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DEPARTMENT: MEDICAL LABORATORY SCIENCE

COLLEGE: MHS

Mls 304 assignment

An **automated analyser** is a medical laboratory instrument designed to measure different chemicals and other characteristics in a number of biological samples quickly, with minimal human assistance. These measured properties of blood and other fluids may be useful in the diagnosis of disease.

Daily Maintenance of Automatic Blood Coagulation Analyzer

1) Daily use

- Keep the operational station clean;
- Cover the lid after use in order to prevent dust;
- Keep reagent and sample positions clean; do NOT leave liquid waste in reagent disk;
- Do NOT drop liquid and matters in the detector; otherwise, test accuracy will be effected;
- Clean sampling-probe after use to prevent clog;
- Stay away from direct sunlight and hazardous matters;
- 8Keep the device upright; do NOT shake or vibrate;
- Keep from erosion and moisture;
- Use stabilized voltage supply when power voltage is unstable;
- Do NOT touch the heater;
- Do NOT touch the moving parts when it is in motion;
- Exiting the system properly before turn off the power; avoid directly turning off the power;
- In case of error and faults, stop using the device and contact the manufacturer.

2. Components Maintenance

- Reagent Disk: keep sample and reagent positions clean. Clean up immediately when any liquid accidentally overflows.
- Sampling-probe: put lubricant on guide bar every week. Put 2 drops of lubricant on the joint of Y-axis guide bar and the arm; slide the arm up and down manually.
- Slider: Put lubricant on X-axis linear guide rail every week to keep it greased.
- Pallet: keep the surface clean. Used cuvettes need to be disposed properly. Put lubricant on Z-axis guide bar every week to reduce friction.
- Detector: Put lubricant on lead screw and guide bars every week.
- Pipeline: Check whether it is clogged or damaged every week. If find any damage, please replace it as soon as possible.

3. Scheduled Maintenance

Every Day

- Dispose the liquid waste.
- Fill the detergent container.
- Fill the distilled water container.
- Check whether unused cuvettes are in the same positions as the setting displays.
- Check whether the reagent containers are in the same positions as the setting displays.
- Check whether the printer is running out of paper.
- Dispose used cuvettes, and remove samples and reagents after use.
- Use medical alcohol to clean keyboard, operational station, and any place contacted by the operator after use.

Every Week

- Clean pipeline with detergent.
- Components maintenance.
- Wipe outer shell, computer, and monitor with soft rag.

Every Half a Year

- Replace tubes.
- Data back-up. Back-up in advance if daily sample number is large.