11.a 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
 LO11a.1. Develops plans of assembly and maintenance of installations, applying programming techniques and establishing procedures for execution monitoring and control. Follow and maintain procedures to be in line with HMI general requirements Test the Electronic components using proper instruments and tools Carry out a simple debugging procedure and report results Carry out a procedure on an ATE on production/assembly line 	 Knowledge of Basic Electronic components (active and passive) and relevant symbols 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 Collaborate effectively within multidisciplinary teams 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. Install Operating Systems and Device Drivers, Install/Uninstall Application software Transferable skills Understand descriptions, specifications, manuals and other info typical of the profession in English

 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 submit and discuss presentations on practical cases