INTRODUCTORY MACROECONOMICS

CLASS-XII

LATEST 2026 CBSE SAMPLE PAPERS

Detailed Explanation of each concept as per CBSE Syllabus

200+ Practice Questions (from CBSE and KVS Sample Question Papers)

Cheat Sheet or Chapter Summary for Last Minute Revision

Contents

CHAPTER

1

National Income

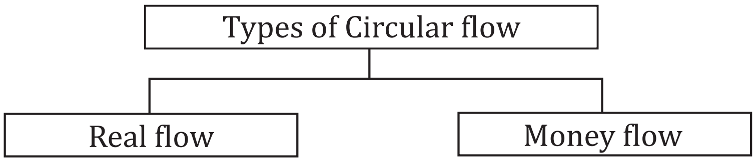
TOPICS TO BE COVERED

- Difference between Micro and Macro Economics
- Difference between Transfer Income and Factor Income
- Concept of Domestic Territory
- Resident (Normal Resident)
- Relation between National Income and Domestic Income
- Circular flow of Income under Two-sector Economy
- Distinguish between Stock and Flow
- Types of Goods
- Methods of Calculating National Income
- National Income Aggregates
- Gross Domestic Product (GDP)

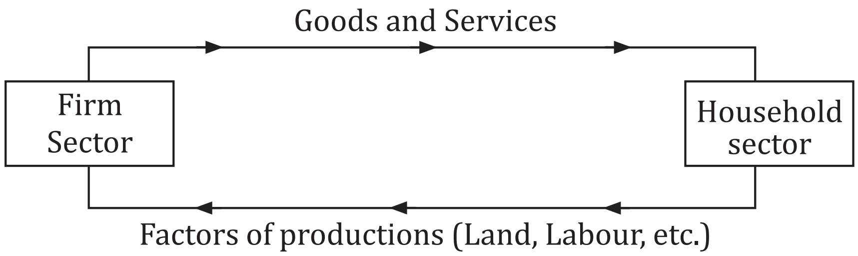
DIFFERENCE BETWEEN MICRO AND MACRO ECONOMICS

S. No.	Micro Economics	Macro Economics
1.	It is the study of the individual economic units of an economy.	It is the study of the economy as a whole and its aggregates.
2.	It deals with individual income, individual prices & Individual output etc.	It deals with national income, general price, and national output etc.
3.	Its central problem is price determination and allocation of resources.	Its central problem is the determination of National income.
4.	Its main roots are demand and supply of particular commodities/factors.	Its main roots are aggregate demand and aggregate supply of the economy as a whole.
5.	It discusses how equilibrium of a consumer or of a producer or of an industry is attained.	It is concerned with determination of equilibrium level of income and employment.

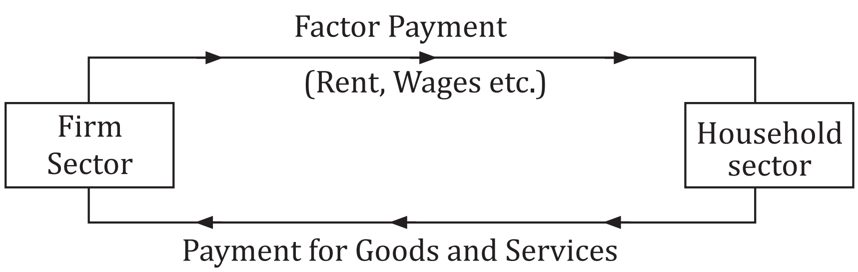
Further, the firm sector gives goods and services to household sector and in return Household sector gives payment for goods & services to firm sector.



Real flow: It refers to the flow of non-inventory transactions in an economy. It is also known as physical flow.



Money flow: It refers to the flow of monetary transactions in an economy. It is also known as nominal flow:



DISTINGUISH BETWEEN STOCK AND FLOW

	Stock Variable	Flow Variable
Meaning	These are those variables whose quantity can be calculated at a particular point of time.	These are those variables whose quantity can be calculated over a period of time
Nature	They are static in nature	They are dynamic in nature
Time dimension	They do not have time dimension	They have a time dimension.
Examples	Balance sheet, wealth, National capital, Money supply, Opening stock, Closing stock etc.	Capital formation, profit loss, change in money supply, change in stock etc.

