Methods of Calculating National Income

3 Marks Questions

1. Calculate sales from the following data (All India 2013)

S.No.	Contents	₹ (in lakhs)
(i)	Subsidies	200
(ii)	Opening Stock	100
(iii)	Closing Stock	600
(iv)	Intermediate Consumption	3000
(v)	Consumption of Fixed Capital	700
(vi)	Profit	750
(vii)	Net Value Added at Factor Cost	2000

Ans. GVA_{MP} = Net Value Added at Factor Cost (NVA_{FC}) – Subsidies + Consumption of Fixed Capital

$GVA_{MP} = 2000 - 200 + 700 =$ ₹ 2500 lakh

Gross Value Added at Market Price (GVA_{MP}) = Value of Output (Sales + Change in Stock) – Intermediate Consumption

$2500 = \text{Sales} + (600 - 100) - 3000$ **(2)**

$\text{Sales} = 2500 + 3000 - 500 = 5500 - 500$

$\therefore$ Sales = ₹ 5000 lakh **(1)**

2. Calculate sales from the following data (Delhi 2013)

S.No.	Contents	₹ (in lakhs)
(i)	Intermediate Cost	700
(ii)	Consumption of Fixed Capital	80
(iii)	Change in Stock	(–)50
(iv)	Subsidy	60
(v)	Net Value Added at Factor Cost	1300
(vi)	Exports	50

Ans. Gross Value Added at Market Price (GVA_{MP}) = Net Value Added at Factor Cost (NVA_{FC}) – Subsidies + Consumption of Fixed Capital

$$GVA_{MP} = ₹\ 1300 - 60 + 80$$
$$= ₹\ 1320 \text{ lakh}$$

GVA_{MP} = Value of Output (Sales + change in Stock) – Intermediate Cost **(2)**

$$1320 = \text{Sales} + (-50) - 700$$
$$\text{Sales} = 1320 + 50 + 700$$

$\text{Sales} = ₹\ 2070$ lakh **(1)**

3. Calculate sales from the following data (Delhi 2013)

S.No.	Contents	₹ (in lakhs)
(i)	Net Value Added at Factor Cost	560
(ii)	Depreciation	60
(iii)	Change in Stock	(–)30
(iv)	Intermediate Cost	1000
(v)	Exports	200
(Vi)	Indirect Taxes	60

Ans. Gross Value Added at Market Price (GVA_{MP}) = NVA_{FC} + NIT + Depreciation

$$= 560 + 60 + 60$$
$$= ₹\ 680 \text{ lakh}$$

NIT = Indirect tax – Subsidies = 60 – 0 = ₹ 60 lakh **(2)**

GVA_{MP} = Value of Output (Sales + Change in Stock) – Intermediate Cost

$$680 = \text{Sales} + (-30) - 1000$$

Sales = 680 + 1000 + 30 = ₹ 1710 lakh **(1)**

4. Calculate Gross Value Added at Factor Cost (Delhi 2012)

S.No.	Contents	₹ (in crores)
(i)	Units of Output Sold (units)	1000
(ii)	Price Per Unit of Output	30
(iii)	Depreciation	1000
(iv)	Intermediate Cost	12000
(v)	Closing Stock	3000
(vi)	Opening Stock	2000
(vii)	Excise Duty	2500
(viii)	Sales Tax	3500

Ans. Sales = Units of Output × Price Per Unit of Output

$= 1000 \times 30$

$= ₹\ 30000$ crore

Value of Output = Sales + Change in Stock

$= 30000 + (3000 - 2000) = ₹\ 31000$ crore **(1½)**

Change in Stock = Closing Stock − Opening Stock

Hence, Gross Value Added at Factor Cost (GVA_{FC})

= Value of Output − Intermediate Cost − Net Indirect Taxes (Excise Duty + Sales Tax)

$= 31000 - 12000 - (2500 + 3500)$

Gross Value Added at Factor Cost (GVA_{FC}) = ₹ 13000 crore

(1½)

5. Calculate Net Value Added at Factor Cost (Delhi 2012)

S.No.	Contents	₹ (in crores)
(i)	Consumption of Fixed Capital	600
(ii)	Import Duty	400
(iii)	Output Sold (units)	2000
(iv)	Price Per Unit of Output	10
(v)	Net Change in Stocks	(−) 50
(vi)	Intermediate Cost	10000
(vii)	Subsidy	500

Ans. Sales = Output Sold × Price Per Unit of Output

$= ₹\ 2000 \times 10 = ₹\ 20000$ crore

Now, Value of Output = Sales + Change in Stock

$= ₹\ 20000 + (-50) = ₹\ 19950$ crore **(1½)**

Gross Value Added at Market Price (GVA_{MP}) = Value of Output − Intermediate Cost

$= ₹\ 19950 - 10000 = ₹\ 9950$ crore

Hence, Net Value Added at Factor Cost (NVA_{FC}) = GVA_{MP} − Consumption of Fixed Capital − Net Indirect Tax

$= 9950 - 600 - (400 - 500) = ₹\ 9450$ crore

[Where, Net Indirect Tax = Import Duty − Subsidy]

[As import duty is an indirect tax] **(1½)**

6. **Find Net Value Added at Market Price** **(Delhi 2012)**

S.No.	Contents	₹ (in crores)
(i)	Output Sold (units)	800
(ii)	Price Per Unit of Output	20
(iii)	Excise	1600
(iv)	Import Duty	400
(v)	Net Change in Stock	(–) 500
(vi)	Depreciation	1000
(vii)	Intermediate Cost	8000

Ans. Sales = Output Sold × Price Per Unit of Output = 800×20 = ₹ 16000 crore

Now, Value of Output = Sales + Net Change in Stock

= 16000 + (–500) = ₹ 15500 crore **(2)**

Now, Gross Value Added at Market Price (GVA_{MP}) = Value of Output – Intermediate Cost

= 15500 – 8000 crore = ₹ 7500 crore **(1)**

Hence, Net Value Added at Market Price (NVA_{MP}) = GVA_{MP} – Depreciation

= 7500 – 1000 crore

= ₹ 6500 crore

7. **Find Net Value Added at Market Price** **(All India 2012)**

S.No.	Contents	₹ (in crores)
(i)	Depreciation	700
(ii)	Output Sold (units)	900
(iii)	Price Per Unit of Output	40
(iv)	Closing Stock	1000
(v)	Opening Stock	800
(vi)	Sales Tax	3000
(vii)	Intermediate Cost	20000

Ans. Net Value Added at Market Price = (Output Sold × Price Per Unit of Output) + (Closing Stock – Opening Stock)– Intermediate Cot – Depreciation

= (900×40) + (1000 – 800) – 20,000 – 700

= 36000 + 200 – 20,000 – 700

= 16200 – 700

= ₹ 15500 crore

8. Find Gross Value Added at Factor Cost (All India 2012)

S.No.	Contents	₹ (in crores)
(i)	Units of Output Sold	2000
(ii)	Price Per Unit of Output	20
(iii)	Depreciation	2000
(iv)	Change in Stock	(–) 500
(v)	Intermediate Cost	15000
(vi)	Subsidy	3000

Ans. Gross Value Added at Factor Cost (GVA_{FC}) = (Output Sold × Price Per Unit) + Change in Stock –Intermediate Cost + Subsidy

$$= 2000 \times 20 + (-500) - 15000 + 3000$$
$$= ₹\ 40000 - 15500 + 3000$$
$$= ₹\ 27500 \text{ crore}$$

9. Find out Net Value Added at Factor Cost (All India 2012)

S.No.	Contents	₹ (in crores)
(i)	Price Per Unit of Output	25
(ii)	Output Sold (units)	1000
(iii)	Excise Duty	5000
(iv)	Depreciation	1000
(v)	Change in Stock	(-) 500
(vi)	Intermediate Cost	7000

Ans. Net Value Added at Factor Cost (NVA_{FC}) = (Price Per Unit of Output × Output Sold) + Change in Stock – Intermediate Cost – Depreciation – Excise Duty

$$= (25 \times 1000) - 500 - 7000 - 1000 - 5000$$
$$= 25000 - 13500$$
$$= ₹\ 11500 \text{ crore}$$

10. From the following data calculate Net Value Added at Factor Cost (Delhi 2011)

S.No.	Contents	₹ (in crores)
(i)	Net Factor Income to Abroad	30
(ii)	Sales	3500
(iii)	Purchase of Intermediate Goods	2000
(iv)	Consumption of Fixed Capital	500
(v)	Exports	400
(vi)	Indirect Taxes	350
(vii)	Change in Stock	50

Ans. Net Value Added at Factor Cost (NVA_{FC}) = Value of Output (Sales + Change in Stock)-Purchase of
Intermediate Goods – Consumption of Fixed Capital – Indirect Taxes
= 3500 + 50 – 2000 – 500 – 350
= 3550-2850 = Rs. 700 crore

11. From the following data calculate Net Value Added at Factor Cost (All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Sales	500
(ii)	Purchase of Intermediate Goods	350
(iii)	Opening Stock	60
(iv)	Indirect Taxes	50
(v)	Consumption of Fixed Capital	90
(vi)	Import of Raw Materials	85
(vii)	Closing Stock	80

Ans. Net Value Added at Factor Cost (NVA_{FC}) = Sales + Change in Stock (Closing Stock- Opening Stock)- Purchase of Intermediate Goods – Consumption of Fixed Capital – Indirect Tax
= 500+ (80-60)-350-90-50
= 520-490 = Rs. 30 crore

12. From the following data calculate Net Value Added at Factor Cost (Delhi 2011 c)

S.No.	Contents	₹ (in crores)
(i)	Purchase of Intermediate Goods	500
(ii)	Sales	750.
(iii)	Import of Raw Materials	50.
(iv)	Depreciation	60
(v)	Net Indirect Taxes	100
(vi)	Change in Stock	(–) 30
(vii)	Exports	20

Ans. Net Value Added at Factor Cost (NVA_{FC}) = Value of Output (Sales + Change in Stock) – Purchase of Intermediate Goods – Depreciation – Net Indirect Taxes
= 750+ (-30)-500-60-100
= 750 – 690 = Rs. 60 crore

13. Calculate value of output from the following data (Delhi 2008)

S.No.	Contents	₹ (in crores)
(i)	Net Value Added at Factor Cost	100
(ii)	Intermediate Consumption	75
(iii)	Excise Duty	20
(iv)	Subsidy	5
(v)	Depreciation	10

