

SAMPURNA JUNE 2024



Lecture No.- 02

ECONOMICS

Chap. 6 — 10 marks

Determination of National Income

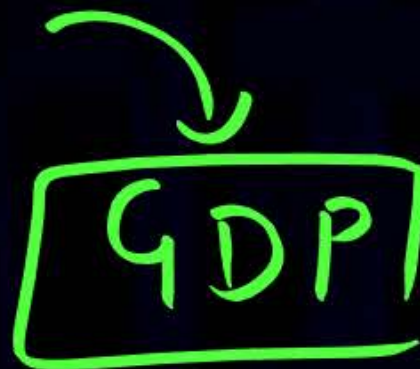
By- LOVE KAUSHIK SIR



RECAP OF PREVIOUS LECTURE

1) National Income Accounting

GDP



TOPICS TO BE COVERED

1) National Income Accounting



$$\begin{array}{l} \text{GDP Deflator} \\ \text{OR} \\ \text{Price Index} \end{array} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

$$\text{GNP Deflator} = \frac{\text{Nominal GNP}}{\text{Real GNP}} \times 100$$

$$* \text{ Deflator} = \frac{\text{Nominal} *}{\text{Real} *} \times 100$$

$$\text{Income Deflator} = \frac{\text{Nominal Income}}{\text{Real Income}} \times 100$$

Year	GDP Deflator
2009	150
2010	125

$$\frac{2009 - 2008}{2008} \times 100$$

Inflation rate (2010)

$$= \frac{\text{GDP Deflator}_{2010} - \text{GDP Deflator}_{2009}}{\text{GDP Deflator}_{2009}} \times 100$$

$$\text{Inflation rate in year 2} = \frac{\text{GDP deflator in year 2} - \text{GDP deflator in year 1}}{\text{GDP Deflator in year 1}} \times 100$$

$$\text{Inflation rate in year 2} = \frac{\text{GDP deflator in year 2} - \text{GDP deflator in year 1}}{\text{GDP Deflator in year 1}} \times 100$$

