

CLASS 12th ECONOMICS

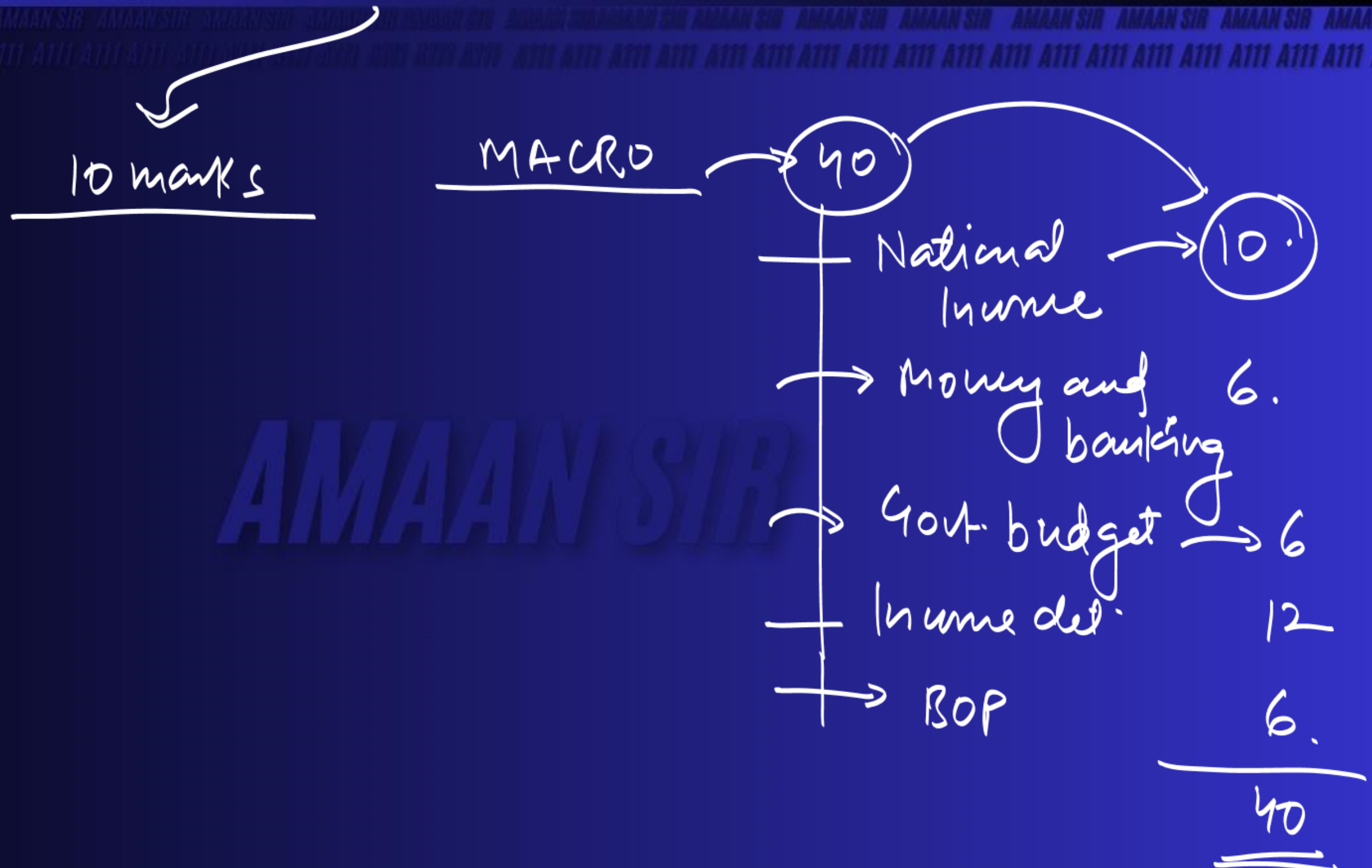
NATIONAL INCOME

CHAPTER-2

ONE SHOT

एक VIDEO में CHAPTER खत्म

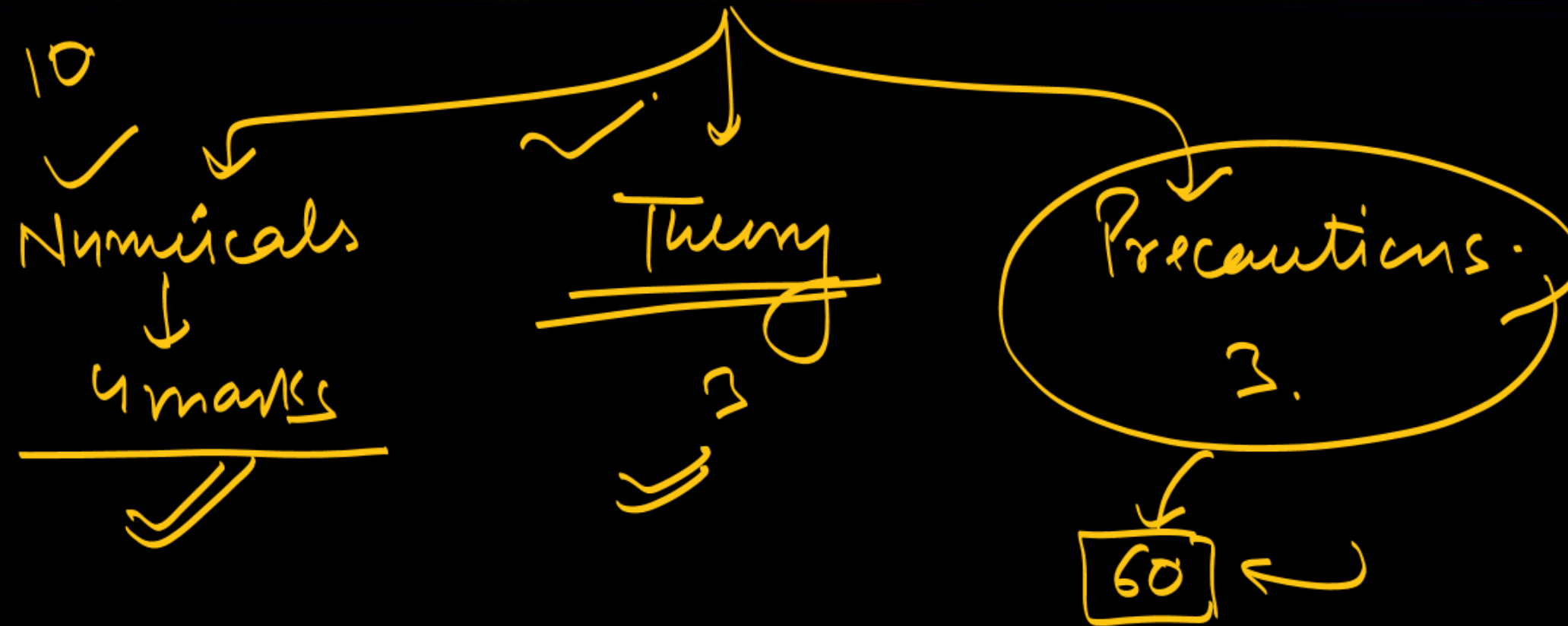




Adda247

National Income

Amaan sir



METHODS TO CALCULATE NATIONAL INCOME

Exp. $\rightarrow$ Income
Exp. method

Income $\rightarrow$ method

$$= 10 + 20 + 30 + 40$$

$$= \underline{\underline{\text{₹}100/-}}$$

Exp.

