

UNIT IV

S.No	Questions	BT	CO	PO
Part – A (Short Answer Questions)				
1	Define optical sensors.	1	4	1,2
2	What is a photodetector?	2	4	1,2
3	What is a photo resistor (LDR)?	2	4	1,2
4	State the principle of operation of an LDR.	1	4	1,2
5	Define X-ray sensor.	2	4	1,2
6	What is nuclear radiation?	2	4	1,2
7	Define fibre optic sensor.	1	4	1,2
8	State the principle of fibre optic sensing.	1	4	1,2
9	Define electrochemical cell.	2	4	1,2
10	What are the components of an electrochemical cell?	2	4	1,2
Part – B (Long Answer Questions)				
11	a) Explain the basic characteristics of optical sensors.	3,4	4	3,4,1 1
	b) Discuss the principles and applications of optical sensing systems	3,4	4	3,4,1 1
12	a) Explain the principle and operation of X-ray sensors..	3,4	4	3,4,1
	b) Explain liquid junction potential and its causes..	3,4	4	3,4,1 1
13	a) Explain the construction and working of sensor electrodes.	1,2	4	1,2
	b) Discuss ion-selective electrodes and their applications.	1,2	4	1,2
14	a) Explain the construction and operation of reference electrodes.	3,4	4	1,2
	b) Discuss calomel and silver-silver chloride electrodes.	1,2	4	1,2
15	a) Explain fault in house wiring and its remedies	1,2	4	1,2
	b) Prepare estimation of repair and maintenance of ceiling fan.	3,4	4	3,4,1 1
16	a) Explain the construction and working of sensor electrodes.	3,4	4	3,4,1 1
	b) Discuss ion-selective electrodes and their applications.	1,2	4	1,2