LabVIEW Training - Level 1

SI No	Training Topic	Training Topic Description	# of Hours	Exercise	Quiz
1	Introduction To LabVIEW	1) Virtual Instrumentation 2) Data Flow and Graphical Programming Concept 3) What is LabVIEW? What can it Do? 4) Using LabVIEW in the Real World 5) Real World Applications	1	×	√
2	LabVIEW Environment	1) Front Panel, Block Diagram, Project Explorer 2) Parts of VI and its Properties 3) Controls and Functions palettes 4) Sub VI and Express VI 5) Alignment Grid and Pull Down Menu	1	√	√
3	LabVIEW Foundation	1) Creating VI's 2) Wiring Up, Executing VI, Useful Tips 3) Loading and Saving Vis 4) Debugging Techniques 5) Creating Sub VI's 6) Documenting the Work 7) Data Types: Numeric, String, Boolean 8) Variables : Local variable, Global variable, Property node and Invoke node	3	√	√
4	Execution with Structures	1) Case structure, Event structure, Sequence structure 2) For Loop, While Loop, Timed Structures 3) Shift Registers, Dialogs, Timing 4) While Loop and Case Structure Combination 5) Formulae and Expression Node 6) Type Definitions 7) State Machine	3	√	√

5	Composite Data	1) All About Arrays and its manipulation 2) All About Cluster and its Operations (Bundle, Unbundle, Bundle by name & Unbundle by name) 3) Error Cluster and Error-Handling Functions 4) Compound and Boolean Arithmetic	2	√	√
6	LabVIEW's Displays	1) Wave Form Charts and Graphs 2) Time Stamps, Waveforms and Dynamic Data 3) Mixed Signal Graphs 4) Exporting Images of Charts and Graphs	2	√	√
7	Strings and File I/O	1) All About Strings and Its Manipulations 2) String Parsing and String Construction 3) File Input and File Output	3	√	√
8	Applications	1) Build Stand Alone Application (EXE) 2) Create an Installer 2) Web publication 3) DLL integration	2	√	√
9	Data Acquisition	1) Signal Measurement and Generation 2) Understanding Analog and Digital I\0 3) Measurement And Automation Explorer 4) DAQmx Tasks 5) Selecting and Configuring DAQ Measurement Hardware	4	√	√
10	Instrument Control	1) All about Instrumentation Control 2) VISA and its functions 3) Connecting to instruments through Serial Communication 4) Connecting to Ethernet Enabled Instruments 5) Instrument Drivers and its development	3	√	√

Note:

* Basic Programming knowledge is mandatory for attending the training.
* Training materials will be provided to all the trainees as part of the training
* A test will be conducted at the end of the training and the test results will be shared with the Management