Answer Any Five questions of the following: **5×2=10**

1. What is Lissajous figure? Write some uses of it.

2. Obtain the equation of a plane progressive wave.

3. Define particle velocity, phase velocity and group velocity.

4. State Huygens principle.

5. Define Interference of light. What is coherence?

6. What are the conditions for single slit diffraction pattern?

7. What is Newton's ring? Why the central spot is dark in Newton's ring as seen by reflected light?