Ans. Value of Output = Net Value Added at Factor Cost (NVA_{FC}) + Depreciation + (Excise Duty – Subsidy) + Intermediate Consumption
= 100+10+ (20-5) + 75
= 185+15
= Rs. 200 crore

14. Calculate intermediate consumption from the following data (Delhi 2008)

S.No.	Contents	₹ (in lakhs)
(i)	Value of Output	200
(ii)	Net value Added at Factor Cost	80
(iii)	Sales Tax	15
(iv)	Subsidy	5
(v)	Depreciation	20

Ans. Intermediate Consumption = Value of Output – Net Value Added at Factor Cost (NVA_{Fc})+ Depreciation + (Sales Tax-Subsidy)
= 200-[80+ 20+ (15 -5)]
= Rs. 90 lakh

15. Calculate sales from the following data (Delhi 2008)

S.No.	Contents	₹ (in lakhs)
(i)	Net Value Added at Factor Cost	300
(ii)	Intermediate Consumption	200
(iii)	Indirect Tax	20
(iv)	Depreciation	30
(v)	Change in Stock	(–) 50

Ans. Sales = Net Value Added at Factor Cost (NVA_{FC})+ Intermediate Consumption – Change in Stock+ Indirect Tax + Depreciation
= 300+ 200-(-50)+ 20+ 30
= Rs. 600 lakh

16. Calculate Net Value Added at Factor Cost from the following data (All India 2008)

S.No.	Contents	₹ (in lakhs)
(i)	Depreciation	20
(ii)	Intermediate Cost	90
(iii)	Subsidy	5
(iv)	Sales	140
(v)	Exports	7
(vi)	Change in Stock	(–) 10
(vii)	Import of Raw Material	3

Ans. Net Value Added at Factor Cost (NVA_{FC}) = Value of Output (Sales + Change in Stock) – Intermediate Cost- Depreciation – Net Indirect Tax
= [140+ (-10)]-90-20-(-5)
= 140-110 + 5
= 30 + 5 = Rs. 35 lakh

17. Calculate Gross Value Added at Factor Cost from the following data (All India 2008)

S.No.	Contents	₹ (in lakhs)
(i)	Sales Tax	20
(ii)	Sales	400
(iii)	Purchase of Raw Materials	250
(iv)	Excise Duty	30
(v)	Change in Stock	(–) 40
(vi)	Import of Raw Materials	12
(vii)	Depreciation	9

Ans. Gross Value Added at Factor Cost (GVA_{FC}) = Value of Output (Sales + Change in Stock)- Purchase of Raw Materials – Indirect Tax (Sales Tax + Excise Duty)
= [400+ (-40)]-250-(20+ 30)
= 400 – 340 = Rs. 60 lakh

18.Calculate Net Value Added at Factor Cost from the following data (All India 2008)

S.No.	Contents	₹ (in lakhs)
(i)	Sales	700
(ii)	Purchase of Machine for Installation in Factory	100
(iii)	Subsidies	50
(iv)	Change in Stock	(–) 30
(v)	Purchase of Raw Materials	400
(vi)	Rent	60
(vii)	Consumption of Fixed Capital	20

Ans. Net Value Added at Factor Cost (NVA_{FC}) = Value of output (Sales + Change in Stock) – Purchase of Raw Materials – Consumption of Fixed Capital + Subsidies
= [700 + (-30)] – 400 -20 + 50
= 750-450 = Rs. 300 lakh

19. Calculate Net Value Added at Factor Cost from the following data (All India 2008)

S.No.	Contents	₹ (in lakhs)
(i)	Sales	800
(ii)	Purchase of Raw Materials from Domestic Market	400
(iii)	Import of Raw Material	100
(iv)	Subsidies	30
(v)	Consumption of Fixed Capital	40
(vi)	Change in Stock	50
(vii)	Rent	70

Ans. Net Value Added at Factor Cost (NVA_{FC}) = Value of Output (Sales + Change in Stock)- (Purchase of Raw Material + Import of Raw Material) – Consumption of Fixed Capital + Subsidies

= (800 + 50) – (400 +100) – 40 + 30

= 880-540

= Rs. 340 lakh

20. From the following information about firm X, calculate Net Value Added at Factor Cost (Delhi 2008 C)

S.No.	Contents	₹ (in lakhs)
(i)	Purchase of Raw Material	500
(ii)	Gross Capital Formation	200
(iii)	Subsidies	60
(iv)	Opening Stock	50
(v)	Sales	800
(vi)	Net Capital Formation	180
(vii)	Closing Stock	40

Ans. Net Value Added at Factor Cost (NVA_{FC}) = Value of Output [Sales + Change in Stock (Closing Stock – Opening Stock)] – Purchase of Raw Material – Depreciation (Gross Capital Formation – Net Capital Formation) + Subsidies

= [800 + (40 – 50)] – 500 – [200 -180] + 60

= 790-500-20+60

= 850-520

= Rs. 330 lakh

21. From the following data calculate Net Value Added at Factor Cost (Delhi 2008 C)

S.No.	Contents	₹ (in lakhs)
(i)	Sales	500
(ii)	Subsidies	30
(iii)	Purchase of Machine Installed in the Factory	400
(iv)	Purchase of Raw Materials	250
(v)	Change in Stock	(–) 20
(vi)	Consumption of Fixed Capital	40

Ans. Net Value Added at Factor Cost (NVA_{FC}) = Sales + Change in Stock – Purchase of Raw Materials- Consumption of Fixed Capital + Subsidies
= 500 + (-20) – 250 -40 + 30
= 530-310
= Rs. 220 lakh

4 Marks Questions

22. Giving reason, explain how should the following be treated in estimating National Income (Delhi 2012)
(i) Expenditure on fertilisers by a farmer.
(ii) Purchase of tractor by a farmer

Ans. (i) Expenditure on fertilisers by a farmer is 'not included' in the estimation of National Income as it is an intermediate consumption as fertilisers are meant for further production.
(ii) Purchase of a tractor by a farmer is included in the estimation of National Income as it is capital formation or investment expenditure.

23. Giving reason, explain how should the following be treated in the estimation of National Income (Delhi 2012)
(i) Payment of bonus by a firm.
(ii) Payment of interest on loan taken by an employee from the employer.

Ans. (i) Payment of bonus by a firm is not Included in the estimation of National Income as it is not a part of factor income.
(ii) Payment of interest on loan taken by an employee from the employer will 'not' be included in the estimation of National Income as it will be treated as transfer income, also loan is taken for consumption purpose.

24. Giving reason, explain how should the following be treated in estimation of National Income (Delhi 2012)
(Interest paid by banks on deposits by individuals.
(ii) National debt interest.

Ans. (i) Interest paid by banks on deposits by individuals should be included in estimation of National Income as it will be treated as factor income.
(ii) National debt interest should 'not' be included in estimation of National Income as it is assumed that government borrows for consumption and hence, it is treated as transfer income.

25. Giving reason, explain how should the following be treated while estimating National Income (All India 2012)
(i) Expenditure on free services provided by government.
(ii) Payment of interest by a government firm.

Ans. (i) Expenditure on free services provided by government should be Included' in the estimation of National Income, as it is a final expenditure of the government.
(ii) Payment of interest by a government firm should 'not' be included in the estimation of National Income, as it is a transfer payment.

26. How should the following be treated while estimating National Income? Give reasons. (All India 2012)
(i) Expenditure on education of children by a family.
(ii) Payment of electricity bill by a school.

Ans. (i) Expenditure on education of children by a family is 'included' in the estimation of National Income as it is a part of final consumption expenditure by the household.
(ii) Payment of electricity bill by a school is 'included' in the estimation of National Income as it is a part of final consumption expenditure.

27. Giving reason, explain the treatment assigned to the following while estimating National Income (All India 2011)
(i) Family members working free on the farm owned by the family.
(ii) Payment of interest on borrowings by general government.

Ans. (i) Family members working free on the farm owned by the family should include' as it is a part of mixed income.
(ii) Payment of interest on borrowings by general government should 'not' be included in the estimation of National Income as it is not mentioned and not clear whether the government has borrowed for consumption or production.

28.Giving reason, explain the treatment assigned to the following while estimating National Income (All India 2011)
(i) Social security contributions by employees.
(ii) Pension paid after retirement.

Ans. (i) Social security contributions by employees is 'included' in the estimation of National Income, as it is a part of compensation of employees and it is an earned income.
(ii) Pension paid after retirement is 'not' included in the estimation of National Income as it is a kind of deferred payment to employees.

29.Giving reason, explain how are the following be treated in estimation of National Income by income method (All India 2010)
(i) Interest paid by banks on deposits.
(ii) National debt interest.

Ans. (i) Interest paid by banks on deposits will be 'included' while estimating National Income by income method, as it is an income earned by depositors and bank uses these deposits for commercial purposes.
(ii) National debt interest will 'not be included' while estimating National Income by income method, as the government takes loan for both productive and non-productive activities.

30.Giving reason, explain how are the following treated in estimating National Income method (Delhi 2010 c)
(i)Interest on a car loan paid by an individual.
(ii) Interest on a car loan paid by a government owned company.
Ans. (i) Interest on a car loan paid by an individual should not be 'included' while estimating National Income as the loan is taken for consumption purpose.
(ii) Interest on a car loan paid by a government owned company should included while estimating National Income as it is a part of government final consumption expenditure.

6 Marks Questions

31. Calculate Net Domestic Product at Factor Cost and Net National Disposable Income from the following (Delhi 2014)

S. No.	Contents	₹ (in arab)
(i)	Net Current Transfers to Abroad	5
(ii)	Government Final Consumption Expenditure	100
(iii)	Net Indirect Tax	80
(iv)	Private Final Consumption Expenditure	300
(v)	Consumption of Fixed Capital	20
(vi)	Gross Domestic Fixed Capital Formation	50
(vii)	Net Imports	10
(viii)	Closing Stock	25
(ix)	Opening Stock	25
(x)	Net Factor Income to Abroad	10

Ans. (a) **Net Domestic Product at Factor Cost** (NDP_{FC})

= Private Final Consumption Expenditure + Government Final Consumption Expenditure + Gross Domestic Fixed Capital Formation + Change in Stock (Closing stock – opening stock) – Net Imports – Net Indirect Tax – Consumption of Fixed Capital

= 300 + 100 + 50 + (25 – 25) – (– 10) – 80 – 20

= 460 – 100 = ₹ 360 arab **(3)**

(b) **Net National Disposable Income** (NNDI)

= (NDP_{FC}) + Net Indirect Tax – Net Factor Income to Abroad – Net Current Transfers to Abroad

= 360 + 80 – 10 – 5 = ₹ 425 arab **(3)**

32. Giving reason explain how should the following be treated in estimating Gross Domestic Product at Market Price? (Delhi 2014)

(i) Fees to a mechanic paid by a firm.
(ii) Interest paid by an individual on a car loan taken from a bank.
(iii) Expenditure on purchasing a car for use by a firm

Ans. (i) it is included in the $GDP_{MP,}$ as it is a part of government final consumption expenditure.
(ii) It is not included in the estimation of GDP_{MP} because loans are not used for production purpose.
(iii) It is included in the estimation of GDP_{MP} because it is a part of final expenditure by a firm.

