MINUTES OF THE PRE-BID MEETING OF THE TENDER FOR SUPPLY, INSTALLATION, COMMISSIONING AND VALIDATION OF LAB EQUIPMENT (PHASE-IV) AT IVC CHENGALPATTU

Document No.:	:	**NPI-120310-EQP-S1-22 REV NO. 00 DECEMBER 2017**
Venue:	:	**HLL Biotech Ltd, Integrated Vaccine Complex, Chengalpattu**
Date:	:	04.12.2017 to 07.12.2017
Project:	:	**IVC, Chengalpattu**
Attendees:	:	See attached list of attendees
Issued By:	:	**DGM (PC)**
Issued On:	:	**19th Dec, 2017**

Agenda	
1.	Pre bid Meeting of the Tender for Supply, Installation, Commissioning and Validation of Lab equipment (Phase-IV)at IVC, Chengalpattu

S. No.	Clarifications on queries	
	Tender for Supply, Installation, Commissioning and Validation of Lab equipment (Phase-IV) at IVC Chengalpattu of the Tender No: NPI-120310-EQP-S1-22 REV NO. 00 DECEMBER 2017	
A	**Discussion on Tender Enquiry Document No:** NPI-120310-EQP-S1-22 REV NO. 00 DECEMBER 2017	
	General Discussion Points	
	QUERY RAISED BY BIDDER	**CLARIFICATION BY HBL**
1	Tender Fee	5250 (inclusive of GST @ 5%)
2	Schedule of Requirement & EMD	The revised Schedule of Requirements and the revised EMD is as attached in ***Annexure-I***
3	Payment Terms	As per TED and will remain same
4	Delivery	**For Domestic Goods:** 2 Months from the date of issue of Purchase Order **For Imported Goods:** 3 Months from the date of LC opening
5	Installation, Commissioning and Validation	As per TED and will remain same (i.e., 1 month from the delivery of equipment at site)
6	Address of Client and all communication	HLL Biotech Limited, Integrated Vaccine Complex, SF 192-195, Tirumani Village Chengalpattu -600 301
7	Payment Terms	As per TED (Ref: Page No: 40) and will remain same
8	AMC	2 years after the warranty period (Ref. Page No: 60 & 76)
9	Schedule wise EMD and Tender Document	Vendor has to submit the Tender Document and EMD Schedule wise (As per Annexure:1)
10	Last date and time for submission of bids	The last and time for submission of bids is 09.01.2018 (For Sch I to X) 10.01.2018 (For Sch XI to X) 11.01.2018 (For Sch XXI to XXX) 12.01.2018 (For Sch XXXI to XXXX) @ 11:00 Hrs
11	Time and date of opening of Techno-Commercial Bids	09.01.2018 – 12.01.2018 @ 11.30 Hrs
12	Submission of LC draft	The draft of the LC has to be approved by the vendor within 7 working days

S. No.	Clarifications on queries	
	Technical Discussion Points	
	QUERY RAISED BY BIDDER	**CLARIFICATION BY HBL**
S .N	CLARIFICATION ON DATA SHEET	
1	**VORTEX MIXER**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.3. Speed range -100 to 3200 rpm	Speed range – 200 – 3000 rpm
1.2	3.4. Operating temperature - 4 °C to 65 °C	Operating temperature - 5 °C to 40 °C
1.3	4.1. Main body - Nitrile rubber	Main body – GMP Compliant
1.4	4.2. Head - Polyethylene	Head - Rubber
IV	**Deep Freezer (Ultra Low temp)**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	2. Capacity (L) – 250 L – 11 Nos, 400 L – 1 No.	Capacity (L) – Min 300 L – 12 Nos, 450 L – 1 No
1.2	3.17. Chart Recorder – To be provided	Chart Recorder – To be provided as inbuilt with Equipment
1.3	5.13 Self closing door (Automatic) shall be provided	5.13 This point is Deleted from data sheet
1.4	9.1. IOQ documents	9.1 – IQ ,OQ & PQ documents to be provided
1.5	Additional Point	PQ - Temperature mapping to be done for 72 hrs in Empty chamber and in Loaded Chamber separately (total study time 144 Hrs)
V	HOT AIR OVEN	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.3. Quantity – 3 Nos	Quantity – 5 Nos. Capacity – 450 L – 4 Nos 250 L – 1 No
1.2	4.1. Outer Body - SS 304/MS Epoxy powder coated reinforced by deep drawn ribbing with integrated and protected large area heating on four side exterior body alloy 304,rust - resistant and easy to clean	Outer Body - SS 304/340/MS Epoxy powder coated/GMP compliant, Heat resistant and easy to clean
1.3	4.2 - Inner Body - Easy to clean interior, made of stainless steel SS316L.	Inner Body – SS 304

