TENDER ENQUIRY DOCUMENT OPEN e -TENDER

FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF MEDICAL EQUIPMENT

ON BEHALF OF

ALL INDIA INSTITUTE OF AYURVEDA (AIIA)

UNDER MINISTRY OF AYUSH, GOVT. OF INDIA

Gautampuri, Sarita Vihar, Mathura Road, New Delhi

E –Tendering

Tender Enquiry No.: HSCC/PUR/AIIA/Medical Equipment/III/2014 dated 23.12.2014

HSCC (INDIA) LTD

(A GOVERNMENT OF INDIA ENTERPRISE)
Plot No. 6-A, Block-E, Sector-1,
NOIDA (U.P.) – 201 301
PHONE: 0120-2540153
FAX: 0120-2542447
URL: www.hsccltd.com

Note:

- **All Bidders are requested submit their offer/ bid as per to draft bid as attached.**
- **In case of any clarification feel free to call on 9891281703/amarhscc@gmail.com/a_singh@hsccltd.co.in**

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All India Institute of Ayurveda (AIIA),

Under Ministry of AYUSH, Govt. of India
Gautampuri, Sarita Vihar, Mathura Road, New Delhi 110 0076
NATIONAL COMPETITIVE BIDDING (NCB), INVITATION FOR BIDS (IFB)

FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING MEDICAL EQUIPMENT
E-Tendering

All India Institute of Ayurveda (AIIA), under Ministry of AYUSH, Government of India, Gautampuri, Sarita Vihar, Mathura Road, New Delhi through its consultant HSCC (India) Ltd invites **ON-LINE** sealed bids from eligible bidders, in Single stage two bid system, for Supply, Installation, Testing & Commissioning and handing over of various **Medical Equipment** at All India Institute of Ayurveda, Sarita Vihar, New Delhi.

The bidders are required to be registered at HSCC e-tender portal www.tenderwizard.com/HSCC. Please log on to www.tenderwizard.com/HSCC only for downloading bid document and for participation through **E-Tendering basis**. For submission and other details, please refer HSCC e-tender portal www.tenderwizard.com/HSCC. For submission of the bids, the bidders are required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities. The bidders are required to submit (a) Original non-refundable fee of INR 1,000/- as bid document fee per set in the form of Cash/ Demand Draft, drawn on a scheduled Bank in India, in favour of **"HSCC (India) Ltd"** payable at New Delhi/Noida (b) Original Bid Security as per Bid Document and submit in the office of DGM (Proc.), HSCC (India) Ltd., E-6A, Sector-1, Noida – 201301 **before the date and time fixed for opening of the bid either by registered post or by hand failing which the bid will be declared nonresponsive**

Complete set of Bid Documents has been made available at E-Tender portal www.tenderwizard.com/HSCC, www.hsccltd.com & www.indianmedicine.nic.in. Prospective bidders are advised to regularly scan through HSCC E-Tender portal www.tenderwizard.com/HSCC, www.hsccltd.com & www.indianmedicine.nic.in. as corrigendum/ amendments etc., if any, will be notified on this portal only and no separate advertisement will be made for this.

DIRECTOR

NOTICE INVITING TENDERS (NIT)

Open Tender

FOR

ALL INDIA INSTITUTE OF AYURVEDA (AIIA)

NEW DELHI

Tender Enquiry No.: HSCC/PUR/AIIA/Medical Equipment/III/2014 Dated 23.12.2014

NOTICE INVITING TENDERS (NIT)

All India Institute of Ayurveda (AIIA), under Ministry of Ayush, Government of India, Gautampuri, Sarita Vihar, New Delhi through its consultant HSCC (India) Ltd invites **ON- LINE** sealed bids from eligible bidders, in Single stage two bid system, for Supply, Installation, Testing & Commissioning and handing over of following **Medical Equipment at All India Institute of Ayurveda, Sarita Vihar, New Delhi.**

Item no.	Equipment Name	Department	Qty.	EMD Amount (INR)	Total Estimated Cost Rs.	Remark
1	Pediatric Ventilator	Anesthesia	2	60,000	30,00,000.00	III
2	ICU Ventilators	Anesthesia	2	60,000	30,00,000.00	III
3	Blood Gas Analyzer	Anesthesia	1	30,000	15,00,000.00	III
4	Patient Warming System	Anesthesia	2	12,000	6,00,000.00	III
5	Resuscitation Kit	Anesthesia	2	4,000	2,00,000.00	III
6	Video Laryngoscope	Anesthesia	2	140000	70,00,000.00	II
7	UV – Visible Spectrophotometer	Bio-Chemistry	1	20,000	10,00,000.00	III
8	Refrigerator Centrifuge	Blood Bank	1	21,000	10,50,000.00	III
9	Microplate Shaker	Blood Bank	1	8,000	4,00,000.00	III
10	Water Bath	Blood Bank	1	2,000	1,00,000.00	III
11	Micropipettes	Blood Bank	3	2,400	1,20,000.00	III
12	Multi Channel pipettes	Blood Bank	3	3,000	1,50,000.00	III
13	Electronic Analytical Balance	Blood Bank	1	8,000	4,00,000.00	III
14	Fully Automated Blood grouping & Cross matching equipment based on Agglutination Technology	Blood Bank	1	7,400	3,70,000.00	III
15	Portable Refrigerated Blood Transport Box	Blood Bank	1	5,200	2,60,000.00	III
16	Ultrasonic Washing System for Glassware /plastic ware	Blood Bank	2	64,000	32,00,000.00	III
17	Portable Color Doppler Echo Cardiography system	Cardiology	1	80,000	40,00,000.00	III
18	Dental Chair (Regular)	Dental	1	14,000	7,00,000.00	III
19	Dental Scaler	Dental	1	9,000	4,50,000.00	III
20	Autoclave	Dental	1	6,000	3,00,000.00	III
21	Intra Oral Camera	Dental	1	3,000	1,50,000.00	III
22	Oesophagoscope with Light source	ENT	1	36000	18,00,000.00	III
23	Binocular Microscope Compound	Microbiology	1	5,000	2,50,000.00	III
24	Autoclaves (Vertical)	Microbiology	1	2,000	1,00,000.00	III
25	Microscope with photographic attachment / Digital camera.	Microbiology	1	12,000	6,00,000.00	III

