Amendment No. 1

13-10-2017

Sub: Amendment to the Bidding Document
Ref.: Notice Inviting Bid ref. HITES/PCD/NCI-AIIMS/01/17-18 dated: 11.09.2017

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

SECTION – I

NOTICE INVITING BIDS (NIB)

Description	Existing	Amended as.
Last date and time of tender downloading	19.10.2017 at 6:00 pm	**31.10.2017 at 6:00 pm**
Last date and time of online submission of tender	20.10.2017 at 12:00 noon	**01.11.2017 at 12:00 noon**
Last date and time of physical submission of EMD, Tender processing Fee, any other document specified in the Bidding Document	20.10.2017 at 2:00 pm	**01.11.2017 at 2:00 pm**
Date of tender Opening	20.10.2017 at 2:30 pm	**01.11.2017 at 2:30 pm**

SECTION – III

SPECIAL INSTRUCTIONS TO BIDDERS (SIB)

Qualification Criteria (Ref. GCC Clause 30.1)

The Purchaser reserves the right to ask for a free demonstration of the quoted equipment after giving reasonable time to the bidder at a pre-determined place acceptable to the purchaser or at site (in case of non-portable and heavy equipment) for technical acceptability as per the bidding document specifications, before the opening of the Price Bid.

Comparison of Bids (Ref. GCC Clause 33 & 34)

The comparison of bids will be based on GCC Clause 33, 34 and if any, as specified in the Technical specification(s). However, at the time of award of contract, the value of award (bid value/contract value) shall be limited to the upfront charges payable by the exchequer for Supply, Installation, Testing & Commissioning value only on DDP basis which is inclusive of warranty (for number of years specified at section VI; List of Requirement, Part I) and any other item(s)/services detailed for upfront purchase in the technical specifications. The cost of any other parameters like CAMC price beyond the warranty period, cost of any Consumables, any other recurring expenditure, etc. which have been considered for ranking of bids or for freezing of rates shall not be part of tender/award/bid/contract value.

SECTION – VII

Item sl. no. 01

Pneumatic Tube Transport System (PTT System)

1. Existing: Scope of Work

Supply of Pneumatic Tube Transport System (herein after mentioned as PTT system) of 160mm pipe (outer diameter) Network, with transfer speed ranging from a minimum transfer rate of 4 m/s to maximum rate of 6 m/s; as per specifications, conforming to DIN/EN/CE standards.

Amended as: Scope of Work

Supply of Pneumatic Tube Transport System (herein after mentioned as PTT system) of 160mm pipe (outer diameter) Network, with transfer speed ranging from a minimum transfer rate of 4 m/s to maximum rate of 6 m/s; as per specifications, conforming to **BIS/ISO/FDA/CE or design standards like HTM etc as and where ever applicable.**

2. Existing: Scope of Work

Point 3. The 160mm diameter Carrier or Container should be able to carry loads weighing upto **7 kg.**

Amended as:

The 160mm diameter Carrier or Container should be able to carry loads weighing upto **5 kg.**

3. Existing: Scope of Work

Point 6. The bidders must quote the STIC (Supply, Installation , Testing & Commissioning) cost per Front Load Station.

Amended as:

DELETED

4. Existing: Scope of Work

Point 7. Service engineer of PTT system shall be deployed in the NCI campus 24 x 7 basis to attend to maintenance for period of ten years.

Amended as:

Minimum One technical personal of bidding firm for PTT system shall be deployed from 8am to 8 pm in the NCI campus for an initial period of One Year to attend to maintenance and training of Institute personnel and subsequently should be available on need basis.

5. Existing: Scope of Work

The Pneumatic Tube Transport (PTT) System shall cover the following buildings:

1. OPD
2. HOSPITAL BLOCK

3. DIAGNOSTIC BLOCK
4. **ADMIN & RESEARCH BLOCK (BIO BANK BLOCK)**

Location wise Quantity of Front Load Stations					
	OPD BLOCK	HOSPITAL BLOCK	DIAGNOSTIC BLOCK	BIO BANK BLOCK	Total
PHASE I					
BASEMENT		1			
GROUND FLOOR	2	2	1		
FIRST FLOOR	1	2	1		
SECOND FLOOR	1	4			
THIRD FLOOR	1	5			
Total – Phase I	5	14	2		21
PHASE II					
BASEMENT				1	
GROUND FLOOR			1		
FIRST FLOOR			1		
SECOND FLOOR			1		
THIRD FLOOR			1		
FOURTH FLOOR	3	5	1		
FIFTH FLOOR		4	1		
SIXTH FLOOR		4			
SEVENTH FLOOR		4			
EIGHTH FLOOR		4			
PHASE II	**3**	**21**	**6**	**1**	**31**
TOTAL	**8**	**35**	**8**	**1**	**52**
AUTO UNLOAD STATION			1		1

Amended as: Scope of Work

The Pneumatic Tube Transport (PTT) System shall cover the following buildings:

1. OPD
2. HOSPITAL BLOCK
3. DIAGNOSTIC BLOCK
4. **DELETED**

Location wise Quantity of Front Load Stations					
	OPD BLOCK	**HOSPITAL BLOCK**	**DIAGNOSTIC BLOCK**	**Total no of stations in Phase I**	**Total no of stations in Phase II**
BASEMENT	2 nos. Front load stations (one near Nursing Station of Recovery room of Radiology and one near the post OP Brachy OT) **PHASE I**			2 nos.	0
GROUND FLOOR	2 nos. Front load station (Near Sample Collection Room) **PHASE I**	2 nos. Front load station (One near Triage and One near the Nursing station of Emergency OT/Emergency) **PHASE I**	1 no. Front load station (Near Drug Store) **PHASE I**	5 nos.	0
FIRST FLOOR		2 nos. Front load station (One near the nursing station of A Block ward and one in Blood Bank) **PHASE I**	**1 no. Front load station & 2 nos. of Auto unload station** (near the sample receiving Counter of Core Lab) **PHASE I**	5 nos (3 nos. Front Load & 2 nos. Auto Unload)	0
SECOND FLOOR		5 nos. Front load station (One near the Nursing Station of BMT ICU, One near Nursing station of BMT PreOp/ Post op and One each near the nursing Station of wards in Blocks A,B & D. **PHASE I**	1 no. Front load station (One near Lab area) **PHASE II**	5 nos.	1 no.
THIRD FLOOR	1 no. Front load station (Near Nursing Station of Day Care) **PHASE I**	5 nos. Front load station One near Nursing Station ICU (A block), one each near nursing station in block - B & D , One each near the nursing station of PreOp/ Post op and OT **PHASE I**	1 no. Front load station (Near Lab area) **PHASE II**	6 nos.	1 no.

