CBSE Class–12 economics

Important Questions - Macro Economics 04

Income Determination

VERY SHORT ANSWER QUESTIONS (1 Mark)

Q1. In a two sector economy Aggregate Demand equals

a) Consumption + Private consumption expenditure

b) Consumption + Exports

c) Consumption + Investments

d) Consumption + Government Expenditure

Ans. (c)

Q2. APS=

a) S/Y

b) None of the these

c) S/D

d) C/S

Ans. (a)

Q3. APC + APS should always be equal to 1

a) False

b) Depends on their values

c) None of these

d) True

Ans. (d)

Q4. Consumption changes in the same direction as income. It is

a) True

b) False

c) Can't say

d) Insufficient information

Ans. (a)

Q5. The law of Psychological consumption states

a) Consumption does not change in the same direction as income

b) Consumption changes in the same direction as investment

c) Consumption changes in the opposite direction as income

d) Consumption changes in the same direction as income but APC remains less than unity

Ans. (d)

Q6. What is the relation between APC and APS?

Ans. The relationship between Average Propensity to Consume (APC) and Average Propensity to Save (APS) is always equal to unity (1), i.e. APC + APS = 1.

It is so because the money income can either be spent on consumption or it can be saved.

Q7. State the important factor influencing the propensity to consume in an economy.

Ans. It is always the level of income (I) influences the propensity to consume (C) of an economy.

Q8. Give the formula of investment multiplier in terms of MPC.

Ans. The formula of investment multiplier in terms of MPC is

$K = 1 / 1 - MPC$

Q9. Write down the equation of saving function.

Ans. Saving function equation is S = -a + (1-b) y

Q10. What is equilibrium income?

Ans. The equilibrium income is the level of income where AD = AS that means Aggregate Demand is equal to Aggregate Supply. Planned savings always equals to plan investment.

Q11. MPS = 1 + MPC. It is

a) Depends on their values

b) True.

c) None of these

d) False

Ans. (d)

Q12. C= a+b(Y)

a) Algebraic function of the level of Investment expenditure

b) Linear function of the level of Consumption expenditure

c) Algebraic function of the level of Consumption expenditure

d) Algebraic function of the level of capital expenditure

Ans. (c)

Q13. The investment demand function is

a) The relationship between investment demand and the National income

b) The relationship between investment demand and the disposable income

c) The relationship between investment demand and the rate of interest

d) The relationship between investment demand and the consumption expenditure

Ans. (c)

Q14. The level of equilibrium income is determined by

a) AD and national income

b) AD and Investment

c) AD and Consumption

d) AD and AS

Ans. (d)

Q15. Multiplier tells us what will be the

a) Change in investment results in the change in income

b) Final change in the income, as a result of change in consumption

c) Final change in the consumption, as a result of change in investment

d) Final change in the income, as a result of change in investment

Ans. (d)

SHORT ANSWER QUESTIONS (3/4 Marks)

Q16. Explain the components of S = -a + (1-b) Y.

Ans. The saving function is S = -a + (1-b) Y. In this (-a) represents the intercept term and represents the amount of savings done when there is zero level income. The savings is negative at 0 level as income consumption (a) is positive. Negative saving can be understand as dissaving, which means at 0 level, there is dissaving of amount which is represented by (-a).

The coefficeint (1-b) measures the slope of the saving funtion. The slope of the saving function gives the increase in savings per unit increse in the income. This is known as Marginal Propensity to Save. Since 'b', that is Marginal Propensity to Consume is less than one, it follows that (1-b) i.e. MPS is positive. Saving is an increasing function of income.

Q 17. Can the average propensity to consume be greater than one? Give the

reason for your answer.

Ans. Average propensity to consume can be greater than one when the consumption exceeds the income. At that level average propensity to save will be negative. APC will be greater than one if APS is negative. For e.g. if the income is Rs. 1000, the consumption is Rs. 1200,
Then APC = 1200 /1000 = 1.20

Q18. Differentiate between ex ante and ex post investment.

