11.b Carry on diagnostic activities interfacing machines/assembly lines and collecting data by Visual Programming tools (*resolve equipment malfunctions, maintain control systems for automated equipment, perform test run)*	
Functional Area: QA	
Pre-Requisites:	
Assessment criteria	**Knowledge**
LO11b.1. Diagnoses breakdowns in discrete and continuous simulated mechatronic systems, identifying the nature of the breakdown, making the necessary corrective interventions to eliminate the dysfunction and restore function. • Carry out a procedure on an ATE on production/assembly line, following instruction manuals • Demonstrate possible solutions and agree tasks within a team	• Reading of electronic circuit drawing. • Knowledge of Types of Resistors, capacitors and their identification • Understanding of Working and operation of Diodes, Rectifier circuits. Zener voltage Regulators • Knowledge of Transistors and their applications.
	Skills
	• Capability to Check PC Power Supply, SMPS cables and connections to mother boards, connection of I/O devices to PC, HDD/DVD cables. • Identify, analyse, synthesize and act on information from a range of sources, verbal, written and in electronic format • Understand functional application of different levers, stoppers, adjustment etc.
	Transferable skills
	• Collaborate effectively within multidisciplinary teams • Analyze descriptions, specifications, manuals and other info typical of the profession in English, providing comments on how to improve them

	• Ability to communicate effectively, orally and in writing with “engineering” community and with “society” (extrapolating concepts for “non-experts) through an abstraction approach • Ability to prepare draft operational procedures on practical cases