

MINUTES OF THE MEETING

PRE BID MEETING OF TENDER FOR SUPPLY, INSTALLATION COMMISSIONING AND VALIDATION OF LAB EQUIPMENT AT IVC, CHENGALPATTU

Document No. : NPI-120310-EQP-S1-TD-13

Venue : HLL Biotech Limited, Chennai

Date : 22.09.2015 to 25.09.2015

Project : Integrated Vaccines Complex, Chengalpattu

Attendees : See attached list of attendees

Issued by : Mr. Suresh S (Sr. Manager –Procurement)

Issued on : 01.10.2015

Issued from : HLL Biotech Limited, Chennai

| Agenda | |
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| 1. | Pre-bid Meeting of Lab Equipment for IVC, Chengalpattu |

| S. No. | Clarifications on queries |
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| | Tender for Supply, Installation, Commissioning and Validation of Lab Equipment at IVC, Chengalpattu NPI-120310-EQP-S1-TD-13 |
| I | Discussion on Tender Enquiry Document: NPI-120310-EQP-S1-TD-13 |
| | General Discussion Points |
| 1. | Techno-Commercial Bid & Price Bid has to be submitted individual schedule wise. |
| 2. | Power of Attorney and PAN copy to be submitted along with the Techno-Commercial Bid. |
| 3. | Partial quoting of schedules are not permitted. Schedules has to be quoted in full. |
| 4. | Landed cost of equipment plus AMC charges together shall be considered for final L1 price evaluation. |
| 5. | Payment terms for Domestic Goods and Import Goods holds good. No Change in Tender document. |
| 6. | Performance Security - Performance Security Shall be initially valid for 20 months (Page 31 of 100). Clause 5.1 |
| 7. | Notification of award – The Performance Security to be submitted within 10 days of Notification of award (Page 26 of 100). Clause 40.1 |
| 8. | Section XI C - AMC charges for 2 years on yearly basis without spares (Page 72 of 100) |
| 9. | Revised Price Schedule (Domestic, Import & AMC) has been uploaded. Section XI (A,B & C) |
| 10. | Revised NIT (Notice Inviting tender) with revised EMD amount has been uploaded. Section I |
| 11. | Page 85 off 100. Section XVIII Contract Form B Clause: e During AMC period, the supplier shall visit at each consignee's site for preventive maintenance & breakdown maintenance including testing and calibration (Inclusive of all reagents & service charges) as per the manufacturer's service/ technical/ operational manual. The supplier shall visit each consignee site as recommended in the manufacturer's manual, but at least once in 3 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods. |
| 12. | RBI exchange rate at the time of price bid opening will be considered for L1 evaluation. |
| 13. | If the equipment has extended warranty up to Three (3) years, AMC cost can be mentioned as zero in the AMC price schedule. Section XI C |
| 14. | Supply payment shall be released within 30 days from the date of receipt of materials at site and submission of necessary documents. |
| 15. | Installation payment shall be released within 30 days from the date of receipt of user certified invoice. |
| 16. | Indian representatives of Foreign vendors can submit the credentials in their name. |
| 17. | Equipment name and Schedule number to be super scribed in the Tender cover/envelope. |

| S. No. | Clarifications on queries | |
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| 18. | Revised bid submission and opening date mentioned in NIT Sheet | |
| S. No. | Clarifications on Datasheet | |
| II | Deep Freezer – Low Temperature (DS-DPF 01) schedule III | |
| 1 | Specific revision in the Datasheet | |
| | Datasheet Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 1.1 | Point no.2.1,2.4,2.5,2.6,2.7 – 300L Point no.2.2-100L Point no 2.3-500L | Point no.2.1, 2.4, 2.5,2.6,2.7 – minimum 300L Point no.2.2- minimum 100L Point no 2.3- minimum 430L |
| 1.2 | Point no.2.3 G1-DPF 02, Capacity -500L (Horizontal) | Deleted from this schedule, considered as a separate schedule as (schedule III a) |
| 1.3 | Point no.3.9 Temperature precision (setting resolution) ± 0.5 deg C | Deleted |
| 1.4 | Point no.3.14 Temperature Uniformity ± 3 deg C | Modified as ± 5 deg C |
| 1.5 | Point no 3.15 Validation Port: Ports for inserting probes for temperature mapping to be provided | Validation Port: Provision to insert minimum 10 probes through the port |
| 1.6 | Point no.5.10 Positive air circulation by internal fans must be provided to ensure temperature uniformity and recovery | Deleted |
| 1.7 | Vendor to provide 50 nos of circular charts (Type: Weekly) and 2 nos of recording pen for each equipment. | |
| III | URS: Deep Freezer – Ultra Low Temperature (DS-DPF 01) schedule IV | |
| 2 | Specific revision in the Datasheet | |
| | Datasheet Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 2.1 | Point no.2.1,2.2- 500L capacity Point no.2.3- 200L capacity | Point no.2.1,2.2-min 490L Point no.2.3- min 300L |

