#### Unit I – National Income and Related Aggregates

# Solved Textual Q&A

#### A. 1-Mark Very Short Answers

- 1. Define Macroeconomics.
  - → The study of aggregate economic variables like national income, output, and general price level.
- 2. Name the four major sectors in the circular flow model.
  - → Households, Firms, Government, External sector (foreign).
- 3. Differentiate intermediate goods from final goods.
  - → Intermediate goods are inputs used in production; final goods are ready for consumption or investment.
- 4. What is Net National Product at Factor Cost (NNP at FC)?
  - → GNP minus depreciation and net indirect taxes.
- 5. Define Personal Disposable Income.
  - → Income available to individuals after paying personal taxes, available for consumption and saving.

## B. Short Answer (2-3 Marks)

- 1. Explain Gross Investment vs. Net Investment.
  - → Gross investment is total spending on capital assets; net investment = gross investment minus depreciation.
- 2. What is the Value Added (or Product) method of GDP calculation?
  - → Sum of gross value added across all economic sectors (output minus intermediate consumption).
- 3. State two differences between GDP at Market Price and GDP at Factor Cost.

- → Market Price includes indirect taxes less subsidies; Factor Cost excludes indirect taxes and adds subsidies.
- 4. How do you calculate Personal Income from National Income?
  - → Start with NNP at FC, subtract retained earnings and corporate taxes, add transfer payments.
- 5. What is the distinction between Nominal and Real GDP?
  - → Nominal GDP uses current prices; Real GDP uses constant (base year) prices to account for inflation.

### C. Long Answer (4–6 Marks)

- 1. Describe the three methods of calculating National Income.
  - → Product method: Sum of value added across sectors. Income method: Sum of incomes earned by factors of production (wages, interest, rent, profit). Expenditure method: Sum of consumption, investment, government spending and net exports.
- 2. Explain aggregate relationships between GNP, NNP, GDP, NDP. →
  - GNP = GDP + Net Factor Income from Abroad (NFIA)
  - ∘ NNP = GNP − Depreciation
  - ∘ NDP = GDP − Depreciation
  - NNP at FC = NNP Net Indirect Taxes
- 3. Define and distinguish Personal Income (PI), Personal Disposable Income (PDI), National Disposable Income (NDI) and Private Income.

 $\rightarrow$ 

 PI: NNP at FC – corporate taxes – retained earnings – undistributed profits + transfer incomes.

- PDI: PI personal taxes.
- NDI: National income plus net current transfers from abroad.
- Private income = national income plus net current transfers to private sector.

### 4. Critically analyse limitations of GDP as an index of welfare.

- → Excludes non-monetized services (housewives' work), ignores distribution of income, externalities (pollution), sits on value of harmful goods (liquor), and doesn't capture leisure or quality of life
- 5. Numerical problem: Using given data, compute GDP, NNP at MP, NNP at FC, and PDI. (Use the "Raju the barber" example or similar model numericals from NCERT/AHSEC)

#### 20 Additional Model Questions & Answers

- Short Answer Type (2–3 Marks)
  - 1. Why are transfer payments excluded from national income?
    - → They are non-productive transfers, not payment for current production.
  - 2. What is Net Factor Income from Abroad (NFIA)?
    - → Factor income earned by nationals abroad minus similar payments to foreigners.
  - 3. Define Market Price vs Factor Cost.
    - → Market price includes indirect taxes; factor cost is market price minus indirect taxes plus subsidies.
  - 4. What is National Disposable Income?
    - → NNP at MP + net current transfers from foreign sources.

#### 5. Why is NNP considered a better indicator than GDP?

→ Because it reflects depreciation and value of output net of capital consumption.

#### 6. Define Gross Domestic Product (GDP).

→ Total market value of final goods and services produced within a country's territory in a year.

#### 7. What is Private Income?

→ Income received by private sector including factor incomes and current transfers.

#### 8. Give one example of an imputed item in national income.

→ Imputed rent of owner-occupied housing.

### 9. What is meant by double counting?

→ Counting intermediate goods along with final goods, leading to inflated national income.

# 10. What is the difference between gross and net value added?

 $\rightarrow$  Net value added = gross value added – depreciation.

### Long Answer Type (4–6 Marks)

# 11. Explain the circular flow of income in a two-sector model.

→ Households supply factors to firms, receive factor incomes, spend on goods & services; firms use household spending as revenue, paying for factors in return. Money and goods flow in opposite directions.

## 12. Apply income method with itemized categories.

→ Include wages, rent, interest, profit, operating surplus, mixed income. State precautions (exclude transfer payments, include imputed items)

# 13. Using numerical data calculate personal disposable income.

→ Given: GDP, depreciation, indirect taxes, retained earnings & taxes, compute PI and PDI.

# 14. Explain the importance of real GDP in welfare comparison.

→ Real GDP adjusts for inflation, allowing comparison of actual output and welfare across years.

# 15. Discuss the concept of national income at factor cost vs market price.

→ Factor cost removes distortion of tax/subsidies; gives actual earning of factors.

# 16. Distinguish between personal disposable income and national disposable income.

→ PDI belongs to individuals; NDI includes public sector as well and represents total useable resources of nation.

### 17. Numerical on GNP and GDP conversion including NFIA.

→ Provided base values: GDP, NFIA, depreciation, compute GNP and NNP components.

## 18. What are consumption goods and capital goods?

→ Consumption goods satisfy current wants; capital goods are used for further production.

# 19. Why is Real GDP considered superior to Nominal GDP for economic analysis?

→ It excludes price changes, focusing purely on volume changes of goods and services.

# 20. How does national income accounting help government policy?

→ Provides data for planning, budgeting, monitoring economic growth, inflation control, and redistribution policies.