Technical specifications

ANNEXURE – A.

~~Enclosure – I~~

1. (a) ELISA reader

i. Should be 8-channel optical measuring system.
ii. Should be an open system which allows to program & save different ELISA protocols.
iii. Should have capability for Mono, Bichromatic measurements.
iv. Instrument should be able to read all types of micro well plates with transparent bottom-flat, C-, U- and V- shaped.
v. Should be able to read end point and kinetic reaction.
vi. Should have at least 5 standard filters – 405,450,492,550 & 620 nm and should have at least 3 open positions for future additions.
vii. The results and interpretation graphs should be displayed on the screen and printout possible
viii. Should work with a LED, keypad.
ix. Should have in built plate shaking with minimum of 3 speeds and minimum upto 5 minutes.
x. Instruments should have external printer facility with USB port based printers.
xi. Memory back up option should be available for data management.
xii. The On-board software should have capability of storing the calibration curve data.
xiii. The system must have internal printer & accept external dot matrix printer and must print results in preformatted matrix form giving details such as Sample No., Value, Abs and interpretations. with cut-off equation for qualitative results.

(b) ELISA plate washer

i. Washer manifold should be 8 or 12 channel.
ii. Pump used for aspiration and dispensing should be Vacuum Pump.
iii. Needle height should be adjustable for dispensing and aspiration according to the size of the wells.
iv. Strip mode & Plate Mode washing both should be present.
v. Should be able to adapt both U, flat or curved bottom plates.
vi. Automatic Printing should be done at the registered change of Buffer.
vii. Plate carrier should be autoclavable.

10/8/18

10/8/18

14/08/18

Technical specifications

2 **Digital balance :**

a) Digital display
b) Capacity 1000 gm
c) Resolution = 0.01 gm

3 **Centrifuge Machine**

Specifications :	Table top model
Max. speeds :	Not less than 5000 rpm
Max RCF :	Not less than 3600 g
Swing out heads :	16 or more (16×ml)

4 **Boiling water bath**

1) Rectangular shaped double walled
2) Electrically heated
3) 220/230v output compatible
4) Digital temperature control
5) 6 hole capacity or more

5 **Microscope**

- Microscope frame:
  - Coaxial coarse/fine knobs: Tension adjustment on the right side
  - Fine focus knob graduated
  - Stage movement (XY direction) on rack and pinion
- Quadruple revolving nose piece (fixed)
- Plane stage of 120x132 millimeters
- With right hand mechanical stage
- Universal power supply (100V to 240V) for 6V 20W illuminator
- Dust cover
- Mirror unit (plano-concave)

Observation tube:

- Binocular observation tube (inclination 45 degree, interpupillary distance adjustment range (53-75 millimeters), diopter adjustment on the left

Objectives

- 4x,10x,40x,100x
- anti-fungus

10/8/15

10/8/15

Eyepiece

- 10x, anti fungus

Lamp

- 6V 20 W halogen lamp
- Source light= 240 V.

Item no.6:- Semi auto analyzer

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

ii) Temperature 37^{0}C self monitoring built in incubation systems for temperature controlled absorbance reading.

iii) Light source: Tungsten/halogen or higher grade with one additional bulb.

iv) Should have end point, kinetic and two point kinetic measurement modes.

v) Should have flow cell measuring device.

vi) Should have inbuilt printer.

vii) Should have a measurement range from 0.001 to 2.300 Abs.

viii) Should have facility for reading results on LED display.

ix) Should have quality control –two control /test QC survey of at least 30 points, levy Jenny plot.

x) Should have a test programme memory of 50 or more.

xi) Aspiration should be based on bellow/peristaltic pump/vacuum pump.

xii) Should provide with start up reagents and quality controls.