150

125

125

Price = $\frac{\text{Gross Value}}{1,00,000}$

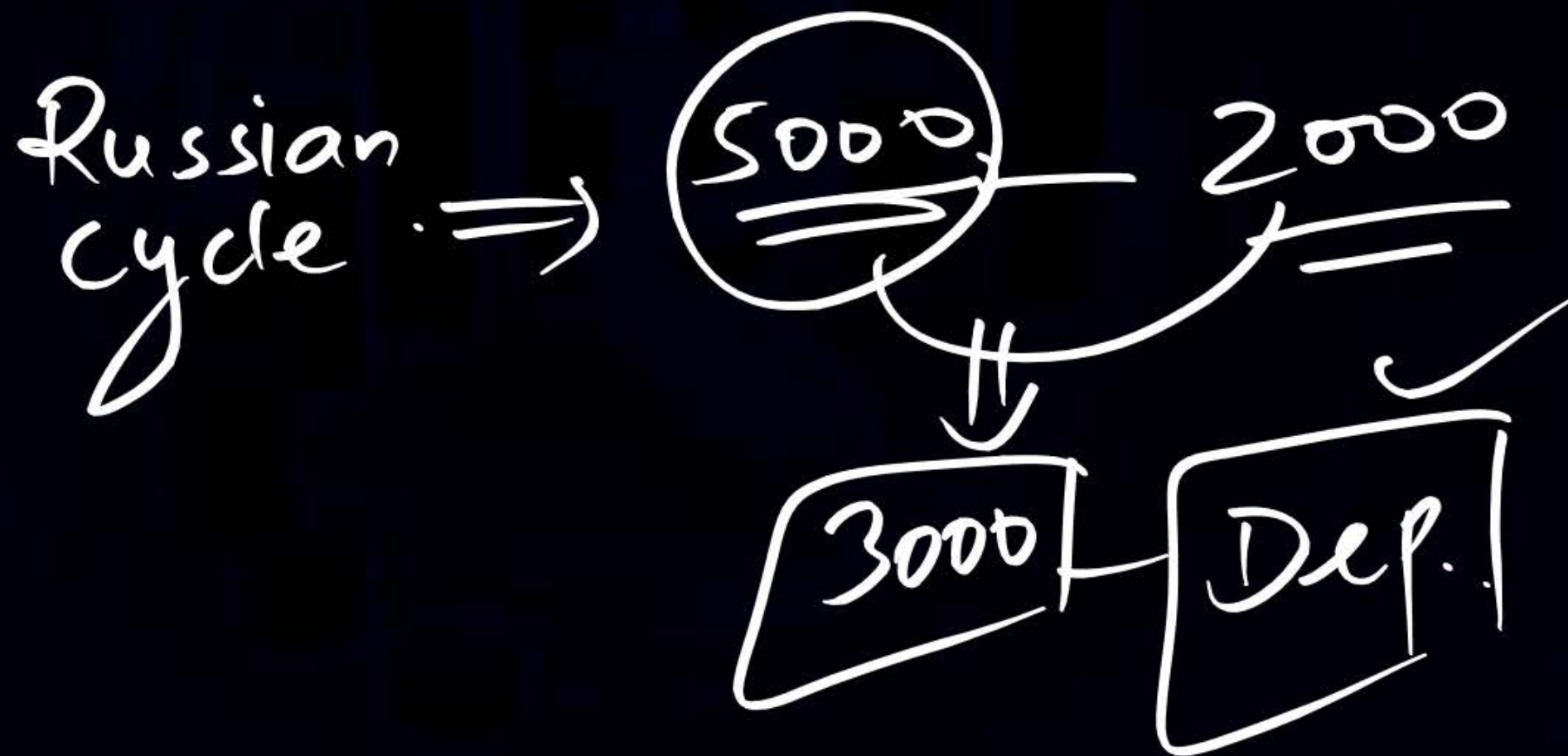
Rahul

40,000

Net Value


Wears out
OR
Depreciation
OR
Consumption of fixed capital
OR
Current Replacement Cost

$$\text{Gross value} - \text{Dep.} = \underline{\underline{\text{Net Value}}}$$



$$\begin{array}{r}
 \text{GDP} = 100 \\
 - \text{Dep.} = -30 \\
 \hline
 \text{NDP} \quad \boxed{70} \\
 \hline
 \end{array}$$

$$\text{GDP} - \text{Dep.} = \text{NDP}$$



Net Domestic Product

$$\begin{aligned} \text{Q} \quad \text{GDP} &= 1000 \\ \text{Dep} &= 200 \end{aligned}$$

$$\begin{aligned} \text{NDP} &= \text{GDP} - \text{Dep.} \\ &= 1000 - 200 \\ &= 800 \end{aligned}$$

$$\begin{aligned} \text{Q} \quad \text{NDP} &= 700 \\ \text{Dep} &= 200 \end{aligned}$$

$$\text{GDP} - \text{Dep.} = \text{NDP}$$

$$\begin{aligned} \text{GDP} &= \text{NDP} + \text{Dep} \\ &= 700 + 200 \\ &= 900 \end{aligned}$$

Direct Tax

- income tax
- Property | wealth tax
- House tax
- Corporate Profit tax
- Gift tax
- Capital gain tax

