7. National Income

Q. 1. Complete the following statements :

1) While estimating national income, we include only value of final goods and services in order to ....

a) make computation easier

<u>b) avoid double counting</u>

c) maximize national welfare of the people.

d) evaluate the total economic performance of a nation

2) NDP is obtained by ....

a) deducting depreciation from GNP

<u>b) deducting depreciation from GDP</u>

c) including depreciation in GDP

d) including depreciation in GNP

3) In India, national income is estimated using ....

a) output method

b) income method

c) expenditure method

<u>d) combination of output and income method</u>

Q 2. Complete the Correlation :

1) **<u>GDP</u>** : C+I+G+ (X-M) :: GNP:C+I+G + (X-M) + (R-P).

2) Output method: **<u>Inventory method</u>** : Income method : Factor cost method.

3) Theoretical difficulty : Transfer payments : **<u>Practical difficulty</u>** : Valuation of Inventories

Q. 3. Choose the correct option:

1) Wrongly matched pair:

a) National Income Committee - 1949

b) Financial year - 1st April to 31" March

c) Income method - National Income = Rent +Wages+Interest + Profit + Mixed income + Net Income from abroad

d) Expenditure method - National Income Rent + Wages + Interest + Profit

Options: 1) a 2) b 3) c 4) d

Answer is 4) d

Q. 4. Identify and Explain the following concepts:

1) Vrinda receives monthly pension of Rs.5.000/ from the State Government.

Ans. (A) Identified concept : Transfer income

(B) Explanation of concept : If the expenditure incurred by another person/organization is received by an individual in the form of income without any form of productive work, then such income is called 'transfer income'.

(2) Viru kept aside 100 kgs. out of 500 kgs. of wheat produced in his farm for his family.

Ans: (A) Identified concept : Product for self consumption.

(B) Explanation of concept : The product for self-consumption is the part of the product that is set aside to meet the needs of oneself and one's family.

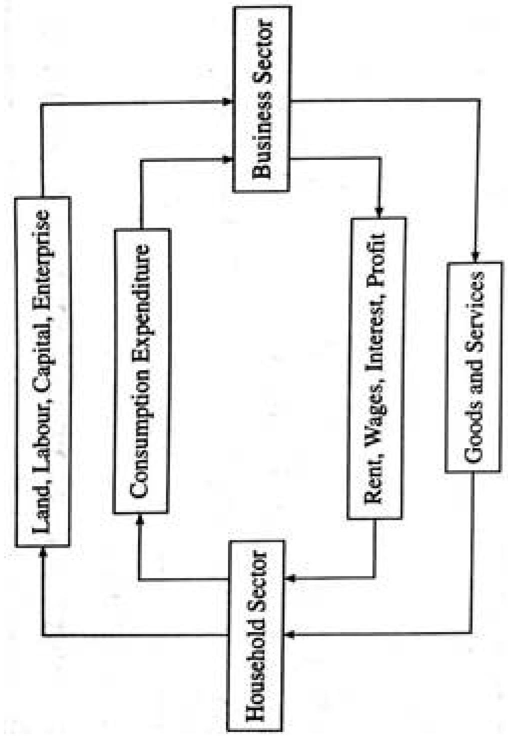
(3) Sheetal purchased wheat flour for her bakery from the flour mill.
Ans: (A) Identified concept : Private investment expenditure.
(B) Explanation of concept : Expenditure incurred by an entrepreneur or a private entity on raw materials, machinery, etc. for the manufacture of various goods and services is called private investment expenditure.

(4) Shobha collected data regarding the money value of all final goods and services produced in the country for the financial year 2018 - 2019
Ans. (A) Identified concept : Measure of national income by product method.
(B) Explanation of concept : Measurement of national income by summing the economic values of all final goods and services produced in a particular financial year is a measure of national income by product method.

(5) Rajendra has a total stock of 500 gel pens in his shop which includes the 200 gel pens produced in the previous financial year.
Ans. (A) Identified concept : Inventories.
(B) Explanation of concept : Inventories refer to the stock of raw materials, medium goods, semi-finished goods and final goods in the current financial year and in the previous financial year available to the producer.