FOURTH FLOOR	2 nos. Front load station (One each near Nursing Station in Pre Op/ Post op & OT) **PHASE II**	5 nos. Front load station One near Nursing Station ICU (A block), one each near nursing station in block - B & D , One each near the nursing station of PreOp/ Post op and OT **PHASE II**	1 no. Front load station (Near Lab area) **PHASE II**		8 nos.
FIFTH FLOOR		3 nos. Front load station (One each near Nursing stations of Block-A, B & D) **PHASE II**	1 no. Front load station (Near Lab area) **PHASE II**		4 nos.
SIXTH FLOOR		3 nos. Front load station (One each near Nursing stations of Block-A, B & D) **PHASE II**			3 nos.
SEVENTH FLOOR		3 nos. Front load station (One each near Nursing stations of Block-A, B & D) **PHASE II**			3 nos.
EIGHTH FLOOR		3 nos. Front load station (One each near Nursing stations of Block-A, B & D) **PHASE II**			3 nos.
Total number of stations in Phase - I				**23 Nos.**	
Total number of stations in Phase - II					**23 Nos.**

Note:
The drawings of hospital block, OPD block and Diagnostic block indicating the tentative station locations can be obtained from the Project Office NCI - AIIMS, Room no. 160, Ist floor, Dr. BRAIRCH, AIIMS, New Delhi.

The location of stations is approximate in nature and may vary by approx 10 meters on same floor if required at the time of award of work.

Minimum Lines Requirement for PTT System of NCI-AIIMS

Sr. No	Blocks	No of Lines
1	**OPD Block**	**Minimum 2 Lines** (including 1 Dedicated Line from Sample collection room on Ground floor of OPD to line transfer zone)
2	**Hospital Block**	**Minimum 2 Lines** (Carrier load of different stations must be appropriately split between both the lines)

3	**Diagnostic Block**	**Minimum 3 Lines** (including 2 Dedicated Lines from line transfer zone to Auto unload stations near sample receiving area of Core Lab on 1st Floor of Diagnostic Block)
Note: - The bidder may add additional lines (Including commensurate hardware/software) if required so as to meet with the testing criteria specified in technical specifications under Para: XVI (Testing criteria for operational PTT system of NCI AIIMS).		

6. Existing: Main control system:

Point j. Main Control System should include the following:

- Main Control Unit Hardware for Main Control System with power supply.
- Software package for main controller includes the following:-
  1. Licensed Software for the system including extension lines, as required.
  2. Licensed Software for Code-Tag System/Transponder System/RFID.
  3. Licensed Software for Visualization & Editor.
  4. Licensed Software for History & Evaluation.

Amended as: Main control system:

Point j. Main Control System should include the following:

- Main Control Unit Hardware for Main Control System with power supply.
- Software package for main controller includes the following:-
  1. Licensed Software for the system including extension lines, as required.
  2. Licensed Software for Code-Tag System/Transponder System/RFID.
  3. Licensed Software for Visualization & Editor.
  4. Licensed Software for History & Evaluation.

All software licenses should be perpetual in nature. All software upgrade/updates during the warranty and CAMC period should be provided free of cost.

7. Existing: Para II Online UPS:

Uninterruptable Power Supply shall be provided for Main Controller. It should be of standard make, minimum **Capacity of 3KVA**, Back-up of minimum 30 minutes power backup for Main Control System & peripherals excluding Blowers.

Amended as: Para II Online UPS:

Uninterruptable Power Supply shall be provided for Main Controller. It should be of standard make, Back-up of minimum **10 minutes** power backup for Main Control System & peripherals excluding Blowers.

8. Existing: Para III. Side Channel Blower with speed control (VFD)

1. Independent Blowers of maximum power consumption of **6 KW**, 3-phase 400v/50Hz power rating, low noise, unidirectional rotation with electronic air switch to switch between compressed air and vacuum.
2. **Each blower should be provided with a system to Control frequency of the blower**

which will further control the speed of the carrier for transferring sensitive laboratory samples at lower transfer speed of 3m/s.

3. It should be provided with all the mounting accessories and soundproof enclosure.
4. Solid particles or contaminants must be withheld using the filters before entering the side channel blower.
5. The open intake and discharge ports should be protected by wire guards

Amended as: Para III. Blowers with speed control (VFD)

1. Independent Blowers with speed control (VFD); low noise, unidirectional rotation with electronic air switch to switch between compressed air and vacuum.
2. **DELETED**
3. It should be provided with all the mounting accessories and soundproof enclosure.
4. Solid particles or contaminants must be withheld using the filters before entering the side channel blower.
5. The open intake and discharge ports should be protected by wire guards.

9. Existing: V. Automatic Unload Station 160mm for Core Laboratory:

Point 1. The Auto Unload Station is a dedicated Receiving station, should be provided with a dedicated line. This station should be exclusively used for receiving Auto Unload carriers. The system must be configured to prevent Normal Carriers from choosing the Auto Unload Station as its destination.

Amended as: V. Automatic Unload Station 160mm for Core Laboratory: (2 Nos with independent dedicated from line transfer zone for sample collection room near core Lab on 1st Floor of Diagnostic Block)

Point 1. Auto Unload Stations are dedicated Receiving station, with independent dedicated line from line transfer zone. These stations should be exclusively used for receiving Auto Unload carriers. The system must be configured to prevent Normal Carriers from choosing the Auto Unload Station as its destination.

10. Existing: V. Automatic Unload Station 160mm for Core Laboratory:

V. 11. Should be provided with OEM carrier rack to store minimum 10 nos. carriers.

Amended as:
Deleted

11. Existing: IX Line Transfer Zone Mechanism**: (minimum 8 lines)**

The PTT system should be provided with a "Line Transfer Zone Mechanism" which allows the interface between all the transport lines of the PTT system, so as to allow smooth transfer of carriers between the transfer lines, providing smooth and uninterrupted operation of the PTT system.

The Line Transfer Zone Mechanism should have the following features:

a. Contactless positioning, two direction operation.
b. Carrier designated as "Emergency-Carrier" should be able to physically overtake the normal carriers in the PTT system within the Line Transfer Zone Mechanism using line prioritisation.
c. Should have the provision to keep the storage units vacant for the transit of Emergency carriers.
d. Should be able to accommodate multiple carriers within the Line Transfer Zone Mechanism, so as to prevent stacking of carriers within the incoming lines.
e. The Line Transfer Zone Mechanism shall operate without any manual intervention.

Amended as: IX Line Transfer Zone Mechanism

The PTT system should be provided with a "Line Transfer Zone Mechanism" which allows the interface between all the transport lines of the PTT system, so as to allow smooth transfer of carriers between the lines, providing smooth and uninterrupted operation of the PTT system.

The Line Transfer Zone Mechanism should have the following features:

a. Contactless positioning, two direction operation.
b. Carrier designated as "Emergency-Carrier" should be able to physically overtake the normal carriers in the PTT system within the Line Transfer Zone Mechanism using line prioritisation.
c. Amended as : **DELETED**
d. Amended as : **DELETED**
e. The Line Transfer Zone Mechanism shall operate without any manual intervention.

12. Existing: Para X. Diverters (Three-Way)

The routing device shall consist of One incoming and Three outgoing delivery tubes.
It should Air Tight with Steel Housing and provided with Optical Sensors.
The Routing device must provide smooth connection between incoming and outgoing tube, to prevent impact on transported items. The Routing device must consist of a maintenance-free rotary oscillating pipe in a pneumatically sealed device housing, to prevent air loss with self-adjusting Teflon gaskets providing airtight operation in negative as well as positive pressure operation.

Amended as:
DELETED

13. Existing: Para XI. Forwarding Tube:

Every Station and Routing device must be provided transparent tube.
The forwarding tube should be made of medium density PVC of 160 mm Outer Diameter and 153 mm (approx.) Inner Diameter with properties such as good Physical tensile strength, absorption of water, self-extinguishing.