↳ imposed on individuals

Indirect Tax

Sales tax

Service tax

Entertainment tax

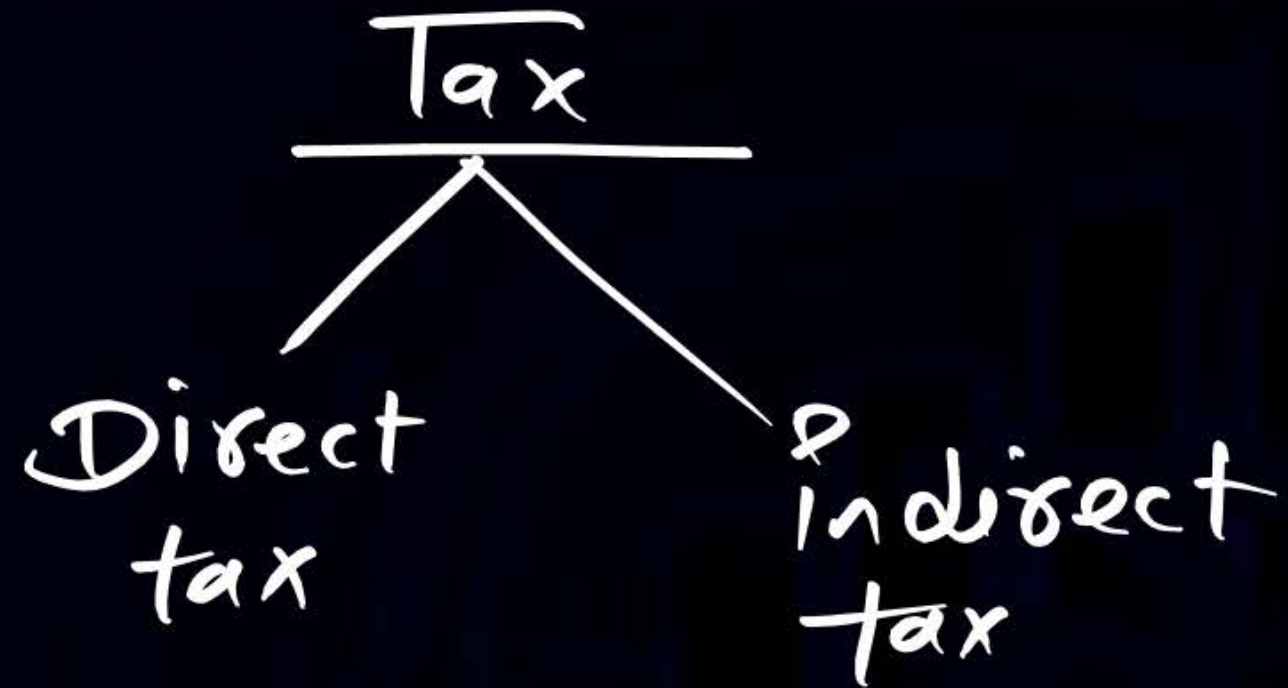
Tax on Production / Excise duty

Custom duty

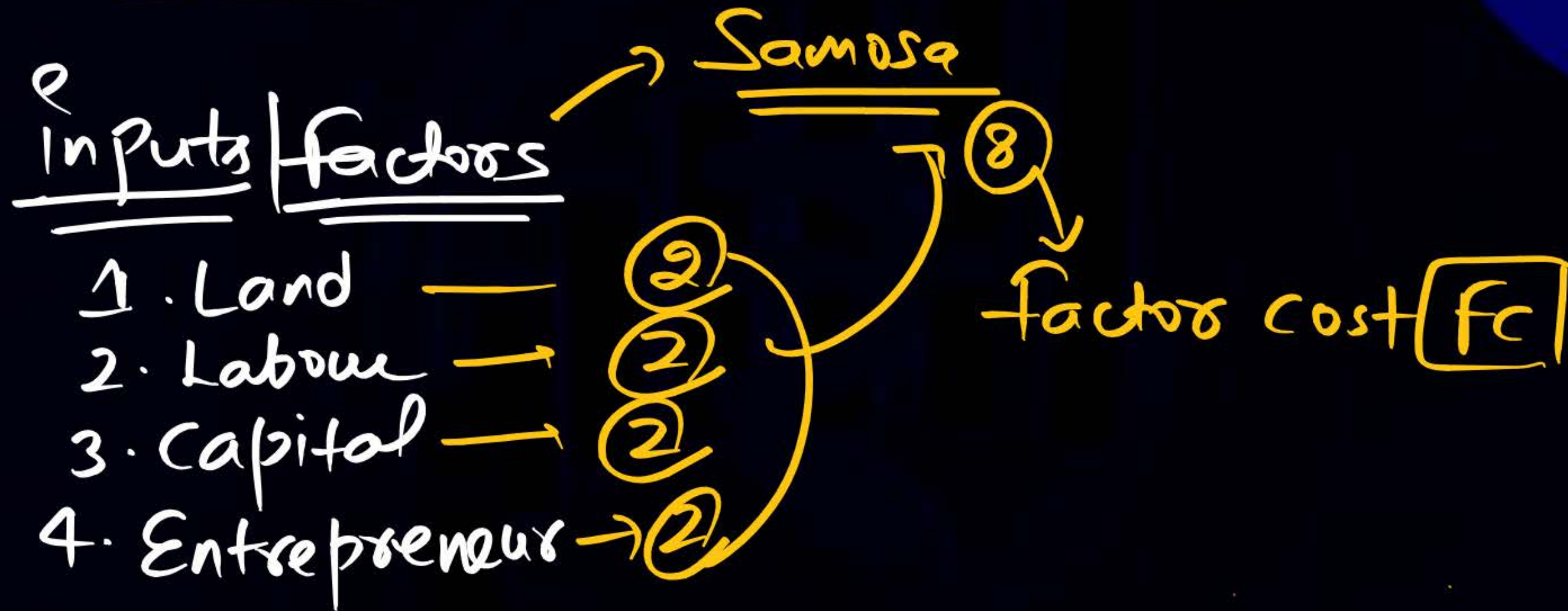
Imposed on goods & services

1 July 2017

GST



Indirect tax



$$FC + (IT - \underline{Sub.}) = MP$$

$$FC + NIT = MP$$

FC

8

+

2

-

1

=

11

indirect tax - subsidies

market price
MP

$$IT - Sub = NIT$$

Net indirect Tax

$$Q \quad FC = 150$$

$$= \quad IT = 18$$

$$\text{Sub.} = 2, \quad MP = P$$

$$MP = FC + NIT$$

$$= 150 + 16 = \underline{\underline{166}}$$

$$18 - 2 = 16$$

$$\textcircled{A} \quad 132$$

$$\textcircled{B} \quad 166$$