TYPES OF GOODS

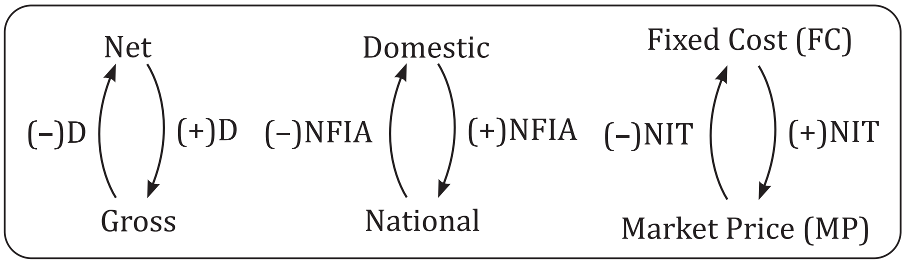
Types of Goods

- On the Basis of Nature
  - Final Goods
    - Used by Ultimate User
      - Consumer
      - Producer
      - Government
    - No Further transformation
    - No Resale in the Same Year
    - No Value addition
    - It will be included while estimating National Income
  - Intermediate Goods
    - Used as Raw Material
    - Remain Inside Production boundary
    - Further transformation will take place
    - Value addition will be there
    - Will be resale in the same year
    - Will not be included while estimating National Income
- On the Basis of User
  - Consumption Goods
    - Goods used by consumer for direct consumption.
    - Semi durable Goods. [1-2 year] Ex:- cloth, shoes, crockery, etc.
    - Durable Goods [5 years and more] Ex: AC, Cars, Fridge, etc.
    - Single used goods. Ex:- bread, milk
    - Services Doctor, lawyer, CA, etc.
  - Producer Goods
    - Goods used by producer for production purpose
      - Capital Goods
        - Plant
        - Machinery
        - Building
      - Single use Producer Goods
        - Raw Material

Note: (i) The Goods are Final or intermediate is depend upon its end use and user and (ii) All capital goods are producer goods but all producer goods are not capital goods.

❑ **Conversation Formulas:**

1. $NNP_{MP} = GNP_{MP}$ – Depreciation
2. $NDP_{MP} = GDP_{MP}$ – Depreciation
3. $NDP_{FC} = NDP_{MP}$ – Net indirect taxes (Indirect tax – subsidies)
4. $GDP_{FC} = NDP_{FC}$ + Depreciation
5. $NNP_{FC} = NDP_{FC}$ + Net factor income from abroad.
6. (NNP_{FC} is the sum total of factor income earned by normal residents of a country during the accounting year)
7. $NNP_{FC} = GDP_{MP}$ – depreciation + Net factor income from abroad – Net indirect taxes.

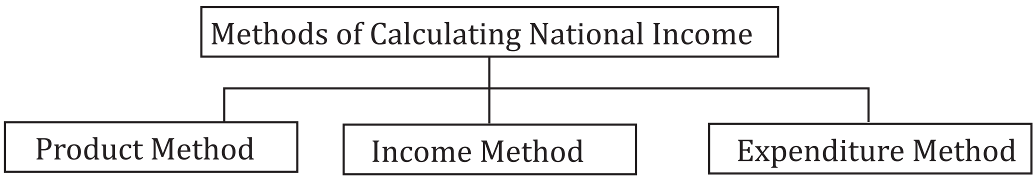


D → Depreciation/Consumption of fixed Asset

NFIA → Net factor income from abroad (Factor Income from Abroad - Factor Income to Abroad)

NIT → Net Indirect Taxes

METHODS OF CALCULATING NATIONAL INCOME



1. **Product Method (Value Added Method)**
   (i) Sales + Change in Stock = Value of Output
   (ii) Change in stock = Closing stock – Opening Stock
   (iii) Value of Output – Intermediate Consumption = GDP_{MP}/GVA_{MP}
   (iv) NNP_{FC} (National Income) = GDP_{MP} – Consumption of fixed capital (depreciation) + Net factor income from abroad – Net indirect tax

   The Main Steps Involved in Measuring National Income through Product Method:
   A. Classify the producing units into industrial sectors like primary, secondary and tertiary sectors.
   B. Estimate the net value added at the factor cost.
   C. Estimate the value of output by sales + change in stock.
   D. Estimate gross value added by value of output – intermediate cost.
   E. Deduct depreciation and net indirect tax from gross value added at market price to arrive at net value added at factor cost = NDP_{FC}.
   F. Add net factor income received from abroad to NDP_{FC} to obtain NNP_{FC} which is national income.

