# Determination of Income and Employment

Standard difficulty · 20 questions · 40 marks · Time: 37 minutes

Name: _____ Date: _____ Score: ____ / 40

Write full answers in Sections B and C. Answers are on the last page — try every question first!

## Section A — Choose the correct answer — 8 × 1 = 8 marks

**1.** The change in consumption per unit change in income is the:
**(a)** multiplier **(b)** marginal propensity to save
**(c)** average propensity to consume **(d)** marginal propensity to consume

**2.** What is meant by "marginal propensity to consume"?
**(a)** change in consumption per unit change in income
**(b)** equilibrium output below full employment
**(c)** trying to save more leaves total saving unchanged
**(d)** income at which all factors are employed

**3.** If the marginal propensity to consume is 0.5, what is the investment multiplier?
**(a)** 0.5 **(b)** 5 **(c)** 3 **(d)** 2

**4.** Suppose C = 160 + 0.5Y and autonomous investment I = 20 (₹ crore). What is equilibrium income?
**(a)** ₹360 crore **(b)** ₹180 crore **(c)** ₹410 crore **(d)** ₹320 crore

**5.** With an MPC of 0.6, by how much will equilibrium income rise if investment rises by ₹130 crore?
**(a)** ₹325 crore **(b)** ₹216.67 crore **(c)** ₹130 crore **(d)** ₹78 crore

**6.** The consumption function is C = 180 + 0.8Y. What is saving when income is ₹400 crore?
**(a)** ₹260 crore **(b)** ₹500 crore **(c)** ₹80 crore **(d)** −₹100 crore

**7.** When income rises by ₹200 crore, consumption rises by ₹160 crore. What is the MPS?
**(a)** 0.08 **(b)** 0.8 **(c)** 0.2 **(d)** 5

**8.** Suppose C = 160 + 0.75Y and I = 150 (₹ crore). If firms produce ₹1,170 crore, what happens to inventories?
**(a)** they pile up by ₹70 crore **(b)** they pile up by ₹17.5 crore
**(c)** they run down by ₹17.5 crore **(d)** they run down by ₹70 crore

## Section B — Short answer — 8 × 2 = 16 marks

**9.** What is the marginal propensity to consume? What values can it take?

**10.** Explain each term: (a) full employment income (b) paradox of thrift

**11.** What follows in each case? (a) equilibrium output is above full employment (b) the MPC rises

**12.** Suppose C = 150 + 0.75Y and I = 200 (₹ crore). Find equilibrium income, consumption and saving there.

**13.** Investment rises by ₹850 crore and the MPC is 0.6. Find the rise in income in each of the first three rounds, and the total rise in the end.

**14.** At an income of ₹1,800 crore, consumption is ₹1,080 crore. Find the APC and APS.

**15.** The MPC is 0.9. By how much must investment rise to raise equilibrium income by ₹1,600 crore?

**16.** When income is ₹200 crore, consumption is ₹170 crore; when income is ₹700 crore, consumption is ₹520 crore. Find the MPC and MPS.

## Section C — Longer answers — 4 × 4 = 16 marks

**17.** Explain how equilibrium output is determined with the consumption function and investment.

**18.** Match each with its meaning: (a) deficient demand (b) investment multiplier (c) paradox of thrift. Choose from: equilibrium output below full employment; change in income per unit change in autonomous investment; trying to save more leaves total saving unchanged.

**19.** Suppose C = 140 + 0.9Y and I = 110 (₹ crore). (a) Find equilibrium income. (b) Find the multiplier. (c) If investment rises by 90, find the new equilibrium income and show that saving equals investment there.

**20.** Suppose $\bar{C}$ = 90, I = 80 (₹ crore), and people decide to save more, so the MPC falls from 0.9 to 0.8. (a) Find equilibrium income before and after. (b) Find saving at each equilibrium. (c) What does this show?

**Want another sheet on this chapter?** In the Ambiful Worksheets app every sheet is new, with its answer key, and your child never gets the same question twice.
Scan the code to get the free app, or open **worksheets.ambiful.com/get**

# Answer key

Determination of Income and Employment · AW-12SS-DIE-2026-V1 · For parents — fold back or tear off before handing the sheet to your child.

| Q | Answer | Working |
|---|---|---|
| 1 | **(d) marginal propensity to consume** | — |
| 2 | **(a) change in consumption per unit change in income** | — |
| 3 | **(d) 2** | 1 ÷ (1 − 0.5) |
| 4 | **(a) ₹360 crore** | (160 + 20) ÷ (1 − 0.5) |
| 5 | **(a) ₹325 crore** | 130 × 2.5 |
| 6 | **(d) −₹100 crore** | 400 − (180 + 0.8 × 400) |
| 7 | **(c) 0.2** | 1 − 160/200 |
| 8 | **(c) they run down by ₹17.5 crore** | AD = 160 + 150 + 0.75 × 1,170 = 1,187.5; output − AD = −17.5 |
| 9 | **ΔC/ΔY, the share of extra income spent; usually between 0 and 1.** | — |
| 10 | **(a) income at which all factors are employed (b) trying to save more leaves total saving unchanged** | — |
| 11 | **(a) excess demand; prices tend to rise in the long run (b) the multiplier becomes larger** | — |
| 12 | **Y ₹1,400 crore; C ₹1,200 crore; S ₹200 crore (= I)** | Y = (150 + 200) ÷ 0.25; C = 150 + 0.75 × 1,400 |
| 13 | **₹850 crore, ₹510 crore, ₹306 crore; total ₹2,125 crore** | each round × 0.6; total 850 × 2.5 |
| 14 | **APC 0.6, APS 0.4** | 1,080 ÷ 1,800; 1 − 0.6 |
| 15 | **₹160 crore (multiplier 10)** | 1,600 ÷ 10 |
| 16 | **MPC 0.7, MPS 0.3** | (520 − 170) ÷ 500 |
| 17 | **AD = $\bar{C}$ + cY + $\bar{I}$; output adjusts until Y = AD, giving Y = ($\bar{C}$ + $\bar{I}$)/(1 − c).** | — |
| 18 | **(a) equilibrium output below full employment (b) change in income per unit change in autonomous investment (c) trying to save more leaves total saving unchanged** | — |
| 19 | **(a) ₹2,500 crore (b) 10 (c) ₹3,400 crore; S = 3,400 − (140 + 0.9 × 3,400) = 200 = I** | Y = ($\bar{C}$ + I) ÷ (1 − c) |
| 20 | **(a) ₹1,700 crore and ₹850 crore (b) both ₹80 crore (saving = investment) (c) the paradox of thrift: trying to save** | (90 + 80) ÷ 0.1; ÷ 0.2 |

| Q | Answer | Working |
|---|---|---|
| | **more lowers income but not total saving** | |