33. Calculate Net National Product at Factor Cost and private income from the following (Delhi 2014)

S. No.	Contents	₹ (in arab)
(i)	National Debt Interest	60
(ii)	Wages and Salaries	600
(iii)	Net Current Transfers to Abroad	20
(iv)	Rent	200
(v)	Transfer Payments by Government	70
(vi)	Interest	300
(vii)	Net Domestic Product at Factor Cost Accruing to Government	400
(viii)	Social Security Contributions by Employers	100
(ix)	Net Factor Income Paid to Abroad	50
(x)	Profits	300

Ans. (a) **Net National Product at Factor Cost** (NNP_{FC})

= Wages and Salaries + Rent + Interest + Profits + Social Security Contributions by Employers – Net Factor Income Paid to Abroad

= 600 + 200 + 300 + 300 + 100 – 50 = 1500 – 50 = ₹ 1450 arab **(3)**

(b) **Private Income** = NNP_{FC} – Net domestic product at factor cost accruing to government + Transfer payment by government – Net current transfer to abroad + National debt interest

= 1450 – 400 + 70 – 20 + 60 = 1580 – 420 = ₹1160 arab **(3)**

34. Calculate National Income and Net National Disposable Income from the following (All India 2014)

S. No.	Contents	₹ (in arab)
(i)	Net Change in Stocks	50
(ii)	Government Final Consumption Expenditure	100
(iii)	Net Current Transfers to Abroad	30
(iv)	Gross Domestic Fixed Capital Formation	200
(v)	Private Final Consumption Expenditure	500
(vi)	Net Imports	40
(vii)	Depreciation	70
(viii)	Net Factor Income to Abroad	(–) 10
(ix)	Net Indirect Tax	120
(x)	Net Capital Transfers to Abroad	25

Ans. (a) National Income (NNP_{Fc})= Private Final Consumption Expenditure + Government Final Consumption Expenditure + Gross Domestic Fixed Capital Formation + Net Change in Stocks – Net Imports – Depreciation – Net Indirect Tax – Net Factor

Income to Abroad
= 500 + 100 +200 +50-40-70- 120- (- 10)
= 860 – 230
=Rs. 630 arab

(b) Net National Disposable Income (NNDI)
= NNP_{Fc} + Net Indirect Tax – Net Current transfer to Abroad
= 630 + 120 – 30 = Rs. 720 arab

35. Calculate Net National Product at Market Price and Gross National Disposable Income from the following: (All India 2014)

S. No.	Contents	₹ (in arab)
(i)	Closing Stocks	10
(ii)	Consumption of Fixed Capital	40
(iii)	Private Final Consumption Expenditure	600
(iv)	Exports	50
(v)	Opening Stock	20
(vi)	Government Final Consumption Expenditure	100
(vii)	Imports	60
(viii)	Net Domestic Fixed Capital Formation	80
(ix)	Net Current Transfers to Abroad	(–)10
(x)	Net Factor Income to Abroad	30

Ans. (a) **Net National Product at Market Price** (NNP_{MP})

= Private Final Consumption Expenditure + Government Final Consumption Expenditure + Net Domestic Fixed Capital Formation + Change in Stock (Closing Stock – Opening Stock) + Net Exports (Exports – Imports) – Net Factor Income to abroad

= 600 + 100 + 80 + (10 – 20) + (50 – 60) – 30

= 780 – 50 = ₹ 730 arab **(3)**

(b) **Gross National Disposable Income** (GNDI)

= NNP_{MP} + Consumption of Fixed Capital – Net Curent Transfers to Abroad

= 730 + 40 – (– 10) = ₹ 780 arab **(3)**

36. How should the following be treated in estimating National Income of a country?
You must give reason for your answer.
(i) Taking care of aged parents
(ii) Payment of corporate tax
(iii) Expenditure on providing police services by the government
Ans. (i) It is not included in the estimation of National Income as it does not involve any production of goods and services.

(ii) It is included in the estimation of National Income as it is a part of profit.
(iii) It is included in the estimation of National Income as it is a part of government final consumption expenditure.

37. Calculate Net National Product at Factor Cost and Gross National Disposable Income from the following: (Delhi 2014)

S. No.	Contents	₹ (in arab)
(i)	Social Security Contributions by Employees	90
(ii)	Wages and Salaries	800
(iii)	Net Current Transfers to Abroad	(–) 30
(iv)	Rent and Royalty	300
(v)	Net Factor Income to Abroad	50
(vi)	Social Security Contributions by Employers	100
(vii)	Profit	500
(viii)	Interest	400
(ix)	Consumption of Fixed Capital	200
(x)	Net Indirect Tax	250

Ans. (*i*) **Net National Product at Factor Cost** (NNP_{FC})

= Wages and Salaries + Social Security Contribution by Employers + Rent and Royalty + Profit + Interest – Net Factor Income to Abroad

= 800 + 100 + 300 + 500 + 400 – 50 = ₹ 2050 arab **(3)**

(*ii*) **Gross National Disposable Income** (GNDI)

= NNP_{FC} + Net Indirect Tax + Consumption of Fixed Capital – Net Current Transfer to Abroad

= 2050 + 250 + 200 – (–30) = ₹ 2530 arab. **(3)**

38. Calculate National Income and Gross National Disposable Income from the following: (Delhi 2014)

S. No.	Contents	₹ (in arab)
(i)	Net Current Transfers to Abroad	(–) 15
(ii)	Private Final Consumption Expenditure	600
(iii)	Subsidies	20
(iv)	Government Final Consumption Expenditure	100
(v)	Indirect Tax	120
(vi)	Net Imports	20
(vii)	Consumption of Fixed Capital	35
(viii)	Net Change in Stocks	(–) 10
(ix)	Net Factor Income to Abroad	5
(x)	Net Domestic Capital Formation	110

Ans. (a) National Income (NNP_{FC})= Private Final Consumption Expenditure + Government Final Consumption Expenditure + Net Domestic Capital Formation – Net Imports – Net Indirect Tax- Net Factor Income to Abroad
= 600 + 100 + 110-20-(120-20)-5
= 810- 125 = Rs. 685 arab
(b) Gross National Disposable Income (GNDI)
= NNP_{FC} + Net Indirect Tax + Consumption of Fixed Capital – Net Current Transfer to Abroad = 685 + (120-20) + 35 -(- 15)
= Rs. 835 arab

39. Calculate Net Value Added at Factor Cost form the following data: (Compartment 2014)

S. No.	Contents	₹ (in kakns)
(i)	Intermediate Consumption	300
(ii)	Change in Stock	50
(iii)	Net Indirect Taxes	70
(iv)	Sales	500
(v)	Consumption of Fixed Capital	20
(vi)	Imports	40

Ans. $NVA_{FC} = GVA_{MP}$ – Consumption of Fixed Capital – NIT

GVA_{MP} = Sales + Change in Stock – Intermediate Consumption

$= 500 + 50 - 300$

= ₹ 250 lakh

$NVA_{FC} = 250 - 20 - 70$

= ₹ 160 lakh

40. Calculate Personal Disposable Income: (Compartment 2014)

S. No.	Contents	₹ (in crores)
(i)	Net Domestic Product at Factor Cost accruing to private sector	700
(ii)	Corporation Tax	40
(iii)	Net Factor Income from Abroad	(–) 20
(iv)	Depreciation	50
(v)	Savings of Private Corporate Sector	150
(vi)	Current Transfers from Government	80
(vii)	National Debt Interest	60
(viii)	Direct Taxes Paid by Households	70
(ix)	Net Current Transfers to Abroad	(–) 10

Ans. Private Income = Net Domestic Product at Factor Cost Accuring to Private Sector + NFIA + Current Transfer from Government + National Debt Interest + Net Current Transfers from Abroad
= 700+ (-20)+ 80+ 60+
10 –
= Rs. 830 crore
Personal Disposable Income = Private Income – Corporation Tax – Corporate Savings – Direct Tax
= 830-40-150-70 = Rs. 570 crore

41. Calculate National Income: (Compartment 2014)

S. No.	Contents	₹ (in crores)
(i)	Net Domestic Capital Formation	150
(ii)	Government Final Consumption Expenditure	300
(iii)	Net Factor Income from Abroad	(–) 20
(iv)	Private Final Consumption Expenditure	600
(v)	Depreciation	30
(vi)	Net Exports	50
(vii)	Net Indirect Taxes	90
(viii)	Net Current Transfers from Rest of the World	40

Ans. National Income (NNP_{FC})

= Government Final Consumption Expenditure + Private Final Consumption Expenditure + Net Domestic Capital Formation + Net Exports – NIT + NFIA
= 300 + 600 +150 + 50-90 + (-20)
= Rs. 990 crore

42. How should the following be treated while estimating National Income? (Foreign 2014)
You must give reason in support of your answer.
(i) Bonus paid to employees.
(ii) Addition to stocks during a year.
(iii) Purchase of taxi by a taxi driver.

Ans. (i) No, it is not included while estimation of National Income as it is not a factor income.
(ii) Yes, it is included while estimation of National Income as it is considered as a change in stock during the year.
(iii) Yes, it is included while estimation of National Income as it is an investment expenditure by the producer.