| S. No. | Clarifications on queries | |
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| | Point no.2.4 to 2.11 - 300L capacity Point no. 2.12 & 2.13 -300L capacity | Point no.2.4 to 2.11 - min 300L Modified as min 490L capacity |
| 2.2 | Point no.3.9 Temperature precision (setting resolution) $\pm 0.5^{\circ}\text{C}$ | Deleted |
| 2.3 | Point no.3.13 Temperature Uniformity $\pm 3^{\circ}\text{C}$ | Modified as $\pm 5^{\circ}\text{C}$ |
| 2.4 | Point no.3.15 Validation Port: Ports for inserting probes for temperature mapping to be provided | Validation Port: Provision to insert minimum 10 probes through the port |
| 2.5 | Point no.3.21 | Included as an additional point Temperature range: - 50°C to -86°C |
| 2.6 | Point no.5.2 Auto defrost to be provided: | Deleted |
| 2.7 | Point no. 5.5 (SMS alert at the time of deviation temperature) | Deleted |
| 2.8 | Table 3 B4-DPF 03, B4-DPF 04, F1-DPF 01-02 Horizontal | Modified as B4-DPF 03, B4-DPF 04, F1-DPF 01-02 Vertical |
| 2.9 | Vendor to provide 50 nos of circular charts (Type: Weekly) and 2 nos of recording pen for each equipment | |
| IV | Refrigerator (DS-RFR 01) schedule V | |
| 3 | Specific revision in the Datasheet | |
| | Datasheet Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 3.1 | Point no.2.7, 2.9 200L capacity | Modified as 300L capacity |
| 3.2 | Point no.3.10 Temperature stability $\pm 1^{\circ}\text{C}$ | Deleted |
| 3.3 | Point No 2.6: B4-RFR 06 | B4-RFR 06: Capacity minimum 490L(Refer GMP Refrigerator Specifications, Schedule-V)to hold 4 nos of 20 litre glass bottles with height of 590mm and Diameter of 300mm. |
| 3.4 | Table 3: B4-RFR 06: Glass Bottle Height: | Table 3: B4-RFR 06: Glass Bottle Height: 590 mm |

| S. No. | Clarifications on queries | |
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| | 290mm | |
| 3.5 | Vendor to provide 50 nos of circular charts (Type: Weekly) and 2 nos of recording pen for each equipment | |
| V | Incubator (DS-INC 01) schedule II | |
| 4 | Specific revision in the Datasheet | |
| | Datasheet Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 4.1 | Point No.2 Table top/ floor model | Vendor should specify |
| 4.2 | Point No.3.5 Temperature range : ambient +5 to 75 deg C | Changed as +5 to 60 deg C |
| 4.3 | Point No.3.6 Temperature Stability ± 0.2 deg C | Deleted |
| VI | BOD incubator (DS-BIC 01) schedule II | |
| 5 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 5.1 | Point No.3.5 shelves: SS316L | Changed as SS 304 |
| 5.2 | Point No.4.4 Outer door | Modified as Outer door - SS 304 / Powder coated |
| 5.3 | Point No. 5.7 It should have viewing window in the doors | Deleted |
| 5.4 | Point No. 5.13 Vendor should provide four electrical sockets for the accessories | Deleted |
| VII | CO₂ incubator (DS-CIN 01) schedule II | |
| 6 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |

