1. NATIONAL INCOME

Q:1 Explain the meaning and features of National Income?
OR Explain How is Income = Expenditure = Value of Product?

(A) Introduction :-

National Income is one of the important subject matter of Macro-Economics. It is used as a yardstick through which Progress of an economy is measured.
National Income is the total money value of all the goods and services Produced in a country during a year.

(B) Meaning :-

1. According to National Income Committee (NIC) :-

" A National Income measures the volume of goods and services turned out during a given year without duplication "

2. Prof. A.C. Pigou :-

" National Income is a part of objective income of the community including income from abroad which can be measured in money ".

3. N. Gregory Mankiw :-

" National Income is the market Value of all final goods and services Produced within a country during a given Period of time ".

(C) Features of National Income :-

1. Macro Economic Concept :-

National Income is the market Value of all the goods and services Produced in the whole economy. Thus it is Macro economic Concept.

2. **Monetary Concept :-** National income include market price of all the good and services Produced in the economy. Thus it is monetary concept.

3. **Flow Concept :-** National Income is the Actual Flow of goods and services Produced and supplied between Household and firms. Thus it is Flow concept.

4. **Time Period :-** National Income is Calculated for the Period of one year i.e from 1st April to 31st March.

5. **Final Value of goods and services :-** To avoid double Counting the value of only Final goods and services must be taken in calculation of National Income.
Example → When a Person Purchase a book for Rs. 100, it include all the payments made to → authors, Paper, Printing, binding and selling.

6. **Current and Constant Price :-** National Income Can be Calculated at Current and Constant Price.

7. **Net Aggregate Value :-** National Income is always estimated at Net Aggregate level. It means Depreciation Cost must be deducted from Gross Value.

$$NNP = GNP - Depreciation$$

8. **Gross and Net value :-** National Income is calculated at Gross Value and Net Value but Net Aggregate Value is best indicator of economy.

$$GNP = C + I + G + (x - M) + (R - P)$$
$$NNP = GNP - Depreciation$$

economicsguidance.com

(9) **Market Price and Factor Cost :-** According to modern economists, National income must be calculated at Market Price as well as at factor cost.

$$GNP_{mp} = C + I + G + (X - M) + (R - P)$$

$$NNP_{mp} = GNP_{mp} - \text{Depreciation}$$

$$NNP_{FC} = NNP_{mp} - \text{Indirect Taxes} + \text{Subsidies}$$

(10) **Income From Abroad :- (R-P) :-**

R - All Receipts from Foreign Countries

P - All Payments to foreign countries

National Income should include income earned from abroad

(11) **Indirect Taxes are Deducted :-** while estimating National Income at Factor Cost, Indirect taxes must be deducted.

(12) **Subsidies must be added :-** while estimating National Income at Factor Cost, Subsidies incurred by Government must be added.

(13) **Transfer Income :-** While estimating National income, Transfer income should not be included in it because it is a Part of redistribution income.

example → Pension benefit, Sickness Allowance, Unemployment, Scholarship etc.