43. **Calculate Gross National Product at Market Price and Net National Disposable Income from the following: (Foreign 2014)**

S. No.	Contents	₹ (in arab)
(i)	Net Factor Income to Abroad	(–) 10
(ii)	Net Current Transfers to Abroad	20
(iii)	Wages and Salaries	400
(iv)	Corporation Tax	50
(v)	Profit after Corporation Tax	150
(vi)	Social Security Contributions by Employers	50
(vii)	Rent	100
(viii)	Interest	70
(ix)	Mixed Income of Self Employed	300
(x)	Net Indirect Tax	140
(xi)	Consumption of Fixed Capital	80

Ans. (*i*) Gross National Product at Market Price (GNP_{MP})

= Wages and Salaries + Profit offer Corporation Tax + Corporation tax + Social Security Contributions by Employers + Rent + Interest + Mixed Income Self Employed + NIT + NFIA + Consumption of Fixed Capital

= 400 + 150 + 50 + 50 + 100 + 70 + 300 + 140 + (– 10) + 80

= ₹ 1330 crore

(*ii*) Net National Disposable Income

= National Income + NIT + Net Current Transfers from Rest of the World

= (GNP_{MP} – NIT + Consumption of Fixed Capital) + NIT + Net Current Transfers from Rest of the World

= (1050 + 140 + 80) + 140 + (–20)

= ₹ 1390 crore

44. **Calculate National Income from the following data (Delhi 2013)**

S.No.	Contents	₹ (in crores)
(i)	Private Final Consumption Expenditure	900
(ii)	Profit	100
(iii)	Government Final Consumption Expenditure	400
(iv)	Net Indirect Taxes	100
(v)	Gross Domestic Capital Formation	250
(vi)	Change in Stock	50
(vii)	Net Factor Income From Abroad	(–) 40
(viii)	Consumption of Fixed Capital	20
(ix)	Net Imports	30

Ans. National Income (NNP_{FC})

= Private Final Consumption Expenditure + Government Final Consumption Expenditure + Gross Domestic Capital Formation – Net Imports – Net Indirect Taxes – Consumption of Fixed Capital + Net Factor Income from Abroad
= 900 + 400 + 250-30-100-20 + (-40)
= 1550 – 190 = Rs. 1360 crore

45. Calculate Gross National Product at Market Price from the following data (All India 2013)

S.No.	Contents	₹ (in crores)
(i)	Compensation of Employees	2000
(ii)	Interest	500
(iii)	Rent	700
(iv)	Profits	800
(v)	Employers' Contribution to Social Security Schemes	200
(vi)	Dividends	300
(vii)	Consumption of Fixed Capital	100
(Viii)	Net Indirect Taxes	250
(ix)	Net Exports	70
(x)	Net Factor Income to Abroad	150
(xi)	Mixed Income of Self Employed	1500

Ans. Net Domestic Product at Factor Cost(NDP_{FC}) = Compensation of Employees + Interest + Rent+ Profits + Mixed Income of Self Employed
= 2000 + 500 + 700 + 800 + 1500
= Rs. 5500 crore
Gross National Product at Market Price (GNP_{mp}) = NDP_{FC} + Net Indirect Taxes – Net Factor
Income to Abroad + Consumption of Fixed Capital
= 5500 + 250- 150 + 100 = 5850- 150
= Rs. 5700 crore

46. Find out
(a) Net National Product at Market Price and
(b) Gross National Disposable Income from the following data

S.No.	Contents	₹ (in crores)
(i)	Net Current Transfers From Abroad	(–) 10
(ii)	Wages and Salaries	1000
(iii)	Net Factor Income From Abroad	(–) 20
(iv)	Social Security Contributions by Employers	100
(v)	Net Indirect Tax	80
(vi)	Rent	300
(vii)	Consumption of Fixed Capital	120
(viii)	Corporation Tax	50
(ix)	Undistributed Profits	60
(x)	Dividend	200
(xi)	Interest	400

Ans. (a) Net Domestic Product at Factor Cost (NDP_{FC})

= Wages and Salaries + Social Security Contributions by Employers + Rent + Corporation Tax + Dividend + Undistributed Profit + Interest

= 1000 + 100 + 300 + 50 + 200 + 60 + 400

= ₹ 2110 crore

$NNP_{MP} = NDP_{FC}$ + Net Indirect Tax + Net Factor Income from Abroad

= 2110 + 80 + (– 20) = ₹ 2170 crore

(b) Gross National Disposable Income (GNDI)

= GNP_{MP} + Net Current Transfers from Rest of the World

or

GNDI = NNP_{MP} + Depreciation (Consumption of Fixed Capital) + Net Current Transfers from Rest of the World

= 2170 + 120 + (– 10) = ₹ 2280 crore **(3 × 3 = 6)**

47.Find out
(i) National Income .
(ii) Net National Disposable Income (Delhi 2012)

S.No.	Contents	₹ (in crores)
(i)	Factor Income from Abroad	15
(ii)	Private Final Consumption Expenditure	600
(iii)	Consumption of Fixed Capital	50
(iv)	Government Final Consumption Expenditure	200
(v)	Net Current Transfer to Abroad	(–) 5
(vi)	Net Domestic Fixed Capital Formation	110
(vii)	Net Factor Income to Abroad	10
(viii)	Net Imports	(–) 20
(ix)	Net Indirect Tax	70
(x)	Change in Stock	(–) 10

Ans. (a) Net Domestic Product at Market Price (NDP_{MP}) = Private Final Consumption Expenditure + Government Final Consumption Expenditure + Net Domestic Fixed Capital Formation + Change in Stock – Net Imports

$NDP_{MP} = 600 + 200 + 110 + (-10) - (-20)$

= ₹ 920 crore

National Income (NNP_{FC}) = NDP_{MP} – Net Factor Income to Abroad – Net Indirect Taxes

= 920 – 10 – 70 = ₹ 840 crore **(4)**

(b) Net National Disposable Income (NNDI) = NNP_{FC} – Net Current Transfers to Abroad + Net Indirect Taxes

= 840 – (– 5) + 70 = ₹ 915 crore **(2)**

48.Find out
(i) Gross National Product at Market Price
(ii) Net Current Transfers from Abroad (All India 2012)

S.No.	Contents	₹ (in crore)
(i)	Private Final Consumption Expenditure	1000
(ii)	Depreciation	100
(iii)	Net National Disposable Income	1500
(iv)	Closing Stock	20
(v)	Government Final Consumption Expenditure	300
(vi)	Net Indirect Tax	50
(vii)	Opening Stock	20
(viii)	Net Domestic Fixed Capital Formation	110
(ix)	Net Exports	15
(x)	Net Factor Income To Abroad	(–) 10

Ans. (a) Gross National Product at Market Price (GNP_{MP}) = Private Final Consumption Expenditure
+ Government Final Consumption Expenditure
+ Net Domestic Fixed Capital Formation
+ Change in Stock (Closing stock – Opening stock)
+ Depreciation + Net Exports + Net Factor Income to Abroad

$= 1000 + 300 + 110 + (20 - 20) + 100 + 15 - (-10)$

$= ₹1535$ crore

(b) Net National Disposable Income (NNDI) = NNP_{MP} + Net Current Transfers from Abroad

$1500 = [GNP_{MP} - \text{Depreciation}]$ + Net Current Transfers from Abroad

$1500 = [1535 - 100]$ + Net Current Transfers from Abroad

Net Current Transfers from Abroad $= 1500 - 1435$

$= ₹65$ crore **(3 × 2 = 6)**

49.Find out
(i) National Income
(ii) Net National Disposable Income (All India 2012)

S.No.	Contents	₹ (in crores)
(i)	Net Imports	(–) 10
(ii)	Net Domestic Fixed Capital Formation	100
(iii)	Private Final Consumption Expenditure	600
(iv)	Consumption of Fixed Capital	60
(v)	Change in Stock	(–) 50
(vi)	Government Final Consumption Expenditure	200
(vii)	Net Factor Income to Abroad	20
(viii)	Net Current Transfers to Abroad	30
(ix)	Net Indirect Tax	70
(x)	Factor Income From Abroad	10

Ans. (a) Gross Domestic Product at Market Price (GDP_{MP}) = Private Final Consumption Expenditure
+ Government Final Consumption Expenditure
+ Net Domestic Fixed Capital Formation
+ Change in Stock + Consumption of Fixed Capital – Net Imports
= 600 + 200 + 100 + (–50) + 60 – (– 10)
= 970 – 50 = ₹ 920 crore

Again,
National Income (NNP_{FC}) = GDP_{MP} – Net Factor Income to Abroad – Net Indirect Tax – Consumption of Fixed Capital
= ₹ 920 – 20 – 70 – 60 = ₹ 770 crore **(4)**

(b) Net National Disposable Income (NNDI) = NNP_{FC} + Net Indirect Tax – Net Current Transfer to Abroad
= ₹ 770 + 70 – 20 = ₹ 840 – 20
= ₹ 820 crore **(2)**

50. Calculate
(a) Net Domestic Product at Factor Cost and
(b) Private income from the following data (All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Domestic Product Accruing to Government	300
(ii)	Wages and Salaries	1000
(iii)	Net Current Transfers to Abroad	(–) 20
(iv)	Rent	100
(v)	Interest Paid by Production Units	130
(vi)	National Debt Interest	30
(vii)	Corporation Tax	50
(viii)	Current Transfers by Government	40
(ix)	Contribution to Social Security Schemes by Employers	200
(x)	Dividends	100
(xi)	Undistributed Profits	20
(xii)	Net Factor Income From Abroad	0

Ans. (a) Net Domestic Product at Factor Cost (NDP_{FC}) = Wages and Salaries + Rent + Interest Paid byProduction Units + Corporation Tax + Dividends + Undistributed Profits + Social Security Schemes by Employers
= 1000+100 + 130 + 50+100 + 20+200 = Rs. 1600 crore
(b) Private Income = NDP_{FC} – Domestic Product Accruing to Government
– Net Current Transfers to Abroad + National Debt Interest + Current Transfers by

Government + Net Factor Income from Abroad
= 1600-300-(-20)+ 30+ 40+0
= Rs. 1390 crore

51. Calculate
(a) Net National Product at Market Price
(b) Private Income from the following data (All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Net Current Transfers to Abroad	30
(ii)	Mixed Income	600
(iii)	Subsidies	20
(iv)	Operating Surplus	200
(v)	National Debt Interest	70
(vi)	Net Factor Income to Abroad	10
(vii)	Compensation of Employees	1400
(viii)	Indirect Tax	100
(ix)	Domestic Product Accruing to Government	350
(x)	Current Transfers by Government	50

Ans. (a) Net National Product at Market Price (NNP_{MP}) = Compensation of Employees + Operating Surplus
+ Mixed Income + (Indirect Tax − Subsidies)
− Net Factor Income to Abroad
= 1400 + 200 + 600 + (100 − 20) − 10
= ₹ 2270 crore

(b) Private Income = NNP_{MP} − Net Indirect Tax − Domestic Product Accruing to Government
− Net Current Transfers to Abroad + National Debt Interest
+ Current Transfers by Government
= 2270 − (100 − 20) − 350 − 30 + 70 + 50
= ₹ 1930 crore **(3 × 2 = 6)**