1.4	4.3. Trays - SS 316L Perforated 3 or more adjustable	Trays – SS 304
1.5	5.1. The gap between inner & outer walls of chamber should be fitted with high grade polyurethane foam (PUF), to ensure maximum thermal efficiency	The gap between inner & outer walls of chamber should be fitted with high grade polyurethane foam (PUF)/ Rock wools, to ensure maximum thermal efficiency
1.6	5.5. Sensors 2 PT 100 sensors Class A in 4 wire circuit,mutually monitoring the performance at the same temperature value	Sensors - PT 100 sensors Class A in 4 wire circuit, mutually monitoring the performance at the same temperature value
1.7	8.1 CE certification, error detection and display with audio visual alarm system for output signal, voltage fluctuations, process, temperature deviation.	CE certification – For all components and for entire Equipment. Error detection and display with audio visual alarm system for output signal, voltage fluctuations, process, temperature deviation.
1.8	5.11 Control Adaptive multifunctional digital PID - Microprocessor controller with 2 high - definition TFT-colour display,self diagnostics for fault analysis parameters adjustable and control temperature(Celsius or Fahrenheit), fan speed, air flap position, programmable timer, time zones	Control Adaptive multifunctional digital PID - Microprocessor controller with 2 high - definition TFT/LCD/LED colour display,self diagnostics for fault analysis parameters adjustable and control temperature(Celsius or Fahrenheit), fan speed, air flap position, programmable timer, time zones
VI	Peristaltic Pump	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	4. Material of Construction 4.1. Main Body - SS	Main Body - cGMP compliant
1.2	5.8. Auto calibration shall be provided for the Equipment with ID	This point Shall be Removed
VII	**Air Sampler**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.3. Accessories Required - SS 316 aspirating head,Battery pack,Battery charger,integrated port for data transfer and carry case	Battery – Aspirating head,Battery pack,Battery charger,integrated port for data transfer and carry case
1.2	3.6. Remote control - Interval sampling, delayed start can be followed by infrared remote control	Remote control – Not Mandatory
1.3	3.10. Battery – Chargeable battery	Battery – Chargeable Li-Ion battery
1.4	3.12 .Airflow – 100 – 300 Litres /min	Airflow – 200 – 300 Litres /min
1.5	3.15. Sample grid – Stainless Steel 316L,Autoclavable	Sample grid – cGMP Compliance

1.6	3.16.Software Compliance – 21 CFR Part11 Compliance	This point shall be deleted
1.7	5. Specific Equipment requirement. 5.10.New addition	Data transfer – USB/IR/Cable
1.8	5.11. New addition	Equiment should be compatible with VHP & H2O2
1.9	5.3. Should have integrated Mass flow sensor	Should have integrated Mass flow sensor/Speed Sensor
VIII	**APOTRINOCULAR STEREO MICROSCOPE**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	**Point modified as/ comment**
1.1	3.5. Zoom ratio – 10:1	Zoom ratio – 8:1 or Better
1.2	3.6. Zoom Range – 1-8X or Better	
1.2	3.8. Total Magnification - 80 X times with plan Apo	80 X times or Better with Standard plan Apo 1X objective and Eyepieces 10 X or with additional accessories.
1.3	3.18. Fluorescent attachment with four filter assembly with the provision for Uniform illumination through the special lens	Fluorescent attachment with four filter assembly with the provision for Uniform illumination through the special lens with Blue Filter cube and Green Filter Cube
1.4	3.20. Camera Type - 5 mega pixel CCD camera or better	Camera Type - 5 Mega Pixel CCD/CMOS camera or better with the High Sensitivity with High Resolution Camera with 30 FPS with USB 3 interface suitable for Bright Field, DIC and Epi Fluorescent applications (high quantum efficiency) or Better.
1.5	5.Specific Equipment requirement 5.4. Nose piece position should be, reversed, knurled grip for easy operation. Should feature smooth operation and with positive click stops	5.5. This point shall deleted
1.6	5.Specific Equipment requirement 5.5. Stage should be delivering a high level of fluid motion control and longevity. Motion must be controlled with a right-hand low-position coaxial control and it should be driven by a rack and pinion system.	5.5. This point shall deleted
1.7	5.11. New Addition	5.11. Both Stereo zoom Microscope and Digital Camera are to be quoted from the Single Manufacturer's only for better synchronization and service support
1.8	5.12. New Addition	5.12.PC to be provided along with This equipment and it should compatible with this microscope software
IX	**CHILLER WATER BATH**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.5.Temperature range - 10 °C to 100 °C	Temperature range - 0- 30 Deg C
1.2	3.11. Reservoir volume - Minimum 15 Ltrs	Reservoir volume - 10 -15 Ltrs
1.3	3.17. PC Communication & Data management - PC controllable & USB port (For transfer of operating data/history)	PC Communication & Data management - PC controllable & USB port / RS232 (For transfer of operating data/history)