Amended as: Para XI. Forwarding Tube:

Every Station and Routing device must be provided transparent tube. **Forwarding Tube: The forwarding tube should be made of medium density PVC of 160 mm Outer Diameter with minimum wall thickness of 3 mm (approx.)**

14. Existing: Para XVI. Tests after completion

After completion of the project, the Institute may carry out the tests after completion, which shall be carried out under normal operating conditions to assure that the system performs well under normal operating conditions.
These tests will include but not limited to:

i. Running of equipment and system as a whole to a minimum of 15 days.
ii. System specific tests and equipment specific test
iii. Any other test which Institute intends to carry out to check the stability and reliability of the system.
iv. Any defects if pointed out in the tests after completion shall be ratified at Contractor's expense and within time as deemed reasonable by the Institute.

Amended as: Para XVI. Testing criteria for operational PTT system of NCI AIIMS:-

PTT system for NCI-AIIMS shall be deemed to be successfully commissioned if loaded carriers (with 3 kg load per carrier) are transported at a transfer rate ranging between 4 m/s to 6 m/s between two stations when randomly selected 25% of the front loading stations are sending the loaded carriers (with 3 Kg Load per carrier) simultaneously to randomly selected 25% free stations in the PTT system. (The receiving stations shall not be same as any of the sending stations and no receiving station shall receive more than one carrier while testing). None of the sending front load stations should indicate "station busy" for more than 30 seconds while testing.

This criteria is only for testing of PTT system and the values indicated herein no way supersede the values of different parameters specified elsewhere in technical specifications of PTT system for NCI AIIMS. The PTT system must meet this testing requirement separately for Phase I (Operational 23 stations) & Phase II (Operational 46 stations). This testing criteria may also be used by NCI-AIIMS periodically to verify the PTT system performance as and when required during the warranty and CAMC period.

15. Existing: Para XX. Future Expansion

1) PTT system may be expended to other blocks/new buildings coming in the campus. Unit rates coated shall apply for such cost**.**

Amended as:

DELETED

16. Existing: Para XXI BILL OF QUANTITY (BOQ)

S.No	Name of item		Quantity	Total Quantity
1	Main Control System: including	1st Phase Qty	1	1

S.No	Name of item		Quantity	Total Quantity
	hardware, software package with license key for programming, real time monitoring & RFID pack for all carriers , stations & transfer System	2nd Phase Qty	0	
2	Line Transfer Zone Mechanism (minimum 8 lines)	1st Phase Qty	1	1
		2nd Phase Qty	0	
3	Side Channel Blower with speed control(VFD)	1st Phase Qty	6	8
		2nd Phase Qty	2	
5	Diverter 160 mm, 3-Way, Air Tight, Steel Housing. Provided with Optical Sensors.	1st Phase Qty	9	11
		2nd Phase Qty	2	
6	Front-load station : 160 mm , with OEM carrier rack , OEM soft-landing basket,	1st Phase Qty	21	51
		2nd Phase Qty	30	
7	Auto-Unload station : 160 mm with OEM carrier rack , OEM soft-landing basket,	1st Phase Qty	1	1
		2nd Phase Qty	0	
8	Arrival Signal Unit (Optic & Acoustic) with extension card	1st Phase Qty	2	4
		2nd Phase Qty	2	
9	Auto Unload Carrier 160 mm: Inload carrier minimum 300mm, compatible with the 160mm transfer line system and two programmable RFID tag for easy return of empty carrier.	1st Phase Qty	42	102
		2nd Phase Qty	60	
10	Carrier 160 mm: Inload 300mm , compatible with the 160mm transfer line system, size programmable RFID tag for easy return of empty carrier.	1st Phase Qty	21	51
		2nd Phase Qty	30	
11	Disposable gasket of Carrier (Spare)	1st Phase Qty	200	500
		2nd Phase Qty	300	
12	160mm Pipe clamp, Screw bolts, Cable	1st Phase Qty	lump	

S.No	Name of item		Quantity	Total Quantity
	Tie, Clips, 90 Deg Bends for Air Tube, Dowel, PVC Conduit for Cable, Baskets, Cushion, insert for carrier PU Foam including other misc. items	2nd Phase Qty	sum	
13	Tubing material suitable for 160 mm system including 160mm Tube, Air tube, Bends, Endpiece, Sleeve, Special Adhesive Glue, Cleaner for PVC Tube, System cable & Mounting tools etc	1st Phase Qty	lump sum	
		2nd Phase Qty		

Amended as: BILL OF QUANTITY (BOQ)

S.No	Name of item	Phase wise Quantity		Total Quantity
1	PTT System Hardware (Line Transfer Zone , Blowers etc) , software , tubing, bends, installation, turnkey works etc. (inclusive of all components/services except those mentioned otherwise in BOQ) NO Additional requirements for operationalization of the PTT system will be entertained. Bidders must calculate adequate quantity of Line Materials and other requirements of their respective systems as per station locations, minimum number of lines required, building layout, PTT system performance criteria etc. as prescribed in the technical specifications.	LUMPSUM		
2	Front-load station	1st Phase Qty	21	44
		2nd Phase Qty	23	
3	Auto-Unload station	1st Phase Qty	2	2
4	Auto Unload Carrier (Unit price shall be frozen for the validity of the contract)	1st Phase Qty	42	88
		2nd Phase Qty	46	
5	Normal Carrier (Unit price shall be frozen for the validity of the contract)	1st Phase Qty	21	44
		2nd Phase Qty	23	

Item sl. no. 02

Integrated Track-Based Automation Enabled Core Clinical Laboratory

1. Existing:

Description: Point 2. The track-based automation should be connected to the Laboratory Information System (LIS) of the Hospital and should perform tasks like sample login, positive identification of sample barcodes, centrifugation, decapping, aliquoting, recapping and storing of samples in **ambient** and refrigerated storage modules and facility to automatically retrieve samples for retesting etc.

Amended as:

Description: Point 2. The track-based automation should be connected to the Laboratory Information System (LIS) of the Hospital and should perform tasks like sample login, positive identification of sample barcodes, centrifugation, decapping, aliquoting, recapping and storing of samples in refrigerated storage modules and facility to automatically retrieve samples for retesting etc.

2. Existing: Para 3. Post Analytical (Storage)

a. Refrigeration **and ambient temperature** sample holding unit
b. Recapper module

Amended as: Post Analytical (Storage)

a. Refrigerated sample holding unit
b. Recapper or **Resealer** module

3. Existing: 1.1 Input Module

Point 4. It should support intermixed 975 mm and 1300 mm sample tubes.

Amended as : 1.1 Input Module

Point 4. It should support intermixed **13x75mm and 13x 100mm** sample tubes.

4. Existing: 1.2 Output Module

Point 5. It should support intermixed 975 mm and 1300 mm tubes

Amended as: 1.2 Output Module

Point 5. It should support intermixed **13x75mm and 13x 100mm** tubes.

5. Existing: 1.3 Centrifuge /Temperature Controlled Centrifuge

Point no 2. Each centrifuge should be configurable for simultaneous handling of **975mm** & **1300 mm** tubes

Amended as: 1.3 Centrifuge /Temperature Controlled Centrifuge

Point no 2. Each centrifuge should be configurable for simultaneous handling of **13x75mm and 13x 100mm** tubes.

6. Existing: 1.4 Decapper

Point no. 3 should support 975 and 1300 tubes simultaneously.