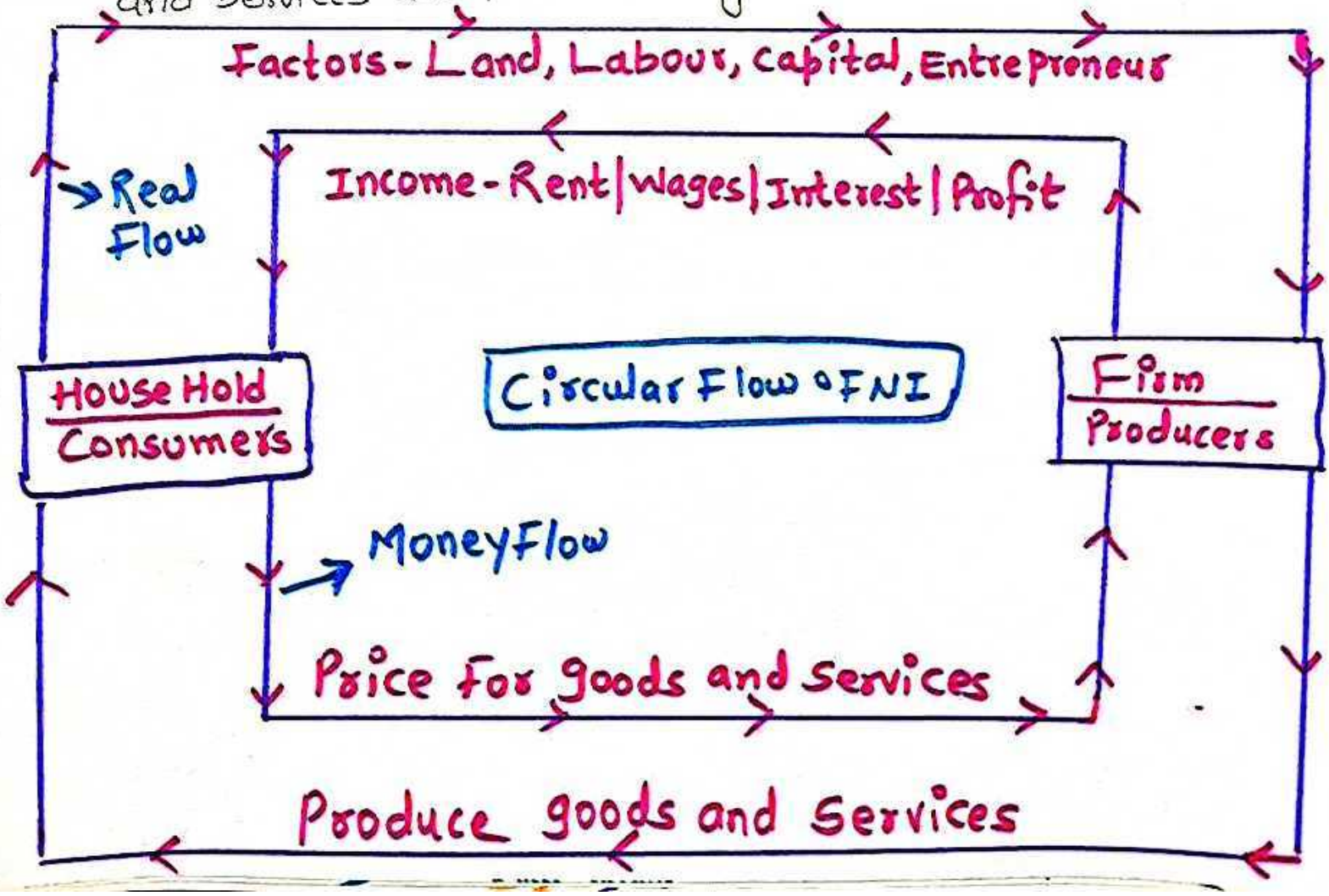
Q:2 Explain Two Sector Model of Circular Flow of National Income?

(A) Two-Sector Circular Flow of National Income:-

In a closed two sector economy, economy is divided into two Parts-

1. **Households (Consumers):-** Households are the Owners of Factors of Production. They Provide Four factors of Production like- Land, Labour, Capital and Entrepreneur to Firms. In Return Firms Pay Rent, Wages, Interest and Profits to house holds

2. **Firms (Producers):-** Firms hire Factors of Production For Producing goods and services. These goods and Services are Purchased by households (consumers)



1] In above diagram, Household Provide four factors of Production to firms and in return firms pay Rent, Wages, Interest and Profit to Consumers.

2] By Utilising four factors of Production, Firm Produce various goods and services which are Purchased by households.

3] **Product Flow/Real Flow:-** The Outer Flow is known as Product Flow/Real Flow where households Provides four factors - Land, Labour, Capital and Entrepreneur to firms. In Return, firms Provide goods and services to households. It is also called Barter Flow.

4. **Money Flow:-** The Inner Flow is known as Money Flow where households earns income in the form of Rent, wages, interest and Profit which is used for Purchasing goods and services.

Q:3 Explain Various methods of measuring National Income?

(A) **Introduction:-** The national income is the money Value of all goods and services Produced in a County during a year. In every economy —

i) Goods are Produced by firms
ii) Income is distributed among four factors of Production
iii) Expenditure for Purchase of goods and services

Thus there is Triple Identity in every economy.

Total Out Put = Total National Income = Total Expenditure

① Total Out Put method :-

This method is known as Product method or Inventory method. Under this method total Value of Out Put Produced by all the sectors of economy during a year. As Per this method economy is divided in three sectors like—

i) Agricultural Sector
ii) Industrial Sector
iii) Service Sector.

Goods and Services Provided by above three sectors are taken together in Total Out Put method at their Current market Price.

Under this method, to avoid Double counting economist suggested following Two approaches :—

ⓐ Final Value of Goods Approach.
ⓑ Value Added method.

ⓐ Final Value of Goods Approach :-

To calculate GNP, Final Value of goods and services are taken into account. The Value of raw materials or intermediate transactions are not taken under this method.

Example :- If Value of Shirt ₹ 500 is included in GNP then Value of Cotton, Labour, Fuel, Packing etc. are not taken into account to avoid Double Counting.

