

**Amendment No. 2**

23.10.19

**Sub: Amendment to the Bidding Document****Ref.: Notice Inviting Bid ref. HITES/PCD/NCI-AIIMS/42/19-20 dated 30.08.2019 read with its Amendment No. 1 dated 11.10.19.**

The following changes have been authorised and are being incorporated in the above referred Bidding Document.

**SECTION- VI****LIST OF REQUIREMENTS****Existing:****Part I:**

Sl. no.	Tender ID	Short Description of goods	Quantity	Warranty Period	CAMC period after warranty
8	2019_HLL_31185_8	Mobile Blood Donation Van	01	05 Years	05 Years

**Part II: Required Delivery Schedule:****For Indigenous and/or Imported goods:**

Supply, Installation and Commissioning to be completed within **90 days** from the date of NOA or date of opening of LC or date of approval of layout drawing (if applicable), whichever is later.

**Read As:****Part I:**

Sl. no.	Tender ID	Short Description of goods	Quantity	Warranty Period	CAMC period after warranty
8	2019_HLL_31185_8	Mobile Blood Donation Van	01	<b>03 Years for Mobile Van &amp; 05 Years for Equipment &amp; Fabrication</b>	<b>05 Years for Mobile Van &amp; 05 Years for Equipment &amp; Fabrication</b>

**Part II: Required Delivery Schedule:****For Indigenous and/or Imported goods:****i) For tenders at Sl. no. 01 to 07 (i.e. Tender ID: 2019\_HLL\_31185\_1 to 2019\_HLL\_31185\_7)**

**Project build-out**, supply and installation to be completed within **120 days** from the date of NOA or date of opening of LC or date of approval of layout drawing (if applicable), whichever is later.

**ii) For tender at Sl. no. 08 (i.e. Tender ID: 2019\_HLL\_31185\_8)**

Supply, Installation and Commissioning to be completed within **180 days** from the date of NOA or date of opening of LC or date of approval of layout drawing (if applicable), whichever is later.

**SECTION – VII****TECHNICAL SPECIFICATION AND GENERAL POINTS****A. TECHNICAL SPECIFICATION:****Tender ID: 2019\_HLL\_31185\_1 (Blood Bank Equipment – Package 1)****Blood Bank Equipment – Package 1****Item No. 4 Portable Blood Donor Couch**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 45; Para 2	Not more than 24" W X 46" L X 8" H	Not more than 24" W X <b>72"</b> L X 8" H

**Item No. 7 Water Bath**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 46; Para 1.1	Should be rectangular & volume within 20-25 liters	Should be rectangular & volume within <b>5-10</b> liters

**Added BOQ for Blood Bank Equipment – Package 1:**

Sl. No	Items	Description	Quantity (nos.)
1	Weighing Scale with Height Measurement for Blood Donors	As per technical specification	2
2	Tube Stripper	As per technical specification	2
3	Blood & Component Balance	As per technical specification	1
4	Portable Blood Donor Couch	As per technical specification	4
5	Domestic Refrigerator	As per technical specification	3
6	Digital pH Meter	As per technical specification	2
7	Water Bath	As per technical specification	4
8	Multichannel Pipette	As per technical specification	1
9	Glucometer	As per technical specification	3
10	BP apparatus	As per technical specification	15
11	Oxygen cylinder and nasal mask	As per technical specification	2
12	Tourniquets	As per technical specification	20
13	X-Ray View box	As per technical specification	3
14	Hand lens	As per technical specification	1
15	Sample racks and trays	As per technical specification	20
16	Neubauer's chamber	As per technical specification	2
17	Naegotte's chamber	As per technical specification	2
18	Hemoglobinometer	As per technical specification	3
19	Transport bags	As per technical specification	20
20	Trolleys for transportation	As per technical specification	5
21	Transport boxes	As per technical specification	5

**Annexure – 2 C (at Page no. 50)****Existing:**

<b>Essential consumables to be quoted (for bid ranking &amp; fixing of year wise rates)</b>		
Sl. No	Name of the consumable	Quantity (approximate quantity over 10 years being factored for bid ranking)
1	Slides	500000
2	Tubes (Glass plain) (12*100 mm)	1000000
3	Fistula needles 16" gauge	50000
4	Pasteur pipettes with rubber teats	10000
5	Beakers (40-100 ml)	5000
6	Conical flasks (100ml)	2
7	Conical flasks (5000 ml)	2
8	Measuring cylinder (glass) (100-1000 ml)	2
9	Lab thermometers	100

10	Micro tips (10-1000 µl)	1000000
11	Micro tips (1 µl)	500000
12	Alcohol swabs	500000
13	Betadine swabs	500000
	<p><b>Important Note:</b> Any reagent, consumables &amp; Essential consumables required for performing tests, calibration, quality control, cleaning the lab system, as per quantities detailed in column "A" of Annexure-2A, and items quoted in Annexure-2B &amp; 2C if not quoted shall be provided free of cost by the bidder during the validity of the contract.</p>	