Amended as:

Point no. 3 should support **13x75mm and 13x 100mm** tubes simultaneously.

7. Existing: 1.6 ReCapper:

Point no 3. It should support 975 mm and 1300 mm tubes simultaneously.

Amended as:

Point no 3. It should support **13x75mm and 13x 100mm** tubes simultaneously.

8. Existing: 2.1 Clinical Chemistry System

Point no 1. Two fully automated, random access, floor model biochemistry analyzers with a minimum throughput of 800 tests/hour.

Amended as:

Point no 1. Two fully automated, random access, floor model biochemistry analyzers **integrated to track based lab automation and each analyser should have a minimum throughput of 800 tests/hour.**

9. Existing: 2.1 Clinical Chemistry System

Point no 9. Must accommodate a minimum of 60 reagents on board. Test Menu of at least more than 100 assays must be available (including routine clinical chemistry, specific proteins, therapeutic drug monitoring, direct anti-globulin testing & ion selective electrolyte assays)

Amended as: 2.1 Clinical Chemistry System

Point no 9. Must accommodate a minimum of **55 reagents** on board. Test Menu of at least more than 100 assays must be available (including routine clinical chemistry, specific proteins, therapeutic drug monitoring, direct anti-globulin testing & ion selective electrolyte assays)

10. Existing: 2.2 Immunoassay System

Point no 3. It should support 975 mm and 1300 mm tubes simultaneously.

Amended as: 2.2 Immunoassay System

Point no 3. It should support **13x75mm and 13x 100mm** tubes simultaneously.

11. Existing: 2.2 Immunoassay System

Point no 6. Must be able to detect lipemic, icteric, hemolysed samples which can be configurable assay specific.

Amended as: 2.2 Immunoassay System

Point no 6. DELETED

12. Existing: 2.3 Hematology

Point no . 11.b Must have facility for in-built (Westguard rules, LJ plots & twin plots) and customizable QC rules to define QC acceptance and rejection criteria

Amended as:
Point no . 11.b Must have facility for in-built (Westguard rules, **LJ plots or twin plots**) and customizable QC rules to define QC acceptance and rejection criteria

13. Existing: 2.4 Coagulation
Point no . 2 Each analyzer should have a minimum throughput of 300 tests/hour when doing PT and APTT simultaneously.

Amended as: 2.4 Coagulation
Point no 2. Each analyzer should have a minimum throughput of **270 tests/hour** when doing PT and APTT simultaneously.

14. Existing: 2.4 Coagulation
Point no 7. Must accommodate a minimum of 50 reagents on board. Test Menu of at least more than 20 assays must be available

Amended as: 2.4 Coagulation
Point no 7. Must accommodate a minimum of **30 reagents** on board. Test Menu of at least more than **14 assays** must be available.

15. Existing: 3. Post Analytical Module
Point no 1. There should be an integrated Refrigerated and Ambient temperature storage unit for storage of samples & automatic retrieval to the track for retesting or discard.

Amended as: 3. Post Analytical Module
Point no 1. There should be an integrated Refrigerated temperature storage unit for storage of samples & automatic retrieval to the track for retesting or discard.

16. Existing: 3. Post Analytical Module
Point no 3. A minimum storage of 10,000 tubes (5000 refrigerated+5000 ambient) should be possible in the post analytical module.

Amended as: 3. Post Analytical Module
Point no 3. A minimum storage of 10,000 tubes (Refrigerated) should be possible in the post analytical module.

17. Existing: 3. Post Analytical Module
Point no 4. An integrated ReCapper module with the following features should be available at the post-analytical stage:
a. Recap the uncapped tubes destined for storage and outlets
b. It should support 975 mm and 1300 mm tubes simultaneously.
c. It should have a minimum recapping capacity of 600 tubes/hour

Amended as: 3. Post Analytical Module
Point no 4. An integrated ReCapper/ **Resealer** module with the following features should be available at the post-analytical stage:
a. Recap/ **Reseal** the uncapped tubes destined for storage and outlets
b. It should support **13x75mm and 13x 100mm** tubes simultaneously.
c. It should have a minimum recapping/ **Resealing** capacity of 600 tubes/hour.

18. Existing:

L1 Calculation shall be based on: Cost of the equipment specified in BOQ + Reagents, additives and QC cost as per Annexure "A" and "B" + CAMC for 6th-10th year + all the Additional requirements listed in the tender including UPS, RO Water system, Manpower and all the turnkey works charges.

In addition, the bidder has to provide complete price list of reagents (including but not limited to buffers, dilutors, additives, semi-consumables, plastic ware, QC material) for all the tests other than those listed in Annexure "A" that can be possibly run on the analyzers quoted by them.

Amended as:

L1 Calculation shall be based on: Cost of the equipment specified in BOQ including all the requirements listed in the tender including UPS, RO Water system, Manpower and all the turnkey works charges + **Grand Total as indicated in Annexure "1"** + CAMC for 6th-10th year(NPV).

The prices of all the reagents and QC material etc. quoted for in Annexure "1" will be fixed for the period of validity of the contract.

In addition, the bidder has to provide complete price list of reagents (including but not limited to buffers, dilutors, additives, semi-consumables, plastic ware, QC material) for all the tests other than those listed in **Annexure "1"** that can be possibly run on the analyzers quoted by them.

19. Existing: BOQ

BOQ

Sr. no	Equipment name	Total Qty
1	Input module	1
2	Output module	1
3	Centrifuge	2
4	Decapper	1
5	Recapper	2
6	Aliquoter	1
7	Fully Automatic Clinical Chemistry analyser	2
8	Fully Automatic Immunoassay analyser	2
9	Haematology analyser	2
10	Coagulation analyser	2
11	Ambient and refrigerated storage unit one each	1

Amended as:

BOQ

Sr. no	Equipment name	Total Qty
1	Input module	1
2	Output module	1
3	Centrifuge	2
4	Decapper	1
5	Recapper (For Pre analytical)	**1**
6	Recapper/Resealer (For Post Analytical)	**1**
7	Aliquoter	1
8	Fully Automatic Clinical Chemistry analyser	2
9	Fully Automatic Immunoassay analyser	2
10	Haematology analyser	2
11	Coagulation analyser	2
12	Refrigerated storage unit one each	1

19. Existing: Annexure-A and Annexure- B

Amended as: Annexure 1 (Furnished in the following page)

Annexure 1

A	B	C	D	E	F	G	H	I		J	K	L	M	N	O		P		Q	R	S	T	U	V
Sl. No	List of Parameters	No. of tests (approximate annual load being factored for bid ranking only)	Reagent Pack Details							Additives							Total Cost of Tests		QC Pack Details					Total Cost of QC per year
			Pack Catalogue No.	No. of tests/pack	Pack size	Cost per Reagent Pack	Total No. of Reagent packs to be used as per No. of tests in column"C"	Total Cost of reagent (G x H)		Pack Catalogue No.	No. of tests/pack	pack size	Cost per Pack	Total No. of packs to be used as per No. of tests in column"C"	Total Cost of additives (M x N)		Total cost of Test = Total cost of Reagent+Total cost of Additives (I + O)		Pack Catalogue No.	pack size	2 level/ 3 level	Cost per QC Pack	Total No. of QC packs to be used/year if run twice a day	Total price of QC per year (T x U)
1	Glucose	150000																						
2	Electrolytes	150000																						
3	Urea	150000																						
4	Creatinine	150000																						
5	Uric Acid	30000																						
6	Cholestrol	150000																						
7	Triglycerides	150000																						
8	Direct LDL	150000																						
9	HDL	150000																						
10	Calcium	150000																						
11	Phosphorus	30000																						