$$= 10 + 20 + 30 + 40$$

$$= \underline{\underline{\text{₹}100/-}}$$



INCOME METHOD

EXPENDITURE METHOD

VALUE ADDED METHOD

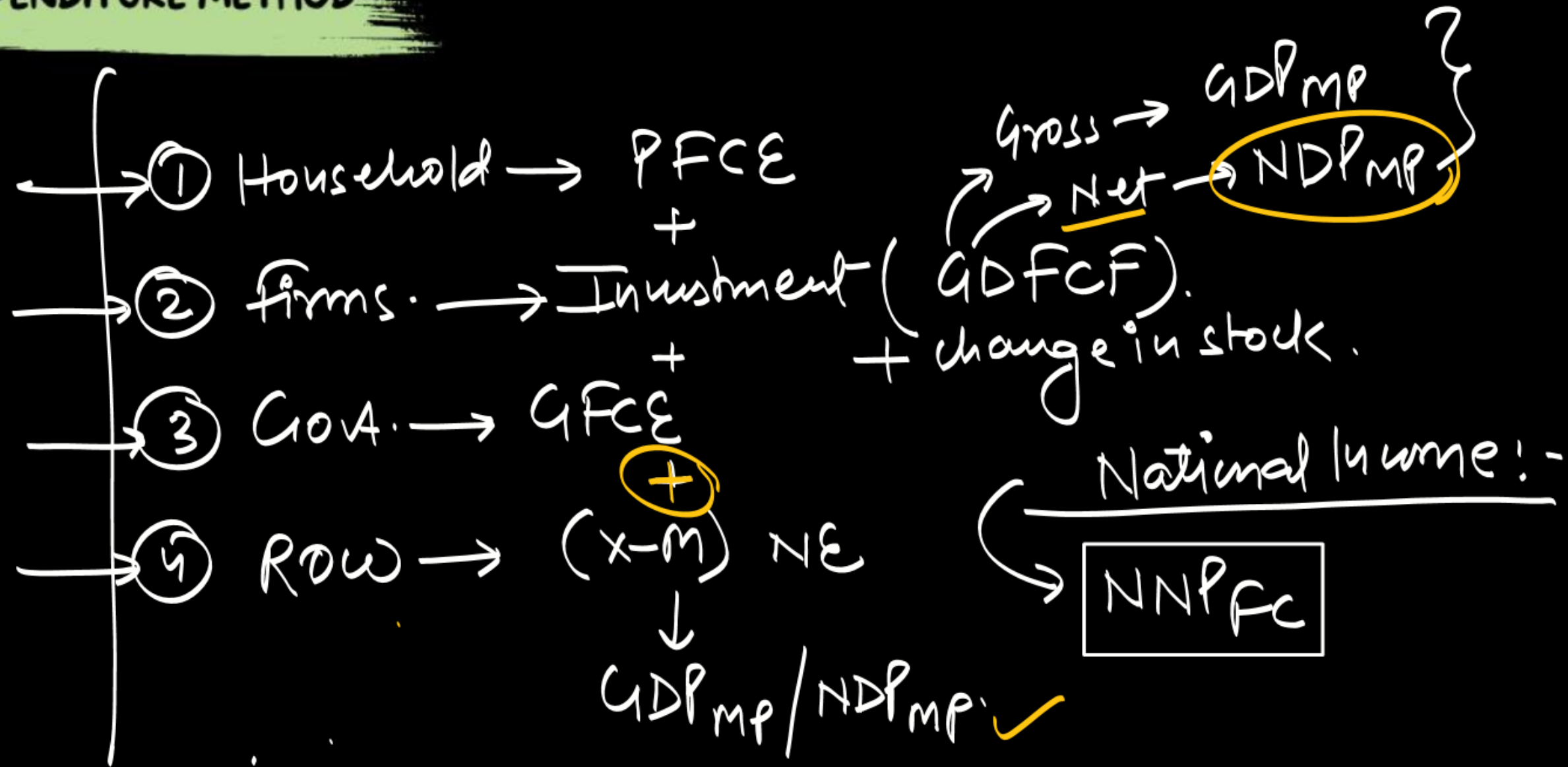


→ Factor Income

Final expenditure

EXPENDITURE METHOD

①



INCOME METHOD

Factor Income → कुल कमाई
→ Earnings

- ① Compensation of employees (COE)
 - wages and salaries in cash
 - wages and salaries in kind → Facilities
 - Employers contribution to social security schemes

COE + OS + MI.

= NDPF

Domestic Income.



- ② Operating surplus (OS) Investment
 - Rent ✓
 - interest ✓
 - Royalty ✓
 - Profit ✓
- ✓✓✓ simple method.

- ③ Mixed Income of self employed

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✓ Question : Calculate 'Net National Product' at Factor Cost from the Following:
Items ₹ (in Crores)

	<u>NNP_{FC}</u>
✓ (i) Wages and Salaries	600
(ii) Rent ←	200
(iii) Interest ←	300
✓ (iv) Social Security Contributions by <u>Employers</u>	100 ✓
✓ (v) Net Factor Income Paid to Abroad	50
(vi) Profits ←	300

Source: CBSE 2014

Answer - 1,450 crore.

$$\begin{aligned}
 &= \overset{W\&S}{(600 + 100)} + \overset{OS}{(200 + 300 + 300)} - \overset{NFA}{50} \\
 &= 1500 - 50 \\
 &= 1450 \text{ Ans}
 \end{aligned}$$

NDP_{FC} = 1500
 ↓
 NNP_{FC} = 1450 Ans

value added method / Production method / output method.

GVAmp = value of output - Intermediate consumption.