**Amended as:****Annexure – 2 C**

<b>Essential consumables to be quoted (for bid ranking &amp; fixing of year wise rates)</b>		
Sl.No	Name of the consumable	Quantity (approximate quantity over 10 years being factored for bid ranking)
1	Slides	500000
2	Tubes (Glass plain) (12*100 mm)	1000000
3	Fistula needles 16" gauge	<b>5000</b>
4	Pasteur pipettes with rubber teats	10000
5	<b>Beakers (100 ml)</b>	<b>500</b>
6	Conical flasks (100ml)	<b>200</b>
7	Conical flasks (5000 ml)	<b>50</b>
8	<b>Measuring cylinder (glass) (100 ml)</b>	<b>100</b>
9	<b>Measuring cylinder (glass) (500 ml)</b>	<b>100</b>
10	<b>Measuring cylinder (glass) (1000 ml)</b>	<b>100</b>
11	Lab thermometers	100
12	Micro tips (10-1000 µl)	1000000
13	Micro tips (1 µl)	500000
14	Alcohol swabs	500000
15	Betadine swabs	500000
	<p><b>Important Note:</b> Any reagent, consumables &amp; Essential consumables required for performing tests, calibration, quality control, cleaning the lab system, as per quantities detailed in column "A" of Annexure-2A, and items quoted in Annexure-2B &amp; 2C if not quoted shall be provided free of cost by the bidder during the validity of the contract.</p>	

**Item no. 2 (Tender ID: 2019 HLL 31185 2)****Blood Bank Equipment – Package 2****I. Scope of Work**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 52; V. Penalties Para 3	Whenever there is breakdown the firm will carry out the repair within 24 hours of receipt of such information (either by telephone or by any other means).	Whenever there is breakdown, the firm will <b>attend</b> within 24 hours of receipt of such information (either by telephone or by any other means).

**Item No. 2: Blood Donor Couch**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 53; Para 3	Should have automatic adjustment of arm-rest to adjust seat width and support for comfortable phlebotomy. Two adjustable arm-rest of length more than 50 cm and width of 15 cm to set the arm position to the donor's comfort.	Should have <b>automatic/manual</b> adjustment of arm-rest to adjust seat width and support for comfortable phlebotomy. Two adjustable arm-rest of length more than 50 cm and width of 15 cm to set the arm position to the donor's comfort.
Page 54; Para 13	Should have central locking with locking lever. Couch should be movable with wheels with locking facility.	<b>Couch should be movable with wheels with locking facility.</b>

**Item No. 3: Blood Bank Refrigerator - 400 L**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 55; Para 8	Independent safety thermostat to avoid negative temperatures.	<b>Safety thermostat to avoid negative temperatures.</b>

**Item No. 4: Platelet Agitator cum Incubator (Upright Model) (150-200 random donor platelet units)**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 55; Para 4	Capacity: 150-200 random donor platelet units	Capacity: 150-200 random donor platelet units. <b>Bidder may propose</b>

		<b>suitable alternative number of equipment to commensurate the said workload.</b>
Page 55; Para 5.c	Must have at least 2 temperature sensors with digital temperature (LED) display with 0.1 °C graduation.	Must have at least <b>1-2</b> temperature sensors with digital temperature (LED) display with <b>0.1-0.5 °C</b> graduation.

**Item No. 5: Platelet Agitator cum Incubator (Upright Model) (48 random donor platelet units)**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 57; Para 5.c	Must have at least 2 temperature sensors with digital temperature (LED) display with 0.1 °C graduation.	Must have at least <b>1-2</b> temperature sensors with digital temperature (LED) display with <b>0.1-0.5 °C</b> graduation.

**Item No. 6: Deep Freezer (-40°C) 400 L**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 58; Para 19	It must have automated defrost or a heating device on frame to avoid condensation	It must have <b>automated/manual</b> defrost or a heating device on frame to avoid condensation.

**Item No. 7: Deep Freezer (-80°C) 400 L**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 59; Para 7	Automatic closing of front door below a opening angle of 90°	<b>Automatic/manual</b> closing of front door below opening angle of 90°
Page 59; Para 13	System should have washable condenser filter to maintain peak cooling efficiency. System should have automatic voltage boost compensations for low voltage conditions.	<b>System should have automatic voltage boost compensations for low voltage conditions.</b>

**Item No. 8: Dielectric Tube sealer (Bench top)**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 60; Para 7	Should have an option of extended portable hand unit with coaxial cable of 1.5-2.0 meter.	<b>Deleted</b>

**Item No. 9: Sterile Connecting Device**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 60; Para 11	Firm will have to supply compatible UPS with minimum half hr backup along with the equipment free of cost.	<b>Deleted</b>

**Item No. 10: Aphaeresis Machine – Type 1**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 61; Para 20 a & b	20. Additional accessories: a. Suitable online UPS for min 1 hr backup with maintenance free batteries b. All consumables required for installation & standardization should be supplied	20. Additional accessories: a. <b>Deleted</b> b. All consumables required for installation & standardization should be supplied

**Item No. 11: Aphaeresis Machine – Type 2**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 62; Para 20 a	20. Additional accessories : a. Suitable online UPS for min 1 hr backup with maintenance free batteries	20. Additional accessories : <b>a. Deleted</b>

**Item No. 14: Electronic Double Pan Component Balance**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 63; Para 13	Equipment should have USFDA or European CE certification.	<b>Deleted</b>

**Item No. 15: Plasma thawing bath**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 64; Para 14	UPS of suitable rating should be supplied.	<b>Deleted</b>

**Item No. 17:****Existing Name:** Refrigerated Blood Bag Centrifuge - **12 bags****Amended As:** Refrigerated Blood Bag Centrifuge