A	B	C	D	E	F	G	H	I		J	K	L	M	N	O		P		Q	R	S	T	U	V
12	Magnesium	30000																						
13	Total Bilirubin	150000																						
14	Bilirubin Conjugated	150000																						
15	ALT	150000																						
16	AST	150000																						
17	Alkaline phosphotase	150000																						
18	Gamma GT	150000																						
19	Amylase	110000																						
20	LDH	150000																						
21	CK NAC	10000																						
22	Urinary Proteins	150000																						
23	Lipoprotein A	10000																						
24	Homocysteine	15000																						
25	B12	15000																						
26	Folate	15000																						
27	Ig G	30000																						
28	Ig A	30000																						
29	Ig M	30000																						
30	Ferritin	30000																						
31	Transferrin	30000																						
32	UIBC / TIBC	5000																						
33	Total PSA	10000																						
34	CA 125	15000																						
35	TSH	15000																						
36	FSH	15000																						

A	B	C	D	E	F	G	H	I		J	K	L	M	N	O		P		Q	R	S	T	U	V
37	LH	10000																						
38	Prolactin	10000																						
39	PTH	10000																						
40	Cortisol	10000																						
41	Testosterone	10000																						
42	Free T3	15000																						
43	Free T4	15000																						
44	SHBG	5000																						
45	Free PSA	5000																						
46	Troponin	5000																						
47	C-peptide	5000																						
48	Insulin	10000																						
49	Myoglobin	5000																						
50	Estradiol	10000																						
51	Progesterone	5000																						
52	AFP	10000																						
53	CEA	10000																						
54	25 (OH) Vitamin D Total	15000																						
55	Vitamin B12	15000																						
56	CK-MB	6000																						
57	HBs Ag	15000																						
58	HIV Combo	30000																						
59	CMV IgM	10000																						
60	Albumin	30000																						
61	CBC only mode	150000																						
62	CBC+DLC+nRB	150000																						

A	B	C	D	E	F	G	H	I		J	K	L	M	N	O		P		Q	R	S	T	U	V
	C mode																							
63	CBC+DLC+nRBC+ Reticulocyte mode	50000																						
64	Anti Xa assay	5000																						
65	APTT	20000																						
66	D-Dimer	10000																						
67	Fibrin degradation products	10000																						
68	Fibrinogen	10000																						
69	Lupus anticoagulant	10000																						
70	Prothrombin time	20,000																						
71	Thrombin time	10000																						
72	Protein C	5000																						
73	Protein S	5000																						
74	Antithrombin assay	5000																						
75	Total protein	150000																						
76	Lipase	5000																						
77	C3	5000																						
78	C4	5000																						
79	CRP	10000																						
80	RF	5000																						
81	Valproic acid	5000																						
82	AFP	10000																						
83	CA 19-9	10000																						

A	B	C	D	E	F	G	H	I		J	K	L	M	N	O		P		Q	R	S	T	U	V
84	Opiates	5000																						
85	Iron	5000																						
86	Total protein (CSF/Urine)	5000																						
																	Sum of above (X)							Sum of above (Y)
	Grand total (Z) (to be incorporated in main price bid at appropriate place therein):																Z = X + Y							

If more than one Reagent, Additive, QC etc are required for performing a particular test , the bidder may add additional rows in the table above as per requirement. However, the cost of all reagent, additives, QC etc reflected in ANNEXURE-1 must be incorporated in the grand total as required. The grand total thus arrived is to be inserted in the main price bid at the appropriate place provided therein. If the same reagent and/or additive and/or QC, etc. are used for multiple tests, the cost of the same must be replicated for each test according to the number of test prescribed in the column 'C' in the above table.

Item sl. no. 03

Centralised Medical Gas Pipeline System

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
1	Page 69 Para 12	**RESPONSIBILITY OF BIDDER** Para: The Medical Gas Pipe Line System must follow Single Standard any one only from: NFPA 99c/HTM 02-01/ ISO 7396-1/DIN/EN. For AGSS Ventury type is not acceptable.	**RESPONSIBILITY OF BIDDER** Para: " The Medical Gas Pipe Line System **(except Copper Piping)** must follow Single Standard any one only from: NFPA 99c/HTM 02-01/ ISO 7396-1/DIN/EN **as and wherever applicable to the components being used in the MGPS. (**Ventury type AGSS is not acceptable). **In clauses where user requirement is different from the standard being followed by the bidder, the user requirement shall prevail over the standard being followed by the bidder.**
2	Page 69 Para 16	**RESPONSIBILITY OF BIDDER** Para: Demonstration may be asked for individual BOQ items before supply to the institute.	**RESPONSIBILITY OF BIDDER** Para: **Deleted**
3	Page 69 Para 18	**RESPONSIBILITY OF BIDDER** Para: Bidder must have a satisfactory installation of complete MGPS as per HTM 0201/NFPA 99C/DIN/EN/ISO-7396-1 standards and demo may be taken for the same.	**RESPONSIBILITY OF BIDDER** Para: **Deleted**
4	Page 70 Para 1.2	**Oxygen Manifold Supply System (without Cylinders)** Para: It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Oxygen Manifold Supply System (without Cylinders)** Para: **Deleted**
5	Page 70 Para 1.3	**Emergency Oxygen Manifold (without Cylinders)** **Para:** It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Emergency Oxygen Manifold (without Cylinders)** Para: **Deleted**

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
6	Page 71 Para 1.4.I	**Oxygen Flow meter with Humidifier Bottle** **Para:** It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Oxygen Flow meter with Humidifier Bottle** **Para:** It should be US FDA / European CE/ ETL/ UL listed.
7	Page 71 Para 2.1	**Fully Automatic Nitrous Oxide Control Panel** **Para:** All functional components should be enclosed on fire resistant, robust synthetic polymer/SS.	**Fully Automatic Nitrous Oxide Control Panel** **Para:** Deleted
8	Page 72 Para 2.2	**Nitrous Oxide Manifold (Without Cylinders)** Para: It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Nitrous Oxide Manifold (Without Cylinders)** **Para:** Deleted
9	Page 72 Para 2.3	**Emergency N2O Manifold (Without Cylinders)** Para: It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Emergency N2O Manifold (Without Cylinders)** **Para:** Deleted
10	Page 72 Para 3	**CO2 MANIFOLD SYSTEM WITH AUTOMATIC CONTROL PANEL (Without Cylinder)** **Para: Manifold &** Control panels should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**CO2 MANIFOLD SYSTEM WITH AUTOMATIC CONTROL PANEL (Without Cylinder)** **Para:** Control panels should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed
11	Page 77 Para 6.1	**Ward Vacuum Units:** **Para:** Should have Polysulfone/polycarbonate 1000cc safety jar, autoclavable at 121° C at 5mins, unbreakable, fitted with an anti-overflow safety device and equipped with a plastic antibacterial filter.	**Ward Vacuum Units:** **Para:** Should have Polysulfone/polycarbonate **100cc safety jar**, autoclavable at 121° C at 5mins, unbreakable, fitted with an anti-overflow safety device and equipped with a plastic antibacterial filter.