| S. No. | Clarifications on queries | |
|--------|---|--|
| 6.1 | Point No.3.3 Filter type | Modified as Filter type - (HEPA/ULPA) Inside the chamber |
| 6.2 | Point No.3.8 temperature recovery time of not more than 4minutes | Modified as , temperature recovery time of not more than 5minutes |
| 6.3 | Point no 3.10 CO ₂ Connection | CO ₂ Connection- Sterile filter, pressure regulator with necessary arrangement. |
| 6.4 | Point no 3.17; Humidity recovery time when door is opened; 6-9minutes | Modified as max 30mins |
| 6.5 | Point no 3.18. temperature sensor; IR | Changed as Pt 100 sensor |
| 6.6 | Point no 4.2 SS 316L | Modified as SS 304 |
| 6.7 | Point no 4.5 Gaskets, seals, o-ring | Included EPDM, PTFE |
| 6.8 | Point no 5.11 triple pane glass door | Triple pane glass door - Deleted |
| VIII | Upright Microscope (DS-UMC 01)-Schedule I | |
| 7 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 7.1 | Point no 1.2 ; B4- UMC 01-used for observing T25 cell culture flasks and cell count using hemocytometer | Modified as B4- UMC 01-used for observing cell count using hemocytometer |
| 7.2 | Point no.3.2 Type- Binocular compound microscope with camera provision | Modified as Trinocular compound microscope with camera provision |
| 7.3 | Point no 3.4; Interpupillary distance adjustment - 46mm to 75mm | Modified as Interpupillary distance adjustment - 55mm to 75mm |
| 7.4 | Point no 3.9 | Included as an additional point Eye pieces (F.O.V)- 10X / 22 |
| 7.5 | Point no 3.10 | Included as an additional point Nose piece type – Quintuple or better |

| S. No. | Clarifications on queries | |
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| 7.6 | Point no 5.1 – Nose piece should rotate 360deg and binocular head should be inclined at 30deg to 45deg. Features Interpupillary and dioptic adjustment. | Modified as Nose piece should rotate 360deg and trinocular head should be inclined at 30deg to 45deg. Features Interpupillary and dioptic adjustment. |
| 7.7 | Point no 5.2; Magnification of the microscope should be 4X,10X,40X and 100X | Modified as Magnification of the microscope should be 4X,10X,40X and 100X (Oil immersion) |
| 7.8 | Point no 5.9; Holders: 35mm diameter petri dish holder, universal holder, glass slide holder, hemocytometer holder. | Modified as Holders: Glass slide holder, hemocytometer holder. |
| 7.9 | Point no.6.4; Accessories to be provided: Co-Axial mechanical stage, Draw tube, spare objectives, Sub stage with LED | Modified as Accessories to be provided: immersion oil and spare fuses. |
| IX | Inverted Microscope (DS-IMC 01)-Schedule I | |
| 8 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 8.1 | Point no 3.2 Type- Inverted Microscope (Binocular) | Modified as Type- Inverted Microscope (trinocular) |
| 8.2 | Point no 3.5: Eye pieces (F.O.V)- 10X | Modified as Eye pieces (F.O.V) - 10X /20 mm or better. |
| 8.3 | Point no 3.6 Magnification – 4X to 40X | Modified as 4X,10X,20X and 40X |
| 8.4 | Point no 3.7 Condensers – Working distance 72mm to 80mm | Modified as, Condensers – Working distance minimum 72mm |
| 8.5 | Point no 2.3,Q1-IMC 01 | Modified as Q1-IMC 01,02 |
| 8.6 | Point no 3.9 Quantity-3nos | Modified as Quantity-4nos |
| 8.7 | Point no 5.1 –Binocular head should rotate 360deg and inclined at 30deg to 45deg. Features Interpupillary and dioptic adjustment. | Modified as trinocular head should rotate 360deg and inclined at 30deg to 45deg. Features Interpupillary and dioptic adjustment.. |

