PRE-EXPERIMENT QUIZ

1. Derive the relation $\frac{1}{\lambda_g^2} = \frac{1}{\lambda_o^2} - \frac{1}{(2a)^2}$ for a rectangular waveguide.
2. What is the cut-off wavelength for a rectangular waveguide?
3. What modification, if any, may be required in the relation in question 1, for a circular waveguide?
4. Rewrite the relation in question 1 so that it holds good for any mode supported by a rectangular waveguide.