26	Autoclave Fully Automatic (Horizontal)	Microbiology	1	24,000	12,00,000.00	III
27	Automatic air sampler	Microbiology	1	8,000	4,00,000.00	III
28	Hot air oven	Microbiology	1	4,000	2,00,000.00	III
29	Serological water bath	Microbiology	2	2,000	1,00,000.00	III
30	Lab Refrigerators	Microbiology	3	12000	6,00,000.00	II
31	Deep Freezer (-20° C)	Microbiology	2	6000	3,00,000.00	II
32	Deep freezer(-80 ° C) vertical / horizontal	Microbiology	1	8000	4,00,000.00	II
33	Shaking water bath	Microbiology	1	3000	1,50,000.00	III
34	Electronic Balance	Microbiology	1	4,000	2,00,000.00	III
35	Automated Bacterial Culture System	Microbiology	1	60,000	30,00,000.00	I
36	Fully Automated bacterial identication and sensitivity System	Microbiology	1	60,000	30,00,000.00	I
37	Auto Loading Urine Strip Analyzer	Pathology	1	7,000	3,50,000.00	III
38	Semi Automated ESR Analyzer	Pathology	1	6,000	3,00,000.00	III
39	Semi Automatic Coagulometer	Pathology	1	10,000	5,00,000.00	III
40	Automated Slide Strainer	Pathology	1	32000	16,00,000.00	II
41	Automatic Tissue Processor	Pathology	1	32000	16,00,000.00	II
42	Microtome	Pathology	1	22000	11,00,000.00	II
43	Sperm Quality Analyzer	Pathology	1	7,000	3,50,000.00	III
44	Transport Incubator	Pediatric	1	12,000	6,00,000.00	III
45	Fiberoptic Phototheraphy Lamp	Pediatric	2	4,000	2,00,000.00	III
46	Pulse Oximeter	Pediatric	5	10,000	5,00,000.00	III
47	Microbilimeter	Pediatric	2	16,000	8,00,000.00	III
48	Mobile Air Asepicizer	Pediatric	2	16,000	8,00,000.00	III
49	Interferential Theraphy Unit with Mobile Trolley	PMR	1	3,000	1,50,000.00	III
50	Short Wave Diathermy Unit	PMR	1	9,000	4,50,000.00	III
51	Ultrasound Theraphy Unit (Two Heads)	PMR	1	3,000	1,50,000.00	III
52	Treadmill (T. M. T) jogger	PMR	1	10,000	5,00,000.00	III
53	Portable Ultrasound With Color Doppler System	Radiology	2	80,000	40,00,000.00	III
54	500 mA Digital Fluro Radiography System	Radiology	1	140000	70,00,000.00	II
55	Digital Mobile X-Ray Unit	Radiology	1	1,40,000	70,00,000.00	III
56	Diathermy	OT	3	36000	18,00,000.00	III
57	Hormonic Scalpel	OT	1	40,000	20,00,000.00	III
58	Instruments Sets	OT	6	24000	12,00,000.00	III
59	Rapid Infusion Pump	Operation Theatre	5	150000	75,00,000.00	II
60	Ante Partum & Intrapartum Foetal Monitor	OBS & GYN	2	20000	10,00,000.00	III
61	Single Puncture Laparascope	OBS & GYN	1	17000	8,50,000.00	II
62	Operative Gynecological Laparoscope Set	OBS & GYN	1	30000	15,00,000.00	II
63	Delivery Bed	OBS & GYN	6	42000	21,00,000.00	II
64	Gynecological Examination Couch	OBS & GYN	4	8000	4,00,000.00	II
65	Patient Transfer Trolley	OBS & GYN	2	6000	3,00,000.00	II
66	Emergency Patient Trolley	OBS & GYN	4	16000	8,00,000.00	II
67	Refraction Unit	Ophthalmoscope	1	14000	7,00,000.00	III
68	Auto-refractokeratometer	Ophthalmoscope	1	20000	10,00,000.00	II
69	Slit Lamp Microscope	Ophthalmoscope	1	12000	6,00,000.00	II

70	A B Scan	Ophthalmoscope	1	20000	10,00,000.00	II
71	Automated Perimeter	Ophthalmoscope	1	16000	8,00,000.00	II
72	Non Contact tonometer	Ophthalmoscope	1	15000	7,50,000.00	II
73	Mobile Examination Lights based on LED Technology - Wall mounted lights (LED) & Floor Mounted	OPD	14 (12 Wall Mounted & 2 Floor Mounted)	58000	29,00,000.00	II

Tender No.: HSCC/PUR/AIIA/Medical Equipment/III/2014 dt. 23.12.2014

Sl. No.	Description	Schedule
i.	Dates of sale of tender enquiry documents	**For item no. 1 to 16:- 23.12.2014 to 30.01.2015, 10:00 hrs to 17:30 hrs IST** **For item no. 17 to 36:-23.12.2014 to 06.02.2015, 10:00 hrs to 17:30 hrs IST** **For item no. 37 to 59:-23.12.2014 to 13.02.2015, 10:00 hrs to 17:30 hrs IST** **For item no. 60 to 73:-23.12.2014 to 20.02.2015, 10:00 hrs to 17:30 hrs IST**
ii.	Place of sale of Tender Enquiry Documents	**DGM (Procurement)** HSCC (India) Ltd, Plot No. 6-A, Block-E, Sector-1, Noida (U.P)-201301
iii.	Cost of the Tender Enquiry Document	INR 1000/-
iv.	Pre Tender Meeting Date & Time	**05.01.2015**, 14:00 hrs IST
v.	Pre Tender Meeting Venue	Same as 2 (ii)
vi.	Closing date & time for receipt of Tender	**For item no. 1 to 16:- 02.02.2015, 14:00 hrs IST** **For item no. 17 to 36:- 09.02.2015, 14:00 hrs IST** **For item no. 37 to 59:- 16.02.2015, 14:00 hrs IST** **For item no. 60 to 73:- 23.02.2015, 14:00 hrs IST**
vii.	Time and date of opening of Techno – Commercial tenders	**For item no. 1 to 16:- 02.02.2015, 14.30 hrs IST** **For item no. 17 to 36:- 09.02.2015, 14.30 hrs IST** **For item no. 37 to 59:- 16.02.2015, 14.30 hrs IST** **For item no. 61 to 73:- 23.02.2015, 14.30 hrs IST**
viii	Venue of Opening of Techno Commercial Tender	Same as 2 (ii)