$$\textcircled{C} \quad 168$$

\textcircled{B}

$$\text{GDP at fc} \mid \text{GDP}_{\text{fc}} = \underline{100}, \underline{\text{NIT} = 25}$$

$$\boxed{\text{mp} = \text{fc} + \text{NIT}}$$

$$\begin{aligned} \text{GDP}_{\text{mp}} &= \text{GDP}_{\text{fc}} + \text{NIT} \\ &= 100 + 25 \\ &= \underline{\underline{125}} \end{aligned}$$

$$GDP_{mp} = 100$$

$$NIT = 20$$

$$GDP_{fc} = ?$$

(A) 80 ✓ (A)

(B) 120

$$GDP_{mp} = GDP_{fc} + NIT$$

$$100 = GDP_{fc} + 20$$

(80)

$$\text{Gross} - \text{Dep} = \text{Net}$$

$$\text{GDP} - \text{Dep} = \text{NDP}$$

$$\text{Net} + \text{Dep.} = \text{Gross}$$

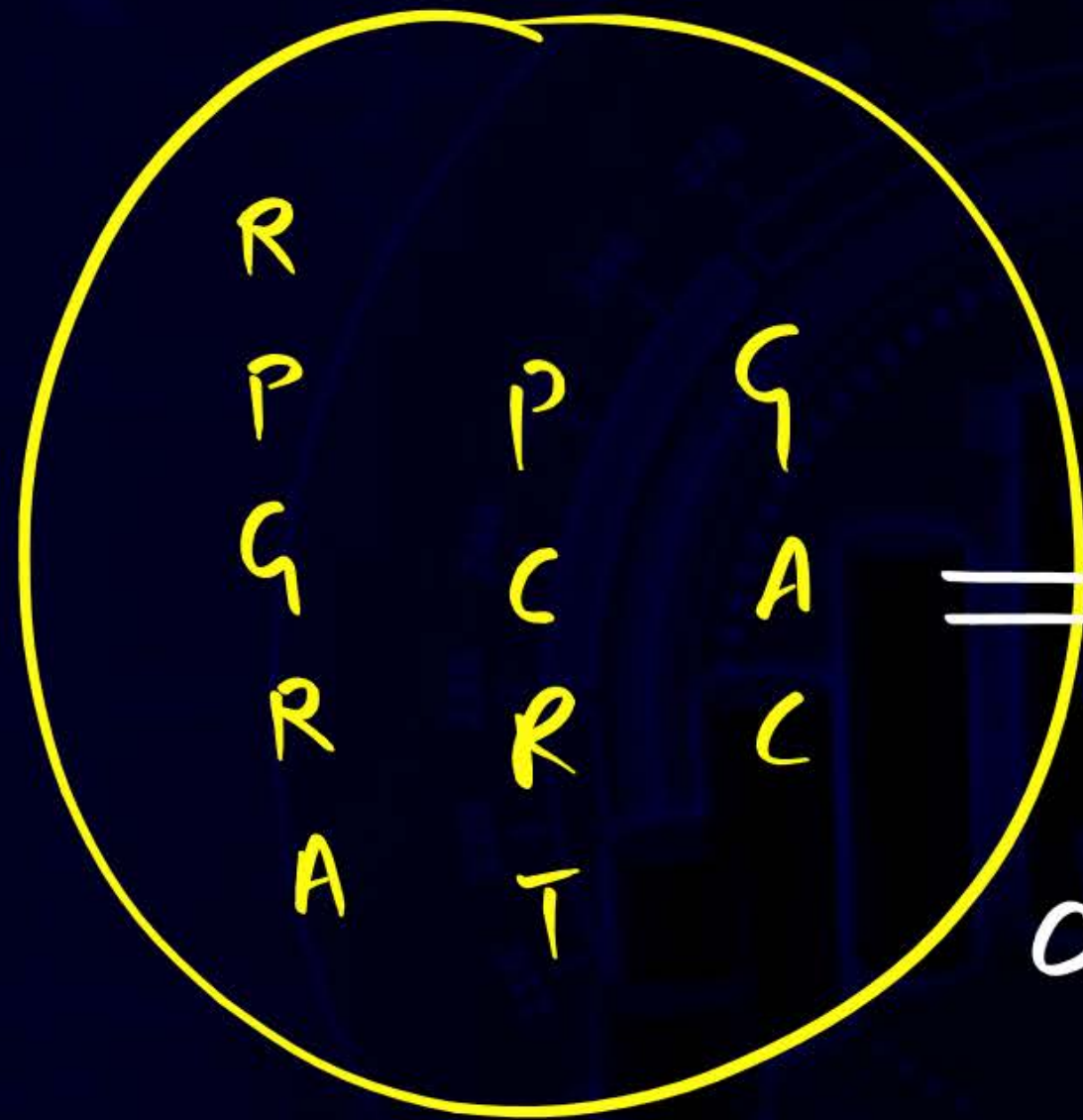
$$\text{NDP} + \text{Dep} = \text{GDP}$$

