2. Circular Flow of National Income

Q.1 Explain Circular Flow of of National Income in Close-economy (Two sector) Economy?

(A) **Introduction :-** National Income is one of the important subject matter of Macro Economics. National Income is the total Money Value of all the goods and services Produced in a country during a year. It is generated from four factors of Production i.e Land, Labour, Capital & Entrepreneur.

(B) **Meaning - J. M. Keynes**

" Ciocular Flow of National Income means the Process where Income and Expenditure of economy Flow in Circular manner between Households and Firms."

(C) **Circular Flow of NI In Two-Sector Economy:-**

Every economy Performs certain functions which help our economy to function Smoothly. These functions are — Production, Exchange, Consumption and Distribution.

In this model economy is divided in Two Parts-

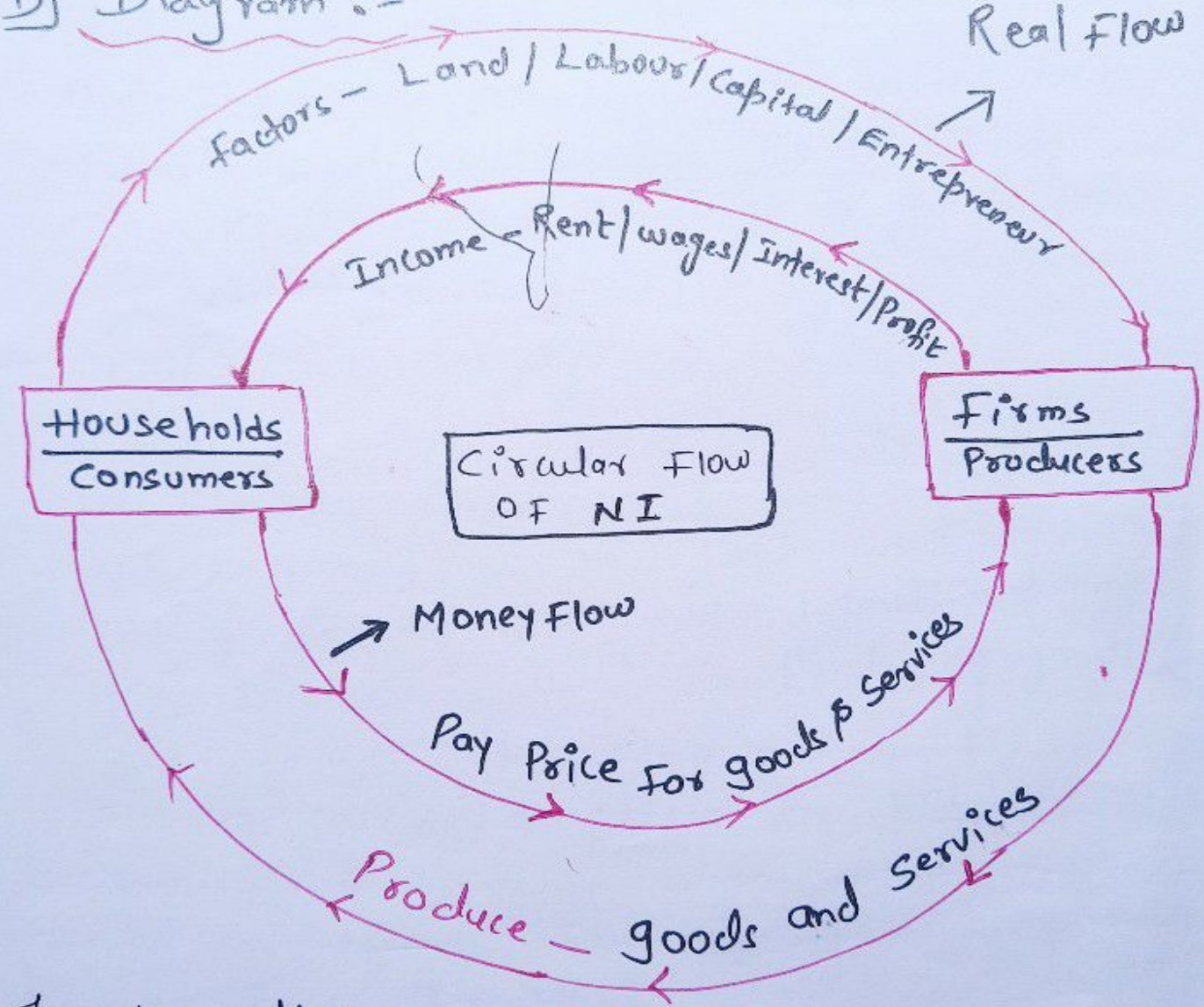
1. Households (Consumers)
2. Firms (Producers)

