

Most Important Numerical Questions

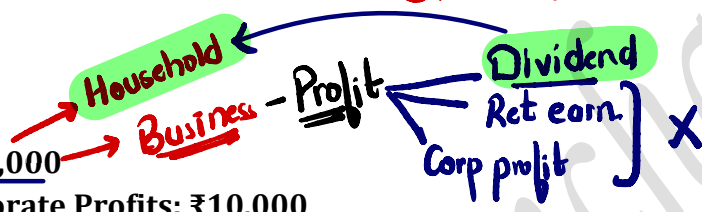
1. The value of NDP at FC will be if the following information is given :-

GNP at MP: ₹60,000
 Depreciation: ₹4,000
 NFIA: ₹3200
 Net Indirect Taxes: ₹6,000

$$\begin{aligned} \underline{NDP}_{FC} &= \underline{GNP}_{MP} - \text{Dep} \\ &\quad - \text{NFIA} \\ &\quad - \text{NIT} \\ &= 60,000 - 4,000 \\ &\quad - 3,200 - 6,000 \end{aligned}$$

- (a) 46,800
- (b) ₹64,000
- (c) 61,080
- (d) None of these

2. Private Income: ₹50,000
Undistributed Corporate Profits: ₹10,000
Profit Taxes: ₹2500
 What is Personal Income?



- (a) 37,500
- (b) ₹48,000
- (c) 34,000
- (d) ₹40,000

$$\begin{aligned} &50,000 \\ (-) &10,000 \\ (-) &2,500 \\ \hline &37,500 \end{aligned}$$

* 3. Consider the following data:-

Compensation of Employees	→	1,200
Operating Surplus	→	2,400
Consumption of fixed capital	- Dep ✓	480
Mixed-income of Self-employed	→	1,320
Net Indirect Tax	→	540
Rent	X	660
Profit	X	960
Net factor Income from abroad	✓	60

Income Method

$$\begin{aligned} &\underline{NDP}_{FC} \\ &= 1200 \\ &\quad + 2400 \quad \left\{ \begin{array}{l} \text{Rent} \\ \text{Int} \\ \text{Profit} \end{array} \right\} \\ &\quad + 1320 \\ \hline &4920 \quad \checkmark \underline{NDP}_{FC} \end{aligned}$$

Which of the following is incorrect?

- (a) GDP at MP = 5,940 Crores.
- (b) GNP at MP = 6,000 Crores.
- (c) NNP at MP = 5,520 Crores.
- (d) NNP at FC = 5,940 Crores

$$\begin{aligned} \underline{GDP}_{MP} &= 4920 + 480 + 540 = 5940 \\ \underline{GNP}_{MP} &= 5940 + 60 = 6000 \\ \underline{NNP}_{MP} &= 6000 - 480 = 5520 \end{aligned}$$

$$\rightarrow 5520 - 540 = 4980$$

4. Consider the following data:

Sales: 20,00,000 ✓

Closing Stock: 40,000

Opening Stock: 10,000

Indirect Taxes: 1,00,000

Depreciation: 60,000

Intermediate Consumption: 3,20,000

Purchase of Raw Material: 1,35,000 X

Rent: 25,000

The amount of Net value added at market price is _____.

$GDP_{MP} = \text{Value of output} - \text{Int consump}$

GVA_{MP}

Sales
+ change in stock

$$= 20,30,000 - 320,000$$

$$= 17,10,000$$

$$- 60,000$$

$$= 16,50,000$$

NDP_{MP}

(a) ₹16,30,000

(b) ₹16,50,000 ✓

(c) ₹16,80,000

(d) ₹16,90,000

5. Consider the following information:

A. NDP at market price 77,000

B. Net Factor Income from abroad (-) 700

C. Depreciation 1,700

D. Subsidies 6,600

E. Indirect Taxes 7,700

The value of National Income is:

NNP_{FC}

$$NNP_{FC} = NDP_{MP} + NFIA - NIT$$

$$= 77,000 - 700 - 1,100$$

(a) 75,000

(b) 75,200 ✓

(c) 75,400

(d) 75,500

6. In respect of the following data, what will be the national income using the expenditure method?

Private final consumption: 25,000

Government final consumption: 12,000

Net Domestic capital formation: 6,500

Net Export: 5,000 Exp. Imp

Net factor income from Abroad: 1000

Net Indirect Taxes: 1,500

NNP_{FC}

$$GDP_{MP} \Rightarrow NDP_{MP}$$

$$\text{Gross Domestic Cap formation} = \text{Gross Investment} = \text{Net Inv}$$

