

## **UNIT 3- EXPLAINED ANSWERS**

### **1. c) The total income earned by the residents of a country in a given period**

National income includes the total earnings of individuals and businesses in a country, including wages, rents, profits, and interest. It represents the overall economic activity and the standard of living within a nation over a specific period.

### **2. b) Final consumption expenditure**

Final consumption expenditure includes household and government spending on goods and services that directly satisfy human wants. It excludes intermediate goods and transfer payments, as they do not contribute to the actual production of new goods and services.

### **3. d) Capital method**

The three recognized methods for calculating national income are the Value-Added Method, Income Method, and Expenditure Method. The Capital Method is not used, as national income is not determined directly by capital but by production, income, and spending.

### **4. a) GDP at factor cost + Indirect taxes – Subsidies**

GDP at market price includes indirect taxes added to the factor cost while deducting subsidies, which artificially lower market prices. This adjustment provides a realistic estimate of the economy's total output valued at prevailing market prices.

### **5. c) Adding the incomes received by all factors of production**

The income method measures national income by summing up wages, rent, interest, and profits earned by households and businesses. This method ensures that all income generated in the production process is accounted for within a specified period.

### **6. b) To measure the economic performance of a country**

National income calculation is essential for assessing economic performance, policy formulation, growth trends, and international comparisons. It helps governments and policymakers analyze productivity, living standards, and overall economic health to guide future development strategies.

### **7. c) The market value of all goods and services produced**

GDP includes only market transactions of goods and services, excluding non-market activities like household work, informal transactions, and black-market operations. It provides an official record of economic production and output for analyzing economic performance.

### **8. a) To adjust nominal GDP to real GDP**

The GDP deflator is an economic metric used to adjust nominal GDP by eliminating the effects of inflation, allowing for an accurate comparison of economic growth over different periods by measuring changes in the overall price level.

### **9. b) A volunteer working for a charity**

Non-market transactions, like volunteer work, are excluded from GDP calculations because they do not involve financial transactions. Despite contributing to social well-being, such activities do not involve formal payments and do not reflect economic market activity.

### **10. c) Depreciation from GDP**

Net Domestic Product (NDP) accounts for depreciation, which measures the wear and tear of capital assets over time. Subtracting depreciation from GDP provides a more accurate representation of the economy's sustainable productive capacity.

## **Aggregates of National Income**

### **11. a) Final goods and services produced by a country's residents**

Gross National Product (GNP) measures the total market value of final goods and services produced by a country's residents, both domestically and abroad, over a specific period, reflecting a nation's total economic output beyond domestic production.

### **12. b) GDP includes only domestic production, while GNP includes income from abroad**

GDP measures economic activity within a country's borders, whereas GNP includes net income from residents earning abroad. This distinction helps analyze a country's overall economic strength, including its contributions to and earnings from international markets.

### **13. c) Income and expenditure are equal in aggregate terms**

National income accounting follows the circular flow of income, where total income generated in an economy equals total expenditure on goods and services. This principle ensures that all economic transactions are measured consistently across different approaches.

### **14. c) Transfer payments**

Transfer payments, such as pensions and social security benefits, are excluded from GDP calculations because they do not represent payments for goods and services produced. They are merely a redistribution of income within an economy without increasing output.

### **15. a) Summing up all expenditures made in the economy on final goods and services**

The expenditure method calculates national income by summing up private consumption, investment, government spending, and net exports. This approach ensures that all final spending on goods and services is included without counting intermediate transactions.

### **16. c) The inclusion of both intermediate and final goods in GDP**

Double counting occurs when both intermediate and final goods are counted in GDP calculations. To avoid inflation of national income figures, only the final value of goods and services should be considered while excluding intermediate inputs.

### **17. c) Wages and salaries**

Factor payments include wages, salaries, rent, interest, and profits earned by individuals and businesses in the production process. These payments represent compensation to the factors of production and are a crucial component of national income measurement.