1. Please long on to www.tenderwizard.com/HSCC only for downloading bid document and for participation through **e-tendering basis**. All corrigendums/modifications/amendments, if any, will be published on the website www.tenderwizard.com/HSCC only. All bidders are requested to visit this website on regular basis.
2. Tenderer may also downloaded the tender enquiry documents from the web site http://eprocure.gov.in/cppp, www.hsccltd.com and submit its tender by utilizing the downloaded document, along with the required non-refundable fee as mentioned in Para 3 above.
3. Interested tenderers may also obtain further information about this requirement from the above office selling the documents. Tender Enquiry Documents may be purchased on payment of non-refundable fee of **INR 1,000/-** per set in the form of Cash/ Demand Draft drawn on a scheduled Bank in India, in favour of **"HSCC (India) Ltd"** payable at New Delhi/Noida**.**
4. All prospective tenderers may attend the **Pre Tender meeting**. The venue, date and time indicated in the Para 2 above.
5. **Bids to be submitted on-line only in single stage two bid system, i.e. Techno-commercial Bid (unpriced bid) and the Price Bid, for the above, including Bid Security and Bid Document Fee on or before the closing date and time indicated above, failing which the tenders will be treated as late and rejected.**
6. In the event of any of the above tender opening/closing dates being declared as holiday/closed day for the purchase organization, the bids will be sold/received/opened on the next working day at the stipulated time.
7. The Tender Enquiry Documents are not transferable.
8. Bids shall be evaluated separately for each **item.**
9. HSCC reserves the right to accept or reject any or all of the tenders in full or in part including the lowest bid without assigning any reason thereof or incurring any liability thereby.

Director (AIIA),
Sarita Vihar
New Delhi

INSTRUCTION FOR E-TENDERING

1. Bid Documents can be downloaded from www.tenderwizard.com/HSCC as mentioned in TE document.
2. The bidder should have to obtain **Digital Signature Registration** and **Vendor's Registration** for participation in **e-tendering** i.e filling up the formats and uploading of the bid on the website www.tenderwizard.com/HSCC.
3. Bidders shall be able to fill-up the following formats of the Techno-Commercial Bid and Price Bid, only after getting Digital Signature Registration & up-load them in the portal site www.tenderwizard.com/HSCC after getting Vendor Registration.
4. The Bidder must **upload** the following as per the tender formats **ONLINE** and these documents must be signed and stamped by the bidders before scanning & attachment:

A) Techno – Commercial Tender (Un priced Tender)

i) Form – A - Bid summary sheet.
ii) Form – B - TE document Fee & EMD/ Bid security.
iii) Form - C – Power of Attorney.
iv) Form - D- Tender Form
v) Form - E - Manufacturer Authorisation form.
vi) Form – F – Affidavit.
vii) Form - G - Proforma "A"
vii) Form - H - Performance Certificate.
viii) Form - I - Bidder information.
IX) Form- J- Technical compliance report to be submitted in tabulated and point wiser manner clearly mentioning page number /para number with authenticated catalogue/ data sheet / manual
X) Technical literature of equipment
XI) Balance sheet for last three years prior to the tender opening, Banker account number & address, Income tax number, if SSI unit- certificate of registration issued by Directorate of Industries/NSIC.

For Form A to J bidder may please refer draft bid

B) Price Bid (Only Online)

i) Price Schedule
ii) CMC Price Schedule
iii) Turnkey Price Schedule, wherever applicable

The Bidder shall ensure that the bid complete in all respects must be uploaded on the website www.tenderwizard.com/HSCC on or before the closing date & time indicated in the bid document. No rectification in the bid is possible after submission of the bid on-line.

5. The Bidder must submit the **Hard copy** of the following Documents in Original, duly signed and stamped on each page must be submitted in sealed envelope as per schedule for submission of the bid mentioned in the TE document only at HSCC (India) Ltd., E-6(A), Sector-I, Noida. Bid will be summarily rejected if Original EMD & Tender Document Fee as per bid document is not found in envelop at the time of tender opening.

1. Original EMD & TE Document Fee.
2. Form – F- Affidavit.
3. Form - H - Performance Certificate.
4. Form – J - Technical compliance report to be submitted in tabulated and point wiser manner clearly mentioning page number /para number with authenticated catalogue/ data sheet / manual.

Note: There must be no discrepancy between the documents submitted through Hard Copy and the documents uploaded On-line, as mentioned above, otherwise bid will be rejected. The techno-commercial bid shall not be opened of those bidders who have not complied with the provisions of the Bid Document Fee and Bid Security clause in the tender document. Based on Techno-Commercial evaluation, the **Price bids** of only those bidders, who are found technically and commercially eligible, shall be opened at a later date to be intimated to them.

SECTION - II

GENERAL INSTRUCTIONS TO TENDERERS (GIT)
CONTENTS

GENERAL INSTRUCTIONS TO TENDERERS (GIT)

A. PREAMBLE

1. Definitions and Abbreviations

1.1 The following definitions and abbreviations, which have been used in these documents shall have the meanings as indicated below:

1.2. Definitions:

(i) "Purchaser" means Director, AIIA, Sarita Vihar, New Delhi
(ii) "Tender" means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder.
(iii) "Tenderer" means Bidder/ the Individual or Firm submitting Bids / Quotation / Tender
(iv) "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract.
(v) "Goods" means the articles, material, commodities, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, medical equipment, industrial plant etc. which the supplier is required to supply to the purchaser under the contract.
(vi) "Services" means services allied and incidental to the supply of goods, such as transportation, installation, commissioning, provision of technical assistance, training, after sales service, maintenance service and other such obligations of the supplier covered under the contract.
(vii) "Earnest Money Deposit" (EMD) means Bid Security/ monetary or financial guarantee to be furnished by a tenderer along with its tender.
(viii) "Contract" means the written agreement entered into between the purchaser and/or consignee and the supplier, together with all the documents mentioned therein and including all attachments, annexure etc. therein.
(ix) "Performance Security" means monetary or financial guarantee to be furnished by the successful tenderer for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
(x) "Consignee" means the Director, AIIA, Sarita Vihar, New delhi person to whom the goods are required to be delivered as specified in the Contract. If the goods are required to be delivered to a person as an interim consignee for the purpose of despatch to another person as provided in the Contract then that "another" person is the consignee, also known as ultimate consignee.
(xi) "Specification" means the document/standard that prescribes the requirement with which goods or service has to conform.
(xii) "Inspection" means activities such as measuring, examining, testing, gauging one or more characteristics of the product or service and comparing the same with the specified requirement to determine conformity.
(xiii) "Day" means calendar day.