1.4	3.24. Controls. a) Records can display on the front panel, printed, or transferred to a PC via USB.	a) Records can display on the front panel, printed, or transferred to a PC via USB/RS232.
1.5	3.24. Controls - b) Menu and settings with customizable security levels using password should be provided	This point shall be deleted
1.6	3.25. New Addition	3.25. Upon power failure the equipment should resume automatically from the set parameters.
1.7	10.6. NPL traceable calibration certificates and calibration procedures	This point shall be deleted
X	**Conductivity Meter**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.20. New Addition	Cell Constant : 0.1 cm-1 (with SS) & 10 cm-1 to be provided each for all conductivity meter.
XI	**Cooling Centrifuge**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
	Datasheet Heading : Cooling Batch Centrifuge Changed as Cooling Centrifuge	
1.1	3.6. Speed range - Min 100 rpm to Max 15,000 rpm	Speed range - Min 1000rpm to Max 15000 rpm
1.2	3.20. Rotor Type : Fixed angle, swing bucket and autoclavable (No decoloration)	Rotor Type : Fixed Angle
1.3	3.25. 2 Nos. additional Rotor and PP autoclavable bottle and accessories along with each centrifuge	2 Nos of PP autoclavable bottle and accessories along with each centrifuge
XII	**Cooling Batch Centrifuge**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.6. Speed range - Min 10000 rpm to Max 15,000 rpm	Speed range - Min 1000 rpm to Max 15000 rpm
1.2	3.14. Temperature Resolution – 0.1 deg C	Temperature Resolution – 1 deg C
1.3	3.27. Quantity (Rotor) – 2 Nos. additional Rotor and PP autoclavable bottle and accessories along with each centrifuge	4 sets of PP autoclavable bottle with lid and accessories along with each centrifuge.(total 3X4sets = 12 sets of PP bottles)
1.4	7.1. Should be supplied with two additional rotor	This point shall be deleted
XIII	**Deep Freezer Low Temperature**	
1	Specific revision in the datasheet	
	NOTE : Vertical Type – 250 L capacity -1 No (Quantity Reduced)	

	Horizontal Type – 425 L capacity - Qty is same as 3 Nos	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	**3.21. QUANTITY – 7 Nos**	**QUANTITY – 250 L – Vertical - 1 No,- (Reduced from 2 Nos to 1 No)**
1.2	9.0. Documents 9.1. IOQ protocol	Changed as IQ,OQ,PQ protocol to be provided and PQ schedule for Deep free as follows PQ to be done for 72 Hrs with empty chamber and 72 hrs with loaded chamber
XIV	**Deep Freezer (Low) (Horizontal)**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	5.2. Auto defrost to be provided	This point shall deleted
1.2	5.13. Self-closing door (Automatic) shall be provided.	This point shall deleted
1.3	3.19. Char Recorder – To be provided	Chart Recorder –Inbuilt Chart recorder to be provided.
1.4	3.21. Quantity – 7 Nos	**Quantity – 3 Nos. Capacity – 425 L (Horizontal Type)**
1.5	9.0. Documents 9.1. IOQ protocol	Changed as IQ,OQ,PQ protocol to be provided and PQ scheduled as follows PQ to be done for 72 Hrs with empty chamber and 72 hrs with loaded chamber
XVI	**GMP Refrigerator**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1.	1.1. Q1RFR -01 – 300 L – QTY -1 No	Equipment Not required
1.2	2.14. Quantity – 5 Nos	**Quantity – 7 Nos.** **300 L capacity – 3 Nos.** **600 - 800 L Capacity – 1 No (Hib) with electrical socket inside the chamber (preferably at lower chamber)** **800-1100 L Capacity – 3 Nos**
1.3	3.Material of Construction 3.1. Interior – SS 304 3.2. Shelves - Adjustable, Perforated, SS304	 3.1- GMP Compliant 3.2 - Adjustable, Perforated GMP Compliant Material
1.4	3.4 Gaskets, seals, o-rings - Food Grade/ nontoxic material	 Gaskets – Silicon. seals, o-rings - Food Grade/ nontoxic material
1.5	4.7. Interface port RS 232 to transfer data to be provided.	Interface port RS 232/USB to transfer data to be provided.
1.6	Additional Point	**600 - 800 L Capacity – 1 No (Hib) with electrical socket inside the chamber (preferably at lower chamber)**
1.7	8.1. IOQ documents.	Changed as IQ,OQ,PQ protocol to be provided and PQ scheduled as follows PQ to be done for 72 Hrs with empty chamber and 72 hrs with loaded chamber

