the final goods. Thus, if the value of these goods is also included in the current year, it will lead to the problem of double counting of the value of those goods.

Question: 40

Answer in detail:
Explain the practical or Statistical difficulties involved in the estimation of national income.

Solution

There are three methods of measuring national income. But all these measures have several difficulties in giving the exact value of national income. There are many activities which create confusion in the mind of the estimators whether to include that activity in the national income.

Following are the practical or statistical difficulties in the measurement of national income:

i. Problem related to double counting: One of the major problems involved in the estimation of national income by the value added method is the problem of double counting. Double counting refers to a situation where the value of a good is taken into account (counted) more than once. Such a problem occurs because, for every producer, the commodity he sells is the final commodity. Thus, if the value of the good is taken into account every single time, it leads to the estimating of the value of the product more than once.

ii. Estimation regarding depreciation: During the process of production, along with the raw materials and inputs, various fixed assets such as machinery, tools etc. are also used. However, during the course of production the fixed assets undergo wear and tear. This wear and tear reduces the value of the fixed assets of business entities. Since depreciation is based on various assumptions, and is subjective in nature, it is difficult for an individual to correctly assess the deduction to be made for depreciation.

iii. Self consumption: At times, the producer or firm keeps a certain portion of the output for self consumption. Such a portion of production that is retained for self consumption should be included in the estimation of national income, but it is difficult to calculate such consumption and production.

iv. Data issues: There is a problem in the estimation of national income as the data is inadequate and unreliable. The following are the kinds of data that are not available:

a) In India, the production and cost data are not available.
b) The data on unearned income such as old age pensions, unemployment allowances etc are not available.
c) Data related to expenditure on consumption and investment by rural and urban households is not obtainable.

v. Windfall gains and capital gains: Windfall gains such as lotteries and capital gains are unearned income and are not included in the estimation of the national income. However, these activities very much add to the national product.

vi. Estimation of inventories: Inventory investment basically refers to the total value of the change in the stock during an accounting year. Since inventories, in the form of inventory investment, form a part of the gross national product, it is necessary to carefully estimate the value of inventories to get the correct estimation of national income.

Question: 41

Answer in detail:
Explain the Output method of measuring National income.

Solution

Output Method: This method measures the national income either, by taking the market value of final goods and services produced in an economy during an accounting year, or by estimating the contribution made by each of the producing units in the economy to the total production within the domestic territory during an accounting year. There are two methods of measuring national income by the output method.

i. The final goods method: This method measures the national income by taking the market value of final goods and services produced in an economy during an accounting year.
ii. The value added method: The value added method measures the national income by estimating the contribution made by each of the producing units in the economy to the total production within the domestic territory during an accounting year.

This can be understood by the following example:

Production stages	**Value of input**	**Value of output**	**Value added**
Milk(farmer)	0	400	400
Cheese(dairy)	400	800	400

Sweets(shopkeeper)	800	1200	400
Total value	1200	2400	1200

Here, we have assumed that there is only one final product (sweets) and there are three stages of production i.e. there is milk, cheese and sweets. Also, it is assumed that milk is the only input in the production of cheese and cheese is the only input in the production of sweets.

As the final value of sweets produced is Rs 1200, national Income is Rs 1200.The value added at every stage can also be summed up to get national income. Value added (value of output- value of input) by the farmer is Rs 400 (400 − 0). Value added by the dairy is Rs 400 (800−400). Value added by the shopkeeper is Rs 400(1200 − 800). Sum of all the values added also gives Rs 1200(400 + 400 + 400).

Thus, national income as per the above example is Rs 1200.

Question: 42

Answer in detail:
Explain the 'Final Good Approach' to avoid double counting of goods and services in the estimation of national income.

Solution

The final goods approach: Final goods refer to those goods and services that are meant for final consumption by the consumers. For example, a packet of cotton balls at a retail shop is a final good. Such cotton is ready to be used by the consumers for various purposes without any requirement of further value addition. Similarly, a car at a showroom is a final good, ready to be driven out on the roads. Intermediate goods refer to those goods that are not readily consumed for final consumption by the consumers.

These goods are used only as inputs/ raw materials in the production process. According to this method, national income is estimated by taking the market value of the final goods and services produced in an economy during an accounting year and ignoring the value of intermediate goods.

This can be understood by the following example:

Production stages	**Value of input**	**Value of output**	**Value added**
Milk(farmer)	0	400	400
Cheese(dairy)	400	800	400
Sweets(shopkeeper)	800	1200	400
Total value	1200	2400	1200

Here, we have assumed that there is only one final product (sweets) and there are three stages of production i.e. there is milk, cheese and sweets. Milk is the only input in the production of cheese and cheese is the only input in the production of sweets.

Now, the final value of sweets produced is Rs 1200. So, the national income is Rs 1200.

If we would have summed the value of output at each stage, the total value of output at each stage would have been Rs 2400. The value of cheese (800) includes the value of milk (400), as well which has already been included at the farmer's level. Similarly, the value of sweets (1200) includes the value of cheese (800), which too has been taken care of at the dairy level.

Thus, estimating the value of output at each level counts the value of a commodity twice or double times. So, the value of national income is Rs 1200.