

Ans:

$$\text{Here, } D = 200 - 15P$$

$$S = 5P$$

$$\text{Setting } D = S$$

$$200 - 15P = 5P$$

$$\text{Solving for } P: \Rightarrow 15P = 200 - 5P$$

$$20P = 200$$

$$P = 10$$

The market equilibrium price (P) is 10 and the quantity (Q) can be found using either demand or supply equation,

using the demand equation:-

$$Q = 200 - 15P$$

$$Q = 200 - 15 \times 10$$

$$= 200 - 150$$

$$\therefore Q = 50$$

Price (P)	Demand (D)	Supply (S)
5	185	5
6	170	10
7	155	15
8	140	20
9	125	25
10	110	30
11	95	35
12	80	40
13	65	45
14	50	50
15	35	55

The market schedule and the graph shown the intersection of demand and supply at  $P=10$  and  $Q=50$  include indicating that the market is in equilibrium.

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The graph below  $\Rightarrow$

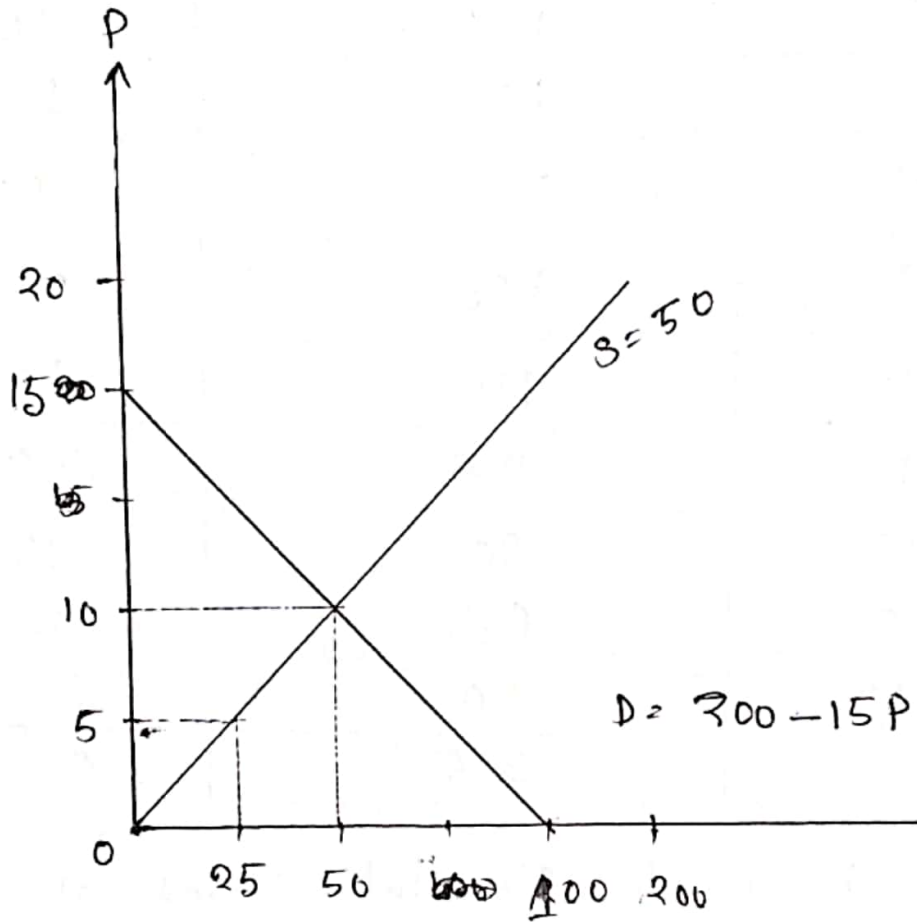


Fig  $\Rightarrow$  Equilibrium Graph