Illustration-1: From the following data, calculate Gross National Product at Market Price:

S. No.	Particulars	₹ in crores
1.	Sales	300
2.	Opening stock	40
3.	Depreciation	30
4.	Intermediate consumption	120
5.	Exports	50
6.	Change in stock	20
7.	Net indirect taxes	15
8.	Factor income to abroad	10

Using Output Method:
Value of output = Sales + change in stock
= ₹300 + ₹20 = ₹320 crores
GDP_{MP} = Value of output – Intermediate consumption
= ₹320 – ₹120 = ₹200 crores
GNP_{MP} = GDP_{MP} + Net factor income from abroad (assuming Factor Income from Abroad equals to zero)
= ₹200 – ₹10 crores = ₹190 crores
Illustration-2: Calculate 'value of output' from the following data:

S. No.	Particulars	₹ in crores
1.	Subsidy	10
2.	Intermediate consumption	150
3.	Net addition to stocks	(–)113
4.	Depreciation	30
5.	Goods and Services Tax	20
6.	Net value added at factor cost	250

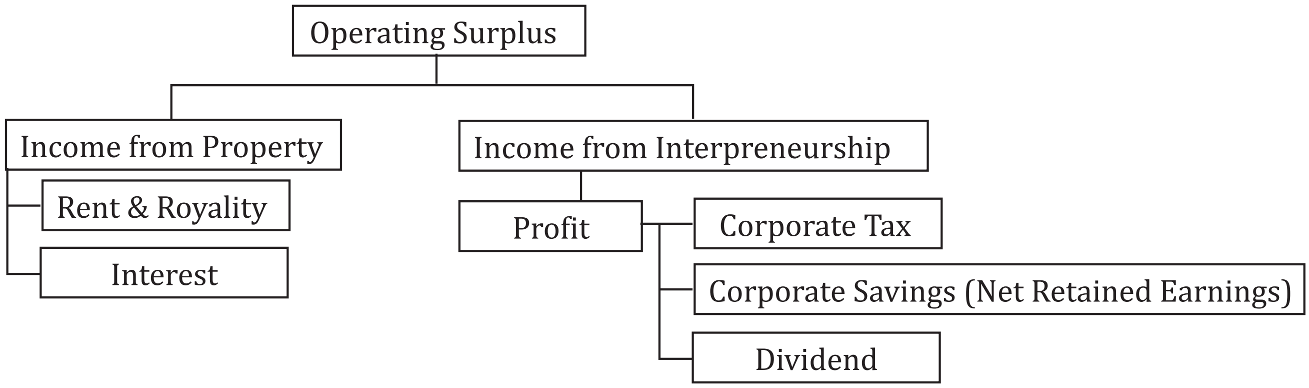
Value of output = NVA at FC + Depreciation + NIT + Intermediate consumption
= 250 + 30 + 10 + 150 = 440
Hence, the required answer is Rs. 440 crores.
Illustration-3: Calculate value of output and gross value added at market price

S. No.	Particulars	₹ in crores
1.	Opening stock	1,000
2.	Closing stock	800
3.	Purchase of raw materials	200
4.	Sales	10,000
5.	Indirect taxes	250
6.	Subsidies	50

Value of output = Sales + Change in stock (Closing stock – Opening stock)
= ₹[10,000 +(800 - 1,000)]crores
= ₹9,800 crores
GVA at MP = Value of output – Intermediate consumption (Purchase of raw materials)
= ₹[9,800 – 200] crores
= ₹9,600 crores
Illustration-4: Calculate the value of 'Sales' from the following data:

S. No.	Particulars	₹ in crores
1.	Net Value Added at Factor Cost	800
2.	Subsidies	40
3.	Change in Stock	(–)70
4.	Sales	?
5.	Intermediate Consumption	450
6.	Consumption of Fixed Capital	40

(b) Operating Surplus:



(c) Mixed Income of Self-Employed (MISE): "Mixed income" in the context of self-employed individuals typically refers to earnings that come from a combination of different sources or activities. Self-employed individuals often engage in various business activities, and their income may come from a mixed source.

- NDP_{FC} = (a) + (b) + (c) = Compensation of Employees + Operating surplus + Mixed Income of Self Employed
- NNP_{FC} (National Income) = NDP_{FC} (Domestic Income) + Net factor income from abroad

Steps Involved in Calculation of National Income through Income Method:

A. Classify the producing enterprises into industrial sectors like primary, secondary and tertiary.

B. Estimate the following factor income paid out by the producing units in each sector
- Compensation of employees
- Operating surplus
- Mixed income of self-employed

C. Take the sum of the factor income by all the sectors to arrive at the NDP_{FC} (which is called domestic income)

D. Add net factor income from abroad to the net domestic product at factor cost to arrive at the net national product at factor cost.