52. Calculate
(a) Gross National Product at Market Price and
(b) Personal Disposable Income from the following data (All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Net Factor Income to Abroad	10
(ii)	Private Income	1700
(iii)	Operating Surplus	300
(iv)	Corporation Tax	150
(v)	Undistributed Profits	30
(vi)	Mixed Income	500
(vii)	Consumption of Fixed Capital	100
(viii)	Personal Taxes	200
(ix)	Compensation of Employees	1200
(x)	Net Indirect Tax	250

Ans. (a) Gross National Product at Market Price (GNP_{MP}) = Operating Surplus + Mixed Income + Compensation of Employees + Net Indirect Tax – Net Factor Income to Abroad + Consumption of Fixed Capital

= 300 + 500 + 1200 + 250 – 10 + 100

= ₹ 2340 crore

(b) Personal Disposable Income = Private Income – Corporation Tax – Undistributed Profits – Personal Taxes

= 1700 – 150 – 30 – 200

= ₹ 1320 crore **(3 × 2 = 6)**

53.Calculate
(a) Gross Domestic Product at Factor Cost and
(b) Net National Disposable income from the following data (All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Net Indirect Tax	130
(ii)	Government Final Consumption Expenditure	100
(iii)	Profits	90
(iv)	Net Domestic Capital Formation	120
(v)	Change in Stocks	(–) 10
(vi)	Private Final Consumption Expenditure	500
(vii)	Net Imports	20
(viii)	Net Current Transfers to Abroad	10
(ix)	Net Factor Income to Abroad	30
(x)	Gross Domestic Capital Formation	160
(xi)	Depreciation	40

Ans. (a) Gross Domestic Product at Factor Cost (GDP_{FC}) = Government Final Consumption Expenditure
+ Private Final Consumption Expenditure + Gross Domestic Capital Formation – Net Imports – Net Indirect Tax
=100 + 500+160 -20-130
=Rs. 610 crore
(b) Net National Disposable Income = GDP_{FC}+ Net Indirect Tax – Net Factor Income to Abroad – Net Current Transfers to Abroad – Depreciation
=610 +130-30 -10-40
=Rs. 660 crore

54. Calculate National Income and Gross National Disposable Income from the following (Delhi 2011)

S.No.	Contents	₹ (in crores)
(i)	Net Current Transfers to the Rest of the World	(–) 5
(ii)	Private Final Consumption Expenditure	500
(iii)	Consumption of Fixed Capital	20
(iv)	Net Factor Income to Abroad	(–)10
(v)	Government Final Consumption Expenditure	200
(vi)	Net Indirect Tax	100
(vii)	Net Domestic Fixed Capital Formation	120
(viii)	Net Imports	30
(ix)	Change in Stock	(–) 20

Ans. (a) National Income (NNP_{FC}) = Private Final Consumption Expenditure
+ Government Final Consumption Expenditure + Net Domestic Fixed Capital Formation
+ Change in Stock + Consumption of Fixed Capital- Net Imports – Net Indirect Tax – Net Factor Income to Abroad
= 500 +200+120 + (-20) + 20-30 -100 -(-10) -20
= 700+100+10-130 = Rs. 680 crore
(b) Gross National Disposable Income (GNDI) =NNP_{FC}+ Net Indirect Taxes + Consumption of Fixed Capital – Net Current Transfer to the Rest of the World
= 680 + 20+100- (-5) = Rs. 805 crore

55. Calculate Net National Product at Market Price and Gross National Disposable Income. (Delhi 2011)

S.No.	Contents	₹ (in arab)
(i)	Consumption of Fixed Capital	40
(ii)	Change in Stocks	(–) 10
(iii)	Net Imports	20
(iv)	Gross Domestic Fixed Capital Formation	100
(v)	Private Final Consumption Expenditure	800
(vi)	Net Current Transfer to Rest of the World	5
(vii)	Government Final Consumption Expenditure	250
(viii)	Net Factor Income to Abroad	40
(ix)	Net Indirect Tax	130

Ans. (a) Net National Product at Market Price (NNP_{MP}) = Private Final Consumption Expenditure
+ Government Final Consumption Expenditure
+ Gross Domestic Fixed Capital Formation
+ Change in Stock – Consumption of Fixed Capital
– Net Factor Income to Abroad – Net Imports

$NNP_{MP} = 800 + 250 + 100 + (-10) - 40 - 40 - 20$

$= 1150 - 110 =$ ₹ 1040 arab **(4)**

Again,

(b) Gross National Disposable Income (GNDI) = NNP_{MP} + Consumption of Fixed Capital
– Net Current Transfers to Rest of the World

$= 1040 + 40 - 5 = 1080 - 5 =$ ₹ 1075 arab **(2)**

56.Calculate
(i) Gross National Product at Market Price
(ii) Net National Disposable Income (All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Private Final Consumption Expenditure	3000
(ii)	Net Factor Income to Abroad	100
(iii)	Government Final Consumption Expenditure	800
(iv)	Net Export	(–) 200
(v)	Net Current Transfers From Rest of the World	300
(vi)	Gross Domestic Fixed Capital Formation	600
(vii)	Change in Stock	(–) 20
(viii)	Net Indirect Taxes	400
(ix)	Factor Income From Abroad	50
(x)	Net Domestic Capital Formation	500

Ans. (a) Gross National Product at Market Price (GNP_{MP}) = Private Final Consumption Expenditure
+ Government Final Consumption Expenditure
+ Gross Domestic Fixed Capital Formation
+ Change in Stock + Net Exports – Net Factor Income to Abroad

$= 3000 + 800 + 600 + (-20)] + (-200) - 100$

$= 4400 - 320$

$=$ ₹ 4080 crore

(b) Net National Disposable Income (NNDI)

$= GNP_{MP}$ – Depreciation + Net Current Transfers from Rest of the World

$= 4080 - (600 - 20 - 500) + 300$

$= 4080 - 80 + 300$

$=$ ₹ 4300 crore **($3 \times 2 = 6$)**

57. Calculate .
(i) National Income
(ii) Gross National Disposable Income from the following data

(All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Government Final Consumption Expenditure	100
(ii)	Gross Domestic Fixed Capital Formation	150
(iii)	Net Current Transfers to Abroad	(–) 10
(iv)	Net Factor Income to Abroad	10
(v)	Change in Stock	30
(vi)	Net Domestic Capital Formation	120
(vii)	Net Indirect Taxes	80
(viii)	Private Final Consumption Expenditure	700
(ix)	Factor Income From Abroad	25
(x)	Net Exports	(–) 20
(xi)	Consumption of Fixed Capital	60

Ans. (a) National Income (NNP_{FC}) = Private Final Consumption Expenditure+ Government Final Consumption Expenditure + Net Domestic Capital Formation + Change in Stock – Net Exports – Net Indirect Taxes – Net Factor Income to Abroad
= 700+100+120+ (-20) -80-10
= 920-110 = Rs. 810 crore
(b) Gross National Disposable Income (GNDI) =NNP_{FC} + Consumption of Fixed Capital + Net Indirect Taxes – Net Current Transfers to Abroad

= 810 + 60 + 80-(-10)
= Rs. 960 crore

58.Calculate

(a) Gross Domestic Product at Market Price and
(b) Factor Income from Abroad from the following data (All India 2010)

S.No.	Contents	₹ (in crores)
(i)	Profits	500
(ii)	Exports	40
(iii)	Compensation of Employees	1500
(iv)	Gross National Product at Factor Cost	2800
(v)	Net Current Transfers From Rest of The World	90
(vi)	Rent	300
(vii)	Interest	400
(viii)	Factor Income to Abroad	120
(ix)	Net Indirect Taxes	250
(x)	Net Domestic Capital Formation	650
(xi)	Gross Fixed Capital Formation	700
(xii)	Change in Stock	50

Ans. (a) Gross Domestic Product at Market Price (GDP_{MP}) = Compensation of Employees + (Profits + Rent + Interest) + (Gross Fixed Capital Formation + Change in Stock – Net Domestic Capital Formation) + Net Indirect Taxes

$= 1500 + (500 + 300 + 400)$
$+ (700 + 50 - 650) + 250 =$ ₹ 3050 crore

Note Depreciation = (Gross Domestic Fixed Capital Formation + Change in Stock) – Net Domestic Capital Formation

(b) Gross National Product at Factor Cost (GNP_{FC}) = GDP_{MP} – Net Indirect Taxes + Factor Income from Abroad – Factor Income to Abroad

$2800 = 3050 - 250 +$ Factor Income from Abroad $- 120$

$2800 = 2680 +$ Factor Income from Abroad

Factor Income from Abroad = $2800 - 2680$

Factor Income from Abroad = ₹ 120 crore **$(3 \times 2 = 6)$**

59. How will you treat the following while estimating National Income of India?

(i) Dividend received by an Indian firm from its investment in shares of a foreign company.
(ii) Money received by a family in India from relatives working abroad.
(iii) Interest received on loans given to a friend for purchasing a car. (Delhi 2010)

Ans. (i) Dividend received by an Indian firm from its investment in shares of a foreign company will be included in the estimation of National Income, as dividend is a part of profit and treated as factor income from abroad which is added to domestic income.
(ii) Money received by a family in India from relatives working abroad will not be included while estimating National Income, as it is merely remittance from abroad and no flow of goods or services are involved.
(iii) Interest received on loans given to a friend for purchasing a car will not be included in the estimation of National Income as loan is given for consumption purpose.

60. How will you treat the following while estimating National Income of India? Give reasons for your answer. (All India 2010)
(i) Dividend received by a foreigner from investment in share of an Indian company.
(ii) Profits earned by a branch of an Indian bank in Canada.
(iii) Scholarship given to Indian students studying in India by a foreign company.

Ans. (i) Dividend received by a foreigner from investment in shares of an Indian company will be deducted from National Income as it is factor income to abroad.
(ii) Profits earned by a branch of Indian bank in Canada is factor income received from abroad. It is included in National Income.
(iii) Scholarship given to Indian students studying in India by a foreign firm will not be included while estimating National Income, as it is a transfer payment.

