UNIT-4

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MEASURING INSRUMENT

4.1 Concept of Resistance in Semiconductors/Concept of Resistivity

4.2 Two-point Probe Method

4.3 Four-point Probe Method

4.4 Van der Pauw Measurements 4.4.1 Van der Pauw Method for Resistivity

4.4.2 Van der Pauw Method for Hall Measurements

4.4.3 Van der Pauw Measurements using Hall Effect

4.5 Hot-Point Probe Measurement

4.6 Capacitance Voltage Measurement

4.7 Deep level Transient Spectroscopy (DLTS)

4.8 Parameter Extraction from diode I-V Characteristics.

4.8 Absorption/Transmission

4.8.1 Absorption in Semiconductor

4.8.2 Band-Gap by UV-vis Spectroscopy

***4.1 Concept of Resistance in Semiconductors/Concept of Resistivity***

**MCQ**

**SHORT QUESTIONS/LONG QUESTIONS**

***4.2 Two-point Probe Method***

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***4.3 Four-point Probe Method***

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***4.4 Van der Pauw Measurements 4.4.1 Van der Pauw Method for Resistivity***

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***4.4.2 Van der Pauw Method for Hall Measurements***

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***4.4.3 Van der Pauw Measurements using Hall Effect***

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***4.5 Hot-Point Probe Measurement***

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***4.6 Capacitance Voltage Measurement***

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**SHORT QUESTIONS/LONG QUESTIONS**

***4.7 Deep level Transient Spectroscopy (DLTS)***

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**SHORT QUESTIONS/LONG QUESTIONS**

***4.8 Parameter Extraction from diode I-V Characteristics.***

**MCQ**

**SHORT QUESTIONS/LONG QUESTIONS**

***4.9 Absorption/Transmission***

**MCQ**

**SHORT QUESTIONS/LONG QUESTION**

***4.9.1 Absorption in Semiconductor***

**MCQ**

**SHORT QUESTIONS/LONG QUESTIONS**

***4.9.2 Band-Gap by UV-vis Spectroscopy***

**MCQ**

**SHORT QUESTIONS/LONG QUESTIONS**

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