### **18. b) The value of government transfer payments**

Government transfer payments, such as unemployment benefits and pensions, are not included in GDP because they do not correspond to new production. Instead, they are redistributions of existing income, which do not increase economic output or productivity.

### **19. c) Adjusts for changes in the price level**

Real GDP removes the effects of inflation by adjusting nominal GDP using a price index. This provides a more accurate measure of actual economic growth and living standards by accounting for fluctuations in price levels over time.

### **20. a) The total quantity of goods and services that producers are willing to supply at different price levels**

The aggregate supply curve represents the relationship between price levels and output supplied by producers. It helps analyze economic fluctuations, inflation, and production capacity based on market conditions and government policies.

## **Related Concepts**

### **21. b) Business spending on new machinery**

Investment expenditure includes spending by businesses on capital goods like machinery, buildings, and equipment, which contribute to future production and economic growth. Unlike consumption, investment enhances productive capacity and long-term economic development.

## **22. c) Gross national income minus corporate profits and taxes**

Personal income refers to the total earnings received by individuals before taxes, including wages, interest, dividends, and government transfers. It excludes undistributed corporate profits, focusing on income available for household consumption and savings.

## **23. b) A government transfer payment**

Transfer payments, such as welfare and unemployment benefits, are excluded from national income because they do not involve the exchange of goods or services. They redistribute income rather than contribute to new economic production or output.

## **24. a) Double counting**

Including intermediate goods in GDP calculations leads to double counting, artificially inflating national income figures. To avoid this, only the final value of goods and services is considered, ensuring accurate economic measurement.

## **25. b) Depreciation**

Net Domestic Product (NDP) accounts for depreciation by subtracting it from GDP. Depreciation measures capital wear and tear, ensuring a realistic assessment of an economy's sustainable productive capacity and long-term economic health.

## **National Income: Related Concepts**

### **26. b) Domestic production and income received from abroad**

Gross National Income (GNI) measures total income earned by a nation's residents, including domestic production and net foreign income. It accounts for income earned from investments and business operations abroad, reflecting a country's overall economic strength.

### **27. b) Government spending**

Factors of production include land, labor, capital, and entrepreneurship. Government spending is not a production factor; rather, it is an expenditure influencing economic activity, fiscal policy, and public services, but it does not directly generate output like productive resources.

### **28. b) Factor payments (wages, rent, interest, and profits)**

The income method calculates national income by summing up factor payments: wages (labor), rent (land), interest (capital), and profits (entrepreneurship). This approach ensures that income generated by production activities is accounted for within the economy.

### **29. c) Part of government spending**

Salaries paid to government employees are included in national income under government expenditure. They represent compensation for services provided in public administration,

education, healthcare, and law enforcement, contributing to economic output like other labor-driven activities.

### **30. a) An increase in exports**

Exports contribute to national income by bringing foreign currency into the domestic economy. Increased exports boost domestic production, employment, and economic growth, enhancing a country's trade balance and improving its Gross Domestic Product (GDP) performance.

### **31. b) Income and consumption expenditure**

The consumption function explains how changes in income influence household spending. Higher income leads to increased consumption, but the rate of spending varies based on consumer preferences, savings behavior, and marginal propensity to consume or save.

### **32. c) The reduction in the value of capital assets over time**

Depreciation refers to the gradual decline in the value of capital goods due to wear and tear, obsolescence, or usage over time. It is subtracted from GDP to calculate Net Domestic Product (NDP), reflecting actual productive capacity.

### **33. c) Wages**

Wages represent compensation received by individuals for their labor, forming a significant portion of national income. Other income components include rent (for land), interest (for capital), and profits (for entrepreneurship), collectively representing payments to factors of production.

### **34. c) Land**

Factors of production include land, labor, capital, and entrepreneurship. Land provides natural resources necessary for production, while capital includes machinery, labor represents human effort, and entrepreneurship combines these resources to create goods and services.

