INDIAN SCHOOL AL WADI AL KABIR

Class: XII	Department: Commerce
Worksheet No: 1	Topic: Determination of Income and Employment

I. MULTIPLE CHOICE QUESTIONS

1. The most important determinant of consumer spending is:
   A) the level of household debt.
   B) consumer expectations
   C) the stock of wealth
   D) the level of income.

2. The most important determinant of consumption and saving is the:
   A) level of bank credit.
   B) level of income.
   C) interest rate.
   D) price level.

3. With an MPS of 0.4, the MPC will be:
   A) 1.0 minus 0.4
   B) 0.4 minus 1.0
   C) the reciprocal of the MPS
   D) 0.4

4. The MPC can be defined as that fraction of a:
   A) change in income that is not spent.
   B) change in income that is spent.
   C) given total income that is not consumed.
   D) given the total income that is consumed.

5. The 45-degree line on a graph relating consumption and income shows:
   A) all points where the MPC is constant.
   B) all points at which saving and income are equal.
   C) all the points at which consumption and income are equal.
   D) the amounts households will plan to save at each possible level of income.

6. As disposable income goes up the:

   A) APC falls.
   B) volume of consumption declines absolutely.
   C) APS falls.
   D) volume of investment diminishes.

7. Holly's break-even level of income is $10,000 and her MPC is 0.75. If her actual disposable income is $16,000, her level of:

A) consumption spending will be $14,500.
B) consumption spending will be $15,500.
C) consumption spending will be $13,000.
D) saving will be $2,500.

8. The level of aggregate expenditures in the private closed economy is determined by the
A) expenditures of consumers and businesses.
B) intersection of the saving schedule and the 45-degree line.
C) equality of the MPC and MPS.
D) intersection of the saving and consumption schedules.

9. Answer the next question(s) based on the following information for a private closed economy, where Ig is gross investment, S is saving, and Y is gross domestic product (GDP).
Ig = Ig = 80
S = -80 + .4Y

Refer to the above information. The equilibrium GDP will be:
A) $160. B) $400. C) $360. D) $480.

Refer to the above information. In equilibrium consumption will be:
A) $400. B) $280. C) $320. D) $360.

Refer to the above information. In equilibrium saving will be:
A) $40. B) $120. C) $60. D) $80.

10. Planned investment plus unintended increases in inventories equals:
A) actual investment.
B) consumption of fixed capital.
C) consumption minus saving.
D) unintended saving.

11. According to classical economists, there always exists _____ equilibrium in the economy.

(A) Full employment

(B) Underemployment

(C) Over full employment

(D) None of these

12. What will be APC when APS = 0? (A) One (B) Zero (C) Two (D) Infinite

13. What is a fiscal measure of correcting deficient demand?

(A) Increase in public expenditure and decrease in taxes
(B) Decrease in public debt
(C) Deficit financing

(D) All of these

14. Which is the measure of correcting excess demand?
    (A) Deficit financing
    (B) Reduction in taxes
    (C) Increase in public expenditure
    (D) Increase in public debt

15. If MPC = 1, the value of the multiplier is:
    (A) 0
    (B) 1
    (C) Between 0 and 1
    (D) Infinity

16. Who is the author of the book 'General Theory of Employment, Interest, and Money'?
    (a) A.C. Pigou
    (b) (b) Malthus
    (c) (c) J.M. Keynes
    (d) (d) Marshall

17. Deflationary Gap shows the measurement of:
    (a) Deficit Demand
    (b) Surplus Demand
    (c) Full Employment
    (d) None of these

18. Keynes discusses equilibrium level of output, using the concept of
    a. induced investment.
    b. autonomous investment
    c. Both a and b
    d. Zero investment.

19. Aggregate supply is the same as:
    a. National Output
    b. National Income
    c. National employment.
    d. Both a and b

20. Suppose in a hypothetical economy, the income rises from ₹ 5,000 crores to ₹ 6,000 crores. As a result, the consumption expenditure rises from ₹ 4,000 crores to ₹ 4,600 crores. Marginal propensity to consume in such a case would be _____
    a. 0.8
    b. 0.4
    c. 0.2
    d. 0.6

Notes:

Formula:

$$K = \frac{\Delta Y}{\Delta I} \quad \text{or} \quad K \times \Delta I = \Delta Y$$

Where K is multiplier,

$$K = \frac{1}{1 - MPC} \quad \text{or} \quad K = \frac{1}{MPS}$$

Derivation of Formula: As we know that,

$$Y = C + I \qquad \ldots(i)$$

Multiplying the whole equation by Δ, we get,

$$\Delta Y = \Delta C + \Delta I \qquad \ldots(ii)$$

Dividing both sides of (*ii*) by ΔY, we get,

$$\frac{\Delta Y}{\Delta Y} = \frac{\Delta C}{\Delta Y} + \frac{\Delta I}{\Delta Y} \qquad \ldots(iii)$$

$$\text{Or } 1 = \frac{\Delta C}{\Delta Y} + \frac{\Delta I}{\Delta Y} \qquad \ldots(iv)$$

