	Parul University **Faculty of Engineering and Technology** **Parul Institute of Engineering and Technology** **Electronics and Communication Engineering Department**

Subject Name	**ICT WORKSHOP**	**A.Y**	**2025-2026**
Subject Code	**(03010702ES01)**	**Semester**	**2nd**

Sr No	Questions	COs	B.T
1	**Draw symbols and write one application each of Diode, Zener diode, LED, and Transistor.**	1	1
2	**Differentiate between Diode and Zener diode (any three points).**	1	2
3	**Write the function of LED and mention its advantages.**	1	2
4	**What is a Digital Multimeter (DMM)? List its main functions.**	2	1
5	**Explain how voltage measurement is done using a DMM.**	2	3
6	**State precautions while measuring current using a DMM.**	2	3
7	**Define CRO and list its main applications.**	3	1
8	**What is a Function Generator? Name different waveforms generated by it.**	3	1
9	**Explain the working principle of a Cathode Ray Oscilloscope.**	3	2
10	**What is a DC regulated power supply? Why is regulation required?**	4	1
11	**Draw and explain the block diagram of DC regulated power supply.**	4	2
12	**Write specifications of a typical DC power supply.**	4	1
13	**Define soldering and de-soldering.**	5	1
14	**List tools required for soldering.**	5	1
15	**Write precautions to be taken during soldering process.**	5	3
16	**What is a temperature sensor? Give two examples.**	6	1

17	**Explain the working of LM35 temperature sensor.**	**6**	**2**
18	**List applications of temperature sensors.**	**6**	**2**
19	**What is a water flow sensor? State its principle of operation**	**7**	**1**
20	**List applications of water flow sensors.**	**7**	**2**
21	**Write advantages of using water flow sensors.**	**7**	**2**
22	**What is a distance measurement sensor? Name one type.**	**8**	**1**
23	**Explain working of an ultrasonic distance sensor.**	**8**	**2**
24	**Write applications of distance measurement sensors.**	**8**	**2**
25	**What is a rain detector sensor?**	**9**	**1**
26	**Explain the working of a rain detector circuit.**	**9**	**2**
27	**List applications of rain detector sensors.**	**9**	**2**
28	**Write objectives of your group project.**	**10**	**2**
29	**List components and sensors used in your project.**	**10**	**1**