	Perform mensurations and calculation	4.1	Select measuring instruments Carry out measurements and calculations	<ul> <li>Lecture- demonstration</li> <li>Self-paced instruction</li> <li>Group discussion</li> <li>Actual demonstration</li> <li>Classroom discussion</li> </ul>	<ul> <li>Oral questioning</li> <li>Direct         Observation</li> <li>Written test /         questioning</li> <li>Actual         demonstration</li> </ul>
_	Maintain tools and equipment	<ul><li>5.1</li><li>5.2</li><li>5.3</li><li>5.4</li></ul>	Check condition of tools and equipment Perform basic preventive maintenance Sharpen edge and tooth cutting tools Store tools and equipment	<ul> <li>Lecture –         Demonstration</li> <li>Self-paced instruction</li> <li>Group discussion</li> <li>Classroom discussion</li> </ul>	<ul> <li>Oral questioning</li> <li>Direct         observation</li> <li>Written test/         questioning</li> <li>Practical exam</li> </ul>

## CORE COMPETENCIES 194 Hours

Unit of Competency	Learning Outcome	Methodology	Assessment Approach
Perform site     assessment	<ul><li>1.1 Validate Parameters for the Installation</li><li>1.2 Prepare Installation Data Sheet</li><li>1.3 Prepare site assessment report</li></ul>	<ul> <li>Lecture- demonstration</li> <li>Case Studies</li> <li>Self-paced instruction</li> <li>Group discussion</li> </ul>	<ul> <li>Direct observation with questions</li> <li>Demonstration with questions</li> <li>Oral/written examination</li> </ul>
2. Check PV components/ materials compliance	<ul><li>2.1 Inspect and test components and materials</li><li>2.2. Interpret individual component manuals</li><li>2.3 Report test results</li></ul>	<ul> <li>Lecture- demonstration</li> <li>Case Studies</li> <li>Self-paced instruction</li> <li>Group discussion</li> </ul>	<ul><li>Direct observation with questions</li><li>Oral/written examination</li></ul>

3.	Install PV system	Preparing Documentation on PV Systems 3.1 Plan and prepare work 3.2. Complete relevant work related documents Installing PV Components 3.3 Install PV Module/Panel/Array 3.4 Install Controller 3.5 Install Battery 3.6 Install Inverter Installing Electrical Wiring 3.7 Prepare electrical tools, materials and equipment 3.8 Read and interpret electrical diagrams 3.9 Install lighting and power circuit using electrical nonmetallic conduit. 3.10 Install light and power circuit using sheathed non-metallic cable 3.11 Install light and power circuit using electrical non-metallic cable	<ul> <li>Lecture- demonstration</li> <li>Self-paced instruction</li> <li>Group discussion</li> </ul>	<ul> <li>Direct Observation</li> <li>and Questioning</li> <li>Demonstration</li> <li>Oral/written examination</li> </ul>
1	Perform PV	metallic surface raceway.  4.1 Prepare to commission	■ Lecture-	■ Oral/Written test
4.	system testing and commissioning	PV system 4.2 Commission PV system 4.3 Inspect and notify completion of work	demonstration Self-paced instruction Group discussion	<ul> <li>Demonstration with questioning</li> <li>Observation with questioning</li> <li>Third party report</li> </ul>