1. **House Holds (consumers) :-** House holds are Owners of factors of Production. They Provide four factors — Land, Labour capital, & Entrepreneur to firms. In return firms Pay

Rent, wages, Interest and Profit to Households.

2) Firms (Producers) :— Firms hire factors of Production for Producing goods and services. These goods and services are Purchased by households.

D] Diagram :-



In above diagram we Observe —

1] Household provide four factors of Production like- Land, Labour, Capital & Entrepreneur to firms. In Return firms Pay Rent, wages and Interest and Profit to Households.

2] By Utilising four factors of Production, Firms Produce goods and Services which are Purchased by Households.

3) **Real Flow / Outer Flow :-** The outer Circle shows the Product Flow / Real Flow where households Provide four factors — Land, Labour, Capital and Entrepreneur to Firms. In return Firms Provide goods and Services to Households. This Flow is the exchange of goods and Services against goods and services which is called Baster System.

4) **MONEY Flow / Inner Flow :-** The Inner Circle shows money flow. Here Consumers earn income in the Form of Rent, wages, Interest and Profit. This Income is used for Purchasing goods and Services. This Flow @ shows Flow of money income & expenditure between Household & Firms

The Circular Flow of National Income shows a **TRiple Identity**—

Total Exp. of firms = Total Income of Households

Total Exp. of Households = Total Income of Firms

Total out Put = Total Income = Total Exp.

National Product = National Income = National Exp.

