$$\Delta X' = \frac{\lambda}{2\pi}.\{\pm(2m-1)\pi\}$$

$$\Delta X' = \pm(2m-1)\frac{\lambda}{2} \quad \text{....(14)}$$

i.e. all those points in space or on the screen at which the hales difference is odd multiple of π or the path difference is odd multiple of λ/2 represents the position of minimum.

By eq. (8), $I_{min} = K\{a_1^2 + a_2^2 + 2a_1a_2(-1)\}$

$$I_{min} = K(a_1 - a_2)^2 \quad \text{....(15)}$$

Note: If I_1 and I_2 are intensity of individual wave

$$I = I_1 + I_2 + 2\sqrt{I_1 I_2}\cos\phi \quad \text{....(16)}$$

$$I_{max} = (\sqrt{I_1} + \sqrt{I_2})^2 \quad \text{....(17)}$$

$$I_{min} = (\sqrt{I_1} - \sqrt{I_2})^2 \quad \text{....(18)}$$

Special case: when the intensity of two incident waves is equal i.e.

$I_1 = I_2$, Then $I_{max} = 4I_1$ and $I_{min} = 0$