Q. 5. Answer the following
1)Explain the two sector model of circular flow of national income.
Ans. Circular flow of national income is the basic concept of macroeconomics. The two sector model of circular flow of national income can be explained with the help of the following points : (1) The two sector model of circular flow of national income assumes that there are only two sectors, viz. household and firms in an economy.
The circular flow of national income between these two sectors is explained with the help of the following diagram:

(Kindly rotate your phones)



(2) From the diagram, it can be seen that households are the owners of factors of production, viz. land, labour, capital and entrepreneur. Household sector supplies their services to the firms. Firms produce goods and services by using the services of factors of production. Firms supply goods and services to the household sector. Thus, services of factors of production flow from household sector to firms and goods and services flow from firm to household sector continuously. This flow is known as real flow or product flow. It is shown by an outer flow in the above diagram.
(3) From the diagram, it can be seen that as household sector supplies land, labour, capital and entrepreneur to the firm, it in turn receives rent, wages, interest and profit from the firms. Similarly, as firms supply goods and services to the household sector, it in turn receives the prices from household sector that are paid by household sector for purchasing those goods and services. Thus, the factor payment flows from firm to household sector and price payment flows from household sector to the firms. This flow is known as money flow. It is shown by an inner flow in the above diagram.
(4) From the diagram, it can be seen that income of household sector gets converted into consumption expenditure. Similarly, income of firm gets converted into factor payment. Thus, the flow of income and expenditure continues as production is a continuous activity due to never ending human wants. It makes the flow of national income circular between household sector and firms.

2) Explain the importance of national income.
Ans. The importance of national income can be explained with the help of the following points :
(1) Useful for the economy : The information/ data of national income is very important for the economy of a country. In present times, the national income data is regarded as accounts of the economy, which is known as 'Social Accounts'. It provides information about how the aggregate of a nation's income, output and product result from the income of different individuals, products of industries and transactions of international trade.
(2) Helpful in framing national policies : The statistical data of national income forms the basis of national policies such as employment policy, industrial policy, agricultural policy, etc. The information

about national income enables to know the direction in which the industrial output, investment and saving, etc. change. National Income also helps to generate economic models like growth model, investment models, etc. Thus, proper measures can be adopted to bring the economy to the right path. **(3) Helps in economic planning :** For economic planning, data pertaining to national income is very essential. This includes data related to a country's gross income, output, savings, investment and consumption which can be obtained from different sources.

(4) Useful in economic research : National income data is also used by the research scholars of economics. For example, the data of the country's input, output, income. savings, consumption, investment employment, etc. which are obtained from social accounts helps in economic research.

(5) Helpful in comparing standard of living: National income data helps to compare the standards of living of people in different countries and of people living in the same country at different times. For example, the data about national income of developed countries and undeveloped countries help in comparing the standard of living of people of these countries.

(6) Helpful in knowing the distribution of income : National income statistics enables to know about the distribution of income in the country from the data related to wages, rent, interest and profits. This data helps in understanding the economic disparities in the incomes of different sections of the society.

3) Explain the features of national income.

Ans. The features of national income are as follows:

(1) Macroeconomic concept : National income represents income of the economy as a whole rather than that of an individual. Therefore national income is a macroeconomic concept.

(2) Inclusion of value of only final goods and services : In order to avoid double counting, the value of only final goods and services produced in the economy are considered while calculating national income. While calculating national income, the value of intermediate goods or raw materials is not considered. For example, while estimating the value of sugar, the value of sugar cane is not taken into account, as it is already included in the price of the sugar.

(3) Inclusion of net aggregate value : National income includes net value of goods and services produced and does not include depreciation cost. (i.e. wear and tear of capital assets)

(4) Inclusion of net income from abroad: National income includes net income from abroad, i.e. difference between export value and import value (X-M) and net difference between receipts from abroad and payments made abroad (R-P). (5) Expressed with reference to financial year : National income is always expressed with reference to a specific time period. In India, it is calculated for every financial year, i.e. from 1st April to 31st March.