| S. No. | Clarifications on queries | |
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| 8.8 | Point no 5.3; Holders: Petri dish holder, universal holder,terasaki holder, glass slide holder, hemocytometer holder | Modified as Holders: Petri dish holder, universal holder (terasaki holder, glass slide holder, hemocytometer holder) |
| 8.9 | Point no.6.4; Accessories to be provided: Spare fuses, Draw tube, spare objectives, Sub stage with LED lamp | Modified as Accessories to be provided: Spare fuses |
| X | Fluorescence Microscope (DS-FMC 01)-Schedule I | |
| 9 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 9.1 | Point no 3.2 Type - Fluorescence microscope (binocular) | Modified as Type - Fluorescence microscope (binocular with camera port) |
| 9.2 | Point no 3.5: Eye pieces (F.O.V)- 10X/23 or better | Modified as Eye pieces (F.O.V) - 10X /22 mm or better |
| 9.3 | Point no 3.6 Magnification -- 4X to 40X and more | Modified as 4X,10X,20X and 40X |
| 9.4 | Point no 3.7 Interpupillary distance - 48mm to 75mm | Modified as Interpupillary distance adjustment - 55mm to 75mm |
| 9.5 | Point no 3.9 Fluro Chrome FITC,DAPI,TRITC, Etc | Modified as Fluorochrome-FITC,DAPI,TRITC |
| 9.6 | Point no 3.16 Camera – Dual mode high speed cooled camera with 5mp in colour and 2.0mp in monochrome mode or better. | Modified as Camera – 5MP CCD color cooled camera with monochrome mode or better. |
| 9.7 | Point no 5.3 Stage and nose piece movement shall be motorized. | Deleted. |
| 9.8 | Point no 5.5 The fluorescence microscope should have provision for taking photos of the samples under analysis and should be compatible to be connected and viewed through PC. Microscope camera and software shall be offered from original equipment manufacturer for better synchronisation. | Modified as; The fluorescence microscope should have provision for taking photos of the samples under analysis and should be compatible to be connected and viewed through PC.. |

| S. No. | Clarifications on queries | |
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| 9.9 | Point no.6.4; Accessories to be provided: Spare fuses, Draw tube, spare objectives, Sub stage with LED lamp | Modified as Accessories to be provided: spare fuses, Halogen lamp(as light source) |
| XI | Peristaltic Pump (DS-PSP 01)-Schedule IX | |
| 10 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 10.1 | Point no 3.11 Rotor Speed 0.1-600rpm | Modified as; Rotor Speed 10-550rpm |
| 10.2 | Point no 3.12 Pump head – single, should be compatible with silicon tubing of sizes 3.2mm to 9.6mmID | Modified as Pump head – single/ double, should be compatible with silicon tubing of sizes 3.2mm to 9.6mmID |
| XII | Weighing Balance (DS-WGB 01)-Schedule X | |
| 11 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 11.1 | Page no.1 & 5 | Modified. Refer Annexure-I |
| 11.2 | Point no 4.1 MOC – Acrylic (for analytical balances) | Modified as MOC – Acrylic (for analytical balances), SS304 (for platform scales) |
| 11.3 | Point no 4.3 | Included as an addition point Ingress Protection (IP) – 67/68 |
| 11.4 | Point no 4.4 | Included as an addition point Load cell MOC-17.4pH grade |
| 11.5 | Point no 5.3 standard weights should be provided for the calibration (E1-21 Pieces weigh set-1no) with certification and traceability | Modified as standard weights should be provided for the calibration (E2- (two unit- 21 pieces each) and M1(one unit ranging ; 1kg-2nos, 2kg-2nos,5kg-2nos,10kg-2nos,20kg-30nos,500gm-2nos)with certification and traceability |
| 11.6 | Point no 5.4 Auto Calibration facility should be provided | Modified as Auto Calibration facility should be provided for laboratory balances |