Illustration-1: Calculate value of "Interest" from the following data:

S. No.	Particulars	₹ in crores
1.	Indirect Tax	1,500
2.	Subsidies	700
3.	Profits	1,100
4.	Consumption of fixed capital	700
5.	Gross Domestic Product at Market Price	17,500
6.	Compensation of Employees	9,300
7.	Interest	?
8.	Mixed Income of Self-Employed	3,500
9.	Rent	800

(ii) Using Income Method:

NDP_{FC} = Compensation of employees + operating surplus + Mixed income from self employed

= ₹2,544 + ₹108 + ₹168 + ₹156 + ₹252 + ₹192 + ₹228 + ₹372 = ₹4,020 crores

NNP_{FC} = NDP_{FC} + Net factor Income from abroad

= ₹4,020 + ₹15 = ₹4,035 crores

GNP_{FC} = NNP_{FC} + Depreciation

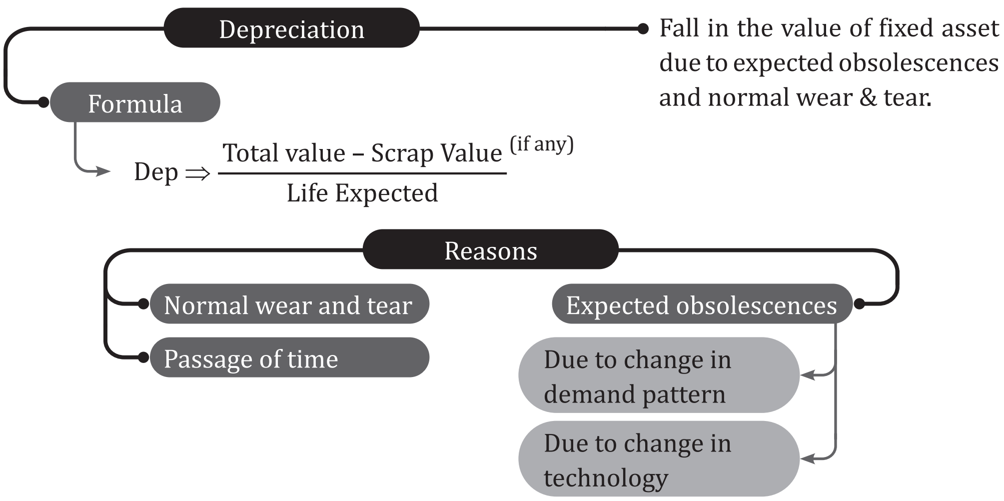
= ₹4,035 + ₹324 = ₹4,359 crores

GNP_{MP} = GNP_{FC} + Net indirect taxes

= ₹4,359 + ₹216 = ₹4,575 crores

NATIONAL INCOME AGGREGATES

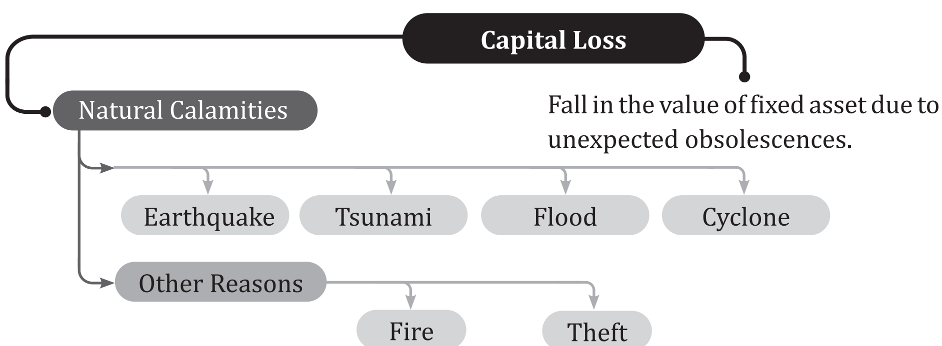
DEPRECIATION



Other Names of Depreciation

- Current replacement cost
- Replacement investment
- Consumption of Fixed Capital

