$$\text{or, } \alpha = \frac{i-1}{x+y-1} \quad \text{---------- (1)}$$

If the dissociation is complete, i.e., $\alpha = 1$. So from equation (1), we get

$$i - 1 = x + y - 1$$

$$\text{or, } i = (x+y) \quad \text{---------- (2)}$$

That is, the experimental colligative property is $(x+y)$-times the theoretical value.

If no dissociation occurs, i.e., $\alpha = 0$. So from equation (1), we get

$$i = 1 \quad \text{---------- (3)}$$

That is, the experimental and theoretical value of colligative property will be equal.