

CBSE Test Paper-05
Chapter 03 Determination of Income and Employment

1. At low level of income saving is negative. **(1)**
 - a. False.
 - b. Insufficient information
 - c. Can't say
 - d. True.
2. Saving is an increasing function of income. It is **(1)**
 - a. Insufficient information
 - b. Can't say
 - c. True.
 - d. False
3. Can the value of APS be negative? **(1)**
 - a. False.
 - b. Can't say
 - c. Insufficient information
 - d. True.
4. The value of the multiplier is determined by the **(1)**
 - a. APS
 - b. APC
 - c. MPC
 - d. MPS
5. Discuss any three measures by which deficient demand in an economy can be corrected? **(1)**
6. What is induced investment? **(1)**
7. What is Break even point? **(1)**

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8. Define Average Propensity to Save. **(1)**
9. Explain the meaning of inflationary gap with the help of a diagram. **(3)**
10. In an economy investment increases from 300 to 500. As a result of this, equilibrium level of income increases by Rs. 2,000, calculate the Marginal Propensity to Consume. **(3)**
11. In an economy the Marginal Propensity to Save is 0.4. National Income in the economy increase by Rs 200 crore as a result of a change in investment. Calculate the change in investment. **(4)**
12. What do you mean by open market operations? How does it control the availability of credit in the economy. **(4)**
13. What happens if $AD > AS$ prior to the full employment level of output? **(4)**
14. In an economy $S = -50 + 0.5Y$ is the saving function (where S - saving and Y = national income) and investment expenditure is 7000. Calculate. **(6)**
- Equilibrium level of national income
 - Consumption expenditure at equilibrium level of national income.
15. Complete the following table. **(6)**

Consumption expenditure (Rs)	Saving (Rs)	Income (Rs)	Marginal Propensity to Consume
100	50	150	-
175	75	-	-
250	100	-	-
325	125	-	-

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Answers

1. d. True.

Explanation: First need of a person is consumption, when consumption gets over or his basic wants are satisfied, he starts saving a part. But, saving being function of income, depends on the latter. So, when income level is low, consumption is not over, and exceeds income. Thus, leads to negative saving.

2. c. **True.**

Explanation: We call $f(x)$ an increasing function of x , as x increases, $f(x)$ also increases.

We know that saving is a function of income. So, as income increases saving also increases.

Thus, saving is an increasing function of income.

3. d. True.

Explanation: Value of APS is negative when consumption expenditure is greater than income. For example, if income = Rs.1000, consumption = 1200.

Then, saving = - 200. (negative saving)

$$APS = - 200/1000 = - 0.2$$

4. c. MPC

Explanation: We know that multiplier is a function of MPC

$$K = \frac{1}{1-MPC}$$

5. The problem of deficient demand can be solved by increasing aggregate demand as under :

- i. Increase in public expenditure on public welfare.
- ii. Increase in public investment.
- iii. Reduction in direct and indirect taxes, which will lead to increase in disposable income and increase in demand.
- iv. Reduction in bank rate. It will result in reduction in the rate of interest. As a

result, investment will increase and AD will also increase.

6. It refers to the investment which is:

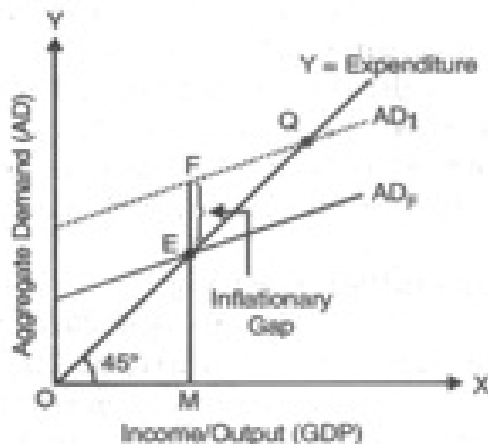
- i. Directly influenced by income level and the rate of interest.
- ii. Depends upon profit expectancy i.e., MEI (Marginal Efficiency of Investment).