61.Explain the problem of double counting in estimating national income, with the help of an example. Also explain, two alternative ways of avoiding the problem. While estimation of National Income. (All India 2010)

Ans. The counting of the value of a commodity more than once while estimation of National Income is called double counting. This leads to over estimation of the value of goods and services produced. In other words, problem of double counting arise when the value of intermediate goods is also added in total output, e.g. suppose if we include the price of wheat, then the price of floor and finally price of bread. It will lead to the problem of double counting. As the price of wheat is included three time and that of floor two times. The problem of double counting can be avoided by the following two alternative ways:

(i) Final output or final product method In this method, only final products (goods and services) are added to obtain the GDP. Intermediate products are ignored. Here, final products are only those products which are ready for end use or consumption by their final users (consumers or producers).

(ii) Value added method This approach or method is a way to avoid the problem of double counting. The value added by a firm is the difference between value of output and the value of intermediate products of each firm of the country. The sum of Value added' by all the firms gives us the GDP of the country. Hence, the problem of double counting is avoided. Value Added by a Firm = Value of Output of the Firm – Intermediate Consumption of the Firm.

62.Calculate (a) Gross Domestic Product at Market Price and (b) Factor Income to Abroad from the following data (All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Compensation of Employees	1000
(ii)	Net Exports	(–) 50
(iii)	Profits	400
(iv)	Interest	250
(v)	Rent	150
(vi)	Gross National Product at Factor Cost	1850
(vii)	Gross Domestic Capital Formation	220
(viii)	Net Fixed Capital Formation	150
(ix)	Change in Stock	20
(x)	Factor Income From Abroad	30
(xi)	Net Indirect Taxes	100

Ans. (a) Net Domestic Product at Factor Cost (NDP_{FC}) = Compensation of Employees + Rent + Interest + Profit

$= 1000 + 150 + 250 + 400 =$ ₹ 1800 crore

Gross Domestic Product at Market Price $(GDP_{MP}) = NDP_{FC}$ + Net Indirect Taxes + Depreciation

$= 1800 + 100 + 50 =$ ₹ 1950

Depreciation $= 220 - (150 + 20)$

$= 220 - 170 =$ ₹ 50 crore

(b) Gross National Product at Factor Cost $(GNP_{FC}) = GDP_{MP}$ – Net Indirect Taxes + (Factor Income from Abroad – Factor Income to Abroad)

$1850 = 1950 - 100 + (30 -$ Factor Income to Abroad$)$

Factor Income to Abroad $= 1850 - 1820 =$ ₹ 30 crore $(3 \times 2 = 6)$

Note Depreciation = Gross Domestic Capital 3Formation – (Net Fixed Capital Formation + Change in Stock)

63. Calculate National Income by the
(a) Expenditure method and
(b) Production method from the following data (Delhi 2011)

S.No.	Contents	₹ (in crores)
(i)	Gross Value Added at Market Price by the Primary Sector	300
(ii)	Private Final Consumption Expenditure	750
(iii)	Consumption of fixed Capital	150
(iv)	Net Indirect Taxes	120
(v)	Gross Value Added at Market Price by the Secondary Sector	200
(vi)	Net Domestic Fixed Capital Formation	220
(vii)	Change in Stocks	(–) 20
(viii)	Gross Value Added by the Tertiary Sector	700
(ix)	Net Imports	50
(x)	Government Final Consumption Expenditure	150
(xi)	Net Factor Income from Abroad	20

Ans. (a) By Expenditure Method
National Income (NNP_{FC}) = Private Final Consumption Expenditure + Government Final Consumption Expenditure + Net Domestic Fixed Capital Formation + Change in Stocks – Net Imports – Net Indirect Taxes + Net Factor Income from Abroad
= 750 +150 + 220 + (-20) -50 -120 + 20 = 1140 -190=? 950 crore

(b) By Production Method
National Income (NNP_{FC}) = Gross Value Added at Market Price by the Primary Sector+ Gross Value Added at Market Price by the Secondary Sector + Gross Value Added at Market Price by the Tertiary Sector-Net Indirect Taxes-Consumption of Fixed Capital + Net Factor Income from Abroad
= 300+200 + 700-120-150 + 20 , ,
= 1220-270 = Rs. 950 crore

64. Calculate Net Domestic Product at Factor Cost by
(a) Income method and
(b) Production method from the following data (All India 2011)

S.No.	Contents	₹ (in crores)
(i)	Net Value Added at Market Price by Primary Sector	1000
(ii)	Wages and Salaries	2000
(iii)	Social Security Contribution by Employers	100
(iv)	Net Value Added at Market Price by the Secondary Sector	600
(v)	Corporation Tax	30
(vi)	Retained Earnings of Private Corporations	10
(vii)	Net Value Added at Market Price by the Tertiary Sector	1400
(viii)	Dividend	60
(ix)	Rent	300
(x)	Interest	300
(xi)	Net Indirect Tax	200
(xii)	Social Security Contribution by Employees	80

Ans. (a) By Income Method

Net Domestic Product at Factor Cost (NDP_{FC}) = Wages and Salaries + Social Security Contribution by Employers + Corporation Tax + Retained Earnings of Private Corporations + Dividend + Rent + Interest
= 2000+100 + 30+10+60 + 300 + 300 = Rs. 12800 crore

(b) By Production Method
Net Domestic Product at Factor Cost (NDP_{FC})
= Net Value Added by Primary Sector + Net Value Added by Secondary Sector
+ Net Value Added by Tertiary Sector – Net Indirect Taxes
= 1000 + 600+1400-200= 3000 -200 = Rs. 2800 crore

65. Calculate Net Domestic Product at Factor Cost by the expenditure method and production method (All India 2010)

S.No.	Contents	₹ (in crores)
(i)	Value of Output in Economic Territory	4100
(ii)	Net Imports	(–) 50
(iii)	Intermediate Purchase by Primary Sector	600
(iv)	Private Final Consumption Expenditure	1450
(v)	Intermediate Purchases by Secondary Sector	700
(vi)	Government final Consumption Expenditure	400
(vii)	Net Domestic Fixed Capital Formation	200
(viii)	Intermediate Purchases by Tertiary Sector	700
(ix)	Net Change in Stocks	(–) 50
(x)	Indirect Taxes	100
(xi)	Consumption of Fixed Capital	50

Ans. (a) By Expenditure Method
Net Domestic Product at Factor Cost(NDP_{FC}) = Private Final Consumption Expenditure+ Government Final Consumption Expenditure + Net Domestic Fixed Capital Formation + Net Change in Stocks – Net Imports – Indirect Taxes
= 1450 + 400 + [200 + (- 50)] – (-50) -100 = Rs. 1950 crore

(b) By Production Method
Net Domestic Product at Factor Cost (NDP_{FC}) = Value of Output in Economic Territory-(Intermediate Purchase by Primary Sector+ Intermediate Purchase by Secondary Sector + Intermediate Purchase by Tertiary Sector)-Consumption of Fixed Capital – Indirect Taxes
= 4100- (600 + 700 + 700) – 50 -100
= 4100 -2150
= Rs. 1950 crore

66. Calculate 'Gross National Product at Market Price' by production method and income method (All India 2010)

S.No.	Contents	₹ (in crores)
(i)	Value of Output by Primary Sector	1000
(ii)	Indirect Tax	200
(iii)	Compensation of Employees	780
(iv)	Net Factor Income to Abroad	100
(v)	Intermediate Purchases by all Sectors	2900
(vi)	Value of Output by Secondary Sector	2000
(vii)	Rent	300
(viii)	Subsidy	50
(ix)	Interest	600
(x)	Consumption of Fixed Capital	120
(xi)	Value of Output by Tertiary Sector	3000
(xii)	Profits	320
(xiii)	Mixed Income of the Self Employed	830

Ans. (a) **By Production Method**

Gross National Product at Market Price (GNP_{MP}) = (Value of Output by Primary Sector + Value of Output by Secondary Sector + Value of Output by Tertiary Sector) – Intermediate Purchase by All Sectors – Net Factor Income to Abroad

$= (1000 + 2000 + 3000) - 2900 - 100$

$= 6000 - 3000$

$=$ ₹ 3000 crore

(b) **By Income Method**

Gross National Product at Market Price (GNP_{MP}) = Compensation of Employees + Rent + Interest + Profits + Mixed Income of the Self Employed + Net Indirect Taxes (Indirect Taxes – Subsidy) – Net Factor Income to Abroad + Consumption of Fixed Capital

$= 780 + 300 + 600 + 320 + 830 + (200 - 50) - 100 + 120$

$= 3100 - 100 =$ ₹ 3000 crore **(3 × 2 = 6)**

67. How will you treat the following while estimating domestic factor income of India? Give reasons for your answer.
(i) Remittances from non-resident Indians to their families in India.
(ii) Rent paid by embassy of Japan in India to a resident Indian.
(iii) Profits earned by branches of foreign bank in India. (Delhi 2009)

Ans. (i) Remittances from non-resident Indians to a resident in India should not be included in the estimation of domestic factor income as it is not a part of domestic income and the income is not generated in domestic territory of India.
(ii) Rent paid by the embassy of Japan is not included in the domestic factor income as the embassy is a part of Japan's domestic operation territory.
(iii) Profits earned by branches of a foreign bank in India as profit is earned in the domestic territory of India. So, it is a part of domestic factor income.

68.Calculate Gross National Product at Factor Cost from the following data by
(a) Income method and
(b) Expenditure method. **(Delhi 2009)**

S.No.	Contents	₹ (in crores)
(i)	Private Final Consumption Expenditure	1000
(ii)	Net Domestic Capital Formation	200
(iii)	Profits	400
(iv)	Compensation of Employees	800
(v)	Rent	250
(vi)	Government Final Consumption Expenditure	500
(vii)	Consumption of Fixed Capital	60
(viii)	Interest	150
(ix)	Net Current Transfer From Rest of the World	(–) 80
(x)	Net Factor Income From Abroad	(–) 10
(xi)	Net Exports	(–) 20
(xii)	Net indirect taxes	80

Ans. (a) By Income Method
Gross National Product at Factor Cost (GNP_{FC}) = Compensation of Employees + Profits + Rent + Interest + Consumption of Fixed Capital + Net Factor Income from Abroad
= 800+ 400+ 250+150+ 60+ (-10)
= Rs. 1650 crore

(b) By Expenditure Method
Gross National Product at Factor Cost (GNP_{FC}) = Private Final Consumption Expenditure+ Government Final Consumption Expenditure + Net Domestic Capital Formation + Consumption of Fixed Capital + Net Exports – Net Indirect Taxes + Net Factor Income from Abroad
= 1000+ 500 + 200 + 60 + (- 20) – 80 + (-10)
= 1760-110
= Rs. 1650 crore

69. How will you treat the following while estimating National Income of India? Give reasons to your answer.
(i) Salaries received by Indian residents working in Russian Embassy in India.
(ii) Profits earned by an Indian bank from its abroad branches.
(iii) Entertainment tax received by government. (Delhi 2009)

Ans. (i) Salaries received by Indian residents working in Russian Embassy in India will be included while estimating National Income in India, as it is a factor income from abroad.
(ii) Profits earned by an Indian bank from its abroad branches is included while estimating National Income of India as it is a factor income from abroad.
(iii) Entertainment tax received by government is not included while estimating the National Income of India as it is a indirect tax and not included at factor cost.