CAPITAL LOSS

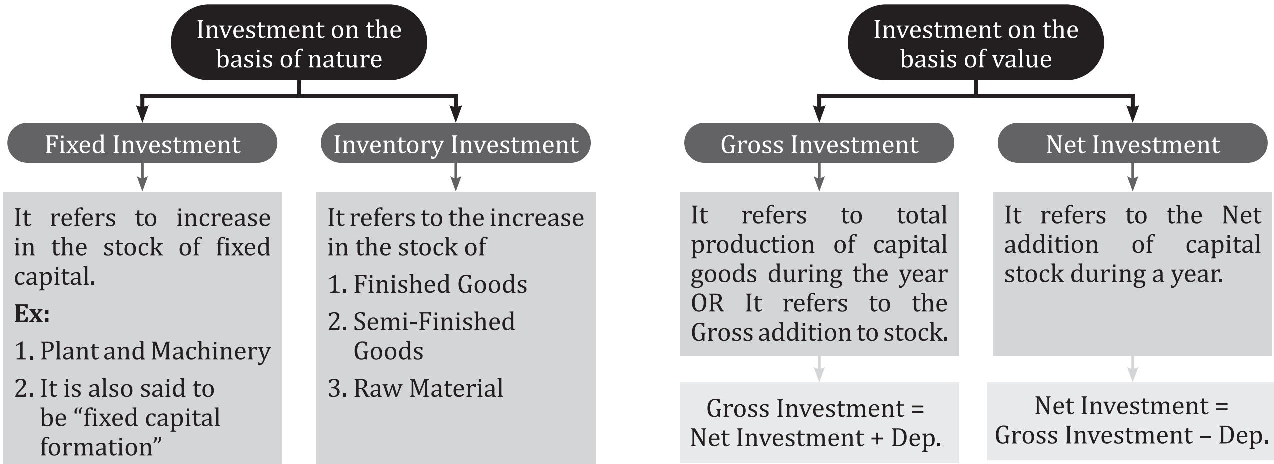


Note:

1. Due to the expected obsolescences the production process do not stop.
2. But due to unexpected obsolecences the production capacity may decrease or it may stop the production process.

INVESTMENT

1. It is an Expenditure.
2. It refers to the process of capital formation or a process that increase the stock of capital.



- **Net Factor Income from Abroad:** Difference between the factor incomes earned by our residents from abroad and factor income earned by non-residents within our country.

  Components of Net Factor Income from Abroad:
  1. Net compensation of employees
  2. Net income from property and entrepreneurship (other than retained earnings of resident companies of abroad)
  3. Net retained earnings of residents companies abroad.

GROSS DOMESTIC PRODUCT (GDP)

It may be defined as the money value of all goods and services produced within the domestic boundary of an economy during a period of time.

- **Limitations of GDP:** The GDP is an index of the welfare of the people in the economy. But it is not an adequate measure of the welfare because of following limitations:
  - **(a) Externalities:** GDP does not account for externalities, which are the unintended side effects of economic activities that affect third parties. Positive externalities (benefits to society) and negative externalities (costs imposed on society) are not reflected in GDP. For example, environmental pollution or the positive impact of education on societal well-being is not directly captured.
  - **(b) Distribution of GDP or Inequality:** GDP provides an aggregate measure of economic output but does not reveal how income is distributed among the population. High GDP does not necessarily imply equitable distribution of wealth. A country may have a high GDP but still experience significant income inequality, which can have implications for social welfare.
  - **(c) Composition of GDP:** GDP aggregates different economic activities without considering their nature or contribution to well-being. It treats all economic activities equally. For instance, GDP does not distinguish between spending on healthcare and spending on arms, even though the healthcare contributes more directly to well-being.
  - **(d) Non-Monetary Transactions:** GDP primarily focuses on monetary transactions and excludes non-market activities, such as household work and volunteer activities. This exclusion may lead to an incomplete picture of economic and social contributions made by individuals and communities.

MULTIPLE CHOICE QUESTIONS

1. For a closed economy (with no foreign trade), which one of the following is correct? **(CBSE SQP 2023-24)**

(*a*) GDP = GNP (*b*) GDP > GNP

(*c*) GDP < GNP (*d*) GDP + GNP = 0

2. The scenario which would lead to an increase in GDP, but might not necessarily improve overall welfare? **(CBSE SQP 2023-24)**

(*a*) Reduction in income inequality

(*b*) Rapid growth of the financial sector

(*c*) Expansion of environmentally harmful industries

(*d*) Increased government investment in education and healthcare

3. Which of the following method can be used to calculate National income?

(*a*) Income Method

(*b*) Expenditure Method

(*c*) Value Added Method

(*d*) All of the above

4. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Domestic Income is a territorial concept.

Reason (R): Domestic Income includes value of final goods and services produced in the entire world.

(*a*) If both Assertion (A) and Reason (R) are True and the Reason (R) is a correct explanation of the Assertion (A).

(*b*) If both Assertion (A) and Reason (R) are True but Reason (R) is not a correct explanation of the Assertion (A).

(*c*) If Assertion (A) is True but the Reason (R) is False.

(*d*) Assertion (A) is False but Reason (R) is True.

