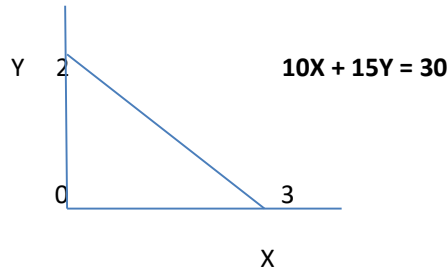


SOLUTION TO MIS-SEMESTER QUESTIONS 2017

Q1 (a) Because AR is the per unit price, while MR is the change in TR with a unit change in commodity sold which falls beyond a range (will elaborate with diagrams and examples).

(b)



(C) $Q_d = 2200 - 200P$ (P = Price) and Supply, $Q_s = 800 + 500P$,

$P = 2/-$ and $q = 1800$ units

(d) $ep = 0.015/0.03 = 0.5$

(e) $i = 9\%$ $m = 12$

$$r = [1 + (0.09/12)]^{12} - 1 = (1.0075)^{12} - 1 = 1.0938 - 1 = 0.0938 = 9.38\%$$

Sol. 2 (a) Will explain consumer's equilibrium with the help of Indifference curve and budget line.

(b) Will explain 4 factors which make the demand for a product inelastic.

Sol.3 (a) (i) TR at $\$3 = 3 \times 3 = 9/-$

TR at $\$5 = 2 \times 5 = 10/-$

As the revenue is increasing when the price is increased, the demand for the product is inelastic.

(ii) ep by mid-point method $= (-1/2) \times [(5+3)/(2+3)] = (-1/2) / (8/5) = -4/5 = -0.8$ or $|ep| = 0.8$

By point method $ep = (-1/2) / (3/3) = -0.5$ or $|ep| = 0.5$

(b) $A = \$5000(A/P, i, n) = 0.2504 \times \$5000 = \mathbf{\$1252.28}$

Sol.4 (a) $Q_x = 15000 - 3000P_x + 7Y + 300P_c$

where Q_x = quantity demanded of bar soaps, P_x = Price of Fair bar soaps, Y = Per capita income of the consumers, P_c = Price of the related product.

Currently, $P_x = \text{Rs.}5$, $P_c = \text{Rs.}6$ and $Y = \text{Rs.}6000$

$$Q_x = 15000 - (3000 \times 5) + (7 \times 6000) + (300 \times 6) = 43800$$

(i) $e_p = -[3000 \times (5/43800)] = -15000/43800 = 0.3425 < 1$, so less elastic .

(ii) $e_y = 7 \times (6000/43800) = 42000/43800 = 0.958$, inelastic and Normal good.

(b) (i) $ec = +1.2$ and $ec = -1.5$

So first case, they are substitutes and the second case is of complementary commodities.

(ii) With a 5% rise in price in case of substitutes, the demand for the other good will increase by (1.2x5) that is 6% and in the case of complements the demand for the other good will decrease by (1.5X5) that is 7.5%.

Sol.5 (a) Will explain the Law of Demand curve with a schedule and curve.

$$\begin{aligned} \text{(b) } F &= [2000(F/A, 8\%, 5\text{years})][F/P, 8\%, 5\text{Years}] \\ &= [2000 \times 5.8667] (1.469) = 11733.4 \times 1.469 = \mathbf{17236.36} \end{aligned}$$

Sol.6 (a) $i=10\%$ and $n=4$ years

$$\begin{aligned} P &= [50 + 50(A/G, i, 4)][P/A, i, 4] = [50 + \{50 \times 1.38116\}][3.1698] \\ &= [50 + 69.058] [3.1698] = \mathbf{377.39} \end{aligned}$$

(b) $F= 10000/-$ $n=5$ years $i=8\%$

$$A = 10000 \times 0.1704 = \mathbf{1704.66}$$