70. How will you treat the following while estimating National Income of India? Give reasons for your answer.
(i) Salaries paid to Russians working in Indian Embassy in Russia.
(ii) Profits earned by an Indian company from its branches in Singapore.
(iii) Capital gains to Indian residents from sale of shares of a foreign company.

Ans. (i) Salaries paid to Russians working in Indian Embassy in Russia will not be included in estimation of National Income of India, as it is a factor income paid to abroad.
(ii) Profits earned by an Indian company from its branches in Singapore will be included while estimating National Income of India, as it is a factor income from abroad.
(iii) Capital gains to Indian residents from sale of shares of a foreign company will not be included while estimating National Income in India, as it is a kind of transfer income.

71. Calculate Gross National Product at Factor Cost by
(a) Income method and
(b) Expenditure method from the following data (Delhi 2009)

S.No.	Contents	₹ (in crores)
(i)	Net Domestic Capital Formation	500
(ii)	Compensation of Employees	1850
(iii)	Consumption of Fixed Capital	100
(iv)	Government Final Consumption Expenditure	1100
(v)	Private Final Consumption Expenditure	2600
(vi)	Rent	400
(vii)	Dividend	200
(viii)	Interest	500
(ix)	Net Exports	(–) 100
(x)	Profits	1100
(xi)	Net Factor Income From Abroad	(–) 50
(xii)	Net Indirect Taxes	250

Ans. (a) By Income Method
Gross National Product at Factor Cost (GNP_{FC}) = Compensation of Employees + (Rent + Interest+ Profits) + Net Factor Income from Abroad + Consumption of Fixed Capital
=1850 + (400 + 500+1100 + 100 + (-50)
= 3950-50 = Rs. 3900 crore

(b) By Expenditure Method

Gross National Product at Factor Cost(GNP_{FC}) = Private Final Consumption Expenditure + Government Final Consumption Expenditure + Net Domestic Capital Formation + Consumption of Fixed Capital + Net Exports + Net Factor Income from Abroad – Net Indirect Taxes
= 2600 + 1100 + 500+100 + (-100) + (-50) -250
= 4300 – 400
= Rs. 3900 crore

72. While estimating National Income, how will you treat the following? Give reasons for your answer. (All India 2009)

(i) Imputed rent of self occupied houses.
(ii) Interest received on debentures.
(iii) Financial help received by flood victims.

Ans. (i) Imputed rent of self occupied houses are included while estimating National Income, as it is a factor income.
(ii) Interest received on debentures are not included in National Income as it is a transfer income.

(iii) Financial help received by flood victims are not included while estimating National Income, as it is a kind of transfer payment.

73.Calculate National Income by
(a) Income method and
(b) Expenditure method from the following data (All India 2009)

S.No.	Contents	₹ (in crores)
(i)	Interest	150
(ii)	Rent	250
(iii)	Government Final Consumption Expenditure	600
(iv)	Private Final Consumption Expenditure	1200
(v)	Profit	640
(vi)	Compensation of Employees	1000
(vii)	Net Factor Income to Abroad	30
(viii)	Net Indirect Taxes	60
(ix)	Net Exports	(–) 40
(x)	Consumption of Fixed Capital	50
(xi)	Net Domestic Capital Formation	40

Ans. (a) By Income Method
National Income (NNP_{FC}) = Compensation of Employees + Rent + Interest + Profit – Net Factor Income to Abroad
= 1000 + 250+150 + 640 -30=Rs. 2010 crore
(b) By Expenditure Method
National Income (NNP_{FC}) = Private Final Consumption Expenditure + Government Final Consumption Expenditure + Net Domestic Capital Formation + Net Exports – Net Indirect Taxes – Net Factor Income to Abroad
= 1200 + 600+ 340 + (-40)-60-30
= Rs. 2010 crore

74. How will you treat the following while estimating National Income? Give reasons for your answer.
(i) Capital gain on sale of a house.
(ii) Prize won in a lottery.
(iii) Interest on public debt. (All India 2009)

Ans. (i) Capital gain on sale of a house will not be included while estimating National Income, as it is already included in the year when it is built.
(ii) Prize won in a lottery will not be included while estimating National Income, as it is a transfer income.
(iii) Interest on public debt will not be included while estimating National Income, as it is the loan taken for consumption purpose.

75. Giving reasons, explain whether the following are included in National Income.
(i) Profits earned by a branch of foreign bank.
(ii) Interest paid by an individual on a loan taken to buy a car.
(iii) Expenditure on machine for installation in a factory. (Delhi 2009)
Ans. (i) Profits earned by a branch of foreign bank will not be included while estimating National Income, as it is a factor income paid to abroad.
(ii) Interest paid by an individual on loan taken to buy a car will not be included while estimating Ntional Income, as loan is taken for consumption purpose.
(iii) Expenditure on machines for installation in a factory will be included while estimating National Income, as it is a final consumption expenditure by factory management.

76. There are only two producing sectors A and B in an economy. Calculate
(a) Gross Value Added at Market Price by each sector
(b) National Income. (Delhi 2009)

S.No.	Contents	₹(in crores)
(i)	Net Factor Income From Abroad	20
(ii)	Sales by A	1000
(iii)	Sales by B	2000
(iv)	Change in Stock of B	(–) 200
(v)	Closing Stock of A	50
(vi)	Opening Stock of A	100
(vii)	Consumption of Fixed Capital by A and B	180
(viii)	Indirect Taxes Paid by A and B	120
(ix)	Purchase of Raw Materials by A	500
(x)	Purchase of raw Materials by B	600
(xi)	Exports by B	70

Ans. (a) Gross Value Added by A = Sales by A + Change in Stock of A (Closing Stock – Opening Stock) – Purchases of Raw Materials by A

$$= 1000 + (50 - 100) - 500$$
$$= 950 - 500$$
$$= ₹\ 450 \text{ crore}$$

Gross Value Added by B = Sales by B + Change in Stock of B – Purchase of Raw Materials by B

$$= 2000 + (-200) - 600$$
$$= 1800 - 600$$
$$= ₹\ 1200 \text{ crore}$$

Gross Value Added by A and B (GDP_{MP}) = $450 + 1200$

$$= ₹\ 1650 \text{ crore}$$

(b) National Income (NNP_{FC}) = GDP_{MP} – Consumption of Fixed Capital – Indirect Taxes + Net Factor Income from Abroad

$$= 1650 - 180 - 120 + 20$$
$$= ₹\ 1370 \text{ crore}$$

($3 \times 2 = 6$)

77. Giving reason, explain whether the following are included in domestic product of India.
(i) Profits earned by a branch of foreign bank in India.
(ii) Payment of salaries to its staff by an embassy located in New Delhi.
(iii) Interest received by an Indian resident from its abroad firms.
(All India 2009)

Ans. (i) Profits earned by a branch of foreign bank in India will be included in domestic income of India, as the profits are earned in domestic territory of India.
(ii) Payment of salaries to its staff by an embassy located in New Delhi will not be included in domestic income of India, as it is not a part of domestic territory of India.
(iii) Interest received by an Indian resident from its abroad firms will not be included in domestic income of India as it is factor income from abroad.

78. There are only two producing sectors A and B in an economy. Calculate
(a) Gross Value Added at Market Price by A and B
(b) National Income (All India 2009)

S.No.	Contents	₹ (in crores)
(i)	Net Factor Income From Abroad	20
(ii)	Sales by A	500
(iii)	Sales by B	600
(iv)	Indirect Tax by A and B	80
(v)	Depreciation by A and B	30
(vi)	Exports by A	45
(vii)	Net Change in Stock of A	10
(viii)	Net Change in Stock of B	(–) 10
(ix)	Intermediate Consumption of A	200
(x)	Intermediate Consumption of B	300

Ans. (a) Gross Value Added (GVA) by A = Sales by A + Net Change in Stock of A – Intermediate Consumption of A
= 500 + 10-200=Rs. 310 crore

Gross Value Added (GVA) by B = Sales by B + Net Change in Stock of B – Intermediate Consumption of B
= 600 + (-10)-300 = Rs. 290 crore
(b) National Income = Gross Value Added (GVA) by A and B = (310 + 290) crores
= Rs. 600 crore

(NNP_{FC}) = Gross Value Added by A and B – Indirect Taxes – Depreciation + Net Factor Income Abroad = 600-80-30+20= 620-110=Rs. 510 crore

79. Calculate Gross National Product at Market Price and Net National Disposable Income from the following data (Delhi 2009 c)

S.No.	Contents	₹ (in crores)
(i)	Net Current Transfers from Abroad	(–) 10
(ii)	Compensation of Employees	800
(iii)	Net Indirect Tax	50
(iv)	Social Security Contributions by Employers	80
(v)	Consumption of Fixed Capital	30
(vi)	Rent	300
(vii)	Net Factor Income to Abroad	10
(viii)	Interest Paid by Production Units	400
(ix)	Royalty	40
(x)	National Debt Interest	14
(xi)	Profit after Tax	250
(xii)	Retained Earnings	20
(xiii)	Corporation Tax	50

Ans. Gross National Product at Market Price (GNP_{MP}) = Compensation of Employees + Rent + Interest + Royalty + Profit After Tax + Net Indirect Taxes – Net Factor Income to Abroad + Consumption of Fixed Capital

$= 800 + 300 + 40 + 250 + 50 - 10 + 30$

$= 1830 - 10$

$= ₹1460$ crore **(4)**

Net National Disposable Income (NNDI) = GNP_{MP} – Consumption of Fixed Capital + Net Current Transfers from Abroad

$= 1460 - 30 + (-10)$

$= ₹\ 1420$ crore **(2)**

80. Calculate
(a) Net Domestic Product at Factor Cost and
(b) Gross National Disposable Income from the following data (Delhi 2008)

