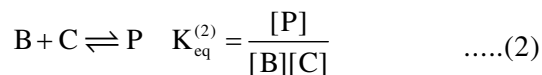
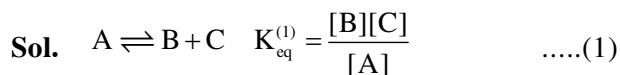




**SOLUTION****1. Official Ans. by NTA (2)**

For



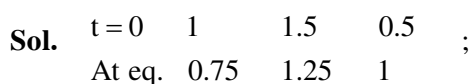
Multiplying equation (1) & (2)

$$K_{\text{eq}}^{(1)} \times K_{\text{eq}}^{(2)} = \frac{[P]}{[A]} = K_{\text{eq}}$$

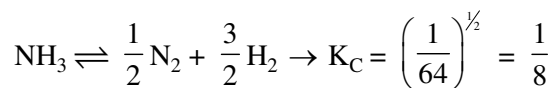
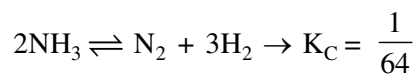
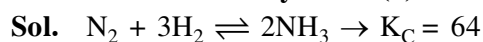
**2. Official Ans. by NTA (3)**

**Sol.** at equilibrium

$$r_a = r_b$$

**3. Official Ans. by NTA (16)**

$$K_{\text{eq.}} = \frac{1^2}{\frac{3}{4} \times \frac{5}{4}} = \frac{16}{15}$$

**4. Official Ans. by NTA (2)****5. Official Ans. by NTA (4)**