

EMO  
PHY-120

## Assignment 3 (Lab) section-C

Q1 (a) Using Huygen's principle draw a diagram to show propagation of a wavefront originating from a monochromatic point source.

(b) Describe diffraction of light due to a single slit. Explain formation of a pattern of fringes obtained on the screen and plot showing variation of intensity with angle  $\theta$  in single diffraction.

Q2 : Light of wavelength  $540\text{ nm}$  is incident normally on a slit of width  $0.2\text{ mm}$ . (a) What is the angular position of the first minimum? (b) What is the position of the second-order minimum on screen placed at  $4\text{ m}$  from slit?