1.3 Abbreviations:

(i) "TE Document" means Tender Enquiry Document
(ii) "NIT" means Notice Inviting Tenders.
(iii) "GIT" means General Instructions to Tenderers
(iv) "SIT" means Special Instructions to Tenderers
(v) "GCC" means General Conditions of Contract
(vi) "SCC" means Special Conditions of Contract
(vii) "DGS&D" means Directorate General of Supplies and Disposals
(viii) "NSIC" means National Small Industries Corporation
(ix) "PSU" means Public Sector Undertaking
(x) "CPSU" means Central Public Sector Undertaking
(xi) "LSI" means Large Scale Industry
(xii) "SSI" means Small Scale Industry

(xiii) "LC" means Letter of Credit
(xiv) "DP" means Delivery Period
(xv) "BG" means Bank Guarantee
(xvi) "ED" means Excise Duty
(xvii) "CD" means Custom Duty
(xviii) "VAT" means Value Added Tax
(xix) "CENVAT" means Central Value Added Tax
(xx) "CST" means Central Sales Tax
(xxi) "RR" means Railway Receipt
(xxii) "BL" means Bill of Lading
(xxiii) "FOB" means Free on Board
(xxiv) "FCA" means Free Carrier
(xxv) "FOR" means Free On Rail
(xxvi) "CIF" means Cost, Insurance and Freight
(xxvii) "CIP (Destinations)" means Carriage and Insurance Paid up to Consignee Site. Additionally the Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.
(xxviii) "DDP" means Delivery Duty Paid named place of destination (consignee site)
(xxix) "INCOTERMS" means International Commercial Terms as on the date of Tender Opening
(xxx) "MOH&FW" means Ministry of Health & Family Welfare, Government of India
(xxxi) "Dte. GHS" means Directorate General and Health Services, MOH&FW.
(xxxii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
(xxxiii) "RT" means Re-Tender.

2. Introduction

2.1 The Purchaser has issued these TE documents for purchase of goods and related services as mentioned in Section – VI – "List of Requirements", which also indicates, *interalia,* the required delivery schedule, terms and place of delivery.

2.2 This section (Section II - "General Instruction Tenderers") provides the relevant information as well as instructions to assist the prospective tenderers in preparation and submission of tenders. It also includes the mode and procedure to be adopted by the purchaser for receipt and opening as well as scrutiny and evaluation of tenders and subsequent placement of contract.

2.3 The tenderers shall also read the Special Instructions to Tenderers (SIT) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIT and the SIT, the provisions contained in the SIT shall prevail over those in the GIT.

2.4 Before formulating the tender and submitting the same to the purchaser, the tenderer should read and examine all the terms, conditions, instructions, checklist etc. contained in the TE documents. Failure to provide and/or comply with the required information, instructions etc. incorporated in these TE documents may result in rejection of its tender.

3. Availability of Funds

3.1 Expenditure to be incurred for the proposed purchase will be met from the funds available with the purchaser/consignee.

4. Language of Tender

4.1 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, shall be written in the English language, unless otherwise specified in the Tender Enquiry. However, the language of any printed literature furnished by the tenderer in connection with its tender may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the tender, the English translation shall prevail**.**

4.2 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, may also be written in the Hindi language, provided that the same are accompanied by English translation, in which case, for purpose of interpretation of the tender etc, the English translations shall prevail.

5. Eligible Tenderers

5.1 This invitation for tenders is open to all suppliers who fulfil the eligibility criteria specified in these documents.

6. Eligible Goods and Services

6.1 All goods and related services to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term "origin" used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied.

7. Tendering Expense

7.1 The tenderer shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender and for subsequent processing the same. The purchaser will, in no case be responsible or liable for any such cost, expenditure etc regardless of the conduct or outcome of the tendering process.

B. TENDER ENQUIRY DOCUMENTS

8. Content of Tender Enquiry Documents

8.1 In addition to Section I – "Notice inviting Tender" (NIT), the TE documents include:

- Section II – General Instructions to Tenderers (GIT)
- Section III – Special Instructions to Tenderers (SIT)
- Section IV – General Conditions of Contract (GCC)
- Section V – Special Conditions of Contract (SCC)
- Section VI – List of Requirements
- Section VII – Technical Specifications
- Section VIII – Quality Control Requirements
- Section IX – Qualification Criteria
- Section X – Tender Form
- Section XI – Price Schedules
- Section XII – Questionnaire
- Section XIII – Bank Guarantee Form for EMD
- Section XIV – Manufacturer's Authorisation Form
- Section XV – Bank Guarantee Form for Performance Security/CMC Security
- Section XVI – Contract Forms A & B
- Section XVII – Proforma of Consignee Receipt Certificate
- Section XVIII – Proforma of Final Acceptance Certificate by the consignee
- Section XIX – Instructions from Ministry of Shipping/ Surface Transport (Annexure 1 & 2)
- Section XX – Check List for the Tenderers
- Section XXI – Consignee List

8.2 The relevant details of the required goods and services, the terms, conditions and procedure for tendering, tender evaluation, placement of contract, the applicable contract terms and, also, the standard formats to be used for this purpose are incorporated in the above-mentioned documents. The interested tenderers are expected to examine all such details etc to proceed further.

9. Amendments to TE documents

9.1 At any time prior to the deadline for submission of tenders, the purchaser may, for any reason deemed fit by it, modify the TE documents by issuing suitable amendment(s) to it.

9.2 Such an amendment will be published on website.

9.3 In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

10. Clarification of TE documents

10.1 A tenderer requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing. The purchaser will respond in writing to such request provided the same is received by the purchaser.

C. PREPARATION OF TENDERS

11. Documents Comprising the Tender

11.1 The **Two Tender System**, i.e. "Techno – Commercial Tender" and "Price Tender" prepared by the tenderer shall comprise the following:

A) <u>Techno – Commercial Tender (Un priced Tender)</u>

i) Earnest money furnished in accordance with GIT clause 19.1 alternatively, documentary evidence as per GIT clause 19.2 for claiming exemption from payment of earnest money.
ii) Tender Form as per Section X (without indicating any prices).
iii) Documentary evidence, as necessary in terms of clauses 5 and 17 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.
iv) Tenderer/Agent who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form.
v) Power of Attorney in favour of signatory of TE documents.
vi) Documents and relevant details to establish in accordance with GIT clause 18 that the goods and the allied services to be supplied by the tenderer conform to the requirement of the TE documents.
vii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.
viii) Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
ix) Certificate of Incorporation in the country of origin.
x) Checklist as per Section XX.