XVII	GAS Chromatography	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.2. Operating Tem Range - Ambient + 4 to 450	Operating Tem Range - Ambient + 10 to 450
1.2	3.7. Minimum number of cappilary columns – 3 Nos	Minimum number of cappilary columns - 6 Nos
1.3	3.15. Minimum detected quantity - 1.5 pgC/s (dodecane)	Minimum detected quantity - 1.5 pgC/s dodecane or 1.4 pgC/s tridecane
1.4	**Auto sampler Details (for QC)** 3.21 – Type - Fully automated liquid auto injector/auto sampler	3.21 – Type - Fully automated liquid auto sampler
1.5	3.33. Colum Dimension with size: l = 30 m, Ø = 0.53 mm;6 per cent polycyanolpropylphenyl siloxane and 94 per cent of polydimethylsiloxane provided	This point shall be deleted
1.6	3.34. Colum dimensions l = 30 m, Ø = 0.25 mm Colum material Fused Silica ,Stationary phase: macrogol 20 000 R (film thickness 0.25 µm).	This point shall be deleted
1.7	Other Accessories 3.39. Hamilton manual syringe provided	1 No of 10µl Hamilton manual syringe to be provided
1.8	3.40. He,H2,N2& Air gas Cylinder (1 No .each)	He,H2,N2& Air gas Cylinder (1 No .each)to be provided for each equipment
1.9	4.0 MOC 4.1. Body - Stainlee steel corrosion resistant	Corrosion resistant GMP compliant Material
1.10	5.0. Specific Equipment requirement 5.1. Printer port along with compatible printer provided	5.1. Printer port along with compatible laser jet printer provided
1.11	5.4. New addition	Suitable PC to be provided. Preferred make: DELL or HP .GC Software compatible
1.12	5.5. New addition	Sealer and De Sealer to be provided for GC vials. 100 Nos of GC Vials to be provided
1.13	9.2. IOQ document	IQ,OQ,PQ documents to be provided
XIX	**INCUBATOR**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
	Note: 200 L – 3 Nos – Not required. Only 700 – 1000 L capacity required – 6 Nos	
1.1	1.1.Q1F –INC 02-03 – Volume - 200 -300 L	Equipment Not Required
1.2	1.2 – F4 INC – 02-07 – Volume - 800 -1000 L	1.2 – F4 INC – 02-07 – Volume - 700 - 1000 L
1.3	1.3 – B1 INC 02 – Volume 200 L	Equipment Not Required
1.4	2.9.Display Unit - LCD	Display Unit – LCD/LED/TFT
1.5	4.4. RS-232 Computer Interface allows remote data logging and monitoring of the system	RS-232/Ethernet/RS422/USB Type or Better
1.6	4.5. The heat given off by the unit must be stated (inside the room).	This point shall be Deleted

1.7	8.1. IOQ Documents	Changed as IQ,OQ,PQ protocol to be provided and PQ scheduled as follows PQ to be done for 72 Hrs with empty chamber and 72 hrs with loaded chamber
XX	**INSPISSATOR**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.7. Number of trays -3 or more adjustable and perforated SS316L trays	Vendor to Specify
1.2	3.8. Inspissating Capacity - 450 bottles in single layer	160 Universal Containers
1.3	3.9. Water Heaters - Two water heaters of about 1.5 kw each shall be provided	Water heaters of about 1.4 kw shall be provided
1.4	Spare Heaters - Two spare heaters shall be provided additionally	Spare Heaters - One spare heater shall be provided additionally
1.5	4.0. Material of Construction 4.1. External body Construction - Built of rust free stainless steel sheet with heavy duty roller wheels	External body Construction – cGMP Compliant
1.6	4.3. Inner Door - Safety transparent door and closed system,Alarming system included.	This Point shall be deleted
1.7	4.4. Outer Door - Fully insulated SS door with lock and handle	This Point shall be deleted
1.8	4.6. Gaskets, seals, O-ring - Food Grade/ nontoxic material like neoprene or better.Use of Asbestos is prohibited	This Point shall be deleted
1.9	4.8. Validation - Validation port shall be provided.	This Point shall be deleted
1.10	5.6. It shall have forced air circulation to achieve uniformity of conditions.	This Point shall be deleted
1.11	5.9. It should have heavy duty roller wheels for stability and easy repositioning of inspissator	This Point shall be deleted
1.12	5.10. Alarm : (Visual - Audio) for temperature deviation	Alarm : Visual for temperature deviation
1.13	8.3. Doors interlocking alarm (visual/ audio)	This Point shall be deleted
XXI - a	**Inverted Fluorescence Microscope**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.2. Type - Fluorescence microscope (Binocular)	Type - Fluorescence microscope (Trinocular)
1.2	3.5. Eye pieces (F.O.V) – 10 X	Eye pieces (F.O.V) – 10 X, F.O.V – Min 22 mm
1.3	3.7. Condensers - Working Distance:72 to 80 mm; Universal condenser with at least 4 position turret to accommodate various phase/ DIC rings.	Working Distance: 72 to 80 mm; Universal condenser with at least 6 position turret to accommodate various phase/ DIC rings.
1.4	3.11. Contrast methods - Bright field,phase contrast	Contrast methods - Bright field, phase contrast, Fluorscence
1.5	3.12 Fluorescence light source - Halogen lamp, Mercury lamp (100W)	Light source – Bright field ,Phase contrast- LED, Fluorescence – Metal alloy (preferably Mercury) Lamp (100W)
1.6	3.16. PC and Monitor - System to include PC suiting the application.The system should include high end PC for all the above applications.PC configuration should be capable of operating above mentioned software.	PC and Monitor - System to include PC suiting the application.The system should include high end PC for all the above applications.PC configuration should be capable of operating above mentioned software