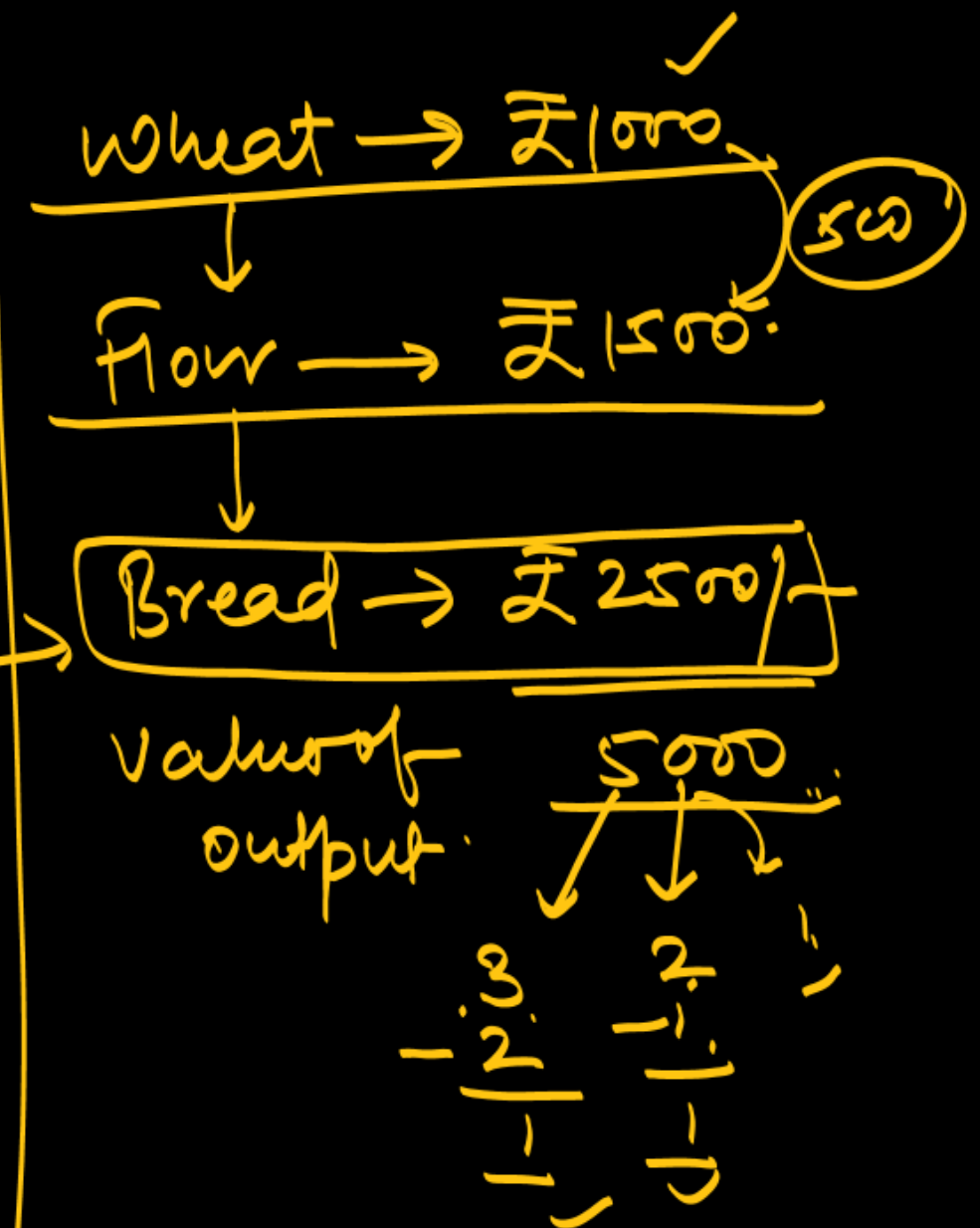
$$GVAmp = VO - IC$$

$$GDPMP = 5000 - (1000 + 1000 + 500)$$

$$= 5000 - (2500)$$

$$GDPMP = \boxed{2500}$$

To avoid the problem of double counting.



Q. Calculate NINPFC

✓ • Sales	1000.
✓ • Change in stock	500
✓ • Production for self cons.	500.
• Unsold stock	1000.
✓ • Purchase of Raw material	1200.
✓ • Consumption of fixed cap.	200
• NFIA	100.
• NIT	50

Production method:-

$$\begin{aligned}
 GVA_{mp} &= VD - IC \\
 &= (1000 + 500 + 500) - 1200 \\
 &= 2000 - 1200
 \end{aligned}$$

$$\begin{aligned}
 GDP_{mp} &= 800 \text{ dep} \\
 \downarrow \downarrow \downarrow & \\
 NINP_{fc} &= 800 \text{ dep} \\
 &\quad - 200 \\
 &\quad \hline
 &\quad 600 \\
 &\quad + 100 \text{ NFIA} \\
 &\quad \hline
 &\quad 700 \\
 &\quad - 50 \text{ NIT} \\
 &\quad \hline
 &\quad \underline{\underline{650}}
 \end{aligned}$$

$$\text{value of output} = \text{Sales} + \text{Prod}^n \text{ for self cons.} + \text{Unsold.}$$

D I.

Intermediate cons.

- Final production.
- Resale
- Recurring
- Asset X.

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Question : Calculate Gross national product at factor cost: (GNP_{fc})

Items	₹ (in Crores)
(i) Private final consumption expenditure	2600
(ii) Government final consumption expenditure	1100
(iii) net Exports	- 100
(iv) dividend	200
(v) Consumption of fixed capital	100
(vi) net domestic capital formation	500
(vii) compensation of employees	100
(viii) net Factor income from abroad	-50
(ix) nit	90
(x) profit	- 100
(xi) interest	500
(xii) rent	400

Source: CBSE 2009