(b) Value Added Method :- In order to avoid double Counting Value added Approach is used. Under this method, Value is added at each stage of Production. Thus, Here GNP is Calculated as the sum total of the Value added at every stage of Production till Final Output is reached in the hands of Consumer.

Example

Stage of Production	Value of each stage of Production (₹)	Total Market Value (₹)
Cotton	₹ 150	₹ 150
Yarn	₹ 200	₹ 350
Cloth	₹ 250	₹ 600
Shirt	₹ 200	₹ 800 = MRP = Final Price

In above example Value is added at each stage of Production till Final Product Shirt will reach in the hands of Consumer.

(₹ 150 + ₹ 200 + ₹ 250 + ₹ 200 = ₹ 800 Price)

★ Precautions :-

1. Value of only Final goods and services should be taken to avoid double Counting.
2. Depreciation must be deducted from GNP.
3. Net Income From Abroad must be added.
4. Changes in the Price level must be taken into account.
5. Sale and Purchase of second hand goods should be ignored.
6. Transfer income should not included.
7. Value of Exports should be added and Value of Import must be deducted.

(2) Income method :-

This method is also known as Factor Cost method. Under this method, national Income is calculated by adding the total income received by all Factors of Production in an economy.

National Income is calculated by adding — Rent on Land, wages of Labour, Interest on Capital, Profit of entrepreneur and Income of self-employed People.

$$NI = R + W + I + P + MI + (X - M)$$

1. **Rent :-** It include total Value of actual rent Paid and rent-Value of self-occupied Property
2. **Wages :-** It include wages, Salaries, bonus, Commission, Free Lodging and Boarding of employees etc.
3. **Interest :-** The Net Interest received by individuals From all sources must be added (e.g) Interest on Loans, Saving, deposits etc.
4. **Corporate Profits :-** Net Profit earned by Private business firms before Paying Tax must be added.
5. **Profit of Govt Sector :-** Net Profit earned by Public Sector Firms before Paying Tax must be added.
6. **Mixed Income :-** Few self-employed People earn mixed type of income Like- rent, wages, interest and Profit. So this income is also added in NI.
7. **Net Income From Abroad :-** The Net income earned From abroad must be added in NI.

★ **Precautions:-**

1) All Unpaid Services like – services of housewife, teachers, doctors to their child should be ignored.
2) Transfer Payment Like – Scholarship, Gift, Pensions, Unemployment allowances etc. should be ignored.
3) Direct Income Tax should be ignored.
4) Income from Sale of Shares and bonds should be ignored.
5) Any income from Sale of Second hand goods like Car, house must be ignored.

(3) Expenditure Method:–

This method is also known as Outlay method. Under this method, National income is measured by adding all the expenditure incurred on final goods and services.

$$NI = C + I + G + (X - M)$$

1. **Private Consumption Exp. (C) :-** It include Consumption expenditure by household on non-durable goods Like – Food. It also include expenditure on durable goods Like – Car, Computer, mobile, Ac, TV etc
2. **Investment Exp. (I) :-** It include all type of investments or Capital goods. It also include depreciation Cost.
3. **Government Exp. (G):-** It include —
   i) Government Consumption Expenditure on Various

administrative services like – Law and order, defence, education, heath etc.

ii) Government Investment expenditure on creating infrastructural facilities Like – Construction of Roads, Railways, highways, Bridges, dams etc.

4. Net Foreign Trade (X-M):- It means difference between export and Import of a county during a year.

★ Precautions :-

1) Expenditure on Final goods and services should be included in NI.
2) Expenditure on Transfer income should not be included in NI.
3. Expenditure on Repurchase of second hand goods should be ignored.
4) Expenditure on the repurchase of financial assets such as shares, bonds, debentures etc. should not be included

Q:4 What are the difficulties involved in estimating National Income ?

(A) Introduction :- There are many difficulties in measuring national Income of a County. These difficulties are both Theoretical (conceptual) and Practical (statistical) in nature. Some of the important difficulties are explained as follows :—

(B) Difficulties in Measurement of NI :-

1. **Unpaid Services :-** While Calculating NI, only Paid goods and services are Considered. It means Unpaid services are not included in national Income. (e.g) → Services of housewives, Services provided out of Love, affection, Sympathy etc. are not included in NI.

2. **Transfer Payments :-** There are some incomes which are received without any corresponding Contribution to the Output of goods and services These incomes are called Transfer income. These incomes are transferred from the government to the People without rendering any services. Example → Pension, Sickness allowances, Scholarship etc. It is Very difficult to find out exact amount of transfer income Paid in the economy.