		Preferred Make – HP ,DELL,LENOVO
1.7	3.17. Camera - Colour and monochromatic cooled camera to be attached on the Microscope. minimum 5 megapixel	Colour Camera with 5 Megapixel Suitable for Fluorescence,(USP 3 Interface – Vendor to specify) - to be attached on the microscope
1.8	5.10 - Additional Point	Fine focus step size shall be at 1 micron increment
1.9	5.4. Stage and Nose piece movement shall be motorized	This point shall be Deleted
1.10	5.6. Condenser: Bright field, Abbe N.A. 1.25 with iris diaphragm and swing out filter holder which shall be moved through rack pinion. The condenser unit to incorporate high efficiency optical system for optimum utilization of light from low to high magnification.	This point shall be Deleted
XXI - b	**Upright Microscope**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.2. Type - Binocular compound microscope with camera provision	Type - Trinocular
1.2	5.3. Nose piece position should be reversed with knurled grip for easy operation. Should features smooth operation with positive click stops.	Minimum 4 Nose piece position should be reversed with knurled grip for easy operation. Should features smooth operation with positive click stops.
1.3	5.9. Holders: 35mm diameter petri dish holder, universal holder, glass slide ssholder, Haemocytometer holder.	This Point shall be Deleted
1.4	5.14 – New addition	Suitable 5 Mega Pixel colour Camera with High sensitivity
XXI - c	**Inverted Microscope**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.2. Type - Inverted microscope (Binocular)	Inverted microscope (Trinocular)
1.2	3.5. Eye pieces (F.O.V) – 10 X	Eye pieces (F.O.V) – 10 X, F.O.V – Min 22 mm
1.3	5.3. The following specification should be provided : a) Illumination light - white LED/ Halogen. c) Holders: Petri Dish Holder, Universal Holder, Terasaki Holder ,Slide Glass Holder, Hemocytometer	 LED/ Halogen Universal Holder
1.4.	5.9. Provision for epi fluorscence attachment should be provided.	This Point Shall be Deleted
XXII	**Magnetic Stirrer with Heating**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	2.1. F4 –MGH-02 -To hold 1X20 L glass bottle/ unit of dia 300 mm	Additional provision of Tray or Customized Tray size to hold 300 mm dia bottle Shall be considered
1.2	3.5. Stirring Speed - 0-1000 RPM for 20 L	Stirring Speed – 50 -1000 RPM for 20 L
1.3	4.1. Top Plate - SS 304; Flat surface	GMP Compliant material; Flat surface
XXIV	**Magnetic Stirrer**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment

1.1	F4-MGS 02-03 - to hold 1X15 & 1x5 L glass bottle/ unit of dia 300 mm	Suitable to hold 1X15 -**1 No** & 1x5 L glass bottle – **1** No
1.2	R1-MGS 02-04 - to hold 1X20 L glass bottle/ unit of dia 300 mm	Suitable to hold 1X20 L glass bottle – **15** Nos
1.3	B1-MGS 02-12- to hold 1X50 L glass bottle/ Carboy unit of dia 400 mm	Removed
1.4	3.5. Stirring speed - 0-1000 RPM for 20 L; 100-1500 RPM for 5 L	Stirring speed – for 400 mm Dia (50L) – 0 - 600 rpm, for 5 L – 100 -1000 rpm
1.5	4.1. Top Plate - SS 304; Flat surface	Top Plate – GMP Compliant material
XXV	**Micro Aerophilic Condition Incubator**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.1.Model – cGMP Incubator	Model – Micro Aerophilic Condition Incubator, Capacity – 150 L – 170 L
1.2	3.5 - Temperature range - 5°C- 50°C	Temperature range - 7°C- 50°C
1.3	3.17 – O2 Range - 1 - 21%	O2 Range - 1 - 20%
1.4	5.4 - 2. Alarm for prolonged door opening	This point shall be Deleted
1.5	5.5. RS-232 Computer Interface allows remote data logging and monitoring of the system	RS-232 / Better Computer Interface allows remote data logging and monitoring of the system
1.6	6.0 Other Requirements 6.3 – New Addition	Gas Cylinders along with Suitable Regulator to be Provided by Vendor along with Equipment. 1.CO2 gas Cylinder with Regulator – 2 Nos 2. N2 gas Cylinder with Regulator – 2 Nos
1.7	9.2. IOQ Documents	Changed as IQ,OQ,PQ protocol to be provided and PQ scheduled as follows PQ to be done for 72 Hrs with empty chamber and 72 hrs with loaded chamber
XXVI	**RT - PCR**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.6. Temperature Ramp Rate - up to 2.5°C/second	
1.2	3.8. Multiplexing capabilities: 2 to 5	Multiplexing capabilities: Min 4
1.3	3.10. Heating/ cooling method - peltier based or rotary format	Heating/ cooling method - Peltier based only
1.4	3.12 Detector - CCD/photodiodes/photomultiplier	Detector – CCD/CMOS / photodiodes / photomultiplier
XXVII	**PH & Conductivity Meter**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.1.Type : Digital,Benchtop Type with Inbuilt Printer	Type : Digital,Benchtop Type with External printer
XXVIII	**PH Meter**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment

