



15.	(a) Discuss the modes of vibration of a stretched string clamped at both ends. [5]	L2	CO3
	(b) Explain the laws of transverse vibrations of a string? [5]	L2	CO3
	OR		
16.	Derive Sabine's formula for reverberation time. [10]	L3	CO3
17.	(a) Explain the formation of Newton's rings. [5]	L2	CO3
	(b) Describe the construction and working of a Mach Zehnder Interferometer? [5]	L2	CO3
	OR		
18.	Derive equation of Fraunhofer diffraction due to N- slit. [10]	L3	CO3
19.	(a) With the help of suitable diagram, Explain the construction and working of He-Ne laser. [5]	L2	CO3
	(b) Write the characteristics of laser. [5]	L1	CO3
	OR		
20.	(a) Distinguish between light propagation in step index optical fiber and graded Index optical fiber. [5]	L4	CO3
	(b) Describe the basic elements of a fiber optics communication system with the help of block diagram. [5]	L2	CO3