B) <u>Price Tender:</u>

The information given at clause no. 11.1 A) ii) & viii) above should be reproduced with the prices indicated. **In case of tenderer quoting for more than 1 (one) item, the prices for the quoted items should be submitted in separate sealed covers.**

<u>NOTE:</u>

1. All pages of the Tender should be page numbered and indexed.
2. It is the responsibility of tenderer to go through the TE document to ensure furnishing all required documents in addition to above, if any.

11.2 The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender. Individuals signing the tender or other documents connected with a contract must specify whether he signs as:

i. A 'Sole Proprietor' of the firm or constituted attorney of such Sole Proprietor.
ii. A partner of the firm, if it be a partnership, in which case he must have authority to quote & to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney;
iii. Constituted attorney of the firm if it is a company.

NOTE:

1. In case of (ii) above, a copy of the partnership agreement or general power of attorney, in either, case, attested by a Notary Public should be furnished, or affidavit on stamped paper of all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished.
2. In case of the Partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the tender and all other related documents must be signed by every partner of the firm.
3. A person signing the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrantee that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages.

11.3 A tender, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.

11.4 Tender sent by fax/telex/cable/electronically shall be ignored.

12. Tender currencies

12.1 The tenderer supplying already imported goods shall quote only in Indian Rupees and shall enclose **"BILL OF ENTRY** "Without this Bill of Entry payment cannot be made.

12.2 For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only if such services are to be performed /undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the price schedule and will be payable in Indian Rupees only.

12.3 **Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.**

13 Tender Prices

13.1 The Tenderer shall indicate on the Price Schedule provided under Section XI all the specified components of prices shown therein including the unit prices and total tender prices of the goods and services it proposes to supply against the requirement. All the columns shown in the price schedule should be filled up as required. If any column does not apply to a tenderer, same should be clarified as "NA" by the tenderer.

13.2 If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.

13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached under Section XI.

13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:

13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding price schedule shall be entered separately in the following manner:

a) the price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like sales tax, CST VAT, CENVAT, Custom Duty, Excise Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc;
b) any sales or other taxes and any duties including excise duty, which will be payable on the goods in India if the contract is awarded;
c) charges towards Packing & Forwarding, Inland Transportation, Insurance (local transportation and storage) would be borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Price Schedule;
d) the price of Incidental Services, as mentioned in List of Requirements and Price Schedule;
e) the prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
f) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.4.2 For goods offered from abroad, the prices in the corresponding price schedule shall be entered separately in the following manner:

a) The price of goods quoted FOB/FCA port of shipment, as indicated in the List of Requirements and Price Schedule;
b) The amount of freight and insurance.
c) the price of goods quoted CIP (at Consignee Site) Basis as indicated in the List of Requirements & Price Schedule;
d) the charges for Incidental Services including Customs Duty on (CDEC) basis, Custom Clearance, inland transport upto Consignee's site, installation & commissioning, supervision, Demonstration & training, as in the List of Requirements and Price Schedule.
e) the charges for Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery. Other local costs and Incidental costs, as specified in the List of Requirements and Price Schedule;
f) the charges for Incidental Services, as in the List of Requirements and Price Schedule;
g) the prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
h) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.5 Additional information and instruction on Duties and Taxes:

13.5.1 If the Tenderer desires to ask for excise duty, sales tax/ VAT, Service Tax, Works Contract Tax etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

13.5.2 Excise Duty:

a) If reimbursement of excise duty is intended as extra over the quoted prices, the supplier must specifically say so also indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of excise duty will be entertained after the opening of tenders.
b) If a Tenderer chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation, if any, in the excise duty during the time of supply, the tenderer must clearly mention the same and also indicate the rate and quantum of excise duty included in its price. Failure to indicate all such details in clear terms may result in rejection of that tender.
c) Subject to sub clauses 13.5.2 (a) & (b) above, any change in excise duty upward/downward as a result of any statutory variation in excise duty taking place

within contract terms shall be allowed to the extent of actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall be reimbursed to the purchaser by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

13.5.3 Sales Tax:

If a tenderer asks for sales tax/ VAT, Service Tax and Works Contract Tax to be paid extra, the rate and nature of sales tax applicable should be shown separately. The sales tax / VAT, Service Tax and Works Contract Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to sales tax / VAT, Service Tax and Works Contract Tax and is payable as per the terms of the contract. If any refund of Tax is received at a later date, the Supplier must return the amount forth-with to the purchaser.

13.5.4 Octroi Duty and Local Duties & Taxes:

Normally, goods to be supplied to government departments against government contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. However, on some occasions, the local bodies (like town body, municipal body etc.) as per their regulations allow such exemptions only on production of certificate to this effect from the concerned government department. Keeping this in view, the supplier shall ensure that the stores to be supplied by the supplier against the contract placed by the purchaser are exempted from levy of any such duty or tax and, wherever necessary, obtain the exemption certificate from the purchaser.
However, if a local body still insists upon payment of such local duties and taxes, the same should be paid by the supplier to the local body to avoid delay in supplies and possible demurrage charges and obtain a receipt for the same. The supplier should forward the receipt obtained for such payment to the purchaser to enable the purchaser reimburse the supplier and take other necessary action in the matter.

13.5.5 Customs Duty:

The Purchaser will pay the Customs duty wherever applicable.

13.6 For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 10 shall be followed.

13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.

13.8 Unless otherwise specifically indicated in this TE document, the terms FCA, FOB, FAS, CIF, CIP, DDP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris

13.9 The need for indication of all such price components by the tenderers, as required in this clause (viz., GIT clause 13) is for the purpose of comparison of the tenders by the purchaser and will no way restrict the purchaser's right to award the contract on the selected tenderer on any of the terms offered.

14. Indian Agent

14.1 If a foreign tenderer has engaged an agent in India in connection with its tender, the foreign tenderer, in addition to indicating Indian agent's commission, if any, in a manner described under GIT sub clause 12.2 above, shall also furnish the following information:

a) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
b) The details of the services to be rendered by the agent for the subject requirement.
c) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CMC period.

d) A copy of agreement between the Agent & their principal detailing the terms & conditions as well as services and after sales services as above to be rendered by the agent and the precise relationship between them and their mutual interest in the business.
e) Principal / manufacturer's original proforma invoice with the price bid.