5. Final goods are used by:

(*a*) Household

(*b*) Firm

(*c*) Government

(*d*) All of these

6. Which of the following is included in inventory investment?

(*a*) Change in stock of Raw Material

(*b*) Change in stock of Semi-finished Goods

(*c*) Change in stock of Finished Goods

(*d*) All of these

7. Factor income paid to non-residents within the domestic territory of a country leads to:

(*a*) Increase in Domestic Income

(*b*) Decrease in National Income

(*c*) Both (*a*) and (*b*)

(*d*) None of these

8. National Income = Domestic Income, when:

(*a*) Net Factor Income from abroad (NFIA) is positive

(*b*) NFIA is negative

(*c*) NFIA is zero

(*d*) None of the above

9. What does GDP measure?

(*a*) Only the value of final goods and services produced within a country during a given time period.

(*b*) The total value of all goods and services produced within a country during a given time period.

(*c*) The value of goods and services produced within a country's borders, regardless of ownership, during a given time period.

(*d*) The total value of goods and services produced by the citizens of a country, regardless of their location, during a given time period.

10. Which of the following is not included in the calculation of Gross Domestic Product (GDP) in a four sector economy?

(*a*) Government spending
(*b*) Household savings
(*c*) Business investments
(*d*) Net exports

11. In the context of National Income, what does GNP stand for?

(*a*) Gross Net Product
(*b*) Gross National Product
(*c*) Gross Nonresident Product
(*d*) Gross Neutral Product

12. Which of the following represents the total income earned by a nation's residents and businesses from within the country or abroad?

(*a*) Gross Domestic Product (GDP)
(*b*) Gross National Product (GNP)
(*c*) Net Domestic Product (NDP)
(*d*) National Income (NI)

13. Which of the following is the most inclusive measure of National Income?

(*a*) Net Domestic Product (NDP)
(*b*) Gross Domestic Product (GDP)
(*c*) Net National Product (NNP)
(*d*) Disposable Income (DI)

NUMERICAL TYPE QUESTIONS

1. On the basis of the given data, estimate the value of Domestic Income:

(CBSE SQP 2023-24)

S.No.	Items	Amount (₹in crore)
(i)	Household Consumption Expenditure	600
(ii)	Gross fixed capital Formation	200
(iii)	Change in Stock	40
(iv)	Government Final Consumption Expenditure	200
(v)	Net Exports	(–) 40
(vi)	Net Indirect Taxes	120
(vii)	Net Factor Income From Abroad	20
(viii)	Consumption of Fixed Capital	40

2. Calculate Gross Domestic Product at market price using Expenditure method:

(CBSE SQP 2023-24)

S.No.	Items	Amount ₹ (in crore)
(i)	Private final consumption expenditure	9,800
(ii)	Government final consumption expenditure	12,000
(iii)	Change in stock	275
(iv)	Gross domestic fixed capital formation	875
(v)	Consumption of fixed capital	600
(vi)	Net exports	(–) 90
(vii)	Net factor income from abroad	790

3. Calculate National Income by (a) expenditure method and (b) production method from the following data:

(₹ in crores)		
(i)	Gross value added at market price by the primary sector	300
(ii)	Private final consumption expenditure	750
(iii)	Consumption of fixed capital	150
(iv)	Net indirect taxes	120
(v)	Gross value added at market price by secondary sector	200
(vi)	Net domestic fixed capital formation	220
(vii)	Change in stocks (–)	20
(Viii)	Gross value added at market price by the tertiary sector	700
(ix)	Net imports	50
(x)	Government final consumption expenditure	150
(xi)	Net factor income from abroad	20

4. Calculate 'Net Domestic Product at Factor Cost' by the expenditure method and the production method:

(Amount in crores)		
(i)	Value of output in the economic territory	4,100
(ii)	Net imports (–)	50
(iii)	Intermediate purchases by the primary sector	600
(iv)	Private final consumption expenditure	1,450
(v)	Intermediate purchases by the secondary sector	700
(vi)	Government final consumption expenditure	400
(vii)	Net domestic fixed capital formation	200
(Viii)	Intermediate purchases by the tertiary sector	700
(ix)	Net change in stocks (–)	50
(x)	Indirect taxes	100
(xi)	Consumption of fixed capital	50

5. Calculate National Income from following data:

Items	(₹in crore)
Mixed income of self employed	200
Old age pension	20
Dividend	100
Net Indirect Taxes	50
Operating surplus	900
Wages and salaries	500
Profit	400
Employers contribution to Social Security schemes	50
Net factor income from abroad	– 10
Consumption of fixed capital	50

6. Find out 'Value Added by Firm B' from the following data:

S.No.	Items	(₹ in lakh)
(i)	Purchases by firm B from firm A	30
(ii)	Sales by firm B to firm C	25
(iii)	Sales by firm B to households	35
(iv)	Opening stock of firm B	5
(v)	Opening stock of firm C	10
(vi)	Closing stock of firm B	10
(vii)	Purchases by firm B from firm D	15
(viii)	Exports by firm B	20