### **35. b) The price level of final goods and services**

The GDP deflator measures inflation by comparing nominal and real GDP, reflecting price changes in an economy. Unlike the Consumer Price Index (CPI), it covers all domestically produced goods and services rather than just consumer items.

### **36. a) ₹2000 crore**

Real GDP is derived by adjusting nominal GDP for inflation using the GDP deflator. The formula is:

Real GDP = Nominal GDP / GDP Deflator

₹2200 crore / 1.10 = ₹2000 crore, representing actual output at constant prices.

**37. b) ₹9,500 crore**

GDP at factor cost removes indirect taxes and adds subsidies to reflect actual production earnings.

Formula: GDP at factor cost = GDP at market price - Indirect taxes + Subsidies  
₹10,000 crore - ₹1,000 crore + ₹500 crore = ₹9,500 crore.

**38. c) Added to the GDP at market price**

Gross National Product (GNP) includes GDP plus net income from abroad. If residents earn income overseas, it is added to GDP. This adjustment reflects national economic activity beyond domestic borders, ensuring a comprehensive measure of income.

**39. a) ₹1,800 crore**

Net Domestic Product (NDP) accounts for depreciation in calculating national output.

Formula: NDP = GDP - Depreciation

₹2,000 crore - ₹200 crore = ₹1,800 crore, representing the economy's actual productive capacity after accounting for capital depreciation.

**40. b) Income from abroad by residents**

GDP measures domestic output, while GNP adds net foreign income earned by residents. If citizens generate income abroad, it is included in GNP but not GDP, highlighting the distinction between domestic and total national economic activity.

**41. c) Double counting of GDP**

Including intermediate goods in GDP calculations results in double counting, inflating income figures. GDP only accounts for final goods and services to avoid misrepresentation and ensure accurate economic measurement of national production.

**42. b) Transfer payments like pensions**

Transfer payments, such as pensions, unemployment benefits, and social security, are excluded from GDP because they do not correspond to new production. They represent income redistribution rather than economic output contributing to national income.

**43. a) ₹6,400 crore**

Real GDP removes inflation effects from nominal GDP using the GDP deflator.

Formula: Real GDP = Nominal GDP / GDP Deflator

₹8,000 crore / 1.25 = ₹6,400 crore, representing inflation-adjusted economic output at constant prices.

**44. c) Corporate investment in capital goods**

Corporate investments in capital goods are classified under investment expenditure, not final consumption. Consumption expenditure includes household and government spending on

goods and services for immediate use, whereas investments enhance future production capacity.

#### **45. d) Depreciation subtracted from GNP**

Net National Product (NNP) adjusts GNP by subtracting depreciation, representing the economy's net output after accounting for capital consumption. This metric reflects the actual increase in wealth available for use without replacing worn-out capital.

#### **46. a) The contribution of each firm to the final output of the economy**

Value-added represents the incremental contribution of businesses at each production stage, preventing double counting. It measures GDP by summing up the added economic value across all sectors within a specified period, ensuring accurate income estimation.

#### **47. d) Budgetary method**

The budgetary method is not used for calculating national income. The primary approaches—Income, Expenditure, and Value-Added methods—account for income generation, spending, and production contributions, ensuring an accurate representation of national output.

#### **48. c) Lower NDP than GDP**

Net Domestic Product (NDP) is derived from GDP by subtracting depreciation. A higher depreciation level reduces NDP, indicating that more capital assets are worn out, requiring reinvestment to maintain productive capacity in an economy.

#### **49. b) NDP is GDP minus depreciation**

NDP measures an economy's net output after considering depreciation. It provides a more realistic estimate of sustainable economic activity, ensuring that worn-out capital is accounted for while analyzing production efficiency and economic health.

#### **50. b) Gross Domestic Product (GDP)**

GDP measures the total value added at every stage of production in an economy. By summing contributions from all industries, it provides an accurate estimate of overall economic activity, productivity, and national income for a specific period.