$$\text{GDP}_{fc} + \text{NIT} = \text{GDP}_{mp}$$

$$\text{GDP}_{mp} - \text{NIT} = \text{GDP}_{fc}$$

$$\text{NDP}_{fc} + \text{NIT} = \text{NDP}_{mp}$$

$$\text{NDP}_{mp} - \text{NIT} = \text{NDP}_{fc}$$



⇒ Sum total of all factors
 Income earned within
 domestic boundary / territory.

⇓
 Domestic Income

Out



Factor income from Abroad FIFA
OR

Factor income Earned by domestic factors
in Rest of the world

Factor income Paid to Abroad FITA

OR

Factor income Earned by ^{foreign} ↑ factors of
Production in Domestic territory.

$$\begin{array}{ccccccc}
 \textcircled{80} & & \textcircled{10} & & \textcircled{5} & & \textcircled{85} \\
 \text{Domestic} & + & \text{FIFA} & - & \text{FITA} & = & \text{National} \\
 \text{Income} & & \text{---} & & & & \text{Income} \\
 & & \Downarrow & & & & \underline{\underline{\hspace{1cm}}} \\
 & & \text{NFIA} & & & &
 \end{array}$$

$$\text{Domestic Income} + \text{NFIA} = \text{National Income}$$

National income

Domestic
income

Topic: Net Factor income from abroad (NFIA)

<u>FIFA</u>	<u>FITA</u>
Factor income earned by the domestic factors of production employed in the rest of the world	Factor income earned by the factors of production of the rest of the world employed in the domestic territory
Net Factor income from abroad (NFIA)	



$$NFIA = FIFA - FITA$$

Topic: Net Factor income from abroad (NFIA)

NFIA is the difference between the

- aggregate amount that a country's citizens and companies earn abroad, and
- aggregate amount that foreign citizens and overseas companies earn in that country. (FITA)

FIFA

$$\text{Domestic} + \text{NFIA} = \text{National}$$

$$\underset{N}{\text{National}} - \underline{\text{NFIA}} = \underline{\text{Domestic}}_{D}$$

