National Income Accounting

Notes:

- ✓ **Net Investment = Gross Investment – Deprecation**
- ✓ **Net Indirect tax= Indirect tax – subsidy**
- ✓ **NFIA (Net factor Income from abroad) = Factor Income from Abroad – Factor income paid to abroad**
- ✓ **Net Export= Export – Import**

Gross National Product

1. From the following data calculate GNP at factor cost by Income Method & Expenditure Method

Items	Rs. in Crores
Net Domestic capital formation	500
Compensation of employees	1850
Consumption of fixed capital (Depreciation)	100
Govt. Final Expenditure	1100
Private Final consumption Expenditure	2600
Rent	400
Dividend	200
Interest	500
Net Exports	(-) 100
Undistributed Profits	900
Net Factor Income From Abroad (=income from abroad – income to abroad)	(-) 50
Net Indirect Taxes (=indirect Tax – Subsidy)	250

Sol :

Income Method

GNP_{FC} = (Compensation of employees + Rent + Interest + Undistributed Profits + Dividend) + Net Factor Income from Abroad + Consumption of fixed capital
= 1850 + (400 +500 +900 + 200) + (-) 50+ 100
= 3900 CRORE

FC = Factor Cost
MP = Market Price

Note:

- **GNP_{FC} = NNP_{FC} + Consumption of fixed capital**

  (Gross National Product; Net National Product)

- **NNP_{FC} or National Income = Compensation of employees + Rent + Interest + Undistributed Profits + Dividend + Net Factor Income from Abroad**
- **Compensation of employees is income from work which includes wages and salaries in kind and cash, and contribution to social securities**

ii. Expenditure Method

GNP_{FC} = GNP_{MP} - Net Indirect Taxes

Private Final consumption Expenditure + (Net Domestic capital formation + consumption of fixed capital) + Govt. Final consumption Expenditure + Net Exports + Net Factor Income from Abroad - Net Indirect Taxes

= 1100 +2600 + (500 +100) + (-) 100 + (-)50 – 250

= 3900 CRORE

Note

- GNP_{MP} = Private Final consumption Expenditure + Gross Domestic capital formation + Govt. Final consumption Expenditure + Net Export + Net Factor Income from Abroad
  - Gross Domestic capital formation = Net Domestic capital formation + Consumption of fixed capital)
  - Export – Import = Net Export
  - Net Factor Income from Abroad = Factor Income from Abroad – Factor Income Paid to Abroad

- GNP_{FC} = GNP_{MP} - Indirect tax + Subsidy
  = GNP_{MP} - (Indirect tax – subsidy)
  = GNP_{MP} - Net Indirect tax

GDP fc GDP mp

2. From the following data calculate (a) Gross Domestic Product at Factor Cost , and (b) Gross Domestic Product at Market price

Items	Rupees in Crores
Gross national product at factor cost	6,1500
Net exports	(-)50
Compensation of employees	3000
Rent	800
Interest	900
Profit	1,300
Net indirect taxes	300
Net domestic capital formation	800
Gross domestic capital formation	900
Factor income to abroad	80

NDP : Net Domestic Product

(i) GDP at factor cost
= NDP at factor cost + Depreciation
= Compensation of employees+ Rent+ Interest+ Profit +Mixed income+ (Gross domestic capital formation - Net domestic capital formation)

= =Rs 3,000crore + Rs 800 crore + Rs 900 crore + Rs 1,300 crore + (Rs 900 crore - Rs 800 crore)

= Rs 6100 crores

(ii) Gross Domestic Product at Market Price
= GDP at factor cost + Net Indirect taxes
=Rs 6100 + Rs300 crore
= Rs 6,400crore

3. **An Economy has two firms A & B on the basis of following information find out**

a) **Value added by firm A & B**

b) **GDP at Market Price**

Items	Rs. in Lakh
Exports by firm A	20
Imports by firm A	50
Sales to households by firm A	90
Sales to firm B by firm A	40
Sales to firm A by firm B	30
Sale to household by firm B	60

Sol: a)

Value added by firm A
= Sale to households +Sales to firm B + Exports by firm A – Imports by firm A – Purchase from firm B
= Rs 90 + Rs 40+ Rs 20- Rs 50- Rs 30
= Rs 70 Lakh

Value added by firm B
= Sales to Firm A + Sales to households – purchase from firm A
= Rs 30+ Rs 60- Rs 40
= Rs 50 Lakh

b) GDP_{MP}
= Value added by firm A + value added by Firm B
= Rs 70+ Rs 50
= Rs 120 Lakh

4. **Find out the National Income from the following particulars**

Particulars	Amount (crores)
NFIA	(-) 20000
GDP (Market Price)	4400000
Capital Consumption Expenditure (i.e. Depreciation)	10000
Primary Sector	1100000
Secondary Sector	2100000
Service Sector	1250000
Intermediate Goods	50000
Indirect Tax	35000
Subsidy	5000

Hints:

National income (or NNP at factor cost)
= NNP at Market Price – Indirect Tax + subsidy
= NDP at Market Price + NFIA – Indirect Tax + subsidy

= (GDP at market price – Capital consumption expenditure) + NFIA – Indirect + subsidy

Or

National income (or NNP at factor cost)
= (GDP at market price – Capital consumption expenditure) + NFIA – Indirect + subsidy

= (Output of Primary sector + Output of secondary sector + Output of tertiary sector – value of intermediate goods) – Capital consumption expenditure) + NFIA – Indirect + subsidy

5. Determine the national income from the following information.

Private Consumption Expenditure:	Rs.50000 Crore
Public Investment Expenditure	Rs,40000 Crore
Gross Private Investment Expenditure	Rs.76000 Crore
Public Consumption Expenditure	Rs.56000 Crore
Imports	Rs.25000 Crore
Exports	Rs.30000 Crore
Capital Consumption Expenditure	Rs.5000 Crore
NFIA (-)	Rs.12000 Crore
Indirect Tax	Rs.50000 Crore
Subsidy	Rs.10000 Crore

Hints

National income (or NNP at factor cost)

= NNP at Market Price – Indirect Tax + subsidy
= NDP at Market Price + NFIA – Indirect Tax + subsidy
= **(GDP at market price – Capital consumption expenditure) + NFIA – Indirect + subsidy**

= (Private Consumption Expenditure + Gross Private Investment Expenditure + Public Investment Expenditure + Public Consumption Expenditure – Capital consumption expenditure) + (Export – Import) + NFIA – Indirect + subsidy

Note:
Public means government

6. Find out the national income of India from the following data

(A) NDP_{fc}: Rs.5000000 Crore ; NFIA(-):Rs 20000 Crore ; Depreciation :Rs.5000 Crore

(B) GDP_{mp}: 40 Lac Crore ; GNP_{fc} :50 Lac Crore,; NFIA (+) 01 Lac Crore; Depreciation : Rs.02 Lac Crore.

Hints

A. **National income or NNP at factor cost**
= NDP_{fc} + NFIA

B. **National income or NNP at factor cost**
= GNP_{fc} - Depriciation

7. Find out NNP_{FC} from the following information

GNP_{MP}	500000 (Crores)
NFIA (-)	700 (Crores)
Depreciation	15000 (Crores)
Subsidy	8000 (Crores)
Indirect Tax	12000 (Crores)

Hints: NNP_{FC} = GNP_{MP} – Indirect tax + subsidy - Depreciation