15. Firm Price

15.1 Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
15.2 However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIT clause 13 will apply.

16. Alternative Tenders

16.1 Alternative Tenders are not permitted.
16.2 However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD.

16.3 a). If a tenderer, either the Indian Agent on behalf of the Principal / OEM or Principal / OEM itself can bid but both cannot bid simultaneously for the same item / product in the same tender

b). If an agent submits bid on belhalf of the Principal / OEM, the same agent shall not submit a bid on behalf of another Principal / OEM in the same tender for the same item / product.

17 Documents Establishing Tenderer's Eligibility and Qualifications

17.1 Pursuant to GIT clause 11, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.
17.2 The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:

a) in case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIV in this document.
b) the tenderer has the required financial, technical and production capability necessary to perform the contract and, further, it meets the qualification criteria incorporated in the Section IX in these documents.
c) in case the tenderer is not doing business in India, it is duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.

18. Documents establishing Good's Conformity to TE document.

18.1 The tenderer shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully conform to the goods and services specified by the purchaser in the TE documents. For this purpose the tenderer shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the TE documents to establish technical responsiveness of the goods and services offered in its tender.

18.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the tenderer, the tenderer shall list out the same in a chart form without ambiguity and provide the same along with its tender.

18.3 If a tenderer furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

19. Earnest Money Deposit (EMD)

19.1 Pursuant to GIT clauses 8.1 and 11.1(d) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.

19.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. Vague stipulations in the Registration Certificate such as "to customers' specification" etc. will not be acceptable for exemption from furnishing of earnest money. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).

19.3 The earnest money shall be denominated in Indian Rupees or equivalent currencies as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:

i) Account Payee Demand Draft
ii) Banker's cheque and
iii) Bank Guarantee

19.4 The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the tenderer, in favour of the **"HSCC (India) Ltd"** payable at New Delhi/Noida. In case of bank guarantee, the same is to be provided from any commercial bank in India or country of the tenderer as per the format specified under Section XIII in these documents

19.5 The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender. As validity period of Tender as per Clause 20 of GIT is 120 days, the EMD shall be valid for 165 days from Techno – Commercial Tender opening date.

19.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.

19.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.

19.8 In the case of Bank Guarantee furnished from banks outside India (i.e. foreign Banks), it should be authenticated and countersigned by any nationalised bank in India by way of back-to-back counter guarantee and the same should be submitted along with the bid.

20. Tender Validity

20.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of 120 days (One hundred and twenty days) after the date of tender opening prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

20.2 In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by surface mail or by fax/ telex/cable followed by surface mail. The

tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly. A tenderer, however, may not agree to extend its tender validity without forfeiting its EMD.

20.3 In case the day up to which the tenders are to remain valid falls on / subsequently declared a holiday or closed day for the purchaser, the tender validity shall automatically be extended up to the next working day.

21. Signing and Sealing of Tender

21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11.

21.2 Unless otherwise mentioned in the SIT, A tenderer shall submit 2 copies of its tender marking them as "Original" and "Duplicate". Duplicate tenders may contain all pages including Technical Literature/Catalogues as per in Original tenders.

21.3 The original and other copies of the tender shall either be typed or written in indelible ink and the same shall be signed by the tenderer or by a person(s) who has been duly authorized to bind the tenderer to the contract. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the tender.

21.4 Both the copies of the tender shall be duly signed at the appropriate places as indicated in the TE documents and all other pages of the tender including printed literature, if any shall be initialled by the same person(s) signing the tender. The tender shall not contain any erasure or overwriting, except as necessary to correct any error made by the tenderer and, if there is any such correction; the same shall be initialled by the person(s) signing the tender.

21.5 The tenderer is to seal the original and each copy of the tender in separate envelopes, duly marking the same as **"**Original", "Duplicate", and so on and writing the address of the purchaser and the tender reference number on the envelopes. The sentence "NOT TO BE OPENED" before _____ (The tenderer is to put the date & time of tender opening) are to be written on these envelopes. The inner envelopes are then to be put in a bigger outer envelope, which will also be duly sealed, marked etc. as above. If the outer envelope is not sealed and marked properly as above, the purchaser will not assume any responsibility for its misplacement, premature opening, late opening etc.

21.6 TE document seeks quotation following **two Tender System**, in two parts. First part will be known as **'Techno - Commercial Tender'**, and the second part **'Price Tender'** as specified in clause 11 of GIT. Tenderer shall seal **'Techno - Commercial Tender'** and **'Price Tender'** separately and covers will be suitably super scribed. Both these sealed covers shall be put in a bigger cover and sealed and procedure prescribed in Paras 21.1 to 21.5 followed.

D. SUBMISSION OF TENDERS

22. Submission of Tenders

22.1 Unless otherwise specified, the tenderers are to deposit the tenders in the tender box kept for this purpose at **HSCC (India) Ltd, Plot E-6 (A), Sector – 1, Noida**. In case of bulky tender, which cannot be put into tender box, the same shall be submitted by the tenderer by hand to **DGM (Procurement)** or his nominee, **HSCC (India) Ltd, Plot E-6(A) Sector-1, Noida- 201301, Uttar Pradesh**. The officer receiving the tender will give the tenderer an official receipt duly signed with date and time.

22.2 The tenderers must ensure that they deposit their tenders not later than the closing time and date specified for submission of tenders. It is the responsibility of the tenderer to ensure that their Tenders whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time. In the event of the specified date for submission of tender falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be received up to the appointed time on the next working day.

23. Late Tender

23.1 A tender, which is received after the specified date and time for receipt of tenders will be treated as "late" tender and will be ignored.

24. Alteration and Withdrawal of Tender

24.1 The tenderer, after submitting its tender, is permitted to alter / modify its tender so long as such alterations / modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders. Alterations / modifications to tenders received after the prescribed deadline will not be considered.

24.2 No tender should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a tenderer withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the tenderer in its tender.

E. TENDER OPENING

25. Opening of Tenders

25.1 The purchaser will open the tenders at the specified date and time and at the specified place as indicated in the NIT.

In case the specified date of tender opening falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day.

25.2 Authorized representatives of the tenderers, who have submitted tenders on time may attend the tender opening provided they bring with them letters of authority from the corresponding tenderers.

The tender opening official(s) will prepare a list of the representatives attending the tender opening. The list will contain the representatives' names & signatures and corresponding tenderers' names and addresses.