Answer - _____ crore.

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Question : Find Gross National Product at Market Price (GNP_{mp})

Items

₹ (in Crores)

$$= 800 + 300 + 200 + (-30)$$

$$\begin{array}{r} \text{NDP}_{MP} = 1270 \\ \downarrow \downarrow \\ \text{GNP}_{MP} = 1270 + 100 \text{ dep} \\ \hline 1370 \\ - (-10 \text{ NFIA}) \\ \hline 1380 \end{array}$$

Items	
(i) Private final consumption expenditure	800
(ii) Net current transfers to abroad	20
(iii) Net factor income to abroad	(-) 10
(iv) Government final consumption expenditure	300
(v) indirect tax	150
(vi) <u>Net domestic capital formation</u>	200
(vii) <u>Depreciation</u>	100
(viii) <u>Net imports</u>	30

Source: CBSE 2016
Answer - 1,380 crore.

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NDPfc

Question 2: Compute Domestic Income from the following (NDPfc).

Items GDP_{mp} ₹ (in Crores)

$$= 2200 + 2500 + 1190 \\ + (-100) - \underline{420}$$

(i) Government final consumption expenditure 2,500

(ii) Subsidies 120

(iii) Gross domestic fixed capital formation 1,190

(iv) Net factor income to abroad 125

(v) Net decrease in inventories (change in stock) 100

(vi) Net exports (-) 420

(vii) Net indirect taxes 470

(viii) Current replacement cost (depreciation) 145

(IX) Private final consumption expenditure 2,200

$$\begin{array}{r} \text{GDP}_{mp} = 5370 \\ \downarrow \\ \text{NDP}_{fc} = 5370 \\ \quad - 145 \text{ dep} \\ \hline \quad 5225 \\ \quad - 470 \text{ NIT} \\ \hline \quad \underline{4755} \end{array}$$

Answer - 4,755 crore.