7. From the following data calculate net value added at factor cost:

Particulars	(₹ in crores)
Per unit of output	20
Output sold (in units)	1250
Excise duty	5000
Consumption of fixed capital	1000
Change in stock	(–) 500
Single use producer goods	6000

8. From the following data calculate National Income by (i) Income Method, and (ii) Expenditure Method:

S.No.	Items	(₹ in crore)
(i)	Compensation of employees	600
(ii)	Government final consumption expenditure	550
(iii)	Net factor income from abroad	(–)10
(iv)	Net export	(–)15
(v)	Profit	400
(vi)	Net indirect tax	60
(vii)	Mixed income of self-employed	350
(viii)	Rent	200
(ix)	Interest	310
(x)	Private final consumption expenditure	1000
(xi)	Net domestic capital formation	385
(xii)	Consumption of fixed capital	85

9.

Compensation of Employees (₹500) + ________ + Mixed income of Self-employed (₹500) = Net Domestic Product at Factor Cost (₹5,000)

Analyse the formula given above and state the missing term in it. Also, mention its components.

10. Calculate GNPfc

Items	(₹ in crores)
Gross fixed capital formation	100
Change n stocks	20
Net capital formation	110
Mixed income self employed	200
Net factor income from abroad	–10
Net exports	–20
Compensation of employees	250
Operating surplus	400
Net indirect taxes	50

11. Calculate Gross Value Added at factor cost

Items	(₹ in crores)
Sales	180
Rent	5
Subsidies	10
Change in stock	15
Purchase of raw material	100
profits	25

SUBJECTIVE TYPE QUESTIONS

1. Explain the concept of Double Counting in the context of calculating National Income and provide a practical way to avoid it. **(CBSE SQP 2023-24)**

2. State the meanings of the following:
   (i) Externalities
   (ii) Operating Surplus
   (iii) Consumption Goods **(CBSE SQP 2023-24)**

3. Giving valid reasons, explain how the following would be treated while estimating domestic income?
   (i) Payment made by American tourists for goods purchased in India.
   (ii) Tomatoes grown by Ms. Puja in her kitchen garden. **(CBSE SQP 2023-24)**

4. "Machine purchased by a firm is always a capital good". Do you agree with the given statement? Give valid reasons for your answer. **(CBSE SQP 2023-24)**

5. In the estimation of a country's National Income, are the following items included. Provide reasons for each.
   (i) Rent-free house to an employee by an employer
   (ii) Purchases by foreign tourists
   (iii) Purchase of a truck to carry goods by a production unit **(CBSE SQP 2023-24)**

6. Elaborate on the concepts of Nominal Gross National Product and Real Gross National Product with examples to illustrate the significance of these measures in economic decision-making. **(CBSE SQP 2023-24)**

7. Domestic services (Household services) performed by a woman are not considered as an economic activity. Defend or refute the given statement with valid reason.

8. Mona purchased a car worth ₹5,50,000 to commute between her home and the office. Would you treat it as an intermediate consumption and therefore not included in the estimation of national income? Justify your answer.

9. Defend or refute the statement "Value of intermediate goods is equal to the value of intermediate consumption".

10. Firm A spent 500 on non-factor inputs and produced goods worth 900. It sold goods worth 600 and 300 to firm B and consumer households respectively. Find out gross value added by firm A.

11. Is it correct to say that all producer goods are capital goods?

12. Distinguish between Factor payment and Transfer payment.

13. Should we treat subsidies to the producers as transfer payments?

14. What is meant by the term circular flow of income? State its significance.

15. What are the components of the domestic territory of India?

16. Explain the concept of normal residents of a county.

Answers

1. (*a*) **2.** (*c*) **3.** (*d*) **4.** (*c*) **5.** (*d*) **6.** (*d*) **7.** (*c*) **8.** (*c*) **9.** (*c*) **10.** (*b*) **11.** (*b*) **12.** (*b*) **13.** (*c*)

Solutions

NUMERICAL TYPE QUESTIONS

1. Domestic Income (NDP at FC) = Private final consumption expenditure + Government final consumption expenditure + (Gross fixed capital formation + change in stock) + Net exports – Consumption of fixed Capital – Net Indirect Taxes

= (i) + (iv) + [(ii) + (iii)] + (v) – (viii) – (vi)

= 600 + 200 + (200 + 40) + (–40) – 40 – 120

= 840 crore

2. Using Expenditure Method, GDP at MP = Private final consumption expenditure + Government final consumption expenditure + Gross domestic capital formation (Gross domestic fixed capital formation + Change in stock) + Net exports