25.3 Two - Tender system as mentioned in Para 21.6 above will be as follows. The **Techno - Commercial Tenders** are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno - Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). Thereafter, in the second stage, the Price Tenders of only the Techno - Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date notified after the evaluation of the Techno – Commercial tender. The prices, special discount if any of the goods offered etc., as deemed fit by tender opening official(s) will be read out.

F. SCRUTINY AND EVALUATION OF TENDERS

26. Basic Principle

26.1 Tenders will be evaluated on the basis of the terms & conditions already incorporated in the TE document, based on which tenders have been received and the terms, conditions etc. mentioned by the tenderers in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

27. Scrutiny of Tenders

27.1 The Purchaser will examine the Tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed stamped and whether the Tenders are generally in order.

27.2 The Purchaser's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.

27.3 The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. As prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non – responsive and will be rejected.

27.4 The following are some of the important aspects, for which a tender shall be **declared non – responsive and will be summarily ignored;**

(i) Tender form as per Section X (Signed and stamped) not enclosed.
(ii) Tender is unsigned.
(iii) Tender validity is shorter than the required period.
(iv) Required EMD (Amount, validity etc.)/ exemption documents have not been provided.
(v) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
(vi) Tenderer has not agreed to give the required performance security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section – V – " Special Conditions of Contract", for due performance of the contract.
(vii) Goods offered are not meeting the tender enquiry specification.
(viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
(ix) Poor/ unsatisfactory past performance.
(x) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
(xi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.
(xii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
(xiii) Tenderer has not agreed for the delivery terms & delivery schedule.

28. Minor Infirmity/Irregularity/Non-Conformity

28.1 If during the evaluation, the purchaser find any any minor informality and/or irregularity and/or non-conformity in a tender, the purchaser will convey its observation on such 'minor' issues to the tenderer by registered/speed post etc. asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

29 Discrepancies in Prices

29.1 If, in the price structure quoted by a tenderer, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless the purchaser feels that the tenderer has made a mistake in placing the decimal point in the unit price, in which case the total price as quoted shall prevail over the unit price and the unit price corrected accordingly.

29.2 If there is an error in a total price, which has been worked out through addition and/or subtraction of subtotals, the subtotals shall prevail and the total corrected; and

29.3 If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail, subject to sub clause 29.1 and 29.2 above.

29.4 If, as per the judgement of the purchaser, there is any such arithmetical discrepancy in a tender, the same will be suitably conveyed to the tenderer by registered / speed post. If the tenderer does not agree to the observation of the purchaser, the tender is liable to be ignored.

30. Discrepancy between original and copies of Tender

30.1 In case any discrepancy is observed between the text etc. of the original copy and that in the other copies of the same tender set, the text etc. of the original copy shall prevail. Here also, the purchaser will convey its observation suitably to the tenderer by register / speed post and, if the tenderer does not accept the purchaser's observation, that tender will be liable to be ignored.

31. Qualification Criteria

31.1 Tenders of the tenderers, who do not meet the required Qualification Criteria prescribed in Section IX, will be treated as non - responsive and will not be considered further.

32. Conversion of tender currencies to Indian Rupees

32.1 In case the TE document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Price Tender' opening.

33. Schedule-wise Evaluation

33.1 In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender. However, as already mentioned in GIT sub clause 13.2, the tenderers have the option to quote for any one or more schedules and offer discounts for combined schedules. Such discounts wherever applicable will be taken into account to determine the lowest evaluated cost for the purchaser in deciding the successful tenderer for each schedule, subject to tenderer(s) being responsive.

34. Comparison of Tenders

34.1 Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery Duty Paid (DDP) consignee site basis. The quoted turnkey prices and CMC prices will also be added for comparison/ranking purpose for evaluation. Net Present value (NPV) of the Comprehensive Annual Maintenance charges (CMC) quoted for 3 years after the warranty period shall be added to the bid price for evaluation and will be calculated after discounting the quoted price by a discounting factor of 10% per annum."

35. Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders

35.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender will include and take into account the following:

i) In the case of goods manufactured in India or goods of foreign origin already located in India, sales tax & other similar taxes and excise duty & other similar duties, Customs Duties, Service Tax, Works Contract Tax etc which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and

ii) in the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.

35.2 The purchaser's evaluation of tender will also take into account the additional factors, if any, incorporated in SIT in the manner and to the extent indicated therein.

35.3 i. In exercise of powers conferred in section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Government has notified a new Public Procurement Policy for Micro & Small enterprises effective from 1st April 2012. The policy mandates that 20% of procurement of annual requirement of goods and services by all Central Ministries/Public Sector Undertakings will be from the micro and small enterprises. The Government has also earmarked a sub-target of 4% procurement of goods & services from MSEs owned by SC/ST entrepreneurs out of above said 20% quantity.

ii. In accordance with the above said notification, the participating Micro and Small Enterprises (MSEs) in a tender, quoting price within the band of L 1+15% would also be allowed to supply a portion of the requirement by bringing down

their price to the L1 price, in a situation where L1 price is from someone other than on MSE. Such MSEs would be allowed to supply up to 20% of the total tendered value. In case there are more than one such eligible MSE, the 20% supply will be shared equally. Out of 20% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and the L1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.

iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centres or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir board or national Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being on MSE, failing which their tender will be liable to be ignored.

36. Tenderer's capability to perform the contract

36.1 The purchaser, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the tenderer, whose tender has been determined as the lowest evaluated responsive tender is eligible, qualified and capable in all respects to perform the contract satisfactorily. If, there is more than one schedule in the List of Requirements, then, such determination will be made separately for each schedule.

36.2 The above-mentioned determination will, interalia, take into account the tenderer's financial, technical and production capabilities for satisfying all the requirements of the purchaser as incorporated in the TE document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its tender as well as such other allied information as deemed appropriate by the purchaser.

37. Contacting the Purchaser

37.1 From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.

37.2 In case a tenderer attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the tenderer shall be liable for rejection in addition to appropriate administrative actions being taken against that tenderer, as deemed fit by the purchaser.

G. AWARD OF CONTRACT

38. Purchaser's Right to accept any tender and to reject any or all tenders

38.1 The purchaser reserves the right to accept in part or in full any tender or reject any or more tender(s) without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected tenderer or tenderers.

39. Award Criteria

39.1 Subject to GIT clause 38 above, the contract will be awarded to the lowest evaluated responsive tenderer decided by the purchaser in terms of GIT Clause 36.