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HW

Calculate Gross Domestic Product (GDP_{fc}) and FITA:



1. compensation of employees	1000
2. Profits	200
3. dividends	50
4. GNP _{mp}	1400
5. Rent	150
6. interest	100
7. gross domestic capital formation	300
8. net domestic fixed capital formation	200
9. change in stock	50
10. FIFA	60
11. NIT	120

→ 2010
CBSE

Numericals
+ Income ✓
+ Exp. ✓
+ value added ✓

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@AMAAN_SIR_ADDA24

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Calculate Gross Domestic Product (GDP_{fc}) and FITA:

1. compensation of employees	1000
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3. dividends	50
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NNP_{fc}

→ Income method:-

$$= \underset{\text{COE}}{250} + (\underset{\text{OS}}{100} + \underset{\text{MI}}{200} + 50) + 50$$

$$\begin{array}{r} \text{NDP}_{fc} = 650 \\ + 20 \text{ NFIA} \\ \hline \text{NNP}_{fc} = 670 \text{ Ans.} \end{array}$$

→ Expenditure method:-

$$= 550 + 60 + \underline{120} + 20 + (10 - 20)$$

$\begin{array}{r} \text{GDP}_{mp} = 740 \\ - 10 \text{ dep} \\ \hline 730 \\ + 20 \text{ NFIA} \\ \hline 750 \end{array}$	$\begin{array}{r} 750 \\ + 100 \text{ IT} \\ + 20 \text{ sub.} \\ \hline 870 \end{array}$
$\begin{array}{r} \text{NDP}_{fc} \\ + 20 \text{ NFIA} \\ \hline 670 \text{ Ans} \end{array}$	$\begin{array}{r} 750 \\ + 100 \text{ IT} \\ + 20 \text{ sub.} \\ \hline 870 \end{array}$

Item	Value
Compensation of Employees (COE) <i>we</i>	250
Imports <i>M</i>	20
Mixed Income (MI) <i>MI</i>	50
Gross Fixed Capital Formation <i>GDFCF</i>	120
Private Final Consumption Expenditure (PFCE) <i>PFCE</i>	550
Depreciation (Dep) <i>Dep</i>	10
Net Factor Income from Abroad (NFIA) <i>NFIA</i>	20
Indirect Taxes (IT) <i>IT</i>	100
Change in Stock <i>Δ stock</i>	20
Subsidies <i>Sub.</i>	20
Rent <i>R</i>	100
Interest <i>I</i>	200
Profit <i>P</i>	50
Exports <i>X</i>	10
Government Final Consumption Expenditure (GFCE) <i>GFCE</i>	60

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GDP:- Total volume of goods and services produced in an economy expressed in monetary terms.

$$\begin{aligned} \text{GDP} &= P \times Q \\ &= ₹20 \times 1000 \text{ units} \\ &= \boxed{₹20,000} \end{aligned}$$

Theory of National Income

-GDP

-Types of GDP ✓

- Nominal GDP
- Real GDP
- Double counting
- Factor income and transfer income
- Intermediate goods and Final goods
- Domestic territory
- Normal residents
- Circular flow of income
-

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Types of GDP *

* Real GDP → GDP at constant price.

Measures the value of current year's output at base year's price.

eg $2011 \rightarrow$ Base year $\rightarrow (\text{₹}10)$ ✓

→ $1000 \text{ units} \times \text{₹}10 = \text{₹}10,000/-$

2025 Current year : ₹20/-

→ $2000 \text{ units} \times \text{₹}10 = \text{₹}20,000/-$

$\text{₹}10$
 10
 $10.$

Real GDP ↑
 Output ↑

Theory of National Income

- GDP
- Types of GDP ✓
 - Nominal GDP
 - Real GDP
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-

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Source → Nominal → GDP at current price ^{Ex:}
measures the value of current year's output at current year's price.

2011 Base year ₹10

$$1000 \text{ units} \times ₹10 = ₹10,000/-$$

2025 Current year ₹20

$$1000 \text{ units} \times ₹ \boxed{20} = ₹20,000/-$$

Misleading figures.

↓
Inflation

GDP ↑ output ↑

Theory of National Income

-GDP

-Types of GDP ✓

- Nominal GDP
- Real GDP

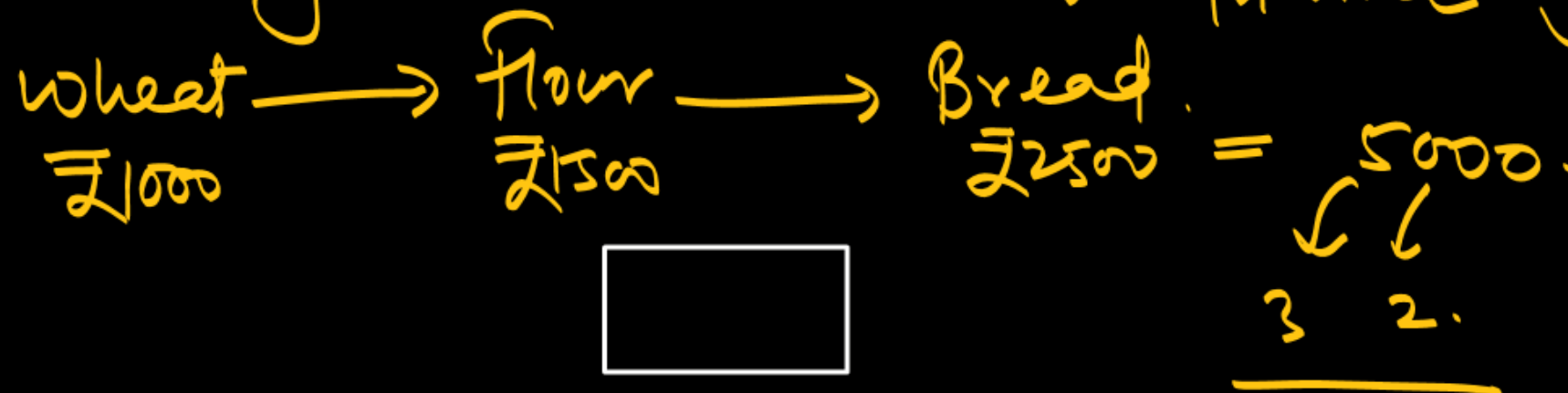
✓ Double counting

- Factor income and transfer income
- Intermediate goods and Final goods
- Domestic territory
- Normal residents
- Circular flow of income