| S. No. | Clarifications on queries | |
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| 11.7 | Point no 5.5 Balances should be capable of counting, tarring, totalizing, percentage weighing, toggling between gross/net value. | Modified as Balances should be capable of counting, tarring, totalizing, percentage weighing, toggling between gross/net value(for analytical & precision balances) |
| 11.8 | Point no 6.2 | Deleted |
| 11.9 | Point no 6.4 | Deleted |
| 11.10 | Point no 6.5 Printer provision of RS-232 port with weighing balances shall be considered for printing time and weight data for the sample. | Modified as Printer provision of RS-232 port with weighing balances shall be considered for printing time and weight data for the sample(for analytical balances) |
| 11.11 | Point no 6.6 | Deleted |
| 11.12 | Point no 6.7 SS ramp should be provided to move the weighing balances. | Modified as ; for weighing more than 100 kg with low profile platform. |
| 11.13 | Two more weighing balances added for QC in this micro weighing balances shall be separated as schedule as Xa | |
| XIII | TOC Analyzer (DS-TOC 01)-Schedule XI | |
| 12 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 12.1 | Point no 3.1 Measuring range -0.05 to 10000µg/ml | Modified as ≤0.05 to max 25000mg/l without interference. |
| 12.2 | Point no 3.2 Detection limit 0.05mg/IC | Modified as Detection limit ≤0.05mg/l |
| 12.3 | Point no 3.10 Injection volume – upto 1000µl | Modified as; Injection volume -Variable from 10 – 2000 micro liters |
| 12.4 | Point no 3.14 | Deleted |
| 12.5 | Point no 3.16 Inorganic carbon handling-Dynamic end point detection to assure complete inorganic carbon removal. | Modified as “Inorganic carbon handling- to assure complete inorganic carbon removal”. |

| S. No. | Clarifications on queries | |
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| 12.6 | Point no.3.18 | Included as an additional point Auto sampler –suitable for minimum of 50 samples to be provided |
| 12.7 | Point no 3.19 | Included as an additional point Injection system - Automatic and internally done. Shall have Automatic Sample Injection provision without using Auto sampler option and auto dilution function. Instrument shall have built-in background correction and check function. |
| 12.8 | Point no 5.2 The system shall display TOC temperature and conductivity. | Modified as The system shall display TOC. |
| 12.9 | Point no 6.1 Automatic power off after electric furnace cools down | Modified as Automatic power off after electric furnace cools down(if applicable) |
| 12.10 | Point no 6.4 | Deleted. |
| 12.11 | Point no 7.2 21CFR,part 11 all measurements recorded to encrypted database | Modified as 21CFR,part 11 batch data should be generated and printed.(applicable to, PC controlled system too) |
| 12.12 | Point no 7.3 Should meet ASTM standard test methods for online monitoring of carbon compounds in water by UV light oxidation. | Modified as Should meet ASTM standard test methods |
| 12.13 | Point no 8.3 | Deleted |
| 12.14 | Point no 8.4 Alarming sensors should be provided | Alarming indicators should be provided |
| 12.15 | Point no 8.5 & 8.6 | Deleted |
| XIV | Hot Air Oven (DS-HAO 01)-Schedule XIV | |
| 13 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 13.1 | Point no 3.4 Temperature range –Ambient + 5 to 300 deg C | Modified as Temperature range –Ambient + 10 to 300 deg C |

| S. No. | Clarifications on queries | |
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| 13.2 | Point no 4.2 Inner Body Easy to clean interior, made of SS316L | Modified as ; Inner Body Easy to clean interior, made of SS304 |
| 13.3 | Point no 4.3 Trays- SS316L perforated 3 or more adjustable | Modified as; SS304 adjustable trays. |
| 13.4 | Point no 5.1 The gap between inner & outer walls of chamber should be fitted with high grade polyurethane foam (PUF), to ensure maximum thermal efficiency. | Modified as; The gap between inner & outer walls of chamber should be fitted with suitable insulations, to ensure maximum thermal efficiency. |
| 13.5 | Point no 5.4 | Deleted |
| 13.6 | Point no 5.7 Display resolution of display set point values 0.1 deg C upto 99.9 deg C, 0.5 deg C from 100 degC and for actual values 0.1 deg C (LED) solid state relays for low noise operation. Warm up timing to research 150degC in 40-50 min | Modified as; Display set point values 0.1 deg C upto 99.9 deg C, 0.5 deg C from 100 degC and for actual values 0.1 deg C (LED) solid state relays for low noise operation. Warm up timing to research 150degC in 40-50 min |
| 13.7 | Point no 5.10 | Deleted |
| XV | Standard Water Bath (DS-WBH 01)-Schedule VII | |
| 14 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 14.1 | Point no 2 Pump capacity/ flow rate (L/M) | The whole column deleted. |
| 14.2 | Point no 2.4 ,2.5; Circulating | Modified as circulating / multisided heating |
| 14.3 | Point no 3.8 Working temperature range Ambient temperature +5 deg C to 100 deg C | Modified as Working temperature range Ambient temperature +10deg C to 95 deg C |
| 14.4 | Point no.4.3 Heating element – SS | Modified as; Heating element –Vendor to specify |
| 14.5 | Point no 4.6 | Deleted |
| XVI | Flocculation Water Bath (DS-FWB 01)-Schedule VII | |