Gross Dep

$$NDP_{MP} = 25,000 + 12,000 + 6,500 + 5,000$$

$$= 48,500$$

$$NNP_{FC} = 48,500 + 1,000 - 1,500$$

(a) ₹49,500

(b) ₹48,000 ✓

(c) ₹47,000

(d) ₹45,500

7. Consider the following data:

Sales: 1,050

Opening Stock: 750

Intermediate Consumption: 525

Closing Stock: 600

Net factor Income from Abroad: 45

Depreciation: 225

Excise Tax: 165

Subsidies: 75

Value of output: $1050 + 600 - 750 - 150 - 900 \rightarrow 525$

GDPMP: 375
 (-) Dep: 225

What is the amount of National Income by Value Added method?

(a) 900

(b) 375

(c) 105

(d) None of these

$$\text{NNP}_{FC} = \text{GDPMP} - \text{Dep} + \text{NFIA} - \text{NIT}$$

$$= 375 - 225 + 45 - 90$$

* 8. Consider the following information-

Private Final Consumption Expenditure: 67

Gross Domestic Fixed Capital Formation: 1,575

Subsidy: 450

Net Import: 90

Change in Stock: 135

Net acquisition of Valuables: 45

Income Paid to abroad: 90

Depreciation: 135

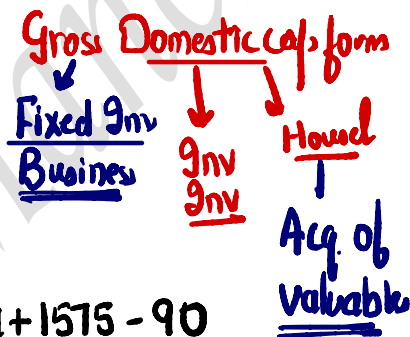
What is the value of NNP FC (by expenditure method)?

(a) ₹1,957 Crores

(b) ₹1,507 Crores

(c) ₹1,462 Crores

(d) None of these



$$\text{GDPMP} = 67 + 1575 - 90 + 135 + 45 \Rightarrow 1732$$

$$\text{NNP}_{FC} = 1732 - 135 - 90 - \text{NIT} - (0 - 450) + 450$$

9. Consider the following data relating to an economy in equilibrium:-

Autonomous Consumption = 500

MPS = 0.3

Investment Expenditure = 1000

What is national income?

(a) 1,500

(b) 5,000

(c) 150

(d) 5,650

$$C = a + bY$$

$$I = S$$

$$\downarrow$$

$$-a + \text{MPS} \times Y$$

$$\frac{1000}{0.3} = \frac{-500 + 0.3Y}{0.3}$$

$$1500 = Y$$

$$\Delta I = 1000$$

$$\Delta Y = 2500$$

10. An increase in investment by 1000 Crores leads to an increase in national income by 2500 Crores. What will be the Marginal Propensity to Consume (MPC)?

- (a) 2.5
 (b) 0.6
 (c) 0.4
 (d) None of these

$$\frac{\Delta Y}{\Delta I} \Rightarrow \frac{2500}{1000} = 2.5$$

$$2.5 = \frac{1}{MPS} \Rightarrow MPS = 0.4$$

$$MPC = 1 - 0.4 = 0.6$$

11. Consider the following about a simple economy:

Consumption function (C) = $50 + 0.8Y_d$

T = 100

I = 250 crores

G = 100 Crores

$$\rightarrow AD = AS$$

What will be the equilibrium level of National Income?

- (a) 1200
 (b) 1400
 (c) 1600
 (d) None of these

$$Y \Rightarrow C + I + G$$

$$C = a + b(Y - T + TR)$$

$$C = 50 + 0.8[Y - 100]$$

$$= 50 + 0.8Y - 80$$

$$Y = 0.8Y - 30 + 250 + 100$$

$$0.2Y = 320$$

$$Y = 1600$$

12. The following information is available regarding structure model of an economy:

C = $40 + 0.8Y_d$

I = 80

G = T = 40

TR = 15

$$C = 40 + 0.8[Y - 40 + 15]$$

$$= 40 + 0.8Y - 32 + 12$$

$$= 20 + 0.8Y$$

What will be the equilibrium level of income?

- (a) 700
 (b) 610
 (c) 175
 (d) None of these

$$Y = 20 + 0.8Y + 80 + 40$$

$$0.2Y = 140$$

$$Y = 700$$

13. C = $60 + 0.9Y_d$

I = 10

M = 10 + 0.05Y

What is the foreign trade multiplier?

- (a) 0.98
 (b) 3.97
 (c) 6.66
 (d) None of these.