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Theory of National Income

Double counting:
counting the value of a commodity twice or more than twice during the calculation of national income



- GDP
- Types of GDP ✓
 - Nominal GDP
 - Real GDP
- ✓ Double counting
- ✓ Factor income and transfer income
 - Intermediate goods and Final goods
 - Domestic territory
 - Normal residents
 - Circular flow of income

Methods:-

① Value added.

$$1000 + 500 + 1000 = 2250 \checkmark$$

② Final product

$$GVA_{mp} = VO - IC$$

$$= 5000 - (2500)$$

$$= \boxed{2500} \checkmark$$

→ Bread → 2500/- ✓

Factor Income!

- ↓
- Income earned
- bilateral
- eg, wages, salaries, dividend etc.
- Added in national income

Transfer Income

- Income received.
- Unilateral.
- eg gift, donation etc.
- Not added.

Intermediate goods

- Help in the production process of final goods.
- Not added in national income
- Purchased for resale
- Remain within the production boundary

Final goods

- They are meant for final consumption.
- Added.
- Purchased for consumption.
- Outside the production boundary

Intermediate goods

- Help in the production process of final goods.
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Concept of "domestic territory":

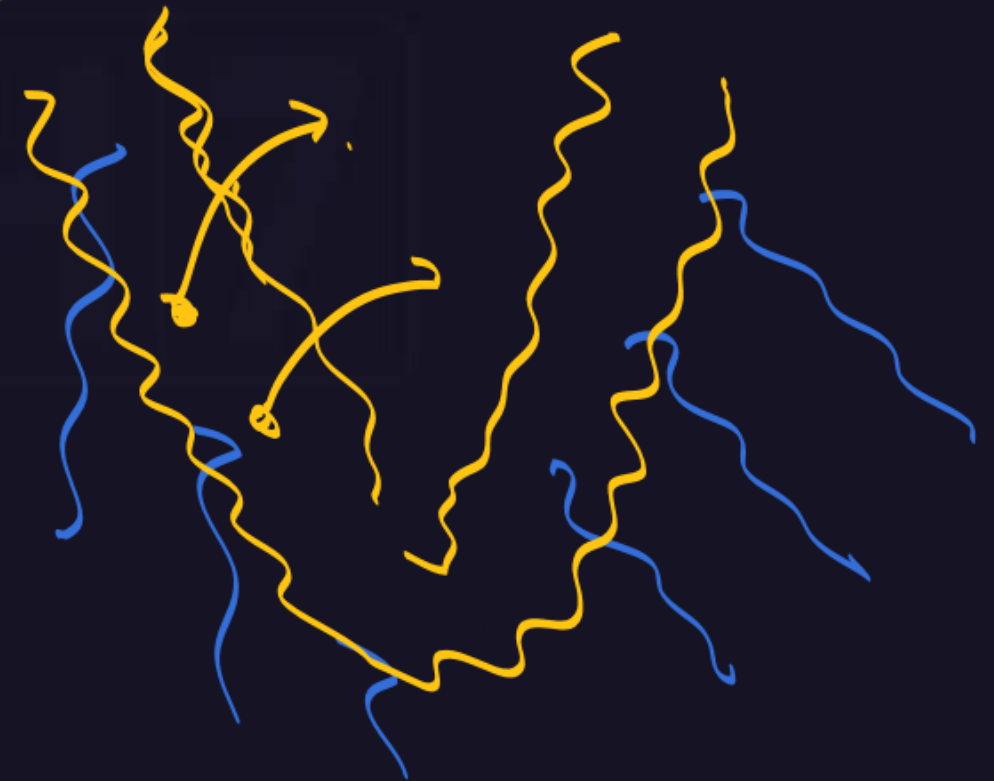
- Domestic territory includes political territory

- Including territory of water.

- Ships, aircrafts, floating platforms - owned and operated by the normal resident in abroad.

→ Political territory /
→ Geographic

12 NM



- oil rigs, fishing vessels owned and operated by the normal residents of the country in abroad.
- ↓
domestic Income

Pok

- Embassies, consulates and military establishments



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← Nominal → Ex → GDP at current price
Source measures the value of current year's output at current year's price.

2011 Base year ₹10

$$1000 \text{ units} \times ₹10 = ₹10,000/-$$

2025 Current year ₹20

$$1000 \text{ units} \times ₹ \boxed{20} = ₹20,000/-$$

Misleading figures.
↓
Inflation

GDP ↑ output ↑

Theory of National Income

-GDP

-Types of GDP ✓

- Nominal GDP
- Real GDP

✓ Double counting

✓ Factor income and transfer income

✓ Intermediate goods and Final goods

✓ Domestic territory

✓ Normal residents

✓ Circular flow of income



7

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Calculate Gross Domestic Product (GDP_{fc}) and FITA:

