

Max. Marks: 4

Questions: 1

Q.1 A thin transparent film with refractive index 1.4, is held on circular ring of radius 1.8 cm. The fluid in the film evaporates such that transmission through the film at wavelength 560 nm goes to a minimum every 12 seconds. Assuming that the film is flat on its two sides, the rate of evaporation is $\pi \times 10^{-13} \text{ m}^3/\text{s}$.

Scan or tap for the full solution

[illegible]