**NAME: OBIA-AMAUWA PRINCESS GINIKACHI**

**MATRIC NUMBER: 17/MHS06/048**

**COURSE TITLE: LABORATORY INSTRUMENTATION AND TECHNIQUES**

**COURSE CODE: MLS 304 ASSIGNMENT: THEORY OF AUTOMATION**

ASSIGNMENT: Describe how you can maintain the Automatic Analysers in ABUAD multi system hospital and keep them in good condition.

**What is an Automatic Analyser?**

An Automatic Analyser is a Medical Laboratory Instrument, designed to measure different chemicals and other characteristics in a number of biological samples, with minimal human assistance. The measured blood properties and other fluids may be useful in the diagnosis of diseases.

To maintain and keep in good condition the Automatic Analyser in ABUAD Multi System Hospital;

* **Calibration of device regularly:** I will ensure that calibration of my device is done properly to maintain accuracy. I will ensure that the calibration is done each time I start a job or at least once a day.
* **Keeping the device in a clean environment:** I will ensure that the device is placed in a clean environment always and kept away from other devices that causes vibration.
* **Keeping samples away from dirt and impurities:** I will be ensure that the samples to be worked on are handled properly and kept from dirt and impurities. This is also done to avoid the contamination of the measurement device and the transfer of contamination to other samples to be measured.
* **Routine check on the electrical components:** I will ensure that routine check is done on the electrical components of the Automatic Analyser to avoid over heating that can lead to fire outbreak and electric shock.
* I will ensure that the cuvettes are rinsed in distilled water and with a special cleaning material after it is used.
* **Routine maintenance:** I will ensure that routine maintenance by a trained and certified professional and that inspection is carried out on the area where the device is installed as well as electrical installation to ensure user safety. This can be done annually or twice a year.
* I will ensure that I am available for programme and training on how to use and maintenance of the device.