3. **Illegal Income :-** It is Very difficult to findout income earned by Illegal activities like- gambling, black-marketing, Smuggling etc. It will also Lead to Under Valuation of NI.

4. **Production For Self-Consumption :-** The Production Kept for self-Consumption by the farmers do not enter in the market. Hence it is not included in NI.

5. **Valuation of Govt. Services :-** Government Provides a number of services such as Law and Order, Defence, Public Administration, education, Health services etc

It is difficult to find the exact value of Govt. Services because they are Provided either at Free cost or at Concessional rate.

(6) Problem of Double counting :- It is main Problem while Calculating NI to avoid double counting. we prefer to take final value of goods and services. But Some time it is very difficult to decide whether goods is final or intermediate.

Example → Flour used by a bakery is intermediate but for a household it is final good. (OR) Rice used by a Restaurant is a intermediate but for a farmer it is Final Product.

(7) Definition of NI :- In Calculation of NI, it is difficult to define the term – Nation. Every nation has own Political boundaries. But People of every nations are working in foreign countries and remit their income to home country. So it Create a Problem while Calculating NI.

(8) Illiteracy :- Majority of Producers in our India are illiterate and ignorant. They do not Keep the record of Production and sale of their goods and Services. Hence NI Cannot be correctly measured.

(9) Inadequate Statistical data :- In developing countries, Proper

data on Product and Cost data relating to Crops, Fisheries, animal husbandary, Forestry small Enterprises etc. are not available. Even incomes are not clearly shown to escape from Tax. Thus, NI is Undervalued.

(10) **Depreciation :-** "Depreciation means wear and tear Cost of Capital assets due to their Use in in Process of Production."
There is no Uniform and Common standard accepted to measure depreciation. Thus it is difficult to deduct actual depreciation from GNP.

(11) **Presence OF Non-monetised Sector :-** In developing Country like India, non-monetised sector is available especially in rural areas. Here goods are exchanged against goods which are not recorded in NI.

(12) **Valuation of Stock :-** Raw materials, intermediate goods, Semi-finished goods and finished goods are in the Total stock of inventories. Any mistake in the measuring Value of inventory will affect on accuracy of NI.

(13) **Capital Gains or Losses :-** Due to increase or decrease in market Value, Property Owners earns Capital gain or Suffer Losses. But these transactions are not recorded in Current Year GNP.

(14) Lack of Occupational Specialization :-

In developing Countries, there is Lack of occupational Specialization which the Calculation of NI more difficult by Output method.

Example → A farmer is busy in farming Dairy Farming, Poultary farming etc. Similarly many People are busy in Supplementry Occupation but that income is not included in NI.

Q:5 State with Reasons whether the following Statements are True or False :

1. National Income estimates include Value of intermediate goods and also of final goods.

Ans:- False. Reasons- Refer Q:1 – 5th Point.

2. GDP includes income earned by nationals outside the Country.

Ans:- False. Reasons:- GDP measures all those goods and services Produced within the Political boundary of a Country. Goods and Services Produced within the Country, either by Citizens or foreigners are included in the GDP of that country but it donot include the income earned by nationals outside the Country.

economicsguidance.com

3. National income refers to the income of a Country for a given Period of time Usually a year.

Ans:- True. Reasons- Q:1 A and B Part.

4. In the Product method national income is estimated by adding the Value of all final goods and services Produced in a country in a given year.

Ans:- True. Reasons- Q:3- 1- a Part

5. In the income method only the incomes that have been earned in return for Productive services are included.

Ans:- True. Reasons- Q:3- 2nd method.

6. In the NI goods and services not transacted in terms of money Calculated.

Ans:- False. Reasons- Q:1- 2nd Point.

7. Income earned by Self-employed People is called Mixed Income.

Ans:- True. Reasons:- Q:3- 2nd method- 7th Point.

8. Under Expenditure method, income spent on every goods and services is included.

Ans:- False. Reasons- Q:3- 3rd method.

9. In national income estimate Capital gains are added.

Ans:- False. Reasons- Q:4- 13 Point

Q:6 Select the Correct answer and rewrite statements :-

1. What is the total money Value of final goods and services Produced within the domestic territory of the Country during a given year? a- GDP

a) GDP b) GNI c) NNI d) None of the above

(2) What is the total money Value of the goods and Services Produced by the nationals during the given year?

a- GNI

a) GNI b) GDP c, NDP d) None of the above

(3) How many different methods are Used for measuring national income? b- Three

a) Two b) Three c) Four d, Six.

(4) In which of the following method national income is estimated by adding the Value of all Final goods and Services Produced in a Country?