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 65; Para 1	Design: Stable, sturdy all-steel design with stainless steel rotor chamber. Easy to clean / corrosion resistant paintings & provision of both drain and condense water collection.	<b>Design: Stable, sturdy all-steel design with stainless steel rotor chamber. Easy to clean / corrosion resistant paintings.</b>
Page 66; Para 4	Max. volume: Should be able to accommodate twelve 350 ml and 450 ml single, double, triple, quadruple, quintuple blood bags with SAGM bag and empty satellite bags with 'In Line filter system'.	Max. volume: Should be able to accommodate <b>twelve or sixteen</b> 350 ml and 450 ml single, double, triple, quadruple, quintuple blood bags with SAGM bag and empty satellite bags with 'In Line filter system'.
Page 66; Para 14	Warm air Outlet: From sides and rear of the Machine	Warm air Outlet: From sides and <b>rear/front</b> of the Machine
Page 66; Para 15.2	Eight (6) buckets (one bucket for 2 blood bags) for centrifuging 12 units of bags.	<b>Six or Eight (6 or 8)</b> buckets (one bucket for 2 blood bags) for centrifuging <b>12 or 16</b> units of bags.
Page 67; Para 16	Noise Level should be less than 60 dB	Noise Level should be less than <b>70 dB</b>

**Item No. 19: Table Top Centrifuge**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 67; Para 1	Must perform in wide temperature range (0-45°C) and in humidity of up to 90%.	<b>Deleted</b>

**Item No. 21: Automated 5-part blood cell counter**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 69; Para 5	Should have an Auto Sampler with capacity of at least 100 tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes.	Should have an Auto Sampler with capacity of at least <b>20</b> tubes at a given time. A single sample rack should be able to accommodate tubes of different sizes.
Page 69; Para 6	Should have throughput of at least 100 samples per hour in CBC and CBC / Diff. mode & 70 samples per hour in Retics mode.	Should have throughput of at least <b>50</b> samples per hour in CBC and CBC / Diff. mode & <b>30</b> samples per hour in Retics mode.



Page 69; Para 8	Dual differential count for WBC	<b>Deleted</b>
Page 70; Para 25	UPS required to run the instrument should be provided free of cost by the firm.	<b>Deleted</b>

**Item No. 22: Coagulation Analyzer**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 70; Para 13	Must have Battery backup for temperature recordings and alarms which is especially needed during power failure/fluctuations.	<b>Deleted</b>

**Item No. 25: Reagent Refrigerator**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 72; Para 8	Independent safety thermostat to avoid negative temperatures.	<b>Safety thermostat to avoid negative temperatures.</b>

**Item No. 27: Bacterial Detection System**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 74; Para 13	The culture bottles should be made of unbreakable plastic with long neck and should be fully compatible with holders without the need for a special adapter.	The culture bottles should be made of <b>unbreakable plastic / Glass</b> with long neck and should be fully compatible with holders without the need for a special adapter.

**Item No. 28: Blast Freezer**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 74, Para 2	Minimum capacity of 24 bags of 250 ml liters.	<b>Minimum capacity of 24 bags of 250 ml.</b>

**Added BOQ for Blood Bank Equipment – Package 2:**

<b>Sl. No</b>	<b>Items</b>	<b>Description</b>	<b>Quantity (nos.)</b>
1	Blood Collection Monitor	As per technical specification	8
2	Blood Donor Couch	As per technical specification	15

<b>Sl. No</b>	<b>Items</b>	<b>Description</b>	<b>Quantity (nos.)</b>
3	Blood Bank Refrigerator - 400 L	As per technical specification	3
4	Platelet Agitator cum Incubator (Upright Model) (150-200 random donor platelet units)	As per technical specification	1
5	Platelet Agitator cum Incubator (Upright Model) (48 random donor platelet units)	As per technical specification	2
6	Deep Freezer (-40° C) 400 L	As per technical specification	3
7	Deep Freezer (-80° C) 400 L	As per technical specification	2
8	Dielectric Tube sealer (Bench top)	As per technical specification	2
9	Sterile Connecting Device	As per technical specification	2
10	Apheresis Machine - Type 1	As per technical specification	3
11	Apheresis Machine - Type 2	As per technical specification	4
12	Dielectric Tube Sealer - Handheld	As per technical specification	2
13	Manual Plasma Extractor	As per technical specification	10
14	Electronic Double Pan Component Balance	As per technical specification	2
15	Plasma thawing bath	As per technical specification	1
16	Haemostatic Analyzer	As per technical specification	1
17	Refrigerated Blood Bag Centrifuge	As per technical specification	2
18	Bio-Safety Cabinet	As per technical specification	3
19	Table Top Centrifuge	As per technical specification	5
20	Cooling Table	As per technical specification	3
21	Automated 5-part blood cell counter	As per technical specification	1
22	Coagulation Analyzer	As per technical specification	1
23	Wireless Data Loggers	As per technical specification	18
24	Lab Autoclave	As per technical specification	1
25	Reagent Refrigerator	As per technical specification	3
26	Aggregometer	As per technical specification	1
27	Bacterial Detection System	As per technical specification	1
28	Blast Freezer	As per technical specification	1
29	Electronic Analytical Balance	As per technical specification	1
30	Walk-in modular cold room	As per technical specification	1
31	Binocular Microscope	As per technical specification	1
32	Micro pipette set (Manual adjustable)	As per technical specification	4
33	Whole Blood Automation Device	As per technical specification	2
34	Blood Bank Software	As per technical specification	1
35	Turnkey as per Annexure-3 (with its amendments, if any)	As per Annexure-3 (with its amendments, if any)	Lumpsum