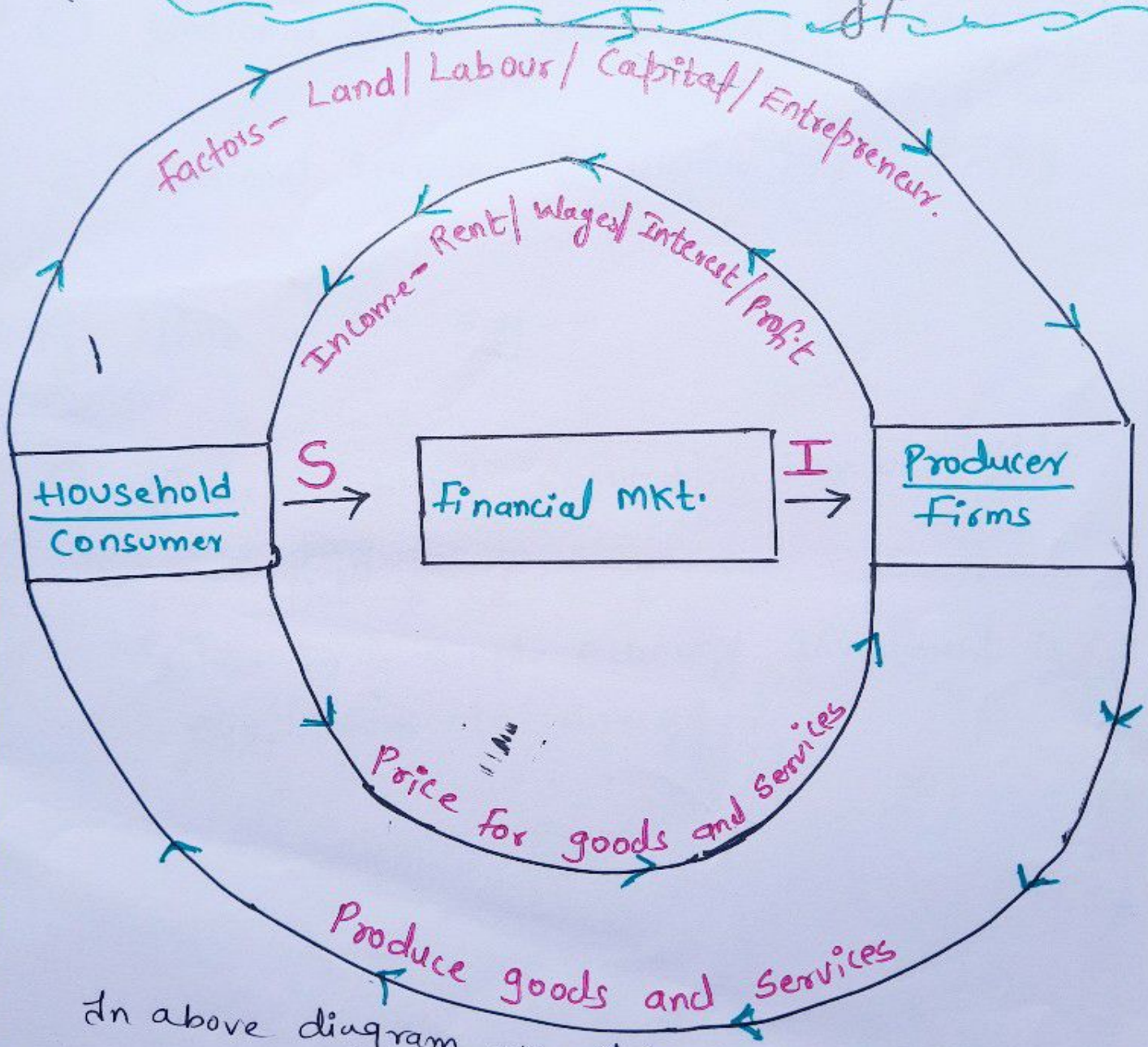
(E) Assumptions :-

1. The economy Consist Two sectors —
   i) Households — Consumers
   ii) Firms — Producers
2. House hold do not Save their Income.
3) Firms do not save from their Profits. It means there is no increase in capital.
4) Economy is closed Economy. It means the economy does not export or Import goods and services.
5) The Government do not play any part in the growth and development of country. There is No Taxes and No Expenditure of Government.
6) All transactions are carried with the help of money as medium of Exchange.

Q.2. Explain Circular Flow of Two-Sector economy with Saving and Investment.

A] Introduction } Same from Q.1.
B] Meaning }

C] Circular Flow OF NI With Saving & Investment :-



In above diagram we observe —

1) Circular Flow of NI with Two Sector economy shows saving and Investment through Financial Market.

2) Financial Market include → Commercial Bank Stock Market, Non-Banking Financial Institutions etc.

(3.) Saving is a leakage in the Circular flow and it gets injected back into Circular form of Investment.

(4) In this Simple economy there is —
- no government Intervention
- No foreign Trade etc.

(5) National Income = Consumption Exp. + Investment

$$Y = C + I \longrightarrow (i)$$

(6) National Income = Consumption Exp. + Saving

$$Y = C + S \longrightarrow (ii)$$

(7) Thus we can say →

$$C + I = C + S = Y$$

(8) If we Subtract Consumption from both side we ~~find~~ find →

$$I = S$$

Thus in a simple economy Investment is equilibrium to Saving.

Q.3 Explain Circular Flow of NI in Three-Sector Economy ?