1. compensation of employees	1000
2. Profits	200
3. dividends	50
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5. Rent	150
6. interest	100
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Telegram: Amaan_sir_adda247		Item		Value	
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		Depreciation (Dep)		10	
		Net Factor Income from Abroad (NFIA)		20	
		Indirect Taxes (IT)		100	
		Change in Stock		20	
		Subsidies		20	
		Rent		100	
		Interest		200	
		Profit		50	
		Exports		10	
		Government Final Consumption Expenditure (GFCE)		60	

Adda247		National Income		Amaan sir	
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			Private Final Consumption Expenditure (PFCE)		2000
			Net Capital Formation		400
			Change in Stock		50
			Compensation of Employees (COE)		1900
			Rent		200
			Interest		150
			Operating Surplus (OS)		720
			Net Indirect Taxes (NIT)		400
			Employers' Contribution to Social Security Schemes		100
			Net Exports		20
			Net Factor Income from Abroad (NFIA)		-20
			Government Final Consumption Expenditure (GFCE)		600
			Depreciation		100
				↓	

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Question : Calculate 'Net National Product' at Factor Cost from the Following:
Items ₹ (in Crores)

(i) Wages and Salaries	600
(ii) Rent	200
(iii) Interest	300
(iv) Social Security Contributions by Employers	100
(v) Net Factor Income Paid to Abroad	50
(vi) Profits	300

Source: CBSE 2014

Answer - 1,450 crore.

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Question 2: Compute Domestic Income from the following (NDP_{fc}).

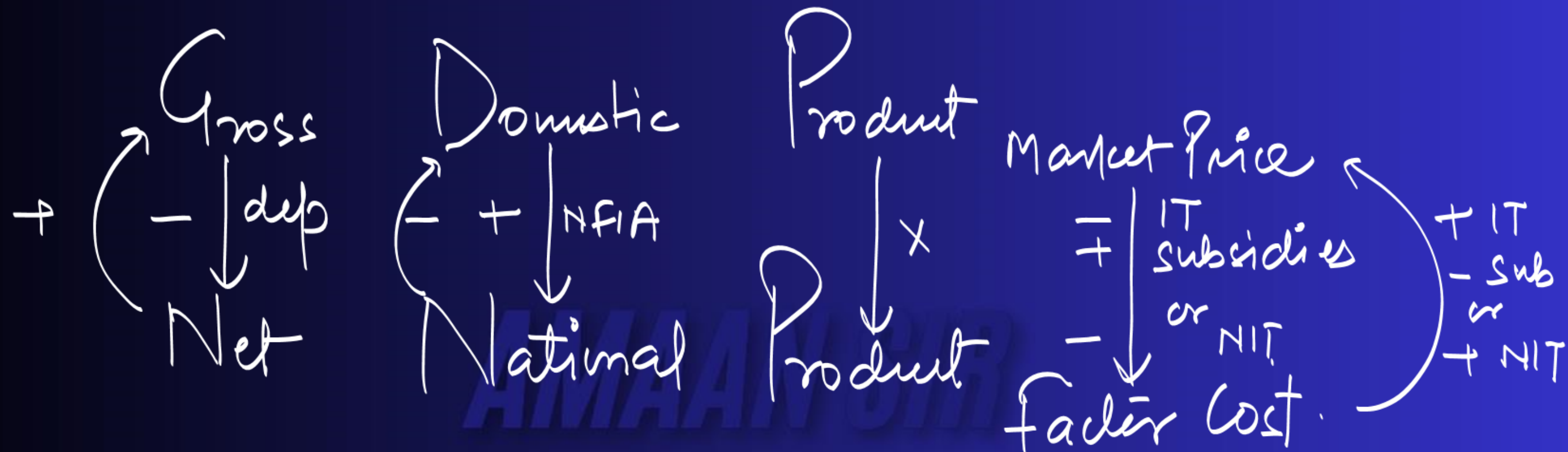
Items	₹ (in Crores)
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(V) Net decrease in inventories (change in stock)	100
(Vi) Net exports	(-) 420
(vii) Net indirect taxes	470
(viii) Current replacement cost (depreciation)	145
(IX) Private final consumption expenditure	2,200

Answer - 4,755 crore.

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Calculate Gross Domestic Product (GDP_{fc}) and FITA:

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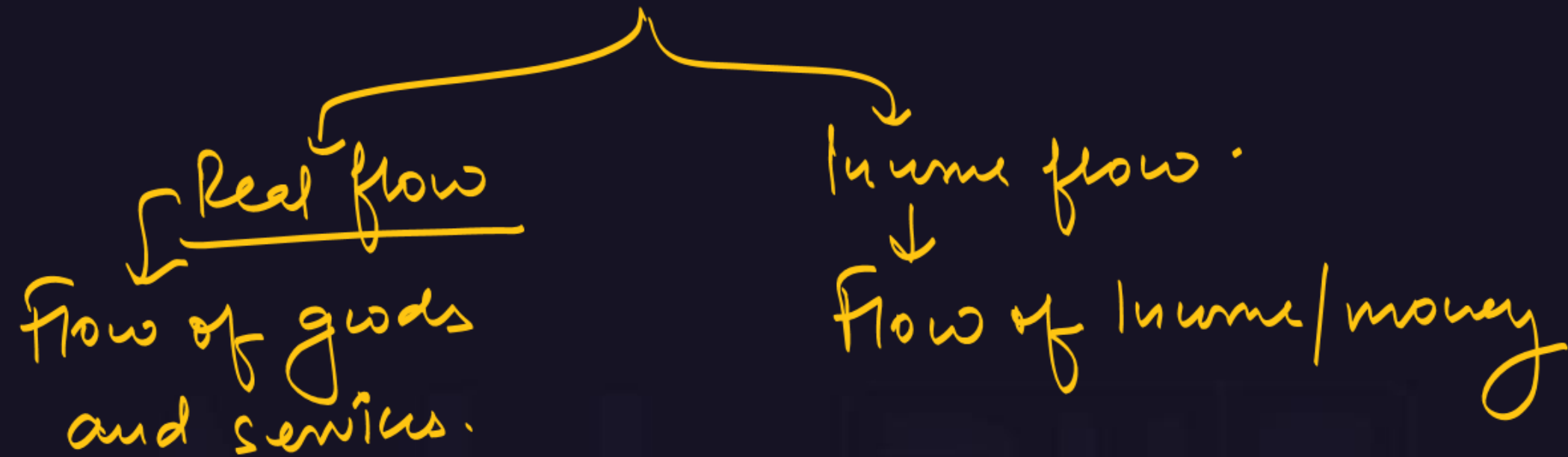


