

Interference sample theory questions

- 1)What are the main types of interference ?Give examples .
- 2)What is thin film(related to interference)?
- 3)Derive conditions of dark and bright interference for thin parallel transparent film.
- 4)What is the wedge shaped film ?How much is the wedge angle?
- 5)Give the formula for dark and bright interference in case of the wedge shaped film.(No derivation)
- 6)Explain the colours observed in the thin film in the sunlight .
- 7)What are Newton's rings? How should the radius of curvature of the surface be used to observe Newton's rings (Small or large)?Why? Draw schematic of the experimental arrangement.
- 8)State with reason whether the centre of Newton's rings will be dark or bright ?
- 9)Explain by giving related equations that the portion which appears bright from the reflected side appears dark from transmitted light and vice versa .
- 10) If in interference light plus light some time can give darkness then how energy is conserved ?Explain in brief giving the suitable examples and equations.