(A) Introduction } Same from Q:1
(B) Meaning }

(C) **Circular Flow In a Three Sector Economy :-**

In three sector economy we observe—

1) HOUSEHOLD & FIRMS
2) FINANCIAL MARKETS
3) GOVERNMENT

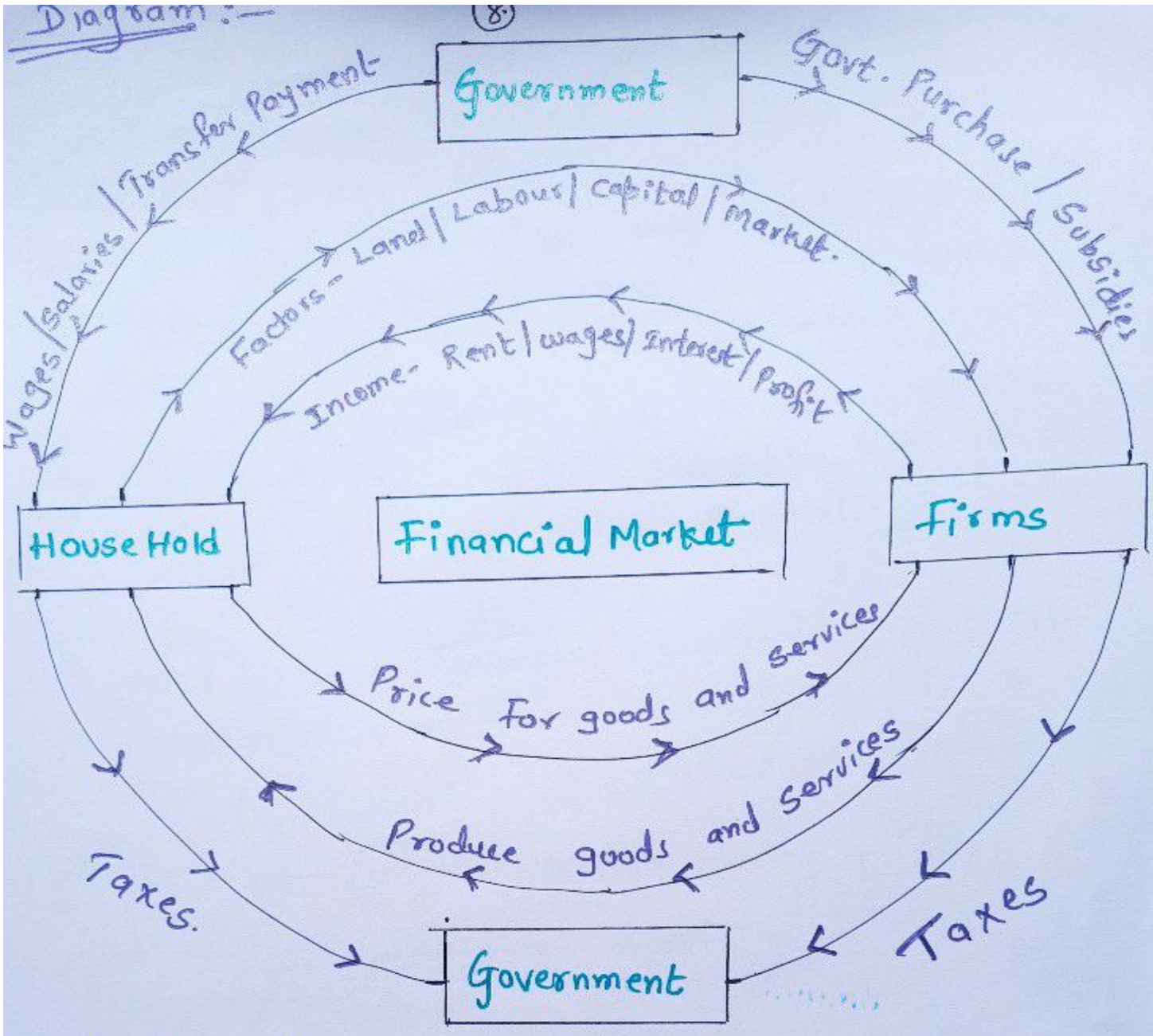
1) **Household and Firms :-** Households are the owners of four factors of Production. Firms Produce Various goods and services by using four Factors of Production.

