

Q 02 In what way is diffraction from each slit related to the interference pattern in a double-slit experiment?

Sol. Relation between diffraction from each slit to the interference Pattern in a double-slit experiment:

- a. If slit width in interference Pattern is reduced to the size of a wavelength of light used; the interference pattern thus obtained in the double slit experiment is modified by diffraction from each of two slits.
- b. The diffraction pattern is itself due to the interference of wavelength belonging to the same but different order of spectrum.