$$\underline{GDP} + NFIA = GNP$$

$$\underline{NDP} + NFIA = NNP$$

$$GNP - NFIA = GDP$$

$$NNP - NFIA = NDP$$

$$GDP_{fc} + NFIA = GNP_{fc}$$

$$GDP_{fc} + NFIA + NIT = GNP_{mp}$$

G
Gross

D
Domestic

P
Product

FC
factor cost

N
Net

N
National

P
Product

MP
market price

GNP_{FC}
GNP_{MP}
NDP_{MP}

11Q

$$NNP_{mp} = 100$$

$$NIT = 50$$

$$NNP_{fc} = NNP_{mp} - NIT$$

$$= 100 - 50$$

$$= 50$$

$$Q \quad GDP_{fc} = 50$$

$$Dep = 2$$

$$NFIA = 1$$

$$NIT = 3$$

$$NNP_{mp} = GDP_{fc} - 2 + \underline{1} + \underline{3}$$

$$= 52$$

$$\text{Q} \quad \underline{\text{NDP}}_{\text{FC}} = 50$$

$$\text{NFIA} = 5$$

$$\underline{\text{NNP}}_{\text{FC}} = ?$$

Ans

$$\begin{aligned}\text{NNP}_{\text{FC}} &= \text{NDP}_{\text{FC}} + \text{NFIA} \\ &= 50 + 5 \\ &= 55\end{aligned}$$