2) **Financial Markets :-** Financial markets help our country to convert Saving of household into Investment in Various Capital Assests.

3) **Government :-** In modern economy Government Plays a major role in the economic system of a country. Government collect income in the form of Taxes. These Taxes (income) of Government are spend on Various goods and Services, Transfer Payment, Subsidies, allowances etc.

Thus income of Government (Taxes) are re-injected into economy which is received by Firms and households shown in following diagram:-

Diagram :—



In above diagram we observe :—

1) Three Sector economy is smoothly functioning between—
   i) Household and firm
   ii) Financial market &
   iii) Government.
2) Household Provide four factors of Production to Firms. In return Firms Pay — Rent, wages, Interest & Profit to Household.
3) Firms Produce goods and services by Utilising factors of Production & Household Purchase those goods and services by Paying Price.

(4) The financial Markets gets Saving from Household and Same is invested into firms for smooth functioning of economy.

(5) The Government Pays wages, Salaries, Transfer income etc to Household. For such income, Household Pay Taxes to Government.

(6) Again Government Purchase goods and services Firms and Give them Subsidies. For such income firms also make Payment of Taxes to Government.

(7) Total Exp. = Consumption Exp. + Investment Exp + Govt. Exp.

$$E = C + I + G$$

(8) Total Income = Consumption + Saving + Taxes
Income

$$Y = C + S + T$$

(9) As we know - Total Exp. = Total Income

$$C + I + G = C + S + T$$

$$\therefore I + G = S + T$$ → By cancel out C from both sides

By re arranging we get →

$$G - T = S - I$$

(10) IF $G > T$ - It means Govt. has Deficit Budget.

IF $G < T$ - It means Govt. has Surplus Budget.

Q.4 Explain Circular Flow of Income and Expenditure in Open Economy / four sector economy.

(A) Introduction & (B) Meaning — Same from Q.1

(C) Circular Flow In a four Sector Economy :-

In open economy we have four sectors -

1) Household and Firms
2) Financial Market
3) Government
4) World Economy.

1) Household and Firms :- Households are the Owners of four factors of Production. Firms Produce various goods and services by using four factors of Production.

