

Questions and solution(National Income)

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 consumption 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	

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

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

4. Find out the National Income of India 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	1200000
Intermediate Goods	50000
Indirect Tax	35000
Subsidy	

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

(A) NDPfc: Rs.5000000 Crore ; NFIA(-):Rs 20000 Crore ; Depreciation :Rs.5000 Crore

(B) GDPmp: 40 Lac Crore ; GNPfc :50 Lac Crore;; NFIA (+) 01 Lac Crore; Depreciation : Rs.02 Lac Crore.

(Hints A.)National income or NNP at factor cost = NDPfc + NFIA

(Hints B) National income or NNP at factor cost = GNPfc - Depreciation

6. Find out NNPFc from the following information

GNP MP 500000 Cr.

NFIA (-) 700cr.

Depreciation 15000 cr.

Subsidy 8000 cr.

Indirect Tax 12000 cr.

Hints: NNPFc = GNP MP - Depreciation – Indirect tax – subsidy

Solution :

1. Income Method $GNPFC = \text{Compensation of employees} + \text{Rent} + \text{Interest} + \text{Undistributed Profits} + \text{Dividend} + \text{Net Factor Income from Abroad} + \text{Consumption of fixed capital} = 1850 + (400 + 500 + 900 + 200) + (-) 50 + 100 = 3900$ CRORE
Note: $\circ GNPFC = NNPFC + \text{Consumption of fixed capital}$
 $\circ NNPFC = \text{Compensation of employees} + \text{Rent} + \text{Interest} + \text{Undistributed Profits} + \text{Dividend} + \text{Net Factor Income from Abroad}$
 $\circ \text{Compensation of employees is income from work which includes wages and salaries in kind and cash, and contribution to social securities}$

ii. Expenditure Method $GNPFC = GNPMP - \text{Net Indirect Taxes} + \text{Private Final consumption Expenditure} + (\text{Net Domestic capital formation} + \text{consumption of fixed capital}) + \text{Govt. Final consumption Expenditure} + \text{Net Exports} + \text{Net Factor Income from Abroad} - \text{Net Indirect Taxes} = 1100 + 2600 + (500 + 100) + (-) 100 + (-) 50 - 250 = 3900$ CRORE

Note : $GNPMP = \text{Private Final consumption Expenditure} + \text{Gross Domestic capital formation} + \text{Govt. Final consumption Expenditure} + \text{Net Export} + \text{Net Factor Income from Abroad}$
 $\circ \text{Gross Domestic capital formation} = \text{Net Domestic capital formation} + \text{Consumption of fixed capital}$
 $\circ \text{Export} - \text{Import} = \text{Net Export}$
 $\circ \text{Net Factor Income from Abroad} = \text{Factor Income from Abroad} - \text{Factor Income Paid to Abroad}$
 $GNPFC = GNPMP - \text{Indirect tax} + \text{Subsidy}$
 $\bullet = GNPMP - (\text{Indirect tax} - \text{subsidy}) = GNPMP - \text{Net Indirect tax}$

2.(i) $GDP \text{ at factor cost} = NDP \text{ at factor cost} + \text{Depreciation} = \text{Compensation of employees} + \text{Rent} + \text{Interest} + \text{Profit} + \text{Mixed income} + (\text{Gross domestic capital formation} - \text{Net domestic capital formation}) = \text{Rs } 3,000 \text{ crore} + \text{Rs } 800 \text{ crore} + \text{Rs } 900 \text{ crore} + \text{Rs } 1,300 \text{ crore} + (\text{Rs } 900 \text{ crore} - \text{Rs } 800 \text{ crore}) = \text{Rs } 6100 \text{ crores}$

(ii) $\text{Gross Domestic Product at Market Price} = GDP \text{ at factor cost} + \text{Net Indirect taxes} = \text{Rs } 6100 + \text{Rs } 300 \text{ crore} = \text{Rs } 6,400 \text{ crore}$

3.a) $\text{Value added by firm A} = \text{Sale to households} + \text{Sales to firm B} + \text{Exports by firm A} - \text{Imports by firm A} - \text{Purchase from firm B} = \text{Rs } 90 + \text{Rs } 40 + \text{Rs } 20 - \text{Rs } 50 - \text{Rs } 30 = \text{Rs } 70 \text{ Lakh}$

$\text{Value added by firm B} = \text{Sales to Firm A} + \text{Sales to households} - \text{purchase from firm A} = \text{Rs } 30 + \text{Rs } 60 - \text{Rs } 40 = \text{Rs } 50 \text{ Lakh}$

b) $GDPMP = \text{Value added by firm A} + \text{value added by Firm B} = \text{Rs } 70 + \text{Rs } 50 = \text{Rs } 120 \text{ Lakh}$

4. Hints: $\text{National income (or NNP at factor cost)} = \text{NNP at Market Price} - \text{Indirect Tax} + \text{subsidy} = \text{NDP at Market Price} + \text{NFIA} - \text{Indirect Tax} + \text{subsidy} = (\text{GDP at market price} - \text{Capital consumption expenditure}) + \text{NFIA} - \text{Indirect} + \text{subsidy}$

Or

$\text{National income (or NNP at factor cost)} = (\text{GDP at market price} - \text{Capital consumption expenditure}) + \text{NFIA} - \text{Indirect} + \text{subsidy} = (\text{Contribution by Primary sector} + \text{Contribution by Primary sector} + \text{Contribution by Primary sector} - \text{Capital consumption expenditure}) + \text{NFIA} - \text{Indirect} + \text{subsidy}$

6. Hints A. $\text{National income or NNP at factor cost} = \text{NDPfc} + \text{NFIA}$
B. $\text{National income or NNP at factor cost} = \text{GNPfc} - \text{Depreciation}$

