Aggregate Demand And Related Concepts
(Numericals)

(Q-1) If APC = 0.8, what should be saving at an income level of ₹ 2,000 crores?

(Ans-1) We have $APC = \frac{C}{Y}$

$0.8 = \frac{C}{2,000}$ → given

⇒ ₹1600 crores = Consumptn [C]

Now $Y = C + S$ → $2000 = 1600 + S$

⇒ ₹400 crores = savings.

(Q-2) If MPC = 1/3 of MPS and autonomous consumption ($\bar{C}$) = ₹40 crores, derieve the consumption and saving function.

(Ans-2) Let MPS = x, then MPC = $\frac{1}{3}x$

We have → MPS + MPC = 1 → $x + \frac{x}{3} = 1$

⇒ $\frac{4x}{3} = 1$ or $x = 3/4 = 0.75$

so MPS = 0.75 and MPC = 0.25 (calculated as → [1 − 0.75])

now → Consumptn function = $\bar{C} + bY$

$= 40 + 0.25Y$

and savings function = $-\bar{C} + (1-b)Y$

$= -40 + 0.75Y$

$=$

(Q-3) The saving function is given as $S = -120 + 0.4(Y)$. Determine-

(i) Consumption function

(ii) consumption at income level of ₹ 600 crores

(iii) Break-even level of income.

(Ans-3) (i) For consumption function we have →

$C = \bar{c} + bY$

We are given $S = -120 + 0.4\ y$

$\downarrow \quad \downarrow$

$-\bar{c} \quad MPS$

On comparison $\bar{C} = 120$ and MPC $(b) = 1 - MPS = 1 - 0.4 = 0.6$

So $C = 120 + 0.6Y$

(ii) at income level of ₹600 crores, we need to calculate C.

so $C = 120 + 0.6\ Y$ → given

$C = 120 + 0.6\ (600)$

$C = 120 + 360 = ₹480$ crores

(iii) Break-even point is when → $C = Y$ or Savings $= 0$

$\Rightarrow S = -120 + 0.4\ Y$, put $S = 0$, here.

$\Rightarrow 0 = -120 + 0.4\ Y$

$\rightarrow \quad 120 = 0.4\ Y$

or $Y = ₹300$ crores

— x — x — x —