

## **21PYB102J - SEMICONDUCTOR PHYSICS AND COMPUTATIONAL**

### **METHODS – Laboratory component**

*List of Experiments (semiconductor physics part)*

<b>S. No</b>	<b>Name of the Experiment</b>	<b>Available in online</b>
1	DETERMINATION OF HALL COEFFICIENT AND CARRIER TYPE FOR A SEMI-CONDUCTING MATERIAL	<a href="http://vlab.amrita.edu/?sub=1&amp;brch=282&amp;sim=879&amp;cnt=1">http://vlab.amrita.edu/?sub=1&amp;brch=282&amp;sim=879&amp;cnt=1</a>
2	BAND GAP DETERMINATION USING POST OFFICE BOX	
3	TO STUDY V-I CHARACTERISTICS OF A LIGHT DEPENDENT RESISTOR (LDR)	
4	RESISTIVITY DETERMINATION FOR A SEMICONDUCTOR WAFER USING FOUR PROBE METHOD	<a href="http://vlab.amrita.edu/?sub=1&amp;brch=282&amp;sim=1512&amp;cnt=1">http://vlab.amrita.edu/?sub=1&amp;brch=282&amp;sim=1512&amp;cnt=1</a>
5	STUDY OF I-V AND I-R CHARACTERISTICS OF A SOLAR CELL & DETERMINATION OF EFFICIENCY OF SOLAR CELL	
6	CHARACTERISTIC OF PN JUNCTION DIODE UNDER FORWARD BIAS & REVERSE BIAS	<a href="http://vlabs.iitkgp.ernet.in/be/exp5/index.html">http://vlabs.iitkgp.ernet.in/be/exp5/index.html</a>
7	STUDY OF I-V CHARACTERISTIC OF PHOTO CELL	
8	STUDY OF ATTENUATION AND PROPAGATION CHARACTERISTICS OF OPTICAL FIBER CABLE	<a href="http://vlabs.iitb.ac.in/vlabs-dev/labs/physics-basics/labs/numerical-aperture-measurement-iitk/index.html">http://vlabs.iitb.ac.in/vlabs-dev/labs/physics-basics/labs/numerical-aperture-measurement-iitk/index.html</a>
9	CALCULATION OF LATTICE CELL PARAMETERS – X-RAY DIFFRACTION	<a href="http://vlab.amrita.edu/?sub=1&amp;brch=282&amp;sim=370&amp;cnt=1">http://vlab.amrita.edu/?sub=1&amp;brch=282&amp;sim=370&amp;cnt=1</a>