1.1	3.1.Type : Digital, Benchtop Type with Inbuilt Printer	Type : Digital, Benchtop Type with External printer
1.2	New Addition	Protection for the electrode (If glass provided) required
XXIX	**Refrigerated Shaker Incubator**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.4. Ambient +5 °C to 60 °C and should CFC/HCFC free (cGMP compliant)	3.4. 15 °C to 60 °C and should CFC/HCFC free (cGMP compliant)
1.2	3.12. 2 Ltrs. X 6 No of Conical flask to accommodate	2 Ltrs. X 6 No of Conical flask to accommodate
1.3	3.20. Operating Log Management -LAN :Factory Option PC and optional himac Log Manager Supporting GLP/GMP	This Point shall be Deleted
1.4	3.21. Illumination - illumination start automatically only after door opening.	This Point shall be Deleted
1.5	3.29. Controls a) Records can displayed on the front panel, printed, or transferred to a PC via USB	a) Records can be printed, or transferred to a PC via USB
1.6	10.2. IOQ Protocol	IQ,OQ,PQ Protocol Required
1.7	10.4. Operation and maintenance manuals shall be provided along with IQ and OQ documents during installation at site.	Operation and maintenance manuals shall be provided along with IQ,OQ and PQ documents during installation at site.
XXX	**Roller Culture Apparatus**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.3. Number of Bottle Positions - 88	Number of Bottle Positions - 86
1.2	3.6. Unit Height and Width - Height and Width shall not be more than 2 meters and 1.2 meters respectively	Unit Height and Width - Height and Width shall not be more than 2 meters and 1.2 meters respectively, Pls.Note: Vendor should ensure that the equipment shall be taken to the intended location for installation without altering the modular panels and doors of the lab area. Equipment shall be dismantled and taken inside the area if required.
1.3	3.15. Power supply - 240 VAC, 50/60Hz, 20 watts or Vendor to specify	Power supply – 240 VAC, 50/60Hz ,To be compatible with Standard Indian Power supply socket
1.4	3.16.Quantity – 4 Nos	Quantity – 8 Nos
1.5	5.9.b) It should provide a minimum of 24 hours of auxiliary power.	It should provide a minimum of 18 hours of auxiliary power
1.6	5.10. c) Alarm should be visual (flashing LEDs), & audible (loud buzzer)	Alarm should be visual (flashing LED/LCD), & audible (loud buzzer)
1.7	9.2. Vendor should provide warranty for Minimum two years from the date of supply.	Vendor should provide warranty for Minimum One year from the date of Installation
XXXI	**Shaker Incubator**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment

1.1	3.4. Temperature Range -Ambient +5 °C to 60 °C and should CFC/HCFC free (cGMP compliant).	Temperature Range -Ambient +5 °C to 60 °C
1.2	3.8. Shaking Range - 25 to 300 RPM	Shaking Range - 50 to 300 RPM
1.3	3.12. Maximum capacity - 2 Ltrs. X 6 No of Conical flask to accommodate	Maximum capacity - 2 Ltrs. X 4 No of Conical flask to accommodate
1.4	3.13. Shelves - Adjustable height shelf for static incubation and storage purpose	Shelves - Removable shelf for static incubation and storage purpose
1.5	3.14 – Timer - From 1 to 99.9 Hrs	Timer - From 1 to 99.9 Hrs for Speed (Shaking)
1.6	3.16 – Programmability - Minimum 5 programme and should have power failure restart mode (The shaker should restart in the last set Temperature and RPM after power failure).	Programmability - Minimum 4 programme and should have power failure restart mode (The shaker should restart in the last set Temperature and RPM after power failure).
1.7	3.17. Type of shaking - Orbital	Type of shaking – 20mm – 50 mm
1.8	3.25. Quantity – 1 No	Quantity – 2 Nos
1.9	3.28. b)Samples can be viewed on from the front panel	b)Samples can be viewed on from the front / Top panel
1.10	5.6. Equipment should be easily movable (caster & wheel lock system)	This point shall be Deleted
1.11	10.2 IOQ Protocol	IQ,OQ,PQ Protocol Required
1.12	10.4. Operation and maintenance manuals shall be provided along with IQ and OQ documents during installation at site.	Operation and maintenance manuals shall be provided along with IQ,OQ and PQ documents during installation at site.
XXXII	**Spectrophotometer UV with CPU**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	NOTE : **TOTAL QUANTITY – 3 Nos**	
1.2	3.10. Wavelength length scanning speed - 2nm to 3000nm per minute	Wavelength length scanning speed – 100 nm to 3000 nm per minute
1.3	6. PC & Printer Requirement – Vendor to specify	PC Make preferred – HP,DELL, LENOVO.with high end specs and also should be compatible for **Spectrophotometer UV software.** **Printer – HP** Laser jet or Ink jet printers
XXXIV	**Thermohygrometer**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.10. Quantity – 28 Nos	Quantity – 60 Nos
XXXV	**Ultra Sonication bath**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.3. Time Range – Vendor to specify	Time Range - 10 to 60 min
1.2	3.4. Temperature Range - Ambient to 65 °C	Temperature Range - 30°C to 73 °C
1.3	3.5. Bath Capacity - 10L or near to its standard	Bath Capacity – **90 L** or near to its standard