7. A point where savings are zero ($S = 0$) and consumption (C) = Income (Y), is called Break even point.

8. Average propensity to save is the ratio of aggregate saving to aggregate income at a given level of income in the economy.

$$\text{Average Propensity to save} = \frac{\text{Savings}}{\text{Income}} = \frac{S}{I}$$

9. Inflationary gap is the excess of aggregate demand over and above its level required to maintain full employment equilibrium in the economy. Inflationary pressure is proportionate to excess demand. Greater the excess demand greater will be the inflationary pressure.



In the figure, full employment equilibrium struck at point E. If the level of demand increases to AD_1 , it is in excess of what is required to maintain full employment. This causes inflation. Inflationary Gap = EF which is the difference between AD_f and AD_1)

10. Marginal Propensity is calculated as follows:

It is given that

Change in Income (ΔY) = Rs. 2,000

And Change in Investment (ΔI) = 200 (500-300)

$$\text{Investment Multiplier (K)} = \frac{\Delta Y}{\Delta I} = \frac{2,000}{200} = 10$$

Also, $K = \frac{1}{1-MPC}$, Where MPC is Marginal Propensity to Consume

$$\text{So, } 10 = \frac{1}{1-MPC}$$

$$\text{or } 10(1 - MPC) = 1$$

$$\text{or } 10 - 10 MPC = 1$$

$$9 = 10 MPC$$

$$\Rightarrow MPC = 9/10 = 0.9.$$

11. Given, MPS = 0.4

i. **Calculation of Multiplier:**

$$\text{Multiplier (K)} = \frac{1}{MPS} = \frac{1}{0.4} = \frac{10}{4} = 2.5$$

ii. **Calculation of Change in Investment:**

$$\Delta I = \frac{\text{Change in Income } (\Delta Y)}{K}$$
$$\therefore \Delta I = \frac{200}{2.5} = 200 \times \frac{10}{25} = \text{Rs } 80 \text{ crores}$$

12. Open market operations means buying and selling of government securities by the central bank in an open market.

Selling: Central bank sells the Government Securities to commercial banks and reduces their lending capacity or it sells Government Bonds to General Public to reduce their capacity to spend on consumer goods.

Buying: Central bank buys the securities back from commercial banks and increases their lending capacity (liquidity) or and it purchases its securities back from the public to increase their capacity to spend.

Credit Control:

- In case of Inflation or excess demand, Central Bank starts selling government securities in the open market.
- This reduces the money supply in the economy
- As a result Consumption, AD falls and there is reduction in Inflationary Gap.
- In case of deflation or deficient demand, Central Bank starts purchasing government securities in the open market.
- This increase the money supply in the economy.

- As a result Consumption, AD rises and there is fall in Deflationary Gap.
- 13.
- There will be underemployment equilibrium.
 - According to Keynes, equilibrium is mere intersection of AD and AS, full employment may or may not be there.
 - Under employment equilibrium refers to a situation when AD is equal to AS but resources are not fully utilised.
 - It occurs prior to the full employment level.
14. i. For equilibrium,
- $I = S$ (Investment = Saving)
- $7000 = -50 + 0.5Y$ (Substituting values of I and S)
- $0.5 Y = 7000 + 50 = 7050$
- $Y = 7050 \times 10/5 = 14,100$
- \therefore Equilibrium level of national income = 14,100
- ii. For equilibrium,
- $Y = C + I$
- $14100 = C + 7000$
- $C = 14100 - 7000 = 7100$
- \therefore Consumption expenditure = Rs 7100
- 15.

Consumption Expenditure (Rs) (C)	Savings (Rs) (S)	Income (Y) (Rs)	Marginal Propensity to Consume
100	50	150	-
175	75	250	0.75
250	100	350	0.75
325	125	450	0.75

Formulae used :

- i. $Y = C + S$
- ii. $MPC = \frac{\Delta C}{\Delta Y}$