

Student ID:			3rd QUIZ(15 Marks) Set A ...April. 2026	
Section: 70_	Time: 35 Min	 Daffodil PHY10.1		

1. Write down the different polarization identification? Mark-1
2. Write down the total internal reflection definition and condition. Mark-3
3. State Fermat's principle and show that the incident angle is equal to the reflection angle. (Mark-4)
4. A ray of light travels from water into a glass at an angle of incidence of 45 degrees. If the refractive index of the glass and water are 1.64 and 1.23, respectively. Determine the angle of refraction. Mark-3
5. Newton's rings are formed using sodium light of wavelength $\lambda = 5.9 \times 10^{-5} \text{ cm}$ between a plane glass plate and a convex lens surface. The diameters of two successive dark rings are 2.0 mm and 2.236 mm. Find the radius of curvature of the lens surface. Mark-4