= 9,800 + 12,000 + 275 +875 + (–)90 crores

= 22,860 crores

3. (a) National Income/NNP_{FC} by the Expenditure Method

= (ii) + (x) + (vi) + (vii) – (ix) – (iv) + (xi)

= 750 + 150 + 220 + (–20) – 50 – 120 + 20

= ₹950 crores

(b) National Income/NNP_{FC} by the Production Method

= (i) + (v) + (viii) – (iii) – (iv) + (xi)

= 300 + 200 + 700 – 150 – 120 + 20

= ₹950 crores

4. (a) NDP_{FC} by the Expenditure Method = (iv) + (vi) + (vii) + (ix) – (ii) – (x)

= 1,450 + 400 + 200 + (–50) – (–50) – 100

= ₹1,950 crores

(b) NDP_{FC} by the production Method = (i) – (iii) – (v) – (viii) – (x) – (xi)

= 4,100 – 600 – 700 – 700 – 100 – 50

= ₹1,950 crores

5. Wages and salaries + Employers' contribution to social security schemes + Operating surplus + Mixed income of the self-employed + Net factor income from abroad

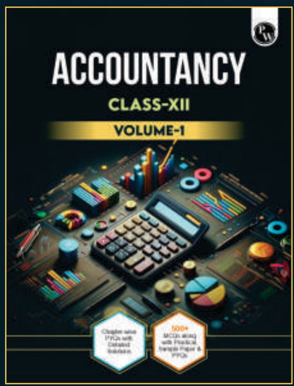
= ₹500 crore + ₹50 crore + 900 crore + 200 crore + (–) 10 crore

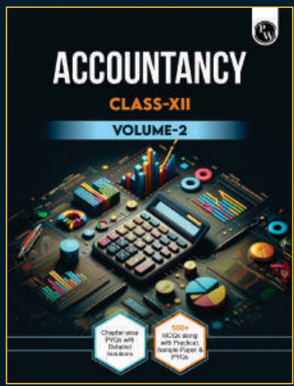
National income = ₹1640 cr

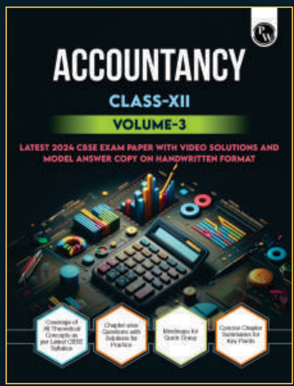
6. Value Added by Firm B = Sales by firm B + Change in stock of firm B – Purchases from other firms

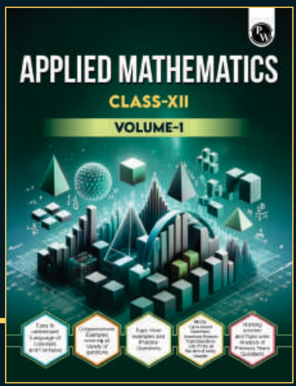
Description	(₹ in lakh)
(i) Sales = Sales by Firm B to Firm C	25
+ Sales by Firm B to Households	35
+ Export by Firm B	20
Total	**80**
(ii) Change in Stock of Firm B = Closing Stock – Opening stock = 10 – 5	5
(iii) Purchases of Firm B from other Firms = Purchase by Firm B from Firm A + Purchase by Firm B from Firm D = 30 + 15	45
Value Added = (80 + 5) – 45	**40**

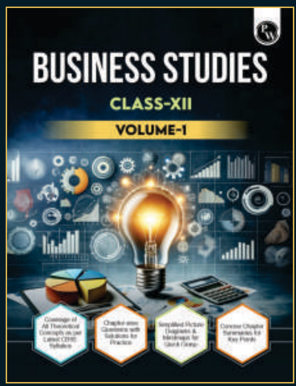
COMPLETE YOUR PREPARATION

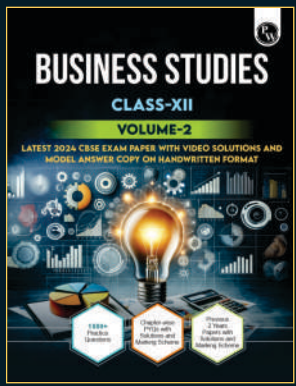


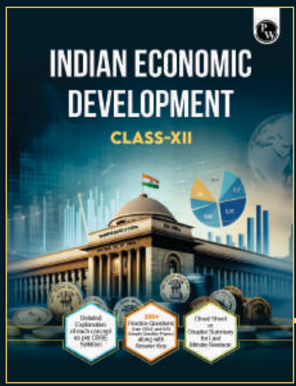












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