C- Product

a) Expenditure b) income c) Product d) GNI

(5) In the expenditure method, which of the Following types of expenditure on goods and Services are included?

a- Final

a) Final b) all c) intermediate d) intermediate and Final

(6.) Under Value Added method, national income is measured by adding the Value a- added at each stage

(a) added at each stage (b) of all input and out put

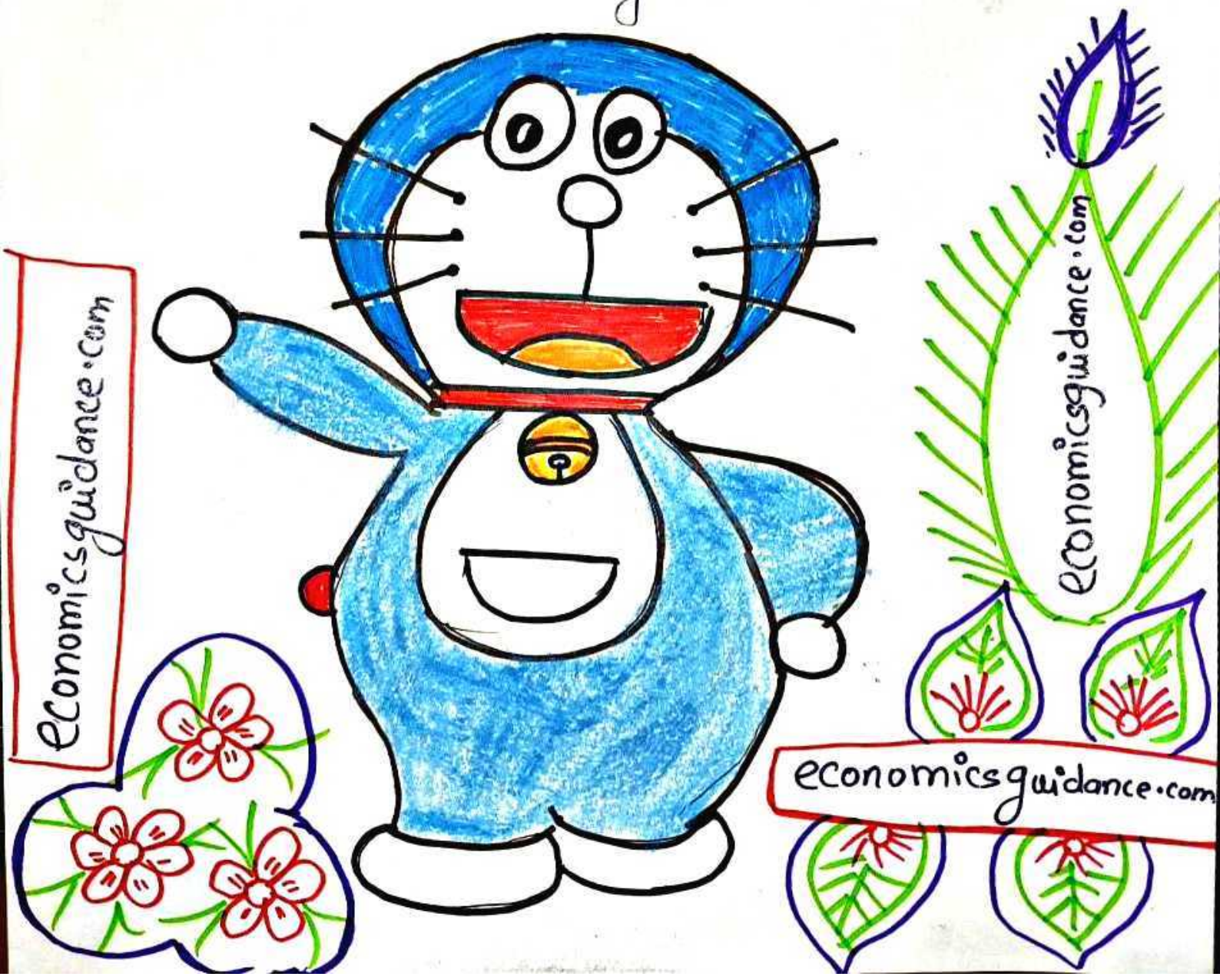
(c) by adding rent, wages and interest

(7) In developing Countries, measurement of NI faces the Following Problems d- All the Above

a) Non-monetised sector b) Lack of adequate statistical data

(c) Lack of Proper accounting Practices d) All the above

economicsguidance.com

Q:7 Match the following statements-

1. National Income → Income earned by all the nationals
2. Only final goods and services → Intermediate goods are not added.
3. Transfer Income → Pension and Scholarship.
4. Stock of Goods → Added to the NI in the year they are produced.