**Annexure – 2 A (at Page no. 85):****Existing Table:**

<b>REAGENT COST (for bid ranking &amp; fixing of year wise rates)</b>						
		<b>A</b>	<b>Reagent Pack Details</b>			
	List of Parameters	No. of tests (approximate load over 10 years being factored for bid ranking)	Reagent Pack - make/brand	Pack Catalogue No.	No. of tests/pack	Total No. of <u>Reagent packs</u> to be used for No. of tests in Column "A"
<b>1</b>	<b>5-Part Hematology</b>					
	CBC	7,30,000				
	CBC + Diff	7,30,000				
	CBC + Diff + Retic	3,65,000				

**Amended as:**

<b>REAGENT COST (for bid ranking &amp; fixing of year wise rates)</b>						
		<b>A</b>	<b>Reagent Pack Details</b>			
	List of Parameters	No. of tests (approximate load over 10 years being factored for bid ranking)	Reagent Pack - make/brand	Pack Catalogue No.	No. of tests/pack	Total No. of <u>Reagent packs</u> to be used for No. of tests in column "A"
<b>1</b>	<b>5-Part Hematology</b>					
	CBC	<b>1,50,000</b>				
	CBC + Diff	<b>1,50,000</b>				
	CBC + Diff + Retic	<b>75,000</b>				

**Annexure - 2 C (at Page no. 86)****Existing Table:**

<b>Essential consumables to be quoted (for bid ranking &amp; fixing of year wise rates)</b>		
		<b>H</b>
Sl.No	Name of the consumable	Quantity (approximate quantity over 10 years being factored for bid ranking only)
1	Triple Blood Bags 350 ml	100000
2	Quadruple Blood Bags 450 ml	100000
3	Top & bottom Blood Bags 450 ml with Integral filters	200000
4	Transfer bags 300 ml with Spike Ports	50000

5	Platelet Filter	100000
6	Apheresis Kits platelets	50000
7	Apheresis Kits stem cell harvest / All other procedures	20000
8	RBC filter	100000
<p><b>Important Note:</b> Any reagent, consumables &amp; Essential consumables required for performing tests, calibration, quality control, cleaning the lab system, as per quantities detailed in column "A" of Annexure-2A, and items quoted in Annexure-2B &amp; 2C if not quoted shall be provided free of cost by the bidder during the validity of the contract.</p>		

**Amended as:**

<b>Essential consumables to be quoted (for bid ranking &amp; fixing of year wise rates)</b>		
		<b>H</b>
Sl.No	Name of the consumable	Quantity (approximate quantity over 10 years being factored for bid ranking only)
1	Triple Blood Bags 350 ml	100000
2	Quadruple Blood Bags 450 ml	100000
3	Top & bottom Blood Bags 450ml with Integral filters	200000
4	Transfer bags 300 ml with Spike Ports	50000
5	Platelet Filter	<b>10000</b>
6	Apheresis Kits platelets	50000
7	Apheresis Kits stem cell harvest / All other procedures	20000
8	RBC filter	<b>10000</b>
<p><b>Important Note:</b> Any reagent, consumables &amp; Essential consumables required for performing tests, calibration, quality control, cleaning the lab system, as per quantities detailed in column "A" of Annexure-2A, and items quoted in Annexure-2B &amp; 2C if not quoted shall be provided free of cost by the bidder during the validity of the contract.</p>		

**Annexure - 3****Turnkey works under Package-2**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 88 Para 8	Bidder has to install CCTV cameras covering all major areas with recording of 60 days.	Bidder has to install CCTV cameras covering all major areas with recording of 60 days. <b>Required number of cameras for the blood bank: 30 Nos.</b> <b>Specs: Full HD 1020p, Colour and Night vision enabled.</b>

		<b>(Suggested make: Godrej/ Hikvision/ CP Plus)</b>
Page 88 Para 9	Bidder has to install portable PA system (microphones and speakers) in the following area	Bidder has to install portable PA system <b>(microphones - 3 Nos and speakers - 30 Nos)</b> in the following area.
Page 88 Para 10	Bidder has to plan following rooms as per cGMP guidelines. 1. Component Lab 2. NAT Lab 3. TTI Lab (Chemiluminescence Lab)	10. Bidder has to plan following rooms as per cGMP guidelines. 1. Component Lab <b>2. Deleted</b> 3. TTI Lab (Chemiluminescence Lab)
Page 89 Para 14	Bidder has to provide Poster Printer with suitable specification that can print posters for Camp purposes.	Bidder has to provide Poster Printer with suitable specification that can print posters for Camp purposes. <b>(Suggested Makes: Epson/HP/Ricoh)</b>
Page 89 Para 18.v	Furniture - Hermen Miller, Godrej, Featherlite, Wipro	Furniture - Hermen Miller, Godrej, Featherlite, Wipro, <b>Geeken, Durian</b>

### Technical Specification of Consumable items

#### II. Triple Blood Bags (350 ml)

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 100; Para 9.e	The expiry date should be at least 2 years from the date of supply of blood bags to the institute	The expiry date should be at least <b>1 year</b> from the date of supply of blood bags to the institute.
Page 100; Para 12 a	<b>12. Automated component extractor</b> a. To be provided by the manufacturer along with all the required documentations	<b>Deleted</b>
Page 101; Para 13 a	<b>13. Sterile connecting device with consumables</b> a. To be provided by the manufacturer to use filters in a closed system	<b>Deleted</b>

#### IV .Quadruple Blood Bags 450 ml

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 101; Para 9 e	The expiry date should be at least 2 years from the date of supply of blood bags to the institute	The expiry date should be at least <b>1 year</b> from the date of supply of blood bags to the institute.
Page 101; Para 12 a	<b>12. Automated component extractor</b> a. To be provided by the manufacturer along with all the required documentations	<b>Deleted</b>