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
12	Page 77 Para 6.7	**Ward Vacuum Units:** **Para:** It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Ward Vacuum Units:** **Para:** It should be US FDA / European CE ETL/ UL certified
13	Page 77 Para 7.a	**Ward Vacuum Units (Low Flow):** Para: It should be US FDA/European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Ward Vacuum Units (Low Flow):** **Para:** It should be US FDA / European CE ETL/ UL certified **with 0-250mbar range**"
14	Page 77 Para 8.1	**Theatre Vacuum unit for OT :** Para: 1no. Suction Regulator and 2nos. 1700ml or more polysulfone/ polycarbonate collection jar and both to be mounted on a trolley.	**Theatre Vacuum unit for OT :** **Para:** 1no. Suction Regulator and 2nos. **1500ml or more** polysulfone/ polycarbonate collection jar and both to be mounted on a trolley.
15	Page 77 Para 8.8	**Theatre Vacuum unit for OT :** Para: It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Theatre Vacuum unit for OT :** **Para:** It should be US FDA / European CE ETL/ UL certified.
16	Page 78 Para 9	**AGSS (Anesthetic Gas Scavenging System) Plant (Package Unit)** Para: Duplex Anesthetic Gas Scavenging System (AGSS) of minimum 2500 LPM Primary and 2500 LPM as standby. It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed. It shall confirm to HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1.	**AGSS (Anesthetic Gas Scavenging System) Plant (Package Unit) :** **Para:** Duplex Anesthetic Gas Scavenging System (AGSS) of minimum 2500 LPM Primary and 2500 LPM as standby. It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed. It shall confirm to HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1. **(In-case of NFPA 99c the control panel of plant must be UL Listed and Undertaking from manufacturer for this tender reference must be submitted for using the same control panel in the system offered)**

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
17	Page 78 Para 9	**AGSS (Anesthetic Gas Scavenging System) Plant (Package Unit)** Para: One pump working and one stand by and vice versa. The package should consist of two rotary vane vacuum pumps, a control panel, and mounted on a common base frame.	**AGSS (Anesthetic Gas Scavenging System) Plant (Package Unit):** **Para:** One pump working and one stand by and vice versa. The package should consist of two **rotary vane/Claw** vacuum pumps, a control panel, and mounted on a common base frame.
18	Page 78 Para 10.1	**DISTRIBUTION PIPING** **Piping specifications** Para: Copper fittings should comply with EN 1254:1 factory degreased and brazing filler metals should comply with EN 1044.	**DISTRIBUTION PIPING** **Piping specifications** **Para:** Copper fittings should comply with **EN 1254:1/ Equivalent ASTM** factory degreased and brazing filler metals should comply with **EN 1044/ ASTM B16.22**.
19	Page 79 Para 11	**GAS OUTLETS:** Para: Push to insert and twist-to-release mechanism for probes.	**GAS OUTLETS:** **Para:** Push to insert **or** twist-to-release mechanism for probes.
20	Page 80 Para 12	**AREA VALVE SERVICE UNIT:** Para: The Area Valve Service Unit should incorporate a ball valve with NIST connectors either side mounted in a lockable box with emergency access. It should be reliable and easy to operate and must have NIST connectors facilitate easy purge, sample & pressure testing and emergency supply system. It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**AREA VALVE SERVICE UNIT:** **Para:** The Area Valve Service Unit should incorporate a ball valve with NIST connectors **(If applicable to standard)** either side mounted in a lockable box with emergency access. It should be reliable and easy to operate and must have NIST connectors facilitate easy purge, sample & pressure testing and emergency supply system".
21	Page 81 Para 14	**Line Isolation Valves Degreased:** The Lockable line valves must **European CE mark/UL listed** and complies with HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1 standard.	**Line Isolation Valves Degreased:** **Para:** Lockable line valves must complies with HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1 standard"

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
22	Page 81 - 82 Para 18	**Bed Head Panel & Ceiling Suspended Columns:** Para: It shall confirm to HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1. The design should be approved by the respective institute before installation and it is responsibility of the bidder after getting order they have to discuss with respective institute and finalized the Bed Head Panel (Vertical/Horizontal) and Ceiling Suspended Columns as per site condition & requirement of the institute. It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Bed Head Panel & Ceiling Suspended Columns:** **Para:** It shall confirm to HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1. The design should be approved by institute before installation and it is responsibility of the bidder after getting order they have to discuss with respective institute and finalized the Bed Head Panel (Vertical/Horizontal) and Ceiling Suspended Columns as per site condition & requirement of the institute. **It should be US FDA / European CE / ETL/ UL certified.**
23	Page 82 Para B	**Ceiling Suspended Columns:** Para: The frame shall be constructed from extruded aluminum alloy. **The end caps should replicate the profile of the vertical head. The aluminum extrusions thickness not less than 3.5 mm. The arms should have ABS head with LED backlighting signaling.**	**Ceiling Suspended Columns:** **Para:** The frame shall be constructed from aluminum alloy. The end caps should replicate the profile of the vertical head.

Item sl. no. 04

Modular Operation Theater (MOT)

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
1	Page 92	All component of Wall & Ceiling System should be from the same manufacturer for the following and undertaking/declaration from the manufacturer should be submitted along with bid: i. Sub frame/Support Structure ii. Wall Panels iii. Wall corners iv. Sealing gaskets v. Ceiling Panels **vi. Laminar flow system**	**Para:** All component of Wall & Ceiling System should be from the same manufacturer for the following and undertaking/declaration from the manufacturer should be submitted along with bid: i. Sub frame/Support Structure ii. Wall Panels iii. Wall corners iv. Sealing gaskets v. Ceiling Panels **vi. Deleted**
2	Page 93 Para ii	**Wall panels:** **Para:** One wall of every MOT should have provision of aesthetic scenery view/picture.	**Wall panels:** **Para:** Deleted
3	Page 92-93 Para ii	**Wall panels:** **Para:** Panels should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Wall Panels:** **Para: Wall Panels should comply with any one applicable international safety /Quality certification.**
4	Page 93 Para v	**Ceiling Panels:** The hermetic suspended ceiling should be a loading structure in heavy gauge material forming the grid on which the ceiling panels made of Solid Mineral Composite Sheet (SMS) thickness of 03mm. The total thickness of panel including Aluminum backing should not be less than 18mm.	**Ceiling Panels:** **Para:** The hermetic suspended ceiling should be a loading structure in heavy gauge material forming the grid on which the ceiling panels made of **Solid Mineral Composite Sheet (SMS) thickness of 03mm. The total thickness of panel including Aluminum backing should not be less than 9mm(minimum 6mm Aluminum backing + 3mm SMS).**
5	Page 93 Para v	Ceiling Panels: Para: Ceiling Panel should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.	**Ceiling Panels:** **Para: Ceiling panels should comply with any one applicable international safety /Quality certification.**
6	Page 94-95 Para 3 (A). X	**LAMINAR AIR FLOW SYSTEM -** **Para:** Should be European CE/USFDA/ETL/UL certified.	**LAMINAR AIR FLOW SYSTEM:** **Para: Laminar Air Flow System should comply with any one applicable international safety /Quality certification.**

