## **SPECIFICATION OF ELISA READER ALONG WITH WASHER:**

- 1. Filter-based ELISA reader with halogen lamp as light source and single-channel optical system with silicon photodetectors for reliable & reproducible test results.
- 2. Halogen Lamp should have a minimum usage option, i.e., it should get "on" while reading and should be "off" when the instrument is on standby mode.
- 3. Should be compatible with a wavelength range from 340 to 850 nm, for various ELISA applications.
- 4. Should have easy access to 8 position filter wheels.
- 5. Instrument should be supplied with 3 standard filters of 405nm, 450nm, and 620nm. 340 nm & 820 nm filter prices should be quoted for future up-gradation.
- 6. Should have automatic calibration and self-diagnostics of any possible error in optical alignment before each program reading.
- 7. Should be able to read 96 microwell plate format in less than 10 seconds.
- 8. The instrument should run in stand-alone mode OR with a computer, software controlled.
- 9. Internal software (standalone mode) should have all the basic applications related to ELISA like quality control, qualitative classification, standard graph, etc.
- 10. Computer software should be supplied with unlimited user licenses and should have reading as well as data analysis options including standard curve fit, qualitative classifications, quality control, etc.
- 11. System should be able to run in stand-alone mode using a 4.5-inch color display and keypad.
- 12. The instrument should have a memory of 99 inbuilt protocols in stand-alone mode and 100 result memory
- 13. The instrument should have 2 USB ports- PC connectivity and the option to directly export results to a pen drive for easy access.

## **DATA ANALYSIS SOFTWARE:**

1. Software should have an option for area selection. i. e different protocols at a different area of the same plate.

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- 2. Database-based software to run backups of all data, and restore backup data (in case of hardware failure of an original computer).
- 3. Single software program should allow any number of measurement steps within the program.
- 4. Data should be able to export in formats such as excel, pdf, XML, or note.

## **ELISA WASHER:**

- 1. Should have the capability to wash 96 well microplates and have a 1x 8-way wash head.
- 2. Should have programmable washing time, volume, and soaking time.
- 3. Should use non-pressurized bottles to minimize the risk of spillage and also a choice for users to substitute bottles with general labware bottles.
- 4. Should provide two 2 liter wash bottles & one 4 liter waste bottle.
- 5. Should provide aerosol cover to prevent aerosols of infectious diseases from spreading.
- 6. Should have a residual volume of less than  $2 \mu l$ .
- 7. Dispensing volume should be  $50 400 \mu l$  for 96 wells.
- 8. Should have a USB port for easy data transfer.
- 9. Should have a large color screen for easy set-up of wash protocols.
- **10.** Should have the liquid level sensors in both the wash and waste bottles to guarantee safe performance.
- 11. Should have a plate sensor to recognize if a plate is present or not.
- 12. Wash manifold, tubing, wash bottle & waste bottle should be autoclavable.

## **Conditions for tender:**

- 1. All accessories should be from the same Original Equipment Manufacturer for the main unit.
- 2. Instruments must be ISO certified and a copy should be enclosed. (The ISO Certificate must be issued by any organization accredited by the Bureau of Indian Standard or accredited by the international accrediting forum "IAF" (Certificate to be attached).
- 3. Should be USA FDA and European CE be approved by 4 digits notified body awal

4. Should be approved by In Vitro Diagnostics (VVD).

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- 5. Other necessary certifications if any required will be provided by the bidder for the smooth functioning of the machine.
- 6. Installation process should be performed by O.E.M trained service engineers/ service representatives on OEM letterhead or Service Report within 15 days of supply, with the mandatory provision of providing preventive services visit of OEM trained Service Engineer/ Service Representative quarterly per year till the completion of warranty period (i.e., 20 visits for the first 05 years) & further quarterly visits (04 visits/year) year till the completion of CMC period.
- 7. The equipment should have a Brand nam/ Model Number embossed/etched on the equipment.
- 8. All the technical specifications in the compliance statement must be supported by Original Literature from the firm/ O.E.M with highlighting Numbering & flagging of all technical certificates.
- 9. Offered Equipment should have a strong Government Installation base.
- 10. Offered Equipment should have a Regional Sales Service Centre of the Original Equipment Manufacturer in the region for a 95 % uptime guarantee.
- 11. For the offered main unit, the essential, optional required consumables'/accessories' shelf life should be declared on the Original Equipment Manufacturer's letterhead.
- 12. In case of technical snag/failure/breakdown the response time for the inspection should be within 24 hours and repair within 05 days otherwise provide a service machine/ alternate arrangement to be made till the period of recovery of the breakdown of the unit, failing which attracts penal action as per the decision of institute/ hospital.
- 13. For offered equipment the Training of technical staff and users should be performed by Original Equipment Manufacturer trained Service Engineers at the proper designated place- at bidders' cost.
- 14. Company should quote their latest model and need to provide an affidavit for the same.
- 15. As a tendering process the Demonstration of the offered Equipment is Mandatory at hospital/institute premises or other designated places at the bidder's cost.

16. The bidder must comply with the General Financial Rules and their modifications if any (USA) issued by the Government of India-2017.

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- 17. Any bidder from a country that shares a land border with India will be eligible to bid in the tender only if the bidder is registered with the Competent Authority (i.e., Registration certificate issued by the Ministry of Commerce and Industry (Department for Promotion of Industry and Internal Trade- DPIIT after October 2020). If any such bidder is not registered with DPIIT they will be liable for technical disqualification.
- 18. Principal (OEM) must authorize only one agent to be quoted in the bid otherwise multiple quotes through different agents in the same bid will be canceled.
- 19. The Bidder and its OEM both have to submit a notarized affidavit on the Indian Non-Judicial Stamp Paper of Rs.100/- that the bidder has not quoted the price higher than the current financial year and last financial year supplied to any government Institute/ Organization/ reputed Private Organization. OEM also has to submit that the price quoted by the bidder in the bid is on its behalf and the lowest in the current and last financial year in the country. Therefore, if at any stage it has been found that the supplier and its OEM have quoted lower rates than those quoted in this bid; the Institute (the purchaser) would be given the benefit of lower rates by the Supplier and any excess payment if any, will become immediately payable to the Institute (the purchaser). If such an affidavit is not submitted, the bid will be outrightly rejected. (Part of technical bid).
- 20. Guarantee / Warranty Period: Separate offers of Comprehensive Maintenance Contract (CMC on main equipment) and Annual Maintenance Contract (AMC on main equipment) for further 5 years after expiry of 5 years of warranty (i.e., 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> years) in rupees only (and on basis of percentage of price) should be included in a financial bid in the absence of which the offer is liable to be rejected. Payment for CMC/AMC shall be made only after the expiry of the warranty of 5 years, in case the Institute (the purchaser) decides for availing of CMC/AMC services. Contract for CMC/AMC shall be decided on expiry of warranty but rates (not more than 5% inclusive of all taxes for 6<sup>th</sup> to 10<sup>th</sup> year) will be frozen at the price of an issued purchase order before the release of payment by the Institute (the purchaser). However, the Institute (the purchaser) may decide not to enter into any CMC/AMC contract without assigning any reason for the same, which shall be

binding upon the bid.

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