Page 101; Para 13 a	<b>13. Sterile connecting device with consumables</b> a. To be provided by the manufacturer to use filters in a closed system	<b>Deleted</b>
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#### V. Top & bottom Blood Bags 450 ml with Integral filters

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 102; Para 9 e	The expiry date should be at least 2 years from the date of supply of blood bags to the institute	The expiry date should be at least <b>1 year</b> from the date of supply of blood bags to the institute.
Page 103; Para 12. d	<b>12. Inline filter for RBC</b> d. Should have 500-600 ml capacity transfer bag attached.	<b>12. Inline filter for RBC</b> d. Should have <b>&gt; 400 ml</b> capacity transfer bag attached.
Page 103; Para 13 a	<b>13. Automated component extractor</b> a. To be provided by the manufacturer along with all the required documentations	<b>13. Automated component extractor (2 Nos)</b> a. To be provided by the manufacturer along with all the required documentations.

#### VI. Specification for Leukocyte Filters

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 103; Para a. 5	Should have 500-600 ml capacity transfer bag attached	Should have <b>&gt; 400 ml</b> capacity transfer bag attached.
Page 103; Para a. 6	Sterile connecting device with the cost of consumables/disposables should be provided by the firm to use filters in a closed system. One for each filter.	<b>One wafer for sterile connecting device for each filter must be supplied.</b>
Page 103; Para b.10	Sterile and should have minimum 24 months of shelf life	Sterile and should have minimum <b>12 months</b> of shelf life.
Page 103; Para b.12	Sterile connecting device including the cost of consumables should be provided by the firm. 4-5 per filter to be provided by the firm.	<b>5 wafers for sterile connection per filter to be provided by the firm.</b>

**Item no. 3 (Tender ID: 2019 HLL 31185 3)****Molecular Immuno-Haematology Lab Equipment**  
(on Turnkey basis)

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 105; Para g) (i)	(i) Off-site training: The firm must provide such training for a period of 2 weeks (including travel, local logistics and accommodation etc.) for a total of 6 persons (2 persons/year). Additionally, the Dept. reserves the right to increase or decrease the number of persons who will be sent for training.	(i) Off-site training ( <b>Need based - Optional</b> ) : The firm must provide such training for a period of 2 weeks (including travel, local logistics and accommodation etc.) for a total of 6 persons (2 persons/year). Additionally, the Dept. reserves the right to increase or decrease the number of persons who will be sent for training.

**2. Fully Automated Nucleic Acid Extraction System with compatible Automated Liquid Handler**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 106; Para 3	The system should realize cost effectiveness through automated dispensing of buffers into standard plastic devices instead of using expensive prefilled cartridges.	The system should realize cost effectiveness through automated dispensing of buffers into standard plastic devices <b>or</b> expensive prefilled cartridges.
Page 106; Para 6	The system should capable to do the sample volumes 10 µl – 10 ml and 1-16 samples or better in a batch.	<b>The system should capable to process 1-16 samples or better in a batch</b>
Page 106; Para 8	System should be provided with a compatible automated, bench-top liquid handling platform offering complete enclosure, pipetting volume (1-1000 µl), HEPA filter, UV light, heater, shaker etc. (Make: Hamilton, Beckman Coulter, Promega, PE or equivalent) for smooth integration and workflow automation.	System should be provided with a compatible <b>automated/semi-automated</b> , bench-top liquid handling platform offering complete enclosure, pipetting volume ( <b>up to 1000 µl or better</b> ), HEPA filter, UV light, heater, shaker etc. for smooth integration and workflow automation.

**3. Real Time PCR (1 no)**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 107; Para 1	Dye compatibility - FAM, SYBR Green, VIC, JOE, HEX, TET, TAMRA, ROX, Texas Red, Cy5, and Quasar 705	<b>Dye compatibility - FAM, SYBR Green, VIC, JOE, HEX, TET, TAMRA, ROX, Texas Red, Cy5.</b>

**Item no. 4 (Tender ID: 2019 HLL 31185 4)****Automatic Nucleic Acid Testing System**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 115; Para 4	The platform should be capable to test samples individually.	<b>The platform should test samples (Blood unit) individually.</b>
Page 115; Para 5	System must perform automated nucleic acid target capture or nucleic acid extraction, amplification, and detection all in a single tube to minimize sample handling and any chances of contamination.	System must perform automated nucleic acid target capture or nucleic acid extraction, amplification, and detection all <b>from</b> a single tube to minimize sample handling and any chances of contamination.
Page 115; Para 7	Test procedure must be able to target & amplify two separate regions of HIV-1 genome.	Test procedure must be able to target & amplify <b>one-two</b> separate regions of HIV-1 genome.
Page 115; Para 20	The sensitivity of assay at 95% LOD must be at least: (i) HIV: 50 IU/ml or better (ii) HCV: 8 IU/ml or better (iii) HBV: 5 IU/ml or better	The sensitivity of assay at 95% LOD must be at least: (i) HIV: <b>60</b> IU/ml or better (ii) HCV: 8 IU/ml or better (iii) HBV: 5 IU/ml or better
Page 116; Para 21	The specificity of the tests must be 100%	The specificity of the tests must be <b>&gt; 99 %</b>

**Item no. 5 (Tender ID: 2019 HLL 31185 5)****Fully Automated Random Access Chemiluminescence**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 117, Para 1	The Instrument should be floor/ bench top model with castor wheels with locking	The Instrument should be <b>bench top / floor</b> model with castor wheels with locking facility, Random Access



<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
	facility, Random Access Chemiluminescence based with facility of continuous loading of samples.	Chemiluminescence based with facility of continuous loading of samples.
Page 117, Para 5	The system should have liquid stable ready to use reagents including control, calibrator.	The system should have liquid, stable, ready to use/ <b>lyophilised (only for HIV)</b> reagents including control, calibrator.
Page 117, Para 11	The bidder should also quote separately the running cost of the machine (without any exclusion) and the cost of kits / consumables/ reagents for each quoted test for a period of 5 years.	The bidder should also quote separately the running cost of the machine (without any exclusion) and the cost of kits / consumables/ reagents for each quoted test for a period of <b>10 years</b> .