1.4	3.6. Ultrasonic frequency - 35 to 45 kHz	Ultrasonic frequency - 35 to 40 kHz
1.5	3.7. Degas/Auto gas - Required	Function Position – Sweep / Normal /Degassing
1.6	3.8. Drain Duct - Required	Drain Duct – SS
XXXVI	**Vacuum Pump**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.3. Noise Level - 50 dB	Noise Level - 70 dB
1.2	3.5. Max Vacuum - min 61 cm (24 Hg)	Max Vacuum – 2 mb
XXXVII	**Potentiometer**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	3.3. Burette Resolution - 1:20000	Burette Resolution - 1:10000
1.1.	3.11. Burette Volume – 10 ml	Burette Volume – 20 ml
XXXVIII	**Water Bath**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
1.1	Capacity – 20 L & 30 L	Capacity – Min 18 L , Min 26 L
1.2	3.10 - Temperature Uniformity - ±0.1 °C	Temperature Uniformity - ±0.2 °C
1.3	5.7. Minimum and Maximum Fill level should be clearly indicated by a marking on the inner surface of the bath.	Minimum Fill level should be clearly indicated by a marking on the inner surface of the bath.
XXXIX	**Weighing Balance**	
1	Specific revision in the datasheet	
	Data sheet point number and excerpt*/description of the specifications*	Point modified as/ comment
	NOTE : **TOTAL QUANTITY REDUCED to 24 Nos (kindly refer the Annexure A for details)**	
1.1	2.2, B1-Hep-WGB 02,03,04 - Capacity 150 Kg – 3 Nos	B1-Hep-WGB 01,02, - Capacity100 g - 150 Kg – **2** Nos
1.2	2.3. B1-Hep-WGB 05 – Capacity 15 Kg – 1 No	B1-Hep-WGB 05 – Capacity 15 Kg – **2** Nos
1.3	2.5. B1-Hep-WGB 07 – Capacity 410 Kg	B1-Hep-WGB 07 – Capacity 410 **g**
1.4	2.2. Equip ID -B1-Hep-WGB 02,03,04 -150 Kg -3 Nos	Equip ID -B1-Hep-WGB 02,03,04 -150 Kg **-2** Nos
1.5	2.6. F4-WGB 01,02,03 – Capacity 1g – 600g-3 Nos	F4-WGB 01,02 - 40 mg - 1000 g – 2 Nos
1.6	2.7. F4-WGB 04 – Capacity 10g – 10 Kg – 1 No	F4-WGB 04 – 10 mg- 220g- 1 No
1.7	3.6. Calibration - External, internal calibration is required	Calibration -Internal calibration is required for the balance having capacity up to1000g (1 Kg) . For other high capacity balances External calibration is required

1.8	3.8. Operational Temperature - (-5 °C) to 50 °C (system shall be suitable)	Operational Temperature - 5°C to 50 °C (system shall be suitable)
1.9	3.9. Door - Opening from 2 sides and top sides	Door - Opening from 2 sides and top sides – For Analytical Balances.
1.20	4.1. MOC of Door -= Acrylic (for analytical balances	MOC of Door - Glass
1.21	4.2.MOC of PAN – SS 304	GMP Compliant
1.22	5.3. Standard weights should be provided for the calibration (**E2 Class** - 21 pieces weigh set - 1 no) with certification and traceability	Following Standard weights should be provided for the Calibration with traceability and NABL/OIML certification and with minimum 1 year validity I. E2 – 1 mg to 200 g - **7** Sets II. F1 - 500 g – 3 Nos,1Kg – 3Nos,2Kg-4Nos, 5Kg – 4Nos, 10Kg – 5 Nos.
1.23	5.5. Balance should be capable of counting tarring, totalizing, percentage weighing, toggling between gross/net value.	This Point shall be Deleted
1.24	6.4. Power failure and recovery should be provided, equipment settings should not get disturbed due to power failure.	This Point shall be Deleted
1.25	6.6. Memory function, to keep the last 20 weight in memory.	This Point shall be Deleted
1.26	9.2. IOQ Protocol to be provided	IQ,OQ & PQ to be provided
1.27	New Addition -	Printers Required – **19 Nos**

For HLL Biotech Limited

19/12/17.

Authorized Signatory

HLL Biotech Limited (A Government of India Enterprise) Integrated Vaccine Complex Survey No. 192 & 195, Melaripakkam Village (PO), Thirukalukundram (TK), Kancheepuram(D), Chengalpattu-603003. (Subsidiary of HLL Lifecare Limited)