S.No.	Contents	₹ (in crores)
(i)	Net Current Transfer From Abroad	(–)5
(ii)	Private Final Consumption Expenditure	250
(iii)	Net Factor Income From Abroad	15
(iv)	Government Final Consumption Expenditure	50
(v)	Consumption of Fixed Capital	25
(vi)	Net Exports	(–) 10
(vii)	Subsidies	10
(viii)	Net Domestic Capital Formation	30
(ix)	Indirect Tax	20

Ans. (a) Net Domestic Product at Factor Cost (NDP_{FC}) = Private Final Consumption Expenditure+ Government Final Consumption Expenditure + Net Domestic Capital Formation + Net Exports – Net Indirect Taxes (Indirect Taxes – Subsidies)

NDP_{FC}= 250+ 50+ 30+ (- 10)- (20- 10) crore = 330 -20 =Rs. 310 crore

(b) Gross National Disposable Income (GNDI) =NDP_{FC} + Net Indirect Tax + Net Factor Income from Abroad + Depreciation + Net Current Transfer from Abroad
= 310+ (20- 10)+ 15+ 25+ (- 5)
= 360 -5
= Rs. 355 crore

81. Calculate
(a) Gross National Product at Market Price and
(b) Net National Disposable Income from the following data (Delhi 2008)

S.No.	Contents	₹ (in crores)
(i)	Net Current Transfers to Abroad	(–) 50
(ii)	Profits	70
(iii)	Consumption of Fixed Capital	30
(iv)	Rent	40
(v)	Indirect Tax	20
(vi)	Interest	100
(vii)	Royalty	10
(viii)	Compensation of Employees	600
(ix)	Subsidy	5
(x)	Net Factor Income From Abroad	(–) 25

Ans. (a) Gross National Product at Market Price (GNP_{MP}) = Compensation of Employees + Rent + Interest + Profit + Royalty + Net Factor Income from Abroad + Consumption of Fixed Capital + Net Indirect Tax (Indirect Tax – Subsidy)

$= 600 + [40 + 100 + 70 + 10] + (-25) + 30 + (20 - 5)$

$= 865 - 25$

$= ₹840$ crore

(b) Net National Disposable Income = GNP_{MP} – Consumption of Fixed Capital – Net Current Transfers to Abroad

$= 840 - 30 - (-50)$

$= ₹860$ crore **(3 × 2 = 6)**

82. Calculate National Income and Net National Disposable Income from the following data (Delhi 2008)

S.No.	Contents	₹ (in crores)
(i)	Net Current Transfers From Abroad	15
(ii)	Net Exports	(–) 20
(iii)	Private Final Consumption Expenditure	400
(iv)	Net Factor Income From Abroad	10
(v)	Government Final Consumption Expenditure	100
(vi)	Indirect Tax	30
(vii)	Net Domestic Capital Formation	50
(viii)	Change in Stocks	7
(ix)	Subsidy	5

Ans. (a) National Income (NNP_{FC}) = Private Final Consumption Expenditure+ Government Final Consumption Expenditure + Net Domestic Capital Formation + Net Exports + Net Factor Income from Abroad – Net Indirect Taxes (Indirect Taxes – Subsidy)

= 400 +100 + 50 + (-20) + 10- (30 – 5)

= 560-45 = Rs. 515 crore

(b) Net National Disposable Income (NNDI) = NNP_{FC} + Net Indirect Taxes + Net Current Transfers from Abroad

= 515+(30-5) +15 = 515+25+15

= Rs. 555 crore

83. Calculate National Income and Private Income from the following data (All India 2008)

S.No.	Contents	₹ (in crores)
(i)	Net Current Transfers From Rest of the World	10
(ii)	Private Final Consumption Expenditure	600
(iii)	National Debt Interest	15
(iv)	Net Exports	(–) 20
(v)	Current Transfers From Government	5
(vi)	Net Domestic Product at Factor Cost Accruing to Government	25
(vii)	Government Final Consumption Expenditure	100
(viii)	Net Indirect Tax	30
(ix)	Net Domestic Capital Formation	70
(x)	Net Factor Income From Abroad	10

Ans. (a) National Income (NNP_{FC}) = Private Final Consumption Expenditure + Government Final Consumption
Expenditure + Net Domestic Capital Formation + Net Exports + Net Factor Income from Abroad- Net Indirect Taxes
= 600+100 +70+(-20)+ 10-30 = 780-50
= Rs. 730 crore

(b) Private Income = NNP_{FC} – Net Domestic Product at Factor Cost Accruing to Government+ Transfer Payments + National Debt Interest
= 730-25 + (10 + 5) +15 = 760-25
= Rs. 735 crore

84. Calculate
(a) Gross National Product at Factor Cost and
(b) Net National Disposable Income from the following data (Delhi 2008 c)

S.No.	Contents	₹ (in crores)
(i)	Net Indirect Tax	800
(ii)	Net Domestic Fixed Capital Formation	500
(iii)	Consumption of Fixed Capital	100
(iv)	Private Final Consumption Expenditure	5000
(v)	Government Final Consumption Expenditure	2000
(vi)	Net Factor Income to Abroad	50
(vii)	Net Exports	(–) 150
(viii)	Change in Stock	(–) 30
(ix)	Current Transfers From Rest of the World	70
(x)	Compensation of Employees	2500
(xi)	Current Transfer to Rest of the World	40

Ans. (a) Gross National Product at Factor Cost (GNP_{FC})
= Private Final Consumption Expenditure + Government Final Consumption Expenditure + Net Domestic Fixed Capital Formation + Change in Stock + Net Export + Consumption of Fixed Capital – Net Factor Income to Abroad – Net Indirect Tax
= 5000 + 2000 + 500 + (-30) + (-150) + 100-50- 800 = 7600-1030 = Rs. 6570 crore

(b) Net National Disposable Income (NNDI) = GNP_{FC} + Net Indirect tax – Consumption of Fixed Capital+ Net Current Transfers from Rest of the World = 6570+ 800 – 100 + (70 – 40)
= 7370 – 70 = Rs. 7300 crore

85. Calculate

(a) Gross National Product at Market Price and

(b) Personal Income from the following data (All India 2008)

S.No.	Contents	₹ (in crores)
(i)	Corporation Tax	35
(ii)	Wages and Salaries	200
(iii)	National Debt Interest	25
(iv)	Operating Surplus	400
(v)	Net Current Transfers From Abroad	15
(vi)	Net Factor Income From Abroad	(–) 10
(vii)	Consumption of Fixed Capital	20
(viii)	Social Security Contribution by Employers	30
(ix)	Net Indirect Tax	40
(x)	Net Domestic Product at Factor Cost Accruing to Private Sector	500
(xi)	Current Transfers from Government	5

Ans. (a) Net Domestic Product at Factor Cost (NDP_{FC}) = Wages and Salaries + Social Security Contribution by Employers + Operating Surplus

= 200 + 30 + 400 = ₹ 630 crore

Gross National Product at Market Price (GNP_{MP})

= NDP_{FC} + Consumption of Fixed Capital + Net Indirect Tax + Net Factor Income from Abroad

= 630 + 20 + 40 + (–10) = ₹ 680 crore

(b) Personal Income = Net Domestic Product at Factor Cost Accruing to Private Sector + Net Factor Income from Abroad + Net Current Transfers from Abroad + Current Transfer from Government + National Debt Interest – Corporation Tax

= 500 + (–10) + 15 + 5 + 25 – 35

= ₹ 500 crore **(3 × 2 = 6)**

86.Calculate

(a) Net National Product at Market Price and

(b) Private Income from the following data (All India 2008)

S.No.	Contents	₹ (in crores)
(i)	Net Factor Income From Abroad	(–) 5
(ii)	Private Final Consumption Expenditure	100
(iii)	Personal Tax	20
(iv)	Gross National Disposable Income	170
(v)	Government Final Consumption Expenditure	20
(vi)	Corporation Tax	15
(vii)	Gross Domestic Capital Formation	30
(viii)	Personal Disposable Income	70
(ix)	Net Exports	(–) 10
(x)	Savings of Private Corporate Sector	5
(xi)	Net National Disposable Income	145

Ans. (a) Net National Product at Market Price (NNP_{MP}) = Private Final Consumption Expenditure + Government Final Consumption Expenditure + Gross Domestic Capital Formation + Net Exports – Depreciation + Net Factor Income from Abroad

$= 100 + 20 + 30 + (-10) + (-5) - 25$

$=$ ₹ 110 crore

(b) Private Income = Personal Disposable Income + Personal Tax + Corporation Tax + Savings of Private Corporate Sector

$= 70 + 20 + 15 + 5$

$=$ ₹ 110 crore **($3 \times 2 = 6$)**

87. Giving reasons, explain how the following are treated while estimating National Income?
(i) Payment of fees to a lawyer by a firm.
(ii) Rent free house to an employee by an employer.
(iii) Purchase by foreign tourists. (Delhi 2008)

Ans. (i) Payment of fees to a lawyer engaged by a firm will not be included while estimating National Income, as it is a kind of intermediate expenditure for the firm.
(ii) Rent free house to an employee by an employer will be included while estimating National Income, as it is a part of compensation to the employee.
(iii) Purchase by a foreign tourists will be included while estimating National Income as it is considered as exports of goods and services.

88.Giving reason, explain, how the following are treated in estimating National Income?
(i) Wheat grown by farmer but used entirely for family's consumption.

(ii) Earning of shareholders from the sales of shares.
(iii) Expenditure by government on providing free education. (All India 2008)

Ans. (i) Wheat grown by farmer but used entirely for family's consumption will be included while estimating National Income, as the production is done for self-consumption purpose and relate to current production.
(ii)Earning of shareholders from the sale of shares will not be included while National Income, as it will be considered as transfer payment.
(iii) Expenditure by government on providing free education will be included while estimating National Income, as it is a part of government's final consumption expenditure.

89. Are the following a part of country's Net Domestic Product at Market Price? Explain.
(i) Net Indirect Taxes
(ii) Net exports
(iii) Net Factor Income from Abroad
(iv) Consumption of fixed capital (All India 2008)

Ans. (*i*) Net Indirect Taxes is a part of NDP_{MP} as we add Net Indirect Taxes to NDP_{FC} to obtain NDP_{MP}.
(*ii*) Net exports are a part of NDP_{MP} as when we calculate NDP_{MP} by expenditure method we include it.
(*iii*) Net Factor Income from Abroad is not a part of NDP_{MP} as the income is not generated in domestic territory of the country.
(*iv*) Consumption of fixed capital is not a part of NDP_{MP} as we subtract it from GDP_{MP} to obtain NDP_{MP}.

$$\left(1\frac{1}{2} \times 4 = 6\right)$$