(6) Flow concept : National income is a flow concept. It shows flow of goods and services produced in the economy during a financial year.

(7) Expressed in monetary terms : National income is always expressed in monetary terms. It represents only those goods and services which are exchanged for money.

4) Explain the concept of Green GNP.

Ans. The concept of Green GNP can be explained with the help of the following points :

(A) Need and Measurement :

The need and measurement of Green GNP can be explained as follows:

(1) Mere increase in GNP will not reflect improvement in quality of life, when it increases environmental pollution or deplete/reduce available resources for future generations.

(2) Green GNP is an indicator of sustainable use of natural environment and equitable distribution of benefits of development. It thus takes into account the economic welfare.

(3) Green GNP is measured with the help of the following formula : Green GNP = GNP - (Net fall in stock of natural capital + pollution load.)

(B) Characteristics of Green GNP :

Following are the characteristics of Green GNP:

(1) Sustainable economic development, i.e. development which should not cause environmental degradation (pollution) and depletion of natural resources,

(2) Equitable distribution of benefits of its development.

(3) It promotes economic welfare for a long period of time.

Q. 6. State with reasons, whether you agree or disagree with the following statements :

1) There are many theoretical difficulties in the measurement of national income.

Ans. Yes, I agree with this statement.

Reasons : Following are some of the theoretical difficulties in measuring national income:

(1) Transfer payments: Some people from an economy receives pension, unemployment allowances, etc. Though pension, unemployment allowances, etc. is considered as an individual's income, it is not an earned income. Individual receives this income from government's expenditure, Therefore it becomes difficult to decide whether or not to include such income in national income.

(2) Illegal income : Illegal incomes received by selling goods and services by following illegal activities like gambling, black marketing, theft, smuggling etc. are not included in national income. But these goods and services do have the value and meet the needs of the consumers. Thus, excluding income from illegal activities leads to underestimation of national income.

(3) Similarly, there are theoretical difficulties in measuring national income related to unpaid services (for example, services of housewives). production for self consumption, income of foreign firms, valuation of government services, changing price level, etc.

Thus, there are many theoretical difficulties in measurement of national income.

(2) Under output method, value added approach is used to avoid double counting. Ans. Yes, I agree with this statement.

Reasons: (1) According to output method, the value added at each stage of production process is included. The difference between the value of final outputs and inputs at each stage of production is called value added.

(2) Thus, GNP is obtained as the sum total of the values added by all different stages of the production process, till the final output is reached in the hands of consumers, to meet the final demand.

(3) This can be illustrated with the help of the following table :

Production Stage	**Value of Output (₹)**	**Value of Input (₹)**	**Value Added (₹)**
Sugar cane (Farmar)	30	0	30
Sugar (Manufaturer)	50	30	20
Retailer (Merchant)	60	50	10
Total value			60

In the given example, a farmer produces and sells sugar cane for ₹30 to the sugar manufacturer. Sugar manufacturer sells sugar for ₹50 to the retailer. Retailer sells sugar for ₹60 to the consumer.

So the value added by farmer (₹ 30), manufacturer (₹ 20), and retailer (₹ 10) i.e. total of ₹60 is included in national income.

Q. 7. Answer in detail:

1) Explain the practical difficulties involved in the measurement of national income.

Ans. Practical difficulties in measuring national income are also known as statistical difficulties in measuring national income. The practical difficulties in measuring national income are as follows:

(1) Problem of double counting : The greatest difficulty in calculating national income is of double counting. It arises from the failure to distinguish properly, between a final and an intermediate product. For example, flour used by a bakery is an intermediate product and that by a household is final product. Therefore, sometimes the flour used by bakery is taken wrongly as a final product. This results in the problem of double counting. Double counting leads to overestimation of national income.

(2) Existence of non-monetized sector : In a developing country like India, especially in rural areas, there exists the non-monetized sector. In India, agriculture, still being in the nature of subsistence farming, a major part of production is consumed at the farm itself and a very small part produced is exchanged for other goods and services. Thus, exchange activities are carried out without the use of money. Therefore, they are not calculated in national income.