**Item no. 6 (Tender ID: 2019 HLL 31185 6)**

**Fully Automated Random Access Immuno-Haematology (IH) Platform**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 119; Para 1	It must be a complete automated walk away system. Must be capable of doing blood grouping, cross matching, antibody screening and/or platelet serology in a completely automated manner with latest model.	It must be a complete automated walk away system. Must be capable of doing <b><u>blood grouping (forward and reverse), AHG cross matching, antibody screening, antibody identification, clinically significant antigen phenotyping (Rh, K), weak D testing</u></b> and/ or platelet serology in a completely automated manner with latest model.
Page 119; Para 2	All necessary requirements for installation and proper functioning should be provided by company along with UPS.	All necessary requirements for installation and proper functioning should be provided by company along with UPS. <b>The bidder should also quote separately the running cost of the machine (without any exclusion) and the cost of kits/consumables/reagents for each quoted test for a period of 10 years. This will be considered for bid ranking.</b>
Page 119; Para 7	Should have through-put of 80 or more samples per hour or should be able to do 80 or more Blood Groupings and hundred or more cross matching in one hour.	Should have through-put of <b>40</b> or more samples per hour or should be able to do <b>40 or more</b> Blood Groupings and hundred or more cross matching in one hour.

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 119; Para 8	It must have provision for distinguishing serum from plasma before centrifugation	It must have provision for distinguishing <b>red cell</b> from <b>plasma/serum</b> .

**Annexure – 2 A (at Page no. 120)****Existing Table:**

<b>REAGENT COST (for bid ranking &amp; fixing of year wise rates)</b>						
		<b>A</b>	<b>Reagent Pack Details</b>			
	List of Parameters	No. of tests (approximate load over 10 years being factored for bid ranking)	Reagent Pack - make/ brand	Pack Catalogue No.	No. of tests/ pack	Total No. of Reagent packs to be used for No. of tests in column "A"
<b>1</b>	<b>Blood Grouping</b>					
	Anti A	5,00,000				
	Anti B	5,00,000				
	Anti D (IgM)	5,00,000				
	Anti D (IgM+IgG)	5,00,000				
	Anti AB	5,00,000				
	Anti H	1,00,000				
	Anti A1 Lectin	1,00,000				
<b>2</b>	<b>Blood Cross matching</b>					
	AHG	15,00,000				
	Gel Cards	15,00,000				
<b>3</b>	<b>Blood Antibody Screening</b>					
	Screen Cells (3 cells)	2,00,000				
	ID Panels (11 Cells)	2,00,000				
	ID Panels (6 Cells)	2,00,000				
	CAT (K)	1,00,000				
	CAT (k/Celino)	50,000				
	CAT (Le <sup>a</sup> )	50,000				
	CAT (Le <sup>b</sup> )	50,000				
	CAT (Duffy a)	50,000				
	CAT (Duffy b)	50,000				
	CAT (Kidd a)	50,000				
	CAT (Kidd b)	50,000				
	CAT (M)	50,000				
	CAT (N)	50,000				
	CAT (S)	50,000				
	CAT (s)	50,000				

CAT (C <sup>w</sup> )	50,000				
CAT (P1)	50,000				
CAT (U)	50,000				
Antisera (K)	1,00,000				
Antisera (k/Celino)	50,000				
Antisera (Lea)	50,000				
Antisera (Leb)	50,000				
Antisera (Duffy a)	50,000				
Antisera (Duffy b)	50,000				
Antisera (Kidd a)	50,000				
Antisera (Kidd b)	50,000				
Antisera (M)	50,000				
Antisera (N)	50,000				
Antisera (S)	50,000				
Antisera (s)	50,000				
Antisera (CW)	50,000				
Antisera (P1)	50,000				
Antisera (U)	50,000				
Anti-E	2,00,000				
Anti-e	2,00,000				
Anti-C	2,00,000				
Anti-c	2,00,000				
CAT (NaCl Type)	3,00,000				
CAT (Extended DCT)	1,00,000				
Enzymes Papain	1,00,000				
LISS	15,00,000				
Bromelin	5,00,000				
Bovine serum albumin (22%)	50,000				
Glycine	50,000				
EDTA	50,000				
Sulphuric acid	50,000				
HCl	50,000				
Sodium Dihydrogen phosphate	50,000				
DiSodium hydrogen diphosphate	50,000				
PEG	50,000				
Xylene	50,000				
Glacial acetic acid	50,000				
Sodium chloride	50,000				
Potassium chloride	50,000				
Potassium dihydrogen phosphate	50,000				
Buffer capsules (pH variants)	50,000				
pH strips	50,000				

	Enzymes Ficin	50,000				
	DTT	50,000				
	Eosin	5,00,000				
	2-mercaptoethanol	50,000				
	Formaldehyde	50,000				
	Ammonia	50,000				
	Glycerol	50,000				
	Kit for cold autoantibody removal	50,000				
	Kit for warm autoantibody removal	50,000				
	Kit for Red Cell Cryo Preservation (IH)	5,000				