2 Sector $\rightarrow \frac{1}{MPS} = \frac{1}{1-MPC}$

3 Sector $\rightarrow \frac{1}{1-b(1-t)}$ (proportion)

$$\rightarrow \frac{1}{1-b+m}$$

MPC Mag prop imp

$$= \frac{1}{1-0.9+0.05} \Rightarrow 0.15$$

14. Calculate Currency with Public respectively-

Notes in Circulation - Rs. 43,22,288 +
Circulation of Rupee Coins - Rs. 26,422 + } 4351055
Circulation of Small Coins - Rs. 2,345 +
Cash on hand with Banks - Rs. 12,345 }

- a) Rs. 43,38,710
- b. Rs. 43,51,055
- c. Rs. 43,63,400
- d. None of the above

15. If Required Reserve Ratio = 0.2 r

Excess Reserve Ratio = 0.10 e

Currency Deposit Ratio = 0.3 c

Calculate Money multiplier

$$\rightarrow \frac{c+1}{c+e+r} = \frac{0.3+1}{0.3+0.1+0.2}$$

- a) 2.17
- b) 2
- c) 1.67
- d) None of the above

16. Calculate Money Multiplier, if:

Reserve Ratio (r) = 10%

Currency = Rs 500 crores $\rightarrow c = \frac{500}{800} = 0.625$

Deposits = Rs 800 crores

Excess Reserve = Rs 4 crores $= e = \frac{4}{800} = 0.005$

- a) 2.08
 - b) 2.22
 - c) 1.99
 - d) None of the above
- $$= \frac{c+1}{0.1+0.625+0.005} = \frac{1.625}{0.73}$$

$$M_1 \rightarrow C + OD + DD$$

17. Calculate narrow money from the following data:

Currency with the public - Rs. 10,000 crore

Demand deposits with the banking system - Rs. 12,000 crore

Time deposit with the banking system - Rs. 11,000 crore

Other deposits with RBI - Rs. 8,000 crore

Demand deposits of post office saving banks - Rs. 2,000 crore

a. Rs. 42,000 crore

b. Rs. 44,000 crore

c. Rs. 30,000 crore

d. Rs. 22,000 crore

18. From the following data, estimate National Income and Personal Income.

Items	₹. in Crores
Net national product at market price	1,891
Income from property and entrepreneurship accruing to government administrative departments	- 45
Indirect taxes	175
Subsidies	30
Saving of non-departmental enterprises	- 10
Interest on National debt	+ 15
Current transfers from government	+ 35
Current transfers from rest of the world	+ 20
Saving of private corporate sector	25
Corporate profit tax	25

Govt Income X

145

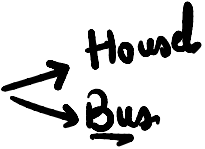
Household Income

Profit ✓

NNP_{FC} = 1746

Private Income = 1761 - bus. income Profit

Private Income



Personal Income → Household

Personal income
1761
- 25
- 25
1711

19.

On basis of following information, calculate NNP at market price and Disposable personal income

Items	₹ in Crores
NDP at factor cost	14900
Income from domestic product accruing to government	(-) 150
Interest on National debt	+ 170
Transfer payment by government	+ 60
Net private donation from abroad	+ 30
Net factor income from abroad	80
Indirect taxes	335
Direct taxes	100
Subsidies	262
Taxes on corporate profits	(-) 222
Undistributed profits of corporations	(-) 105

NNP_{FC}

+ NFI = NNP_{FC}

= 14980

Profit

PI - NI
14980

PI = 14763

Disposable = 14763 - 100
= 14663

CA Handwritten Master

20. **3 Sector**

For a **closed economy**, the following data is given -

Consumption $C = 75 + 0.5(Y-T)$; Investment $I = 80$; Total tax $T = 25 + 0.1Y$; Government expenditure $G = 100$.

(a) Find out equilibrium income?

$$Y = C + I + G$$

(b) What is the value of multiplier?

$$C = 75 + 0.5(Y - 25 - 0.1Y)$$

$$\begin{aligned} C &= 75 + 0.5Y - 12.5 - 0.05Y \\ &= 62.5 + 0.45Y \end{aligned}$$

$$Y = 62.5 + 0.45Y + 80 + 100$$

$$0.55Y = 242.5$$

$$= \underline{440.91}$$

$$\text{Multiplier} = \frac{1}{1 - b(1-t)}$$

$$= \frac{1}{1 - 0.5(1-0.1)} = \frac{1}{1 - 0.45}$$

$$= \frac{1}{0.55} = \underline{1.82}$$

End :)