Rearranging (*iv*), we get,

$$\frac{\Delta I}{\Delta Y} = 1 - \frac{\Delta C}{\Delta Y} \qquad \ldots(v)$$

Or Reciprocately,

$$\frac{\Delta Y}{\Delta I} = \frac{1}{1 - \frac{\Delta C}{\Delta Y}} \qquad \ldots(vi)$$

As we know, $K = \frac{\Delta Y}{\Delta I}$ and $\frac{\Delta C}{\Delta Y} = MPC$, we get,

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

Since, MPC + MPS = 1, we obtain,

$$K = \frac{1}{MPS}$$

Paradox of Thrift: The term thrift means savings and the paradox of thrift shows how an attempt by the economy as a whole to save more out of its current income will ultimately result in lower savings for the economy.

Q. In an economy, S is greater than I. Explain the changes that will take place in this economy.
Answer:
* It implies a situation when a fall in expenditure through S is more than the rise in expenditure through I.
* Accordingly, Aggregate Expenditure wd be less than what is needed to buy the planned output.
* Some output wd remain unsold and producers will have unsold stocks.

* To clear the stocks the producers wd plan lesser output.
* Lesser output wd mean lesser income.
* Lesser income wd mean lesser saving.
* This process wd continue S = I.
* Thus, equality between S and I is restored through the change in the level of Y.

Assertion and reasoning:

Options: Choose the correct options;

a. Both assertion and reason are TRUE and reason is the correct explanation of the assertion.
b. Both assertion and reason are TRUE and reason is NOT the correct explanation of the assertion.
c. Assertion is TRUE but reason is FALSE.
d. Reason is TRUE but assertion is false.

1. Assertion: The value of MPC cannot be greater than one.
   Reasoning: A change in consumption cannot be more than a change in income
   A: a
2. Assertion(A): The higher the value of MPC, the higher the value of the investment multiplier
   Reason(R): The investment multiplier is directly related to MPS.
   A: c
3. Assertion(A): Multiplier explains how many times the income increases as a result of an increase in the investment.
   Reason(R): There is an inverse relationship between the value of marginal propensity to save and investment multiplier.
   A: a
4. Assertion (A): Full employment is that situation in the economy when AS = AD along with fuller utilization of the resources. But it does not mean a situation of zero unemployment in the Economy.
   Reason (R): Full employment means absence of unemployment in the economy.
   A: c

Numerical:

1. The consumption function of an economy is given as C= 40+0.7Y. Calculate the savings at the income level of ₹2200 crores.
   Ans. Savings =₹620 crores

2. The Savings curve makes an intercept of ₹40 crores on the negative Y axis. If consumers spend 60% of additional income, then determine: (i) Savings Function, (ii) Consumption Functions, (iii) Break-even level of income.

   Ans. S= -40+0.40Y; C=40+0.60Y; ₹100 crores.

3. If NI is ₹90 crores and consumption expenditure ₹81, find out the average propensity to save. When income rises to ₹100 crore and consumption expenditure to ₹88 crore, what will be the marginal propensity to consume and save?

   Ans. APC= 0.10; MPC= 0.7 and MPS = 0.3

4. If the consumption function is given by C=30+0.4Y then determine (i) Savings @zero level of income; (ii) MPC; (iii) MPS; (iv) Break-even level of income; (v) Savings Function.

   Ans. (i) -30; (ii) 0.4; (iii) 0.6; (iv) 50; (v) -30+0.6Y

5. The consumption function of an economy is C= 40+0.8Y (amount in ₹ crores). Determine the level of Income where the average propensity to consume will be 1 (one)

Ans. ₹ 200 crores

CASE STUDY:

State Bank of India's latest edition of ECOWRAP has noted that many households may have marginal propensity to consume less because several types of spending are not easily available amid social distancing constraints. Analysing the trends in deposits since the lockdown was first imposed, on May 25, the bank noted that the data revealed that deposits (savings, current and term) increased significantly during Lockdown-1 as people were apprehensive in the beginning about spending, and turned frugal. During Lockdown-2, there was a 25% decline in bank deposits, but term deposit accrual was very healthy.

Source: Business Standard; June 2nd, 2020

Questions:

1._____ is the ratio of change in consumption to change in income. (APC/MPC)

2. According to given article, many households may have marginal propensity to consume because several types of spending are not easily available amid social distancing constraints.
   (a) no change
   (b) more
   (c) less
   (d) None of these

3. There was a 25%_____ in bank deposits, but term deposit accrual was very healthy during lockdown 2.

4. The sum of APC and MPC is _____
   (a) one
   (b) zero
   (c) both (a) and (b)
   (d) None of these

Answer:

1. MPC
2. Less
3. Decline/
4. (d) None of these