Circular flow of Income

→ Flow of money and goods and services across diff sectors of an economy in circular form is known as CFI.

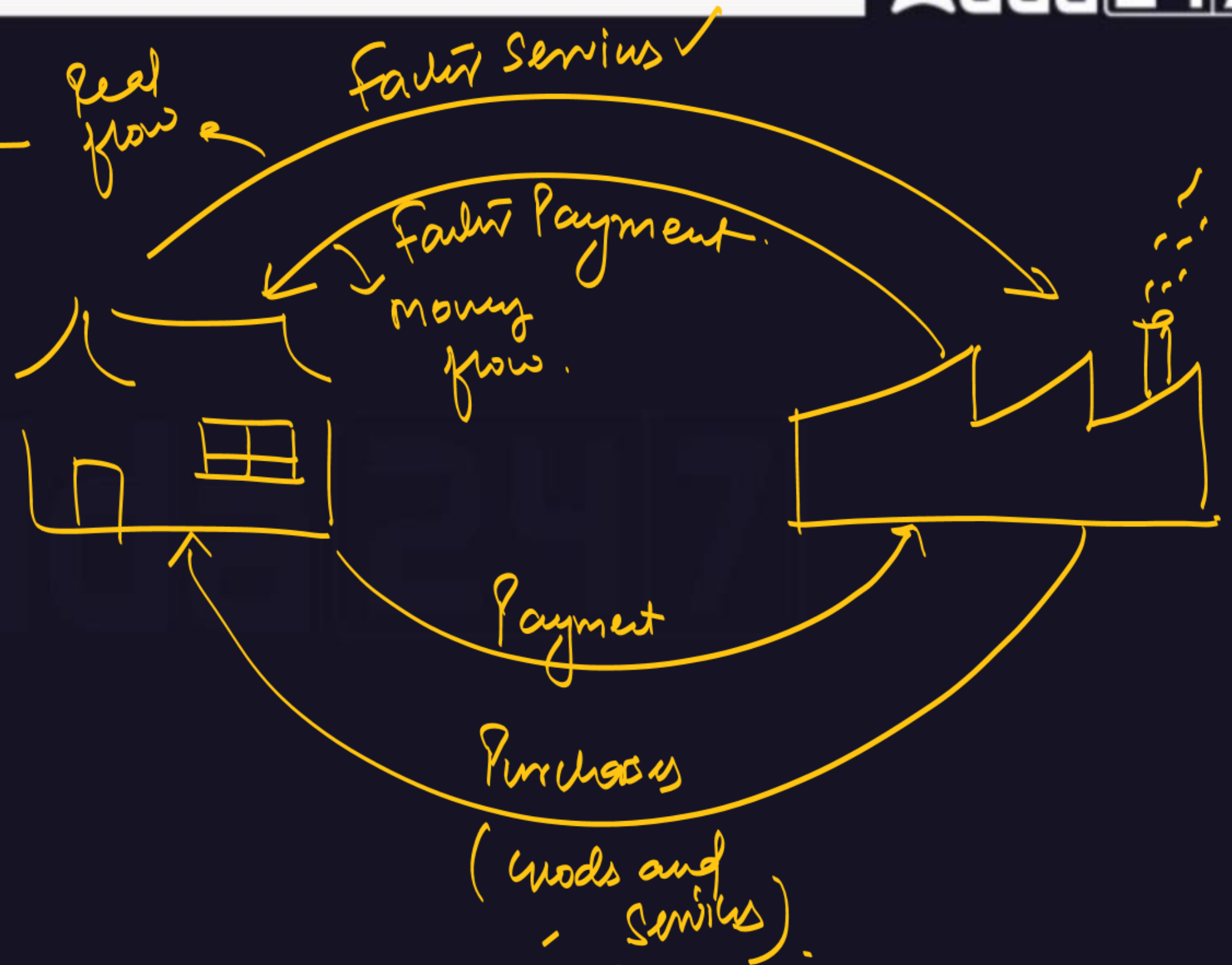
- Household
- Firms
- Govt
- Row





Two-sector model:-

- Household.
- Firms



★

Stock ✓

- Quantity of an economic variable which is measured at a particular point of time.

"Ansh"

3:00

500 Litre



Flow :

- Quantity of an economic variable which is measured over a period of time.
- flow has time dimensions.
eg per hour, per minute,
per annum etc

