

## **Income , Output and Expenditure Method to Calculate National Income Accounting**

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### **1. Calculate Gross value added at factor cost from the following :-**

- (i) Gross value of output at MP 10,500
- (ii) Depreciation 1000
- (iii) Indirect taxes 750
- (iv) Economic subsidies 200
- (v) Intermediate consumption 4000
- (vi) Compensation of employees 2000

#### **Solution**

Gross value added at Factor cost will be calculated as under:-

- Gross value of output at MP 10,500
- + Economic Subsidies +200
- Intermediate Consumption -4000
- Indirect Taxes -750

**Rs.5950/-**

### **2. From the following data, estimate the net value added at factor cost and show that it is equal to the sum of factor incomes :-**

- (i) Sales 9600
- (ii) Increase in stock 2080
- (iii) Intermediate Consumption 2370
- (iv) Depreciation 450
- (v) Wages and salaries 5400
- (vi) Interest 250
- (vii) Rent 750

(viii) Profit 2150

(ix) Net indirect Taxes 310

**Solution**

Value added at FC = Sales + increase in stock – Intermediate Consumption –

Depreciation- Net Indirect Taxes

$$= 9600 + 2080 - 2370 - 450 - 310$$

$$= \text{Rs. } 8550/-$$

Sum of Factor Incomes

Wages & salaries = 5400

+ Interest = 250

+ Rent = 750

+ Profit = 2150

8550

**3. Find out “Net value added at FC by an enterprise from the following data: Rs. In crores**

(i) Consumption of Fixed Capital 10

(ii) Subsidies 5

(iii) Indirect Taxes 25

(iv) Purchase of material and 75

Services from other production units

(v) Value of output 125

**(Ans. = 70 Corers)**

**Calculate value added by Firm A & B from the following data:- Rs. (Lakh)**

(i) Purchase by Firms B from Firm A 40

(ii) Sales by Firm B 80

(iii) Imports by Firm B 10

- (iv) Rent Paid by Firm B 05
- (v) Opening stock of Firm B 15
- (vi) Closing stock of Firm B 20
- (vii) Purchases by Firm A from Firm B 20
- (viii) Closing stock of Firm A 20
- (ix) Opening stock of Firm A 10

**Solution**

**Value of output of Firm A**

$$\begin{aligned} &= \text{Sales} + \text{stock} \\ &= 40 + (20-10) \\ &= 50 \text{ Lakhs} \end{aligned}$$

**Value added By Firm A**

**Value of output – Intermediate Consumption**

$$\begin{aligned} &= 50-20 \\ &= 30 \text{ Lakhs} \end{aligned}$$

**Value of output of Firm B**

$$\begin{aligned} &= \text{Sales} + \text{change in stock} \\ &= 20 + 80 + (20-15) \\ &= 105 \text{ Lakhs} \end{aligned}$$

**Value added By Firm B**

**Value of output – Purchase-Imports –Rent**

$$\begin{aligned} &= 105-40-10-5 \\ &= 50 \text{ Lakhs} \end{aligned}$$

**4. Calculate national income from the following data:-**

**(Rs. Crores)**

- (i) Consumption of fixed capital 50
- (ii) Employers contribution to social security 75
- (iii) Interest 160
- (iv) Net Indirect Taxes 55
- (v) Rent 130
- (vi) Dividends 45
- (vii) Corporate Tax 15
- (viii) Undistributed profit 10
- (ix) Net factor income from abroad -10
- (x) Wages and salaries 450

**Solution**

$$\text{NDP}_{fc} = (X) + (ii) + (iii) + (v) + (vi) + (vii) + (viii)$$

$$= 450 + 75 + 160 + 130 + 45 + 15 + 10 = 885 \text{ Cr.}$$

$$\text{NNP}_{at\ fc} = \text{NDP}_{fc} + (ix)$$

$$= 885 + (-10) = 875 \text{ Cr.}$$

**Notes of solution**

**\*Since wages and salaries and employees contribution to social security are given separately, these must be added to obtain compensation to employees. Dividend, undistributed profit and corporate taxes are to be added to get Total profit/Retained Earnings. Net indirect taxes, is not required in this question. Similarly consumption of fixed capital is also not required in this question.**

**5. Calculate national income from the data given below by expenditure method. Item Rs. (In crores)**

- (i) Personal consumption expenditure 3500
- (ii) Consumption of fixed capital 50
- (iii) Net fixed capital formation 1250
- (iv) Change in stock 500

(v) Exports 400

(vi) Imports 750

(vii) Net indirect taxes 40

(viii) Governments' consumption expenditure 1600

(ix) Net factor income from abroad (-) 10

(x) Wages and salaries 450

**Solution Rs. (In crores)**

Personal Consumption expenditure 3500

+ Net fixed Capital Formation 1250

+ Change in Stock 500

+ Govt. Consumption Expenditure 1600

+ Net Exports (Exports-Imports) -350

Net Domestic product at market price 6500

(-) Net Indirect Taxes 40

Net Domestic product at Factor Cost 6460

+ Net factor Income from abroad (-) 10

NNP FC (National Income) 6450

**Please Note**

**1. Since Net Fixed Capital Formation is given, we are asked to calculate net National Product at factor cost. Thus, consumption of fixed capital is not required here.**

**2. Since, fixed capital is given, we need to add change in stock to get the total domestic capital formation (Investment)**

**3. The entry wages and salaries are not required here.**