



17	What are direct & indirect band gap semiconductor? Write the differences between them. [10M]	4	L2
	OR		
18	What is Quantum dot-based lasers? Explain with neat diagram. [10M]	4	L2
19	Mention the general properties of photo detectors and explain types of semiconductor photo detectors. [10M]	5	L2
	OR		
20	Explain the construction and working of PIN diode. [10M]	5	L2