(3) Inadequate and unreliable data : In developing country like India, no permanent machinery exists for the collection of data. Therefore, adequate and correct data on production and cost data relating to crops, fisheries, animal husbandry. forestry, construction workers, small enterprises, etc. are not available. Besides this data on unearned income, consumption and investment expenditure of rural and urban population are also not available. This does not reveal the actual size of national income and it leads to underestimation of national income.

(4) Depreciation : Depreciation refers to wear and tear of capital assets, due to their use in the process of production. There are no uniform, common or accepted standard rates of depreciation applicable to the various capital assets. Thus, it is difficult to make correct deductions for depreciation due to an element of subjectivity.

(5) Capital gains or losses : Capital gains or capital losses, which accrue to the property owners by increase or decrease in the market value of their capital assets or changes in demand, are not included in the national income because these changes do not result from current economic activities.

(6) Illiteracy and ignorance : Due to illiteracy and ignorance, small producers do not keep an account of their production. So they cannot give information about the quantity or value of their output. This distorts the estimation of national income.

(7) Difficulties in the classification of working population : In India, working population is not clearly defined. For instance, farmers in India are not engaged in agriculture all round the year. Obviously, in the off season, they engage themselves in alternative occupations. In such a case, it is very difficult to identify their incomes from a particular occupation. This leads to underestimation of national income.

(8) Valuation of inventories : Raw materials, intermediate goods, semi-finished and finished products in the stock of the producers are known as inventories. Valuation of inventories requires careful assessment. Any mistake in measuring the value of inventory, distorts the value of the final production of the producer which in turn distorts the estimation of national income.

2) Explain the income method and expenditure method of measuring national income.

Ans. (A) Income method of measuring national income :

Income method of measuring national income is also known as factor cost method. This method approaches national income from the distribution side. This method can be explained with the help of the following points :

(1) According to this method, the income payments received by all citizens of a country, in a given year are added up. The data pertaining to income are obtained from income tax returns, reports, books of accounts as well as estimates from small income.

(2) In this method, the incomes accrued to land, labour, capital and entrepreneur in the forms of rents, wages, interest and profits are all added together. The sum of factor income is treated as Gross National Product. However, in this method, the income received in the form of transfer payments is ignored.

(3) In India, the national income committee of the Central Statistical Organization uses the income method for adding up the income arising from trade, transport, professional and liberal arts, public administration and domestic services.

(4) GNP according to income method is calculated as follows : NI = Rent + Wages + Interest + Profit + Mixed Income + Net income from abroad.

(B) Expenditure method of measuring national income :

Expenditure method of measuring national income is also known as Outlay Method. According to this method, national income is calculated by summing up all consumption expenditure and investment expenditure made by all individuals. firms as well as the government of a country during a year. Thus. gross national product is found by using the following formula : NI = C + I + G + (X-M) + (R-P).

The expenditure method can be explained with the help of the following points :

(1) Private Final Consumption Expenditure (C) : Private final consumption expenditure by households may be on non-durable goods such as food which are used immediately, or on durable goods such as car, computer, television set, washing machine, which are generally used for a longer period of time or on services such as transport services, medical services, etc. National income takes into account the private final consumption expenditure.

(2) Gross Domestic Private Investment Expenditure (I) : It refers to expenditure made by private businesses on replacement, renewal and new investments. National income takes into account the gross domestic private investment expenditure.

(3) Government Final Consumption and Investment Expenditure (G) : Government's final consumption expenditure refers to the expenditure incurred by government on various administrative services like law and order, defense, education, etc. Government's investment expenditure refers to the expenditure incurred by government on creating infrastructural facilities such as construction of roads, railways, bridges, dams, canals, which are used by the business sector for production of goods and services in any economy. National income takes into account the government final consumption expenditure and investment expenditure.

(4) Net Foreign Investment/Net Exports (X-M) : It refers to the difference between exports and imports of a country during a period of one year. National income takes into account the value of net exports.

(5) Net receipts (R-P) : It refers to the difference between expenditure incurred by foreigners in the country (R) and expenditures incurred abroad by residents (P). National income takes into account the value of net receipts.