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
7	Page 95 - 96 Para 4. viii	**PERIPHERAL LIGHTING AND CLEAN ROOM LUMINARIES** Para: The LED **Bulbs** should be from these make - Philips/ GE/ Crompton/ Wipro/ Syska.	**PERIPHERAL LIGHTING AND CLEAN ROOM LUMINARIES: Para:** The LED should be from these make - Philips/ GE/ Crompton/ Wipro/ Syska**/Osram.**
8	Page 96 Para 5. ii	**TOUCH SCREEN CONTROL PANEL - Para:** Screen sized should not be less than 32 inches.	**TOUCH SCREEN CONTROL PANEL: Para:** Screen sized should not be **less than 20 inches.**
9	Page 97 Para 7. iii	**STORAGE UNIT** Para: The overall size should be minimum 200 cm X 120 cm X 40 cm	**STORAGE UNIT : Para:** The overall size should be minimum 200 cm X 120 cm X **35 cm**
10	Page 98 Para 10	**HERMETICALLY SEALED DOORS** Para: Thickness of door wings should range in between 40 and 50mm.	**HERMETICALLY SEALED DOORS: Para:** Thickness of door wings should range in between 40 - **60mm**
11	Page 99 Para 13	Scrub Suite Vending Machine:	Scrub Suite Vending Machine **(Optional- Not Mandatory to Quote - will not be considered for L-1 ranking):**
12	Page 101 Para 16.1.i	**Double arm moveable Pendant for Anesthetist** Double moveable arms (any combination) with total coverage of 2000 mm +/- 5% and 330 deg. Horizontal movements for each arm. Vertical movement should be motorized and the arm height should remain to a height greater than 6 feet above floor level.	**Double arm moveable Pendant for Anesthetist: Para:** Double moveable arms (any combination) with total coverage of 2000 mm **+/- 10% a**nd 330 deg. Horizontal movements for each arm. Vertical movement should be motorized and the arm height should remain to a height greater than 6 feet above floor level.
13	Page 102 Para 16.2.i	**Double arm moveable Pendant for Surgeon** Double moveable arms (any combination) with total coverage of 2000mm +/- 5% and 330 deg. Horizontal movements for each arm. Vertical movement should be motorized and the arm height should remain to a height greater than 6 feet above floor level.	**Double arm moveable Pendant for Surgeon: Para:** Double moveable arms (any combination) with total coverage of 2000mm **+/- 10%** and 330 deg. Horizontal movements for each arm. Vertical movement should be motorized and the arm height should remain to a height greater than 6 feet above floor level.

Item sl. no. 05

Integration and Data Management System for Modular OT with OT Light

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
1	Page 105 Para 1. b	**Installation Requirement & Scope** All communication should be through fiber-optic cable only.	**Installation Requirement & Scope:** Para: **Within OR room communication between devices console etc. can be done using any technology compatible with 3D , HD and 4K signals wherever applicable. However communication to any location outside OR should be through Fiber Optic.**
2	Page 105 Para 1. c	**Installation Requirement & Scope** All required fiber-optic cabling inside MOT and upto IT rack present outside of each MOTs are under bidder scope and Institute will provide OFC (Fiber Optic Communication) from each IT racks to server room/control room, doctor's lounges & auditorium, etc.	**Installation Requirement & Scope :** Para: **All required cabling** inside MOT and upto IT rack present outside of each MOTs are under bidder scope and Institute will provide OFC (Fiber Optic Communication) from each IT racks to server room/control room, doctor's lounges & auditorium, etc."
3	Page 105 Para 2.a	2D & 3D Medical Grade Monitors - Para: 32 inch or more Full High Definition (1920X1080p) medical grade monitor, flat panel LED/LCD Color screen to display both 2D & 3D images and mounted on spring boom arm and second monitor should be mounted on OT Light 3rd arm.	Amended as "**26 inch or more** Full High Definition (1920X1080p) **medical grade monitor should be mounted on OT Light 3rd arm. The 3D/4K Monitor (in MIS OT- 02 Nos) should be mounted on ceiling suspended spring boom arm.**
4	Page 106 Para 4.h	Control System cum Digital Documentation System for MOT: Integration system should be able to control the following equipment - 1. OT Light 2. Routing of video sources to display destination required 3. Room audio & music	Control System cum Digital Documentation System for MOT: Integration system should be able to control the following equipment **-** 1. OT Light 2. Routing of video sources to display destination required 3. Room audio & music

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
		4. Advance Integration –For MIS MOTs (Complete device control for LAPs, Endo Scopic, VATs, etc.)	**4. Deleted**
5	Page 107 Para 5. c	**Monitoring & Control Room for OR Integration System** – Para: Should be supplied with dedicated monitoring screen of minimum 42 inches for viewing all MOTs procedures and another monitor of min. 32 inch for controls of Integration system from monitoring and control room.	**Monitoring & Control Room for OR Integration System:** Para: Should be supplied with dedicated monitoring screen of minimum 42 inches for viewing all MOTs procedures and another monitor of **mininum 19 inch** for controls of Integration system from monitoring and control room."
6	Page 107 Para 5. f	**Monitoring & Control Room for OR Integration System –** Para: The System should be supplied with minimum 50 User License to simultaneously remotely view of video sources of OTs.	**Monitoring & Control Room for OR Integration System –** Para: The System should be supplied with **minimum 30 User License** to simultaneously remotely view of video sources of OTs.
7	Page 108 Para 7.A.vii	Para: Rotation : 360 -330 degrees	**Para:** Rotation : **360 degrees full range**"
8	Page 107-108 Para 7.A.xv	**OT LIGHT WITH CAMERA** **Para:** Surgical Light System Should be European CE with 4 digit notified body/US FDA certified and certificate should be submitted for offered model	**OT LIGHT WITH CAMERA:** Para: Surgical Light System Should be European CE with 4digit notified body/US FDA certified**/ Self declaration of conformity of Eu CE with ISO 13485 issued by 4digit notified body** and certificate should be submitted for offered model
9	Page 107-108 Para 7. C	**OT LIGHT WITH CAMERA** Para: HD LED FLAT PANEL MEDICAL GRADE MONITOR (for Non Integrated MOTs) Should be 30-32" High Definition Progressive Scan Flat-panel Medical Grade Monitors with ceiling mounted spring arm suspension to support high definition/HDTV progressive Scan images and should be able to support and display DVI/HDTV, RGBHV, S-Video, Composite video signals. Aspect ratio 16:9/16:10. Resolution – 1920X1080 or more	**OT LIGHT WITH CAMERA :** Para: Should be **26inch or more** High Definition Progressive Scan Flat-panel Medical Grade Monitors with ceiling mounted spring arm suspension to support high definition/HDTV progressive Scan images and should be able to support and display DVI/HDTV, RGBHV, S-Video, Composite video signals. Aspect ratio 16:9/16:10. Resolution – 1920X1080 or more.

