

- (ii) Payment of salaries to its staff by an embassy located in New Delhi.
 - (iii) Interest received by an Indian resident from firms abroad.
10. How will you treat the following while estimating national income. Give reasons for your answer.
- (i) Capital gain on sale of house.
 - (ii) Prize won in lottery.
 - (iii) Interest on public debt.
11. While estimating national income. How will you treat the following. Give reason for your answer.
- (i) Imputed rent of occupied house.
 - (ii) Interest received on debentures.
 - (iii) Financial help received by flood victims.

NATIONAL INCOME AND RELATED AGGREGATES

NUMERICAL EXERCISE

1. Calculate GVA_{MP} from the following *(Rs. Crore)*
- | | |
|--------------------------------------|-----|
| (i) Purchases by firm X from firm Y | 100 |
| (ii) Purchases by firm Y from firm X | 150 |
| (iii) Sales by firm X | 200 |
| (iv) Sales by firm Y | 300 |
| (v) Exports by firm Y | 30 |
| (vi) Change in stock of firm X | -20 |
| (vii) Change in stock of firm Y | 10 |

2. Calculate NVA_{FC} from the following data (Rs.Crore)
- | | |
|---|-----|
| (i) Subsidy | 40 |
| (ii) Sales | 800 |
| (iii) Depreciation | 30 |
| (iv) Exports | 100 |
| (v) Closing stock | 20 |
| (vi) Opening stock | 50 |
| (vii) Intermediate purchases | 500 |
| (viii) Purchases of machinery for own use | 200 |
| (ix) Import of raw material | 60 |
3. From the following information about a firm in an economy, calculate GVA_{MP} of the firm.
- | | |
|---------------------------------------|-------------|
| | (Rs. Crore) |
| (i) Domestic Sales | 300 |
| (ii) Exports | 100 |
| (iii) Production for self-consumption | 50 |
| (iv) Purchases from firm X | 110 |
| (v) Purchases from firm Y | 70 |
| (vi) Imports of raw materials | 30 |
| (vii) Change in stock | 60 |
4. Calculate Gross National Disposable Income and Personal income from the given data (Rs. Crore)
- | | |
|-----------------------|------|
| (i) Personal Tax | 120 |
| (ii) Net Indirect Tax | 100 |
| (iii) Corporate Tax | 90 |
| (iv) National Income | 1000 |

(v) Net factor income from abroad	5
(vi) Consumption of fixed capital	50
(vii) National Debt Interest	70
(viii) Retained earning of private corporate sector	40
(ix) Net current transfer to the rest of the world	20
(x) Current transfer from government	30
(xi) Share of government in national income	80
5. Calculate (a) NDP_{FC} by expenditure method and (b) NNP_{FC} , by value added method : (Rs. Crore)	
(i) Net domestic capital formation	250
(ii) Net Export	-50
(iii) Private final consumption expenditure	900
(iv) Value of output	
(v) (a) Primary sector	900
(b) Secondary sector	800
(c) Territory sector	400
(v) Value of intermediate consumption :	
(a) Primary sector	400
(b) Secondary sector	300
(c) Territory sector	100
(vi) Consumption of fixed capital	80
(vii) Indirect Tax	100
(viii) Government final consumption expenditure	100
(ix) Subsidy	10
(x) Net factor income from abroad	(-20)

6. From the following data calculate National Income by income and expenditure method : (Rs. crore)

(i) Government final consumption expenditure	
(ii) Subsidies	10
(iii) Rent	200
(iv) Wages and salaries	600
(v) Indirect Taxes	60
(vi) Private final consumption expenditure	800
(vii) Gross domestic capital formation	120
(viii) Social security contribution by employers	55
(ix) Social security contribution by employees	200
(x) Royalty	25
(xi) Net factor income paid to abroad	30
(xii) Interest	20
(xiii) Net domestic capital formation	110
(xiv) Profit	130
(xv) Net Exports	70
(xvi) Change in stock	50

7. A farmer purchases Rs. 2000 worth of seeds, Rs. 3000 worth of fertilizers and pays Rs. 1500 as water charges to raise a wheat crop. He produces 100 quintals of wheat and sells the same at Rs. 200 per quintal. Calculate value added by the farmer.

8. Calculate Personal Disposable Income from the following data :

(Rs. Crore)

(i) Personal Tax	6
(ii) Corporate Tax	4

(iii)	Miscellaneous receipts of govt. administrative departments	2
(iv)	Private Income	331
(v)	Undistributed profits of private corporate sector	2
(vi)	National Debt Interest	12
9.	Calculate (a) Private Income (b) Personal Income and (c) Personal Disposable income :	(Rs. crore)
(i)	NNPFC	1000
(ii)	Direct taxes paid by the households	70
(iii)	Income from property and entrepreneurship according to the government administrative departments	100
(iv)	Corporate profit tax	30
(v)	Savings of non-departmental enterprises	150
(vi)	Retained earnings of private corporate sector	40
(vii)	Current transfers from the government	20
(viii)	National debt interest	50
(ix)	Net current transfers from row	10
(x)	Net factor income from abroad	(-) 5
(xi)	Miscellaneous receipt of the government administrative departments	10
10.	Calculate NDP_{FC} accruing to the private sector :	(Rs. crore)
(i)	National income	4000
(ii)	Income from property and entrepreneurship accruing to the government administrative departments	80
(iii)	National debt interest	10
(iv)	Net factor income from abroad	(-) 20
(v)	Savings of non-departmental enterprises	50
(vi)	Current transfers from the government	30

