

$$\textcircled{1} Q_d = 25 - 2P$$

$$Q_s = 10 + 4P$$

$$\textcircled{2} Q_d = 20 - 5P$$

$$Q_s = 4 + 3P$$

$$\textcircled{3} Q_d = 28 - 4P$$

$$Q_s = 16 + 2P$$

$$\textcircled{4} Q_d = 25 - 3P$$

$$Q_s = 10 + 4P$$

$$\textcircled{5} Q_d = 20 - 5P$$

$$Q_s = 4 + 3P$$

$$\textcircled{6} Q_d = 128 - 9P$$

$$Q_s = -32 + 7P$$

$$\textcircled{7} Q_d = 5 - P$$

$$Q_s = -5.5 + 2P$$

$$\textcircled{8} Q_d = 10 - 2P$$

$$Q_s = 4 + P$$

$$\textcircled{9} Q_s = -20 + 3P$$

$$Q_d = 220 - 5P$$

$$\textcircled{10} Q_s = -45 + 8P$$

$$Q_d = 125 - 2P$$

Exp:- Find the equilibrium price and quantity.

$$Q_d = 220 - 5P$$

$$Q_s = -20 + 3P.$$

Sol:- we know that Equilibrium condition of a Market is

$$Q_d = Q_s \quad \text{--- (A)}$$

By Putting the value of Q_d & Q_s in (A)

$$220 - 5P = -20 + 3P$$

$$220 + 20 = 3P + 5P$$

$$240 = 8P$$

$$\Rightarrow P = \frac{240}{8} = 30$$

$\bar{P} = 30$ Equi. Price.

Put $P = 30$ in Demand & Supply equations

$$Q_d = 220 - 5P$$

$$Q_d = 220 - 5 \times 30$$

$$Q_d = 220 - 150$$

$$Q_d = 70$$

$$Q_s = -20 + 3P$$

$$Q_s = -20 + 3 \times 30$$

$$Q_s = -20 + 90$$

$$Q_s = 70.$$

$\bar{Q} = 70$ Equi. Quantity