| S. No. | Clarifications on queries | |
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| 15 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 15.1 | Point no 3.8 Working temperature range Ambient temperature +5 deg C to 100 deg C | Modified as Working temperature range Ambient temperature +10deg C to 60 deg C |
| 15.2 | Point no 4.2 Heating element-SS | Modified as ; Heating element-Vendor to specify |
| XVII | Elisa Reader (DS-ELR 01)-Schedule VIII | |
| 16 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 16.1 | Point No. 3.3. Visible Absorbance between 400 nm to 700nm | Modified as 200 nm to 999nm |
| 16.2 | Point No.3.4. Temperature range ambient 4 C to 45 C | Modified as Ambient 5° C to 45° C |
| 16.3 | Point No.3.5. Wavelength Range 400 nm to 700 nm | Modified as 200 nm to 999 nm |
| 16.4 | Point no 3.6 Wavelength accuracy - $\leq \pm 0.003$ OD $\pm 1.0\%$, 0 to 2.0 OD | Modified as Wavelength accuracy - 0 to 3.0 OD |
| 16.5 | Point no 3.11 Photometric accuracy - $\leq \pm 0.006$ OD $\pm 1.0\%$, 0 to 2.0 OD | Modified as Photometric accuracy - 0 to 3.0 OD |
| 16.6 | Point no 3.14 End point read time 12 sec for 96 well | Modified as End point read time 15 sec for 96 well |
| 16.7 | Point no 3.16, 5.2, 6.1, 6.4, 6.6 | Deleted |
| XVIII | Elisa Plate Washer (DS-ELW 01)-Schedule VIII | |
| 17 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |

| S. No. | Clarifications on queries | |
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| 17.1 | Point no1.1 The microplate washer is designed and shall be for washing various types of standard 96 well microtitre plates and 384 well microtitre plates, micro strips and micro arrays of Elisa and related applications. | No modification required |
| 17.2 | Point no 3.8 Vacuum- integrated vacuum pump,9L/min | Modified as; Pump-Vacuum / peristaltic |
| 17.3 | Point no 4.2 Wash heads- SS 304 | Modified as Wash heads-Vendor to specify |
| 17.4 | Point no 5.3 Aspiration to be facilitated with a vacuum pump | Modified as; Aspiration to be facilitated with an appropriate pump. |
| 17.5 | Point no 5.6 Unit to allow bottom washing and overflow washing. | Modified as; Unit to allow bottom washing |
| 17.6 | Point no 6.1,6.4 | Deleted |
| XIX | UV Spectrophotometer (DS-SPM 01)-Schedule XV | |
| 18 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 18.1 | Point.No.3.3. Spectrum band width 1 nm | Modified as 1nm to 1.5 nm |
| 18.2 | Point no 3.7 Lamp sources- Xenon flash lamp/tungsten /halogen lamp/deuterium lamp light built in light source auto position adjustment with life of average 3000hours. | Lamp sources- Xenon flash lamp/tungsten /halogen lamp/deuterium lamp light built in light source auto position adjustment with life of average 1000hours or better. |
| 18.3 | Point no 3.13 Stray light – Less than 0.02%NaI at KCl at 198nm | Modified as;Stray light – Less than 0.08%NaI at KCl at 198nm |
| 18.4 | Ponit.No.4.3 – Detector – silicon photodiode | Modified as Silicon photodiode / Photomultiplier |
| 18.5 | Point no 6 | Deleted |