Ans. Ex ante is the planned investment which the planner intends to invest at different level of income and employment in the economy. Ex post investment happens when actual sales differ from the planned sales and firms. Thus it face unplanned addition or reduction of inventories.

Q19. Explain the working of a multiplier with an example.

Ans. Multiplier tells us what will be the final change in the income, as a result of change in investment. Change is investment results in the change in income. Symbolically it is presented by:-

$\Delta I \rightarrow \Delta Y \rightarrow \Delta C \rightarrow \Delta Y$

The working of a multiplier can be explained with the help of the following table which is based on the consumption that is, $\Delta I = 1000$ and MPC = 4/5.

PROCESS OF INCOME GENERATION:-

ROUNDS	Δ I	Δ Y	ΔC
1	1000	1000	4/5×1000 = 800
2	-	800	4/5×800 = 640
3	-	640	4/5×640 = 512
4	-	512	4/5×512 = 409.6
↓∞	↓∞	↓∞	↓∞
	TOTAL	5000	4000

As per the table above,

the initial increase in the investment of Rs 1000, there is a total increase in the income by Rs. 5000 as given MPC = 4/5. Out of this total increase in the income Rs. 4000 will be consumed and Rs. 5000 be saved.

The sum of total increase in income is also derived as:

$\Delta y = 1000+800+640+512+\ldots\ldots\ldots\ldots$ Infinity

$1000+4/5\times1000(4/5)^2\times1000(4/5)^3\times1000+ \ldots\ldots\ldots\ldots$ infinity

$= 1000[1+4/5+ (4/5)^2+ (4/5)^3+\ldots..$ infinity]

$=1000[1/1-4/5] = 1000\times5/1 =$ Rs. 5000 crores.

Q20. Can the value of APS be negative? If yes, then when?

Ans. The value of Average propensity of saving can be negative when the value of consumption exceeds the value of income. At low level of income, saving is negative.

For e.g. If income is Rs. 1000 and consumption expenditure is Rs. 1200

Y=C+S

S=Y-C

1000-1200=-200

APS = -200/1000 = 0.2

APS = S/Y

APS = 0.2

LONG ANSWER QUESTIONS (6 Marks)

Q21. Define and represent inflationary gap on a diagram. Explain the role of the varying reserves requirement in removing the gap.

Ans. An inflationary gap is a macroeconomic concept that describes the difference between the current level of real gross domestic product (GDP) and the anticipated GDP that would be experienced if an

economy is at full employment, also referred to as the potential GDP. An inflationary gap is always related to a business-cycle expansion and arises when the equilibrium level of an economy's aggregate output is greater than the output that could be produced at full employment. As per world dictionary, "The inflationary expenditure gap is an economic term that describes the difference between what an economy can produce at full employment and what the real GPD is." The theory can now be used to analyse the concept of 'inflationary gap'—a concept introduced first by Keynes. This concept may be used to measure the pressure of inflation. Aggregate demand or aggregate expenditure is composed of consumption expenditure (C), investment expenditure (I), government expenditure (G) and the trade balance or the value of exports minus the value of imports (X – M). Inflationary gap is thus the result of excess demand. It may be defined as the excess of planned levels of expenditure over the available output at base prices. An example will help us to clear the meaning of the concept of inflationary gap.

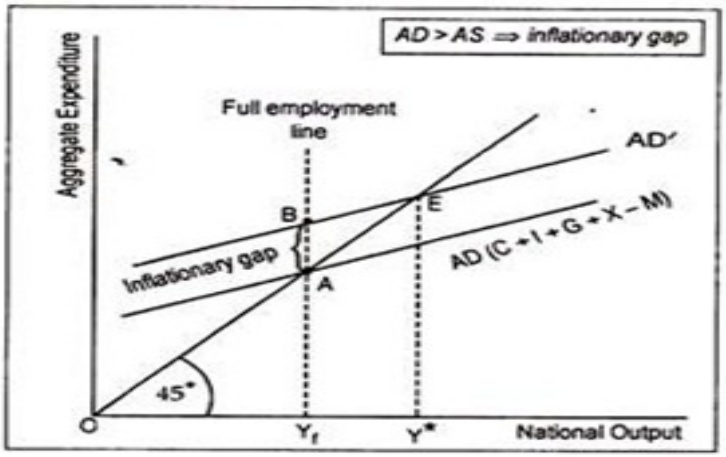

Fig. 11.5: Inflationary Gap

For removing gap, the following things can be useful:

- Cash Reserve Ratio (CRR) is a specified minimum fraction of the total deposits of customers, which commercial banks have to hold as reserves either in cash or as deposits with the central bank. CRR is set according to the guidelines of the central bank of a country. CRR

means Cash Reserve Ratio and as per the guidelines issued by Reserve Bank of India, all banks are in a position to maintain cash at a certain percentage of their deposits in their accounts with RBI. Currency chests are maintained by the banks on behalf of RBI and the cash kept at currency chest is considered to be the cash kept with RBI for the purpose of CRR. When the RBI decides to increase the Cash Reserve Ratio, the amount of money that is available with the banks reduces. This is the RBI's way of controlling the excess supply of money.

- Statutory liquidity ratio (SLR) is the Indian government term for the reserve requirement that the commercial banks in India are required to maintain in the form of cash, gold reserves, government approved securities before providing credit to the customers. The statutory liquidity ratio is determined and maintained by the central bank to control the bank credit, ensure the solvency of commercial banks and compel banks to invest in the government securities. By changing the SLR, the flow of bank credit in the economy can be increased or decreased. Such as, when the central bank decides to curb the bank credit so as to control the inflation will raise the SLR. On the contrary, when the economy faces recession, and the central bank decides to increase the bank credit will cut down the SLR.

Q22. In an economy C = 300+0.5Y and I = Rs.600 (where C = consumption, Y= income or investment). Calculate the following:

1. Equilibrium level of income
2. Consumption expenditure at equilibrium level of income

Ans.

1. We know that, I=Rs.600 and C=300+0.5Y.

   Y=C+I

   Y=300+0.5Y+600

   Y=900/0.5

   Income (Y) = Rs.1800

2. Again, we know that

   Y=C+I

   1800=C+600

   C=1800-600

   Consumption Expenditure (C) is Rs. 1200.

Q23. If in an economy, investment increases by Rs.1000 lakhs to Rs.1200 lakhs and as a result, total income raises by 800 lakhs, calculate Capital MPS.

Ans. ΔI = 1200-1000=200

ΔY = 800

ΔK = ΔY/ΔI

= 800/200 = 4

K = 1/MPS = 4

MPS = ¼ = 0.25

Hence MPS is 0.25

Q24. Explain the role of the following in correcting deficient demand in an economy.

1. Open market operations
2. Bank rate

Ans.

1. Open market operations in correcting deficient demand in an economy – Open market operation refers to the sale and purchase of government and other approved securities by the central bank to the commercial bank and other financial institutions. When cash balance is to be raised in the economy, especially during situation of deficient demand, the central bank purchase more and more securities. This increases the cash holdings of the commercial banks thereby increasing loans and advances by them. Thus, leading to rise in aggregate demand.

2. Bank rate in correcting deficient demand in an economy –

Bank rate is the rate at which the central bank lends money to the commercial banks. To control the situation of deficient demand, bank rate is decreased, due to this reduction of bank rate by central bank, commercial banks will fall the market rate of interest. This will lead to lower cost of borrowing from commercial banks to the consumers and investors. This increases demand for credit, thereby leading to more liquidity in the hands of the people. Consumption expenditure and investment expenditure are raised and aggregate demand (AD) will rise.

Q25. Draw a hypothetical propensity to consume curve from it. Draw this to save the curve.

Ans. APC = C/Y, APS = S/Y

Propensity to save curve is drawn from propensity to consume curve.

When Y=C, then APC = 1, till that point APS in negative at point 'S'

When Y>C, there is a positive saving.