1.Bottle dispensers

- It should be designed for performance handling of liquids from a large variety of bottles and flasks, the dispensers combine the latest in dosing technology, high tech materials and ergonomic design. As a result, users benefit from universal chemical compatibility, ease of operation, superior safety and low maintenance.
- Volumes range 0.25 to 100 mL
- > Superior chemical resistance
- Long lasting performance stability
- Comfortable and convenient in use
- Solid, yet simple construction
- Instant volume setting
- In-lab calibration
- > Autoclavable at 121°C fully assembled
- Supplied with bottle adapters

2.Vacutainer Tube

- Material of Tube Plastic, PET
- Fine and transparent material
- > Non Toxic, Leakproof and Crack Resistance
- > Colored rubber stopper creating a vacuum seal inside the tube
- > Negative air pressure present inside the tube
- Additive Present
- > Type of Additive Anti coagulant
- Additive Used K3 EDTA
- > Color of Cap Lavender or Purple
- Color of Tube Transparent
- Tube Size (mm x mm) 13x75
- > Draw Volume of blood sample (ml) 6
- Shelf Life (in months) 18
- Label on tube for Identification
- Label Type Paper
- Submission of Test Report on form 39 or from Central Govt/NABL/ILAC accredited Lab to prove the conformity to declared specification at the time of supply
- > Product conformity certificate is to be provided to the buyer at the time of supply

1	Self contained cartridge system with internal automated programmes
2	The unit should be ready to use it at anytime and anywhere.
3	The system should have Disposable Cartridge / Cassette
4	The System should provide Blood gas, Electrolyte, Metabolites
5	The results should be available after analysis within 30 seconds which can be seen on the TFT Screen with Printout
6	The systems should have rechargeable battery back up a minimum of 8 Hours
7	Should have built in automated integrated calibration and Quality check, without the use of any reagents
8	The system should be Maintenance free, without any Hidden charges, Room temperature test card storage, Critical result reporting with Reference Values, Wireless Data capture and Transmission, Patient ID bar coding system,
9	Should have capability to store minimum of 2000 Blood Gas Analysis readings and able to display on demand.
10	To supply 100 nos. cartridges free of cost along with the machine
11	The product should have the Standard certificate of FDA Approval with CE Mark.

3.ABG Machine

4.Autoanalyzer

1. Should be microprocessor controlled general purpose bi-chromatic photometer system with at least 6 filters ranging from 340 to 630nm.

2. Temperature 37 self monitoring built-in incubation systems for temperature controlled absorbance reading.

- 3. Light source : Tungsten/ halogen or higher grade with one additional bulb.
- 4. Should have end point, kinetic and two point kinetic measurement modes.
- 5. Should have flow cell measuring device.
- 6. Should have inbuilt printer or External Printer to be supplied.
- 7. Should have a measurement range from 0.001 to 2.300Abs
- 8. Should have facility for reading results on LCD display.

9. Should have quality control – two control/test QC survey of at least 30 points, Levy Jenny plot.

- 10. Should have a filter half bandwidth of 10nm or lesser.
- 11. Should have a test programme memory of 50 or more.
- 12. Should be provided with sample carry over prevention facility.
- 13. Aspiration should be based on Bellow/Peristaltic Pump

14. Should provide 500 ml of reagents for urea, S. creatine, S. bilirubin, sugar, cholesterol, and Quality control 5ml one each for normal, abnormal.

15. Should be supplied with UPS of suitable capacity with a minimum back of 30 minutes.

16. Should be provided with calibration certificate issued by the manufacturer at the time of installation and periodic calibration must be done and calibration certificate to be issued during warranty / AMC/ CAMC period.

17. Should have safety certificate from a competent authority CE-IVD issued by a notified body registered in the European commission / FDA (US).

5.Fume cupboard

- Fume cupboards is a fume cabinets which localised the fume extraction systems fitted in laboratories to protect users from harmful substances that could be inhaled.
- > It should have a cabinet with a moveable front window made out of safety glass.
- It should properly functioning the fume hood exhausts hazardous gases, dusts, mists, vapors from a combined location.
- Cabinet Structure: Material: All steel (1.0mm cold-rolling steel or 1.0mm stainless steel) covered with electrostatic spraying after folding, welding, polishing, acid cleaning, phosphorization and chemical resistance.
- > It should have all the accessories that is required.

6.Spectrophotometer

1. Spectrometer has 3648 –element Toshiba CCD array detector for wavelength range of 200-1100 nm giving a resolution ~1.7nm with a 25um entrance slit installed. L4 collection lens installed.

2. High power Deuterium Halogen light source suitable for Absorption/Transmission and Reflection measurements covering the range 215-2500 nm.

- 3. 400µm premium grade optical fiber 1 m length.
- 4. 200µm premium grade optical fiber 1 m length.
- 5. 4 way cuvette holder.
- 6. Pair of quartz cuvettes with lid.

7. Cross-platform Spectroscopy software compatible with above spectrometer.

8. Compatible latest computer.

9. Spare Deuterium Bulb for DH2000, 210-400 nm, 1000 hrs

10. Spare Halogen Bulb for all DH2000, 360-2500 nm, 900 hrs

11. Reflection measurement setup for powders/solid samples: 400um Reflection probe, Reflection probe holder, White reflection standard PTFE

12. Set of laser diodes 3-5mW with power supply 300,350, 405, 532, 635, 650, 740, 820nm one each for Fluorescence peak measurements