| S. No. | Clarifications on queries | |
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| XX | Polarimeter (DS-POL 01)-Schedule XVI | |
| 19 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 19.1 | Point no 3.10 Temperature range- 20 – 45 degC | Modified as ; 20 – 35 deg C or better |
| 19.2 | Point no 3.15 Prism –Glan Thomson Calcite | Modified as; Glan Thomson Calcite or equivalent |
| 19.3 | Point no 5.1 It must measure and display angle of rotation (AOR), International Sugar Scale (ISS), Specific optical rotation, concentration and purity. | Modified as; It must measure and display angle of rotation (AOR) ,Specific optical rotation, concentration and purity. |
| 19.4 | Point no 5.2 | Deleted |
| 19.5 | Point no 5.3 | Deleted |
| 19.6 | Point no 5.6 21 CFR part 11complince | Modified as; inbuilt 21CFR part 11complince |
| XXI | Refractometer (DS-REF 01)-Schedule XVII | |
| 20 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 20.1 | Point no 3.5 Measurement range –refractive index ± 1.26 -1.70,Brix 0-100 | Modified as Measurement range –refractive index ± 1.3 -1.70,Brix 0-100 |
| 20.2 | Point no 3.12 Temperature range -15 to 85 deg C | Modified as Temperature range -15 to 70 deg C |
| 20.3 | Point no 5.6 Extensive diagnostics ,error detection and display with audio visual alarm system for deviation | Modified as; Extensive diagnostics ,error detection and display with visual alarm system for deviation |


| S. No. | Clarifications on queries | |
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| 20.4 | Point no 7.4 21 CFR part 11 complinace | Modified as; inbuilt 21CFR part 11 complinace |
| XXII | RT-PCR (DS-RT PCR 01)-Schedule XXI | |
| 21 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 21.1 | Point no 3.8 Multiplexing capabilities : 2-5 | Modified as Multiplexing capabilities : min 5 and above |
| 21.2 | Point no 3.10 Heating/cooling method – Peltier based or rotary format | Modified as; Heating/cooling method – Peltier based |
| 21.3 | Point no 5.2 ,6.3 | Deleted |
| XXIII | Colony Counter Automatic & Colony Counter Manual (DS-CCA,DS-CCM)-Schedule XXIV | |
| 22 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 22.1 | CCA; Point no 3.4. Camera with Pixel : 640X480 pixels | Modified as : Vendor to specify |
| 22.2 | CCA; Point no 3.11 | Deleted |
| 22.3 | CCM Point no 3.6 Maximum count -9999 | Modified as; Maximum count -1999 |
| XXIV | Kjeldhal Apparatus (DS-KJA01)-Schedule-XVIII | |
| 22 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |

| S. No. | Clarifications on queries | |
|-------------|---|---|
| 22.1 | Point no 3.2 and 3.19 | Minimum 6 units to be provided |
| 22.2 | Point no 4.1 Distillation unit- SS with epoxy coated | Modified as; Distillation unit- SS with epoxy coated or equivalent |
| 22.3 | Point no 4.2 Digestion system –SS | Modified as; Digestion system –SS or equivalent |
| 22.4 | Point no 5.5 Digestion unit should have to absorb fumes | Modified as; 5 Digestion unit should have scrubber to absorb fumes |
| 22.5 | Point no 5.9 It should have bellow pumps for accurate dispensing of reagents | Modified as; It should have acid resistant pumps for accurate dispensing of reagents |
| 22.6 | Point no 5.10 It should have alkali resistant Poly Propylene plastic splash head for long life time. | Modified as; It should have alkali resistant Poly Propylene plastic / glass splash head for long life time. |
| 22.7 | Point no 5.12 | Deleted |
| XXV | Table Top Centrifuge (DS-TCC 01)-Schedule-XIX | |
| 23 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 23.1 | Point no 3.8 Rotor capacity 48 positions for 1.5ml /2.0ml with lid and six positions for 50ml tubes including rotor lid | Modified as; Rotor capacity min 44 positions for 1.5ml /2.0ml with lid and six positions for 50ml tubes including rotor lid |
| 23.2 | Point no 5.8 | Deleted |
| XXVI | Magnetic Stirrer (MGH 01 , MGS)-Schedule-XX | |
| 24 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |

