



e-Edge Education Centre

Time -1h

XII B Physics

M.M -23

1. What is meant by fringe width .Derive an expression for fringe width in interference pattern? [3]
2. State and explain Brewster's law. [2]
3. State Huyghen's principle and prove the (i) laws of reflection and (ii) law of refraction on the basis of wave theory. [5]
4. What is meant by interference of light? Discuss young's double slit experiment to demonstrate interference of light. [2]
5. Derive the conditions for constructive and destructive interference. [3]
6. Draw a labelled diagram of a compound microscope .Deduce an expression for its magnifying power. How can the magnifying power be increased? [3]
7. Draw a labelled diagram of an astronomical telescope. .Deduce an expression for its magnifying power when the final image is (a) at infinity (b) at least distance of distinct vision. [5]