Sl. No	Tender Page & Para	Existing Tender Specification	Amended as
10	Page 108 Para 7.D	**OT LIGHT WITH CAMERA** Para: Recording System (Price to be offered separately - For Non-Integrated MOT) Recording system to be offered separately. Recording system should be full HD monitor LCD 21" touch screen or more and having the one TB storage space. USB port should be available for archiving the procedures.	**OT LIGHT WITH CAMERA:** Para: Recording system to be offered separately. Recording system should be full HD monitor **LCD 7" touch screen or more** and having the **minimum 500 GB storage space.** USB port should be available for archiving the procedures.
11	Page 109	**BOQ for Integration** **Monitors - Medical Grade** **A.** Digital 32 inch Medical Grade monitor - 8Nos. **B.** 2D & 3D Medical Grade Monitor **- 8Nos**. **C.** 4K Medical Grade Monitor 32 inch (Optional) **– 0 Nos.** **E.** Ceiling boom arm to mount 32" monitor- 8Nos.	**BOQ for Integration** Monitors - Medical Grade **(As per specs)** **A.** Digital **Medical Grade monitor(26 inch or more) -** 8 Nos. **B. Deleted** **C. Deleted** **E.** Ceiling boom arm to mount 32" monitor **(Only for MIS OTs)- 02 Nos.**
12	Page 109	**BOQ for Integration** **2 B.** 3D 1 Encoder and 1 Decoder Set (As per requirement of institute) - **08 Nos** **2C.** 4K 1 Encoder and 1 Decoder Set (As per requirement of institute) - **08 Nos.** **4C. 32 inch monitor - 1No.**	**BOQ for Integration** **2 B.** 3D 1 Encoder and 1 Decoder Set (As per requirement of institute) **- 01 No.** **2C.** 4K 1 Encoder and 1 Decoder Set (As per requirement of institute) **- 01 No.** **4C. Minimum 19inch monitor – 01 No.**

SECTION- VI

LIST OF REQUIREMENTS

Part II: Required Delivery Schedule:

Existing:

a) For Indigenous goods or for imported goods if supplied from India:
90 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date by when it is to be delivered at consignee site. Bidders may quote earliest delivery period.

Installation and Commissioning shall be done at the earliest but not later than 45 days of delivery of goods at site or date of handing over the site for installation, whichever is later.

b) For Imported goods directly from foreign:
90 days from the date of opening of L/C. The date of delivery will be the date of Bill of Lading/Airway bill. (Bidders may quote the earliest delivery period).

Installation and Commissioning shall be done at the earliest but not later than 45 days of delivery of goods at site or date of handing over the site for installation, whichever is later.

For delayed delivery and/or installation and commissioning liquidated damages will get applied as per GCC clause 23.

Amended as:

For Indigenous goods or for imported goods:

Supply, installation and commissioning to be completed within 120 days from the date of NOA or date of opening of LC or date of layout drawing approval, whichever is later.
(In case of LC necessary documents like valid Performance Security and Proforma Invoice are to be submitted within 30 days and in case layout drawing approval is applicable, it should be submitted by the supplier within 21 days respectively from the date of release of NOA.)

For delayed delivery and/or installation and commissioning liquidated damages will get applied as per GCC clause 23.

SECTION - VIII

Existing Qualification criteria is amended as under:

AMENDED QUALIFICATION CRITERIA

a. APPLICABLE FOR ITEMS AT SL. NO. 1 & 2 OF THIS BIDDING OCUMENT

1. The bidders must be a manufacturer. In case the manufacturer does not quote directly, they may authorise their authorized agent as per proforma of "Manufacturer Authorization Form" as given in the bidding document to quote and enter into a contractual obligation.

2. The Manufacturer **and/or Bidder** should have supplied and installed in last **Seven** years from the date of Bid Opening, similar equipment meeting major parameters of technical specification which is functioning satisfactorily.

3. In support of 2, the Bidder shall furnish Performance statement in the enclosed Proforma 'A'.

   The Bidder shall furnish Satisfactory Performance Certificate in respect of above, duly translated in English and duly signed alongwith the bid.

4. The Purchaser reserves the right to ask for a free demonstration of the quoted equipment after giving reasonable time to the bidder at a pre-determined place acceptable to the purchaser or at site (in case of non portable and heavy equipment) for technical acceptability as per the bidding document specifications, before the opening of the Price Bid.

PROFORMA 'A'

PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last **seven** years)

TE No. : _____

Date of Bid Opening : _____

Name and address of the Bidder : _____

Name and address of the Manufacturer : _____

Order placed by {**full address (including detail of authority on whose behalf the order was placed, if applicable)**}	Order no. and date ##	Description **(BOQ including quantity)**	@**'Contract value'** (Rs.)	Consignee	Date of Delivery Period			Have the goods been functioning satisfactorily (attach documentary proof)**
					Contract	Actual	Reasons for Delay if Any	
1	2	3	4	5	6	7	8	9
@ **'Contract value' is limited to the upfront charges paid (DDP price) for items in the ordered BOQ (on Supply, Installation, Testing & Commissioning basis) inclusive of warranty.**								

We hereby certify that the details of all orders received in last **7 years** of quoted equipment (**from Govt. hospitals/institutes of national importance or at any other reputed hospitals/institutes globally)** has been furnished. We hereby further certify that if at any time, information furnished by us is proved to be false or incorrect; we are liable for any action as deemed fit by the purchaser in addition to forfeiture of the Bid Security.

Name_____

Business Address_____

Signature of Bidder_____

Place: _____ Seal of the Bidder_____

** The documentary proof will be a latest certificate from the consignee/end user with cross-reference of order no. and date

The bidders are requested to submit the purchase order copies for the specific model quoted along with the Techno-commercial Bid.

b. APPLICABLE FOR ITEMS AT SL. NO. 3, 4 & 5 OF THIS BIDDING DOCUMENT

1. **Status:** The Bidder should be a Manufacturer or its authorized Agent.

2. **Turnover:** Eligible Bidders should have an average annual turnover in the consequetive past three financial years (2014-15, 2015-16, 2016-17) at least 80% of the estimated cost**.**

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

   Eligible bidder(s) should have in the past **7 (seven)** years ending 31st March 2017 successfully executed similar orders meeting major parameters of technical specification at Govt. hospitals/institutes of national importance or at any other reputed hospitals/institutes globally as stated below:

   a. One single order on Supply, Installation, Testing & Commissioning (SITC) basis for a minimum value of 80% of the estimated cost.

   or

   b. Two single orders on SITC basis for minimum value of 60% of the estimated cost.

   or

   c. Three single orders on SITC basis for minimum value of 40% of the estimated cost.

   Note: 1. The copies of order(s) along with the completion certificate(s) indicating that the specified works have been completed shall be submitted with technical bid.

   2. In case the bidder is a 100% owned Indian Subsidiary of an International firm, the Turnover/Global experience of the parent international firm shall also be considered.

4. **Financial Status:** Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 30th June 2016 or 30th September 2016 or 30th December 2016 or 31st March 2017. Audited Profit & Loss account and Balance Sheet (duly self certified) for the immediate last five consecutive financial years should be submitted along with the bid.

NB:

Estimated Cost of items for meeting the Criteria at point 3 above

Sl. no.	Rfx/ Event number	Short Description of goods	Quantity	Total Estimated Cost (Rs. in cr.)
3	3000002186	Centralised Medical Gas Pipeline System	1	12.00
4	3000002187	Modular Operation Theater (MOT)	9	9.00
5	3000002188	Integration and Data Management System for Modular OT with OT Light	8	8.00

SECTION - VIII

PRICE SCHEDULE

Existing price schedule in the bidding document are indicative. Bidders are advised to strictly follow the instructions and price format being published in the designated e-tender portal where bids are to be submitted as per bidding document.

All other contents of the tender enquiry including terms & conditions remain unaltered.