| S. No. | Clarifications on queries | |
|--------|---|---|
| 24.1 | Magnetic Stirrer with Heating Point no 3.1 Model- table top cGMP with heating | Modified as; Model- table top cGMP with media controlled heating |
| 24.2 | Point no 3.3 Features- Flat surface LED display and timer required | Modified as; Features- Flat surface LED display. |
| 24.3 | Point no 6.1 standard accessories: 5Nos PTFE coated magnetic stirring bars suitable to 20L to be provided for each equipment. | Modified as; standard accessories: 5Nos PTFE coated magnetic stirring bars suitable to min 100ml -20L to be provided for each equipment |
| 24.4 | Magnetic Stirrer Point no.2.6 to hold 1X5Lglass bottle/unit of dia 180mm | Modified as; to hold 1X20Lglass bottle/unit of dia 300mm |
| 24.5 | Point no 3.3 Features- Flat surface LED display and timer required | Modified as; Features- Flat surface LED/LCD display. |
| 24.6 | Point no.3.5 Stirrer speed 0-1000rpm for 20L;100-1500rpm for 5L | Modified as; Stirrer speed 0-1000rpm for 20L; |
| 24.7 | Point no 3.6 Operating Temperature- 4-37degC | Modified as; Operating Temperature- 5-37degC |
| 24.8 | Point no 6.1 standard accessories: 5Nos PTFE coated magnetic stirring bars suitable to 20L to be provided for each equipment. | Modified as; standard accessories: 5Nos PTFE coated magnetic stirring bars suitable to min 100ml -20L to be provided for each equipment |
| XXVII | pH Meter & Conductivity meter (DS-PHM 01) Schedule-XXII | |
| 25 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 25.1 | Point no 3.1 Type –Digital, Benchtop type with inbuilt printer | Modified as; Type –Digital, Benchtop type with printer |
| 25.2 | Point no 3.3,3.9 Quantity – 5nos | Modified as Quantity – 4nos |
| 25.3 | Point no 3.7 Type –Digital, Benchtop type with inbuilt printer | Modified as; Type –Digital, Benchtop type with printer |
| 25.4 | Point no 3.11 Conductivity range- 0.001 to 999999µS/cm | Modified as; Conductivity range- 0.001 to 999999µS/cm or better |

| S. No. | Clarifications on queries | |
|--------|---|---|
| 25.5 | Point no 5.4 Instrument should be capable of multipoint calibration with max 3 buffers as per USP ranges. | NIST traceable buffer upto min 3 and max 5 buffers to be provided. |
| 25.6 | Point no 5.5 Readymade buffer solution of 4,7,10 to be provided-one set | Modified as; pH meter & Conductivity meter: Readymade buffer solution of 4,7,10 to be provided-one set |
| 25.7 | Point no.5.7 LCD display to show the pH and temperature readings, audible beep indication during valid key operation. | Modified as; LCD display to show the pH and temperature readings, indication during valid key operation |
| 25.8 | Point no 5.9 spare pH electrode to be provided. | Modified as; spare pH & conductivity electrode to be provided |
| 25.9 | Point no 6.3 pH meter should have a in-built printer for on the spot printing ex. pH, temperature, date and time intervals. | Modified as; pH meter should have a printer for on the spot printing ex. pH, temperature, date and time intervals |
| 25.10 | Point no 9.5 | Deleted |
| XXVIII | Vortex Mixer (DS-VOM 01) Schedule-XXIII | |
| 26 | Specific revision in the Datasheet | |
| | URS Point number and excerpt* / description of the specification * | Point modified as / Comment |
| 26.1 | Point no 3.3 Speed range – 100 to 3200rpm | Modified as; Speed range – 100 to 3000rpm |
| 26.2 | Point no 3.4 Operating temperature- 4 to 65 deg C | Modified as 4 to 40 deg C |
| 26.3 | Point no 4.1 MOC- Nitrile rubber | Modified as; cGMP compliant |

For HLL Biotech Limited


 S. SURESH, 1/10/15.

 Chief Executive Officer