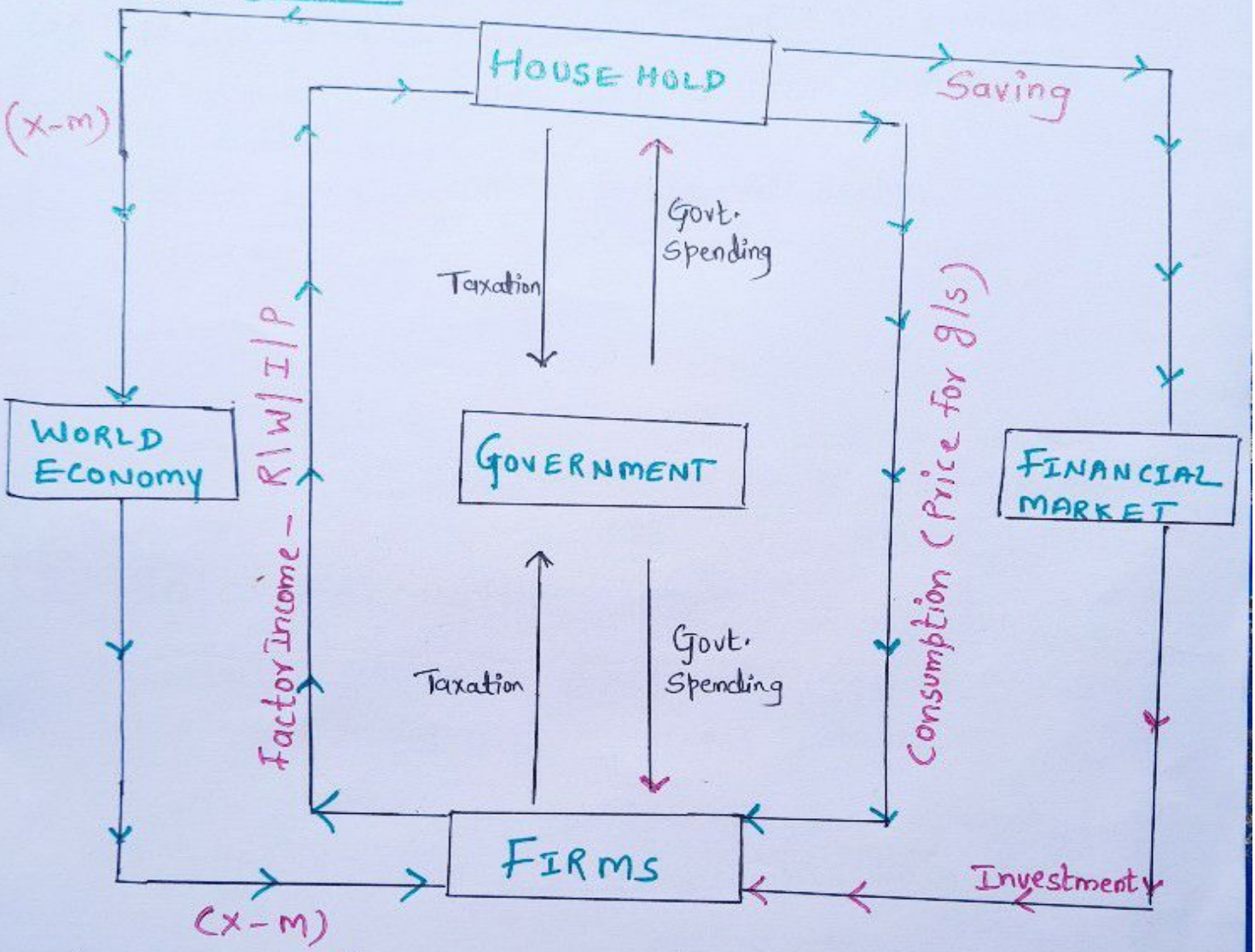
2) Financial Market :- Financial Markets help our country to convert Saving of Household into Investment in various Capital Assests

3) Govt :- Government Pay wages, salaries and Transfer Payment to Households. In return they Pay Taxes to Government.
Government also Purchase goods From firms and Provide Subsidies to firms. In return Firms Pay Taxes to Government.

4) World Economy :- Every economy has foreign economic relations involving Exports and Imports.
Export of goods and services, foreign Investments etc will result in InFlow of money
Similarly Import of goods and services, Lending

to other countries will result in Out Flow of money. Household, firms, financial market all are related with world economy through Import and Export.

(5) Diagram :—



In above diagram we observe—

(1) Circular Flow of transaction is smoothly conducted among four sectors of economy.

(2) Household earn income in the form of Rent, Wages, Interest and Profit. This income is used for purchasing various gooch and Services.

(3) The Government pay wages, salaries, Transfer income etc. to household. In return household pay Taxes to Government

(4) Government Purchase goods from Firms and Give them Subsidies.
For such income Firms Pay Taxes to Government.

(5) Firms and Household both are related with World Economy through Import and Export.

(6) Financial Market will help to Convert Saving of ~~Housel~~ Household into Capital Investment towards Firms.

(7) There is Equilibrium in all Sectors.

i.e Saving = Investment

$$S = I$$

Govt. Exp. = Taxes

$$G = T$$

Export = Import

$$X = M$$

(8) Total Expenditure = $C + I + G + M$

Total Income = $C + S + T + X$

as Total Exp. = Total Income

$\therefore C + I + G + M = C + S + T + X$

By Cancel out consumption both side

$$I + G + M = S + T + X$$

By assuming Equilibrium —

$$(I - S) + (G - T) + (X - M) = 0$$

(9) Today many countries are open economies with External sector. They get higher GDP due to foreign trade. Today Indian economy is liberalised and integrated with global economy. So world economy play an important role to increase national Income.