**Amended as:**

<b>REAGENT COST (for bid ranking &amp; fixing of year wise rates)</b>						
		<b>A</b>	<b>Reagent Pack Details</b>			
	List of Parameters	No. of tests (approximate load over 10 years being factored for bid ranking)	Reagent Pack - make/brand	Pack Catalogue No.	No. of tests/pack	Total No. of <u>Reagent packs</u> to be used for No. of tests in column "A"
<b>1</b>	<b>Consumables for Automated IH Platform</b>					
	<b>Blood Grouping (forward and reverse)</b>	<b>500,000</b>				
	<b>AHG cross matching</b>	<b>250,000</b>				
	<b>Antibody Screening</b>	<b>100,000</b>				
	<b>Antibody Identification</b>	<b>100,000</b>				
	<b>Clinically significant antigen phenotyping (Rh, K)</b>	<b>100,000</b>				
	<b>Weak D testing</b>	<b>50,000</b>				
<b>2</b>	<b>Blood Grouping</b>					
	Anti A	5,00,000				

	Anti B	5,00,000				
	Anti D (IgM)	5,00,000				
	Anti D (IgM+IgG)	5,00,000				
	Anti AB	5,00,000				
	Anti H	1,00,000				
	Anti A1 Lectin	1,00,000				
<b>3</b>	<b>Blood Cross matching</b>					
	<b>AHG Gel cards (IgG + C3d)</b>	<b>15,00,000</b>				
	<b>Gel Cards (IgG only)</b>	<b>15,00,000</b>				
<b>4</b>	<b>Blood Antibody Screening</b>					
	Screen Cells (3 cells)	2,00,000				
	ID Panels (11 Cells)	2,00,000				
	ID Panels (6 Cells)	2,00,000				
	CAT (K)	1,00,000				
	CAT (k/Celino)	50,000				
	CAT (Le <sup>a</sup> )	50,000				
	CAT (Le <sup>b</sup> )	50,000				
	CAT (Duffy a)	50,000				
	CAT (Duffy b)	50,000				
	CAT (Kidd a)	50,000				
	CAT (Kidd b)	50,000				
	CAT (M)	50,000				
	CAT (N)	50,000				
	CAT (S)	50,000				
	CAT (s)	50,000				
	CAT (C <sup>w</sup> )	50,000				
	CAT (P1)	50,000				
	<b>Deleted</b>	<b>Deleted</b>				
	Antisera (K)	1,00,000				
	Antisera (k/Celino)	50,000				
	Antisera (Lea)	50,000				
	Antisera (Leb)	50,000				
	Antisera (Duffy a)	50,000				
	Antisera (Duffy b)	50,000				
	Antisera (Kidd a)	50,000				
	Antisera (Kidd b)	50,000				
	Antisera (M)	50,000				
	Antisera (N)	50,000				
	Antisera (S)	50,000				
	Antisera (s)	50,000				
	Antisera (CW)	50,000				
	Antisera (P1)	50,000				

	<b>Deleted</b>	<b>Deleted</b>				
	Anti-E	2,00,000				
	Anti-e	2,00,000				
	Anti-C	2,00,000				
	Anti-c	2,00,000				
	CAT (NaCl Type)	3,00,000				
	CAT (Extended DCT)	1,00,000				
	Enzymes Papain	1,00,000				
	LISS	15,00,000				
	Bromelin	5,00,000				
	Bovine serum albumin (22%)	50,000				
	Glycine	50,000				
	EDTA	50,000				
	Sulphuric acid	50,000				
	HCl	50,000				
	Sodium Dihydrogen phosphate	50,000				
	DiSodium hydrogen diphosphate	50,000				
	PEG	50,000				
	Xylene	50,000				
	Glacial acetic acid	50,000				
	Sodium chloride	50,000				
	Potassium chloride	50,000				
	Potassium dihydrogen phosphate	50,000				
	Buffer capsules (pH variants)	50,000				
	pH strips	50,000				
	Enzymes Ficin	50,000				
	DTT	50,000				
	Eosin	5,00,000				
	2-mercaptoethanol	50,000				
	Formaldehyde	50,000				
	Ammonia	50,000				
	Glycerol	50,000				
	Kit for cold autoantibody removal	50,000				
	Kit for warm autoantibody removal	50,000				
	<b>Deleted</b>	<b>Deleted</b>				

**Item no. 7 (Tender ID: 2019 HLL 31185 7)****Biological X-Ray based Blood Irradiator**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 123, Para 9	The system MUST be self-contained with respect to the irradiation chamber and electronics, and MUST NOT exceed a physical foot print of 1.5 x 1.5 m, height 3 m and weight 1,200 kg.	The system MUST be self-contained with respect to the irradiation chamber and electronics, and MUST NOT exceed a physical foot print of 1.5 x 1.5 m, height 3 m and weight <b>1,500 kg.</b>
Page 123, Para 15	The system MUST be accompanied by a calibrated dosimeter, for dose and dose rate measurements within the irradiation chamber. The firm will also have to supply the radiation tags along with any other quality control requirements. The rates for the same must be quoted in the tender.	The system MUST be accompanied by a calibrated dosimeter, for dose and dose rate measurements within the irradiation chamber. The firm will also have to supply <b>1000 radiation tags</b> along with any other quality control requirements <b>including dose mapping in every 6 months till the life cycle of the equipment. The rates for the same must be quoted in the tender for 200,000 radiation tags for fixing of rates for 10 years.</b>