11 Q

$$GDP_{mp} = 50$$

$$NIT = 2$$

$$Dep = 1$$

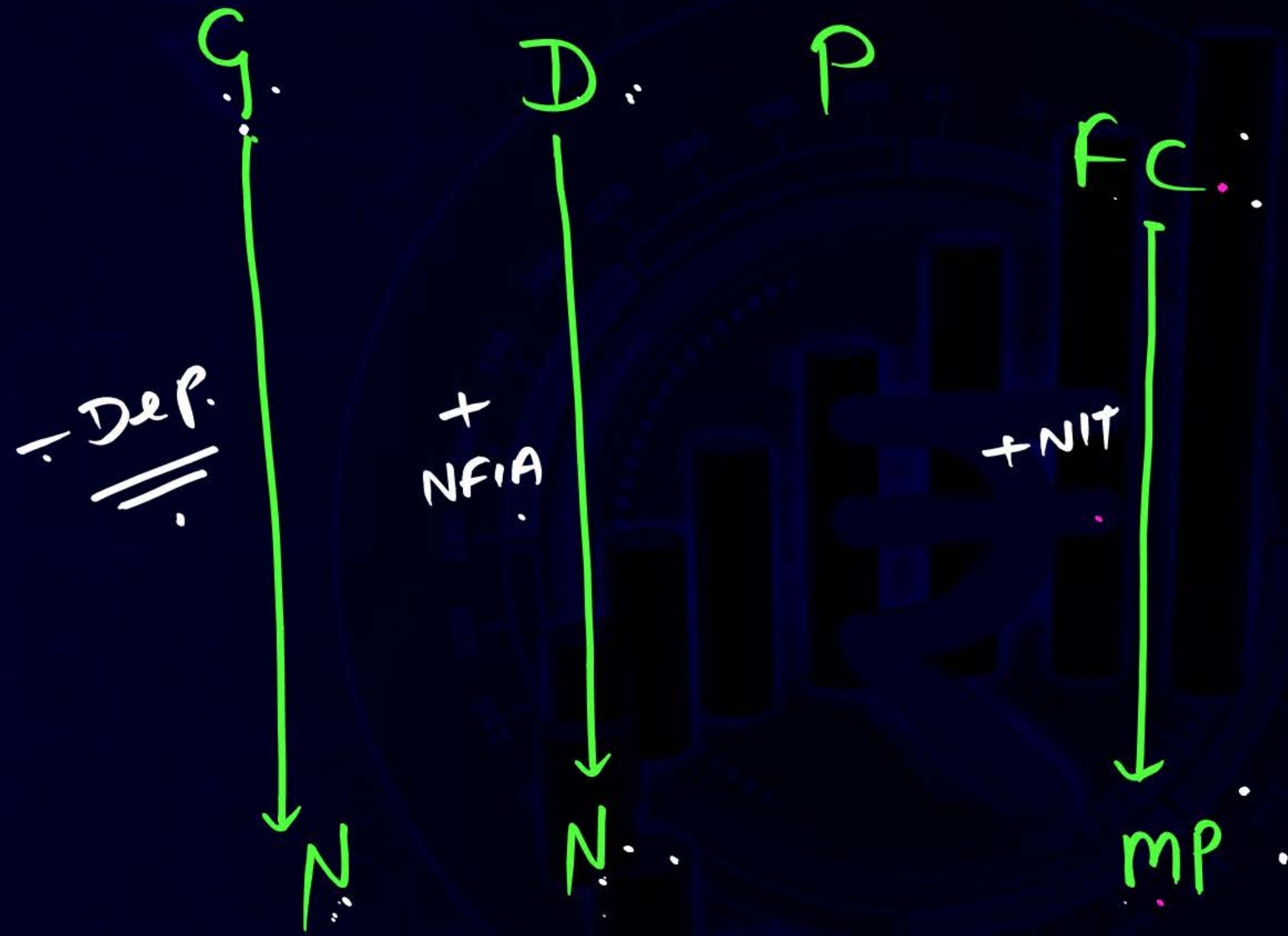
$$NDP_{fc} = ?$$

Ans

$$NDP_{fc} = GDP_{mp} - Dep - NIT$$

$$= 50 - 1 - 2$$

$$= 47$$



Golden Rules of National Income

(1) Gross-Depreciation = Net

(2) Factor Cost + Indirect Taxes - Subsidies = Market Price

OR

Factor Cost + Net Indirect Taxes = Market Price

(3) Domestic + Net Factor Income from Abroad (NFIA) = National

10

$$\underline{NDP_{fc} = 100, NIT = 2, Dep = 2, NFIA = 2}$$

$$\textcircled{1} \quad \underline{GDP_{fc}} = \underline{NDP_{fc}} + Dep = 100 + 2 = \underline{\underline{102}}$$

$$\textcircled{2} \quad \underline{GNP_{fc}} = \underline{NDP_{fc}} + NFIA + Dep = 100 + 2 + 2 = 104$$

$$\textcircled{3} \quad \underline{GNP_{mp}} = \underline{NDP_{fc}} + NIT + NFIA + Dep = 100 + 2 + 2 + 2 = \underline{\underline{106}}$$

Q $GDP_{mp} = 100$

$GST = 5$

Subsidies = 2

Consumpⁿ of fixed capital = 5 Dep.

A $NDP_{fc} = GDP_{mp} - NIT - Dep.$
 $= 100 - 3 - 5$
 $= 92$

$NIT = IT - 5$
 $= 5 - 2$
 $= 3$

Topic: Indirect Taxes and Subsidies

Independent of the volume of actual production : Production Taxes & Production Subsidies :

- Examples of production taxes are land revenues, stamps and registration fees and tax on profession, factory license fee, taxes to be paid to the local authorities, pollution tax etc.
- Examples of production subsidies are subsidies to railways, subsidies to village and small industries.

✓
Paid or received on per unit of product :

Product Taxes & Product Subsidies :

- Examples of product taxes are excise duties, sales tax, service tax and import-export duties.
- Examples of product subsidies are food, petroleum and fertilizer subsidies.

QUIZ!

#Q. Fill in the blank: $\underline{\underline{NNP_{FC}}}$ _____ = $\underline{\underline{GDP_{MP}}}$

$$GDP_{MP} = \underline{\underline{NNP_{FC}}} + \underline{\underline{NIT - NFIA}} + \underline{\underline{Dep}}$$

1. + Depreciation - Net factor income from abroad - Net Indirect taxes ✗

2. + Depreciation + Net factor income from abroad + Net Indirect taxes ✗

3. + Depreciation - Net factor income from abroad + Net Indirect taxes (C)

4. + Depreciation + Net factor income from abroad - Net Indirect taxes

#Q. If net national product is given at Market Prices, we − indirect taxes and + subsidies to get National Income of the economy

NNP_{mp}

IT

NNP_{fc}

1. Add, Subtract

2. Add, Divide ^x

3. Subtract, Add

4. Subtract, Divide ^x

$$\begin{aligned}
 \text{NNP}_{fc} &= \text{NNP}_{mp} - \text{NIT} \\
 &= \text{NNP}_{mp} - (\text{IT} - \text{sub}) \\
 &= \text{NNP}_{mp} - \text{I.T} + \text{sub}
 \end{aligned}$$



#Q. From the following information, compute GNP_{MP} $\text{GDP}_{\text{FC}} = ₹ 3,000$; Net factor income to abroad = ₹ 200. Indirect Taxes = ₹ 420, Subsidies = ₹ 240.

