PHYSICS LECTURE WISE QUESTIONS (1st YEAR)

Unit No. & Name	Lecture No.	Questions	Weightage as per University Exam	Reference
Module- 4 Wave Optics	**L1**	Define coherent sources. Discuses why two independent sources of light of same wavelength cannot show interference.	7.5	UPTU (20011)(2013)
		Discuses the temporal and spatial coherence sources of light.	5	UPTU (2014-15)
	L2	Explain the phenomenon of interference in the films due to reflected light.	5	UPTU (2005)(2006)
		Discuses the formation of interference fringes due to a wedge shaped thin film seen by normally reflected sodium light and obtain an expression for the fringe width.	7.5	UPTU (2008)(2011)(2014)
	L3	Drive the expression of the diameter of bright and dark ring of order n in Newton's ring experiment .	5	UPTU(2012)(2013)(2014) (2015-16)
		Explain the constructive and destructive interference in the thin films as seen by reflected monochromatic light	5	UPTU (2012)(2013) (2014)
	L4	Explain why a thin film appears coloured when observed in reflected light	2	UPTU (2009)
		Why are colours are not observed in the case of thick film.	2	UPTU (2011)
	L5	Obtain the expression for the intensity of the single slit Fraunhofer diffraction pattern.	7.5	UPTU (2012-13) (2014-15)
		Give the construction and theory of plane transmission grating and explain the formation of spectra by it .Explain what are absent spectra in the grating?	7.5	UPTU (2011-12) (2013-14)
		What is diffraction grating? Derive an expression for dispersive power of grating and explain it.	5	UPTU (2010)(2011)
	L6	Define resolving power and dispersive power of a grating . Derive an expression for the resolving power if a plane transmission grating.	2	UPTU (2013-14) (2014-2015)
		Explain Rayleigh criteria for limit of resolution. Obtain an expression for resolving power of grating	5	UPTU (2014-15)