11. From the following data calculate (a) Private income (b) Personal income (c) Personal disposable income. (Rs. Crore)

(i) Income from property and entrepreneurship accruing to the Govt. administrative Dept.	100
(ii) Saving of non-departmental enterprises	80
(iii) Factor income from NDP occurring to Private sector	500
(iv) Corporation tax	30
(v) Saving of Pvt. corporate sector	65
(vi) Direct taxes paid by house hold	20
(vii) Current transfers from Govt. Administrative departments	10
(viii) Current transfer from Row	20
(ix) Factor income from abroad	5
(x) Operating surplus	150
(xi) Factor income to abroad	15

[Ans. : (a) 520 Crore (b) 425 Crore (c) 405 Crore]

12. Calculable value of output from the following data : (Rs. crore)

(i) NVA_{FC}	100
(ii) Intermediate consumption	75
(iii) Excise duty	20
(iv) Subsidy	5
(v) Depreciation	10

13. Calculate NDP_{FC} and Private income from the following (Rs. crore)

(i) Domestic product accruing to government sector	300
(ii) Wages and salaries	1000
(iii) Net current transfer to abroad	-20

(iv)	Rent	100
(v)	Interest on public debit	30
(vi)	Interest paid by production unit	130
(vii)	Corporation Tax	50
(viii)	Current transfer by government	40
(ix)	Contribution to social security by employers	200
(x)	Dividends	100
(xi)	Undistributed profit	20
(xii)	Net factor income from abroad	-10

14. Calculate GDP_{FC} and factor income from abroad from following data: (Rs. crore)

(i)	Compensation of employees	800
(ii)	Profit	2000
(iii)	Dividends	50
(iv)	Gross National Product at market price	1400
(v)	Rent	150
(vi)	Interest	100
(vii)	Gross Domestic fixed capital formation	200
(viii)	Net domestic capital formation	200
(ix)	Change in stock	50
(x)	Factor income from abroad	60
(xi)	Net indirect taxes	120

VALUE BASED QUESTIONS

1. Governments provide many services free to the people especially to the weaker section of the society. What should be the status of these services in National income? Explain.

2. Undoubtedly, industrialization leads to rise in real GDP but at the same time it also creates many harmful effects in the environmental like pollution, deforestation etc. Critically examine this statement in the light of adequacy of GDP as an indicator of welfare.

**HINT
(3-4 MARKS QUESTIONS)**

7. (a) Stock (b) Flow
(c) Flow (d) Stock
(e) Stock (f) Stock
10. (a) Intermediate good because it is for resale
(b) final good because purchased by ultimate consumer.
15. (a) Not include as paid for consumption expd.
(b) Included as paid for production expd.

NUMERICAL QUESTIONS (6 MARKS)

1. Value added by firm X = (iv) + (vi) - (i)
= 250 + (-20) - 100
= Rs. 80 cr.
- Value added by firm Y = (iv) + (vii) - (ii)
= 300 + 10 - 150
= Rs160 cr
- GVA_{MP} = Value added by X + value added by Y
= 80 + 160 = Rs. 240 cr.
2. NVA_{FC} = Sales + ΔS - I C- NIT - Dep.
= 800+(-30)-500+40+30
= Rs. 280 lakh.

3. GVAMP = (i) + (ii) + (iii) + (vii) - (iv) - (v) - (vi)
= Rs. 300 crore.
4. GNDI = (iv) + (vi) + (vi) + (ix)
= Rs 1170 crore.
- PI = (iv) - (iii) — (xi) + (vii) + (ix) + (x)
Rs 910 crore.
5. NDP_{FC} , (Exp. method) = (i) + (ii) + (iii) - (vii) + (ix) + (vii) = Rs.1110 crore.
 MNP_{FC} (value added method)= (iv) - (v) - (vi) - (vii) + (ix) + (x) = Rs.1110 crore.
6. National Income (Income method) = (iv) + (viii) + (iii) + (x) + (xii) + (xiv) + (xi)
= 600 + 55 + 200 + 25 + 20+130 + (-30)
= Rs. 1000 crore.
- National income (Exp. Method) = (vi) + (i) + (vii) + (xv) - (vii - xiii) - (v - ii) + (xi)
800 + 100 + 120 + 70 - 10 - 50 + (-30)
= Rs. 1000 crore.
7. Value of output = Price × qty. sold
= 200 × 100 = Rs 20000 crore.
- Intermediate consumption = 2000 +3000 +1500 = Rs. 6500 crore.
- Value added by farmer
Value of output - intermediate consumption
= 20000 -6500 = Rs. 13500 crore.
8. PDI = (iv) - (ii) - (v) - (i) - (iii)
= 331 - 4 - 2 - 6 - 2

- = 331 - 14 = Rs 317 crore.
9. (a) Private income = (i) - (iii) - (v) + (ix) + (vii) + (viii)
 = 1000 - 100 - 150 + 10 + 20 + 50
 = 1080 - 250
 = Rs. 830 lakh.
- (b) Personal income = Private income
 = (iv) - (vi)
 = 830 - 30 - 40 - 830 - 70 = Rs 760 lakh.
- (c) Personal disposable income = Personal income - (ii) - (xi)
 = 760 - 70 - 10
 = 760 - 80 = Rs 680 lakh.
10. NDP_{FC} accruing to the private sector (i) - (iv) - (ii) - (v)
 = 4000 - (-20) - 80 - 50
 = 4000 + 20 - 130 = Rs. 3890 crore
11. (a) Private Income = Rs. 520 crore
 (b) P.I. = Rs. 425 crore (c) P.D.I. = Rs. 405 crore
12. V.O. = Rs. 200 cr.
13. NDP_{FC} = Rs. 1600 Cr.; Private Income = 1380 Cr.
14. GDP_{FC} = Rs. 1300 Cr.
 Factor Income to abroad = Rs. 80 crore.