Annexure-A

nne pharmaplan®

			PRE BID MOM - WEIGHING BALANCE					
S.No	Equipment ID	Capacity (Min - Max)	Quantity (Nos)	Readability	STANDARD	MOC	PAN SIZE	Remarks
2.1	Q1F-WGB 01	10mg - 220 g	1	0.01mg	USP	Vendor To specify	As per Standard	Printer Required -1 No
2.2	B1-Hep-WGB 02,03,04	100g - 150 Kg	2	10g	USP	SS	As per Standard	Printer Required -2 Nos
2.3	B1-Hep-WGB 05	10g - 15Kg	2	0.5gram	USP	SS	As per Standard	Printer Required -2 Nos
2.4	B1-Hep-WGB 06	40 mg - 1000 g	1	10 mg	USP	GMP compliance	As per Standard	Printer Required -1 No
2.5	B1-Hep-WGB 07	20 mg - 410 g	1	0.05 mg	USP	GMP compliance	As per Standard	Printer Required -1 No
2.6	F4-WGB 01,02	40 mg - 1000 g	2	10 mg	USP	GMP compliance	As per Standard	Printer Required -1 No
2.7	F4-WGB 04	10 mg- 220g	1	0.01mg	USP	GMP compliance	As per Standard	Printer Required -1 No
2.8	R1-WGB 01	40 mg mg to 1000 g	1	10 mg	USP	GMP compliance	As per Standard	Printer Required -1 No
2.9	R1-WGB 02,03,04,05,06	200 g to 40 kg	5	1gram	USP	SS	As per Standard	3 out of 5 is Platform type for this External SS PAN is required. Pan Size 65(L)cm X 45(W) cm.Other 2 Nos are Table type. **1 No** -Printer rquired
2.10	B1-WGB 01,02	10 mg- 220g	2	0.01mg	USP	Vendor To specify	As per Standard	Printer Required-**2**Nos
2.11	B1-WGB 03	**100 g - 10 Kg**	1	0.5gram	USP	SS	As per Standard	Printer Required -1 No
2.12	B1-WGB 03	200g - 40 Kg	4	1gram	USP	SS	As per Standard	Printer Required -**4**Nos
2.13	F1-WGB 02	200 g to 40 kg	1	1gram	USP	SS	As per Standard	Table Top Type, Printer Required - **1 No**

Annexure-1

REVISED LIST OF EQUIPMENT AND EMD

Schedule .No	EQUIPMENT NAME	SPEC/CAP	QTY	EMD (in RS)
1	Vortex mixer		2	2,560.00
2	Table top cooling centrifuge	(1.8ml to 50ml)	1	24,000.00
3	Bag sealing machine		2	9,600.00
4	Deep freezer (Ultra Low)	300Lts	12	77,000.00
		450 Lts	1	8,000.00
5	Hot air oven	250 Lts	1	7,000.00
		450L	4	23,400.00
6	Peristaltic Pump	Flow rate / min: 100 to 3000ml	13	57,200.00
		1000 ml -10000 ml	5	38,000.00
		0-3Lts	10	44,000.00
7	Air sampler		11	88,000.00
8	Apo Trinocular stereomicroscope		1	24,000.00
9	Chiller water bath		1	4,000.00
10	Conductivity Meter	Should be operated at 80^0c	7	25,200.00
11	Cooling centrifuge	6 lts(1.5*4)	1	48,000.00
12	Cooling batch centrifuge	Floor mounted 6L capacity RPM max 10000	3	1,80,000.00
13	Deep freezer (Low)	250Lts	NOT REQUIRED	Removed From the List
14	Deep freezer (Low- Horizontal)	425 Lts	2	21,000.00
15	Egg Incubator	1000 eggs capacity	1	30,000.00
16	GMP Refrigerator	300 L - 3 Nos, 600 - 800 L - 1 No, 800 -1000 L - 3 Nos	7	71,200.00
17	Gas Chromatography		2	1,40,000.00
18	HPLC system		NOT REQUIRED	Removed From the List
19	Incubator	800-1000L	6	1,44,000.00
20	Inspissator		1	14,000.00
21	Inverted fluorescence microscope		1	32,000.00
	Upright Microscope		2	12,000.00
	Inverted Microscope	Inverted	4	24,000.00
22	LN2 Storage Container	-70^0c 180 l vertical	4	51,360.00

Schedule .No	EQUIPMENT NAME	SPEC/CAP	QTY	EMD (in RS)
23	Magnetic stirrer with Hot plate	to hold 20L glass bottle capacity	1	2,000.00
24	Magnetic stirrer	SS, To hold 20L	15	24,000.00
		to hold 5L - 1 No , 15L - 1 No	2	12,000.00
25	Micro Aerophilic condition incubator		2	48,000.00
26	RT -PCR		1	18,000.00
27	pH & Conductivity meter		5	15,000.00
28	PH meter	1 to 14	8	19,200.00
29	Refrigerated Shaker Incubator (vertical)	2Litrs *6 flask	1	16,000.00
30	Roller culture Apparatus		8	2,17,840.00
31	Shaker Incubator	2Litrs *4 flask	2	12,800.00
32	Spectrophotometer UV with CPU	200-1100nm	3	18,000.00
33	Table top centrifuge	1ml	1	36,000.00
34	Thermohygrometer		60	1,680.00
35	ultra sonication bath	90L	1	4,300.00
36	Vaccum pump		1	2,000.00
37	Potentiometer		1	5,000.00
38	Water Bath	10 to 100 °C	2	10,000.00
		26 L	2	10,000.00
39	Weighing Balance - (Semi micro)	10mg - 220 g	4	16,000.00
		20 mg - 410 g	1	8,000.00
		40 mg - 1000 g	4	8,000.00
40	Weighing Balance - (Industrial Scale)	100 g - 10 Kg	1	8,000.00
		10g - 15Kg	2	8,000.00
		200 g to 40 kg	10	8,000.00
		100g - 150 Kg	2	8,000.00