$$\text{GNP}_{\text{MP}} = \text{GDP}_{\text{FC}} + \text{NIT} + \text{NFIA}$$

$$= 3000 + 180 + (-200)$$

$$= \underline{2980}$$

$$\begin{array}{r} 420 \\ 240 \\ \hline 180 \end{array}$$

1. 3,380

2. 2,980

3. 3,020

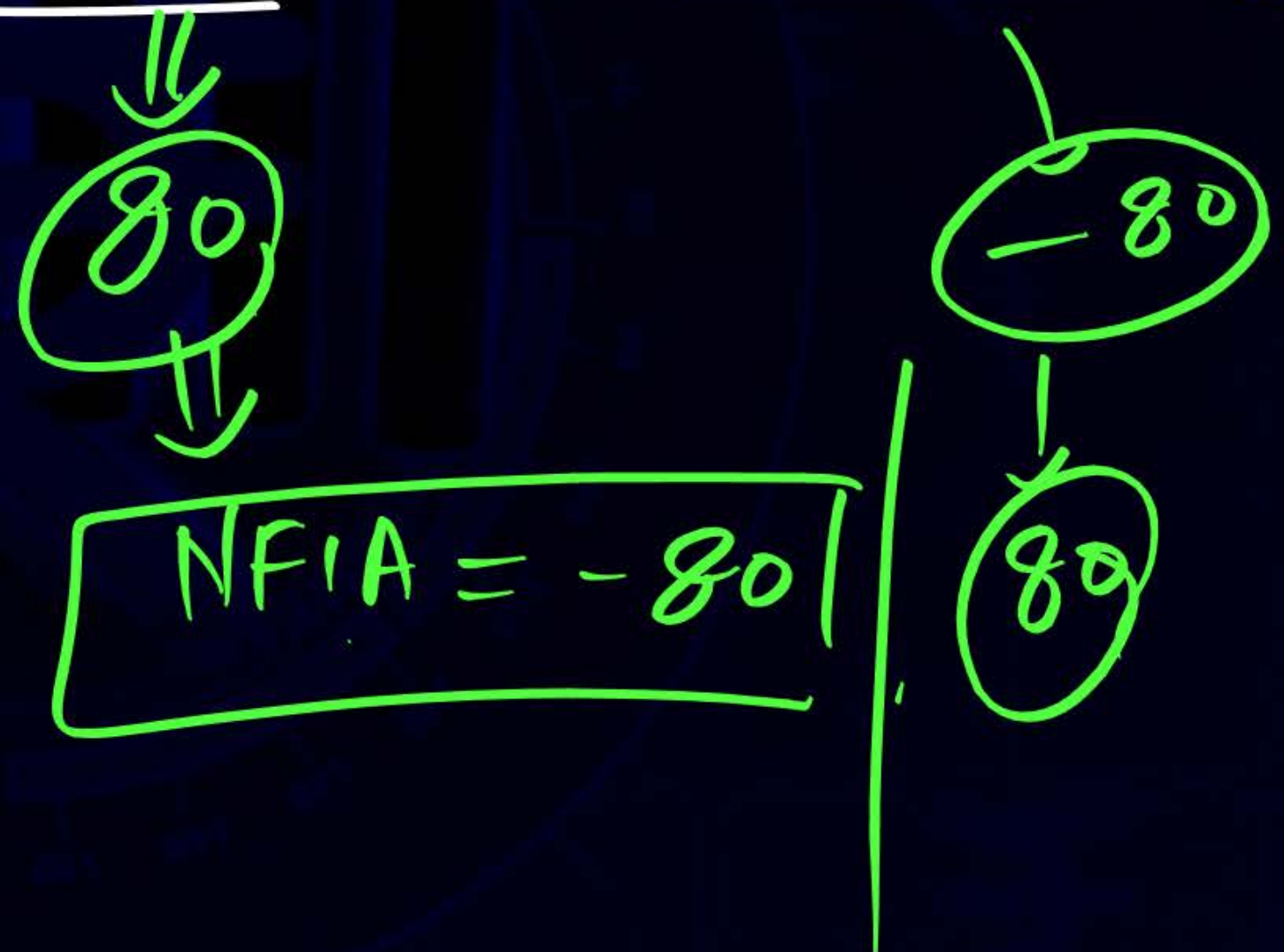
4. 2,620

(B)

Net factor income from Abroad

NFIA

Net factor income To Abroad



2 mins Summary



unit-1
2 classes



Thank You



MARKET

PROFIT

SERVICE

Vertical text on the right side of the slide, including the word 'MARKET' and other illegible characters.