**Item no. 8 (Tender ID: 2019 HLL 31185 8)****Mobile Blood Donation Van**

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 125; Para 2	The net interior dimensions of MBDV body (blood collection area excluding the driver cabin) shall be min. 2000 mm. in width, 2000 mm. in height and min. 9500 mm. in length.	The net interior dimensions of MBDV body (blood collection area excluding the driver cabin) shall be min. 2000 mm. in width, 2000 mm. in height and min. 9500 mm. in length. <b>The firm must provide expandable Donation compartment by at least 500 mm or more (width wise), of length 6-8 ft by hydraulics or electric pressure jack system during parked position which can safely retracted back to the normal width of the MBDV while in motion.</b>

<b>Tender Page &amp; Para</b>	<b>Tender Specification</b>	<b>Amended as</b>
Page 125; Para 3. vi	The vehicle should have >150 HP,4/6-cylinder diesel/ electric engine (Volvo Eicher/ Bharat Benz/ Tata/ Ashok Leyland/ Equivalent), 6 speed manual transmission, power assisted steering, Fuel tank of capacity > 300 litres, Leaf/ Air front suspensions, Rear Air suspensions, all CAM/ disc brakes and the driver cabin should be air conditioned with OEM fitted engine driven air conditioning system. The vehicle should comply with BS IV emission standards or above.	The vehicle should have >150 HP,4/6-cylinder diesel/ electric engine (Volvo Eicher/ Bharat Benz/ Tata/ Ashok Leyland/ Equivalent), 6 speed manual transmission, power assisted steering, Fuel tank of capacity > 300 litres, Leaf/ Air front suspensions, Rear Air suspensions, all CAM/ disc brakes and the driver cabin should be air conditioned with OEM fitted engine driven air conditioning system. The vehicle should comply with BS IV <b>or above</b> emission standard(s).
Page 127; Para 12. vi.	A vertical storage rack (Stainless steel) with 3-4 racks must be placed securely at the back of the bus for storing cello boxes of 22-25 litres (Weight bearing capacity of approximately 50 Kgs.). Suitable fastening belts or a suitable system must be in place to keep the boxes securely while the vehicle is in transit.	A vertical storage rack ( <b>Stainless steel, Mild steel, Aluminium Alloy or equivalent</b> ) with 3-4 racks must be placed securely at the back of the bus for storing cello boxes of 22-25 litres (Weight bearing capacity of approximately 50 Kg). Suitable fastening belts or a suitable system must be in place to keep the boxes securely while the vehicle is in transit.
Page 130; Para 23	Heading: 23. Equipment Specifications	<b>23. Equipment Specifications (All mentioned equipment must be from an ISO-13485 certified manufacturer).</b>
Page 130 Para 23 : 2. a	<b>Item 2. Blood Collection Monitor</b> Para 2.a : Volume Setting: Pre-selection of volume to be collected. Tarring of bag volume before collection. Tarring range: 0 to 600 gm. Easy provision to change preset volume.	Volume Setting: Pre-selection of volume to be collected. Tarring of bag volume before collection. Tarring range: 0 to 600 gm ( <b>50-500ml</b> ). Easy provision to change preset volume.
Page 130 Para 23 : 2.g	<b>Item 2. Blood Collection Monitor</b> Para 2.g : Should operate on mains as well as rechargeable battery. On battery it should operate for a min. of 8 hours or minimum 60 continuous blood collections.	Should operate <b>on mains as well as battery</b> . On battery it should operate for a min. of 8 hours or minimum 60 continuous blood collections.



**SECTION – VIII**

**QUALIFICATION CRITERIA**

**A. APPLICABLE FOR ITEM AT SL. NO. 1**

**(i.e. Blood Bank Equipment – Package 1; Tender ID- 2019\_HLL\_31185\_1).**

**Existing:**

**2. Minimum Work of Similar Nature:**

\*\*The order(s) individually or in combination should include at least 10 (ten) similar line items of the package meeting major parameters of technical specifications.

**Read As:**

**2. Minimum Work of Similar Nature:**

\*\*The order(s) individually or in combination should include **at least 05 (five)** similar line items of the package meeting major parameters of technical specifications.

**D. APPLICABLE FOR ITEM AT SL. NO. 8, i.e. for ‘Mobile Blood Donation Van’:**

**Existing:**

1. The bidders must be a manufacturer. In case the foreign manufacturer does not quote directly, they may authorise an Indian agent as per proforma of “Manufacturer Authorization Form” as given in the bidding document at **Section XIII-A** to quote and enter into a contractual obligation.

**Read As:**

1. The bidders must be a manufacturer. In case the manufacturer does not quote directly, they may authorise an Indian agent as per proforma of “Manufacturer Authorization Form” as given in the bidding document at **Section XIII-B** to quote and enter into a contractual obligation. The manufacturer Authorization for agent is applicable only for items mentioned below:

- i. Base Vehicle
- ii. Blood Donor Couch
- iii. Blood Collection Monitor

**Important Note:**

- i) Technical Compliance Sheet ‘Version 1.0’ for all the tenders under this NIB are being uploaded on CPPP. The same need to be downloaded for submission.
- ii) Price Bid ‘Version 1.1’ for tender ID-**2019\_HLL\_31185\_1, 2019\_HLL\_31185\_2 & 2019\_HLL\_31185\_6** under this NIB are being uploaded under Corrigendum on CPPP. This will supersede the previous version i.e. ‘Ver1.0’ and the same need to be downloaded for necessary submission.

**All other contents of the Bidding Document including terms & conditions remain unaltered.**