Unit-V

S.No		Questions	BT	CO	PO
Part – A (Short Answer Questions)					
1		What are the basic LED configurations being used for fiber optics?	L1	C05	PO1
2		What is LASER? Describe its properties.	L1	C05	PO1
3		What are the direct-band gap and indirect band gap materials?	L1	C05	PO1
4		What are light source materials?	L1	C05	PO1
5		Mention the Four advantages of OFC	L1	C05	PO1
6		What is WDM explain its significance	L1	C05	PO2
7		Write about micro bending and macro bending	L1	C05	PO1
8		Define and Explain Mode coupling?	L1	C05	PO1
9		What are the Requirement of optical fiber?	L1	C05	PO1
10		Explain the terms a) Cut off wave length b) mode filed diameter?	L2	C05	PO1
Part – B (Long Answer Questions)					
11	a)	Explain about the light guidance in a optical fiber with figures and explain the total internal reflection and numerical aperture with diagrams	L2	C05	P02
	b)	Derive the expressions for quantum efficiency and LED power.	L2	C05	PO3
12	a)	Discuss key system features of WDM. Draw diagram of a typical WDM link containing various components and explain it in brief.	L1	C05	PO2
	b)	Write a short note on different types of fiber connectors?	L1	C05	PO1
13	a)	Explain the losses in end separator connecting different fibers when joining two fibers.	L1	C05	PO1
	b)	Explain the connector return losses in optical fibers.	L2	C05	PO1
14	a)	Explain core and cladding losses. Explain losses due to bending.	L2	C05	P02
	b)	Explain the procedure of installing fiber connectors in optical fibers.	L2	C05	PO2
15	a)	Describe graphical representation of link loss budget with a set of assumed values.	L1	C05	PO3
	b)	Sketch the structure of LASER and explain its working principle.	L3	C05	PO2
16	a)	State the threshold condition for LASER Oscillation	L3	C05	PO2
	b)	Explain briefly about the following types of signal distortion by optical waveguides	L2	C05	PO2