40. Variation of Quantities at the Time of Award/ Currency of Contract

40.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded of to next whole number) without any change in the unit price and other terms & conditions quoted by the tenderer.

40.2 If the quantity has not been increased at the time of the awarding the contract, the purchaser reserves the right to increase by up to twenty five (25) per cent, the quantity of goods and services mentioned in the contract (rounded of to next whole number) without any change in the unit price and other terms & conditions mentioned in the contract, during the currency of the contract after one year from the Date of Notification of Award.

41. Notification of Award

41.1 Before expiry of the tender validity period, the purchaser will notify the successful tenderer(s) in writing, by registered / speed post or by fax/ telex/cable (to be confirmed by registered / speed post) that its tender for goods & services, which have been selected by the purchaser, has been accepted, also briefly indicating therein the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. The successful tenderer must furnish to the purchaser the required performance security within **thirty days from the date of dispatch of this notification**, failing which the EMD will forfeited and the award will be cancelled. Relevant details about the performance security have been provided under GCC Clause 5 under Section IV.

41.2 The Notification of Award shall constitute the conclusion of the Contract.

42. Issue of Contract

42.1 Promptly after notification of award, the Purchaser/Consignee will mail the contract form (as per Section XVI) duly completed and signed, in duplicate, to the successful tenderer by registered / speed post.

42.2 **Within thirty days** from the date of the contract, the successful tenderer shall return the original copy of the contract, duly signed and dated, to the Purchaser/Consignee by registered / speed post.

42.3 The Purchaser/Consignee reserves the right to issue the Notification of Award consignee wise.

43. Non-receipt of Performance Security and Contract by the Purchaser/Consignee

43.1 Failure of the successful tenderer in providing performance security and / or returning contract copy duly signed in terms of GIT clauses 41 and 42 above shall make the tenderer liable for forfeiture of its EMD and, also, for further actions by the Purchaser/Consignee against it as per the clause 24 of GCC – Termination of default.

44. Return of E M D

44.1 The earnest money of the successful tenderer and the unsuccessful tenderers will be returned to them without any interest, whatsoever, in terms of GIT Clause 19.6.

45. Publication of Tender Result

45.1 The name and address of the successful tenderer(s) receiving the contract(s) will be mentioned in the notice board/bulletin/web site of the purchaser.

46. Corrupt or Fraudulent Practices

46.1 It is required by all concerned namely the Consignee/Tenderers/Suppliers etc to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Purchaser: -

(a) defines, for the purposes of this provision, the terms set forth below as follows:

(i) "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and

(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition

(b) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

(c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the purchaser if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

SPECIAL INSTRUCTIONS TO TENDERERS (SIT)

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/substitute/supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

A Preamble

No Change

B TE documents

10. Clarification of TE documents

10.1 During pre bid meeting clarification asked by the bidder will be respond by the purchaser. The Bidder request shall be in writing and submit to HSCC office during pre bid meeting or not later than **three days** from date of pre bid meeting, thereafter the bidder request will be ignore or rejected. The purchaser response (including explanation of the query but without identifying the source of inquiry) will be displayed on the website only www.hsccltd.com.

C Preparation of Tenders

11. Documents Comprising the Tender

11.1 The **Two Tender System**, i.e. "Techno – Commercial Tender" and "Price Tender" prepared by the tenderer shall comprise the following:

A) Techno – Commercial Tender (Un priced Tender)

i) Form – A - Bid summary sheet.
ii) Form – B - TE document Fee & EMD/ Bid security.
iii) Form - C – Power of Attorney.
iv) Form - D- Tender Form
v) Form - E - Manufacturer Authorisation form.
vi) Form – F – Affidavit.
vii) Form - G - Proforma "A"
vii) Form - H - Performance Certificate.
viii) Form - I - Bidder information.
IX) Form – J- Technical compliance
X) Technical literature of equipment
XI) Balance sheet for last three years prior to the tender opening, Banker account number & address, Income tax number, if SSI unit- certificate of registration issued by Directorate of Industries/NSIC.

For Form A to J bidder may please refer draft bid

B) Price Bid

i). Price Schedule
ii). CMC Price Schedule
iii). Turnkey Price Schedule, wherever applicable

The Bidder must submit the **Hard copy** of the following Documents in Original, duly signed and stamped on each page must be submitted in sealed envelope as per schedule for submission of the bid mentioned in the TE document only at HSCC (India) Ltd., E-6(A), Sector-I, Noida. Bid will be summarily rejected if Original EMD & Tender Document Fee as per bid document is not found in envelop at the time of tender opening.

1. Original EMD & TE Document Fee.
2. Form – F- Affidavit.
3. Form - H - Performance Certificate.

19. Earnest Money Deposit (EMD)

19.5 The earnest money deposite (EMD)/ bid secuirty shall be valid for a period of forty-five (45) days beyond the bid validity period of the tender. In case of extension of submission of bid/ tender, the validity of bid security (EMD) may be considered from the original date of submission of bid.

20. Tender Validity

20.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of **180 days (One hundred and eighty days)** after the date of tender opening prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

D Submission of Tenders:

- Bidder quote one item or more than one item TE document fee will be Rs. 1000/-

E Tender Opening

Tender opening commitee first open envelop, if no bid Security/EMD and Tender Document fee found in the envelop, bid will be rejected.

F Scrutiny and Evaluation of Tenders

27.4 The following are some of the important aspects, for which a tender shall be **declared non – responsive and will be summarily ignored;**

(vi) Deleted
(vii) Deleted
(ix) Deleted.
(xi) Deleted.

G Award of Contract

42. Issue of Contract

42.1 Deleted

42.2 **Within twenty one days** from the date of the notification of award, the successful tenderer shall return the original copy of the contract along with performance security as per TE document, duly signed and dated, to the Purchaser/Consignee by registered / speed post.

SECTION - IV
GENERAL CONDITIONS OF CONTRACT (GCC)
TABLE OF CLAUSES

GENERAL CONDITIONS OF CONTRACT (GCC)

1. Application

1.1 The General Conditions of Contract incorporated in this section shall be applicable for this purchase to the extent the same are not superseded by the Special Conditions of Contract prescribed under Section V, List of requirements under Section VI and Technical Specification under Section VII of this document.

2. Use of contract documents and information

2.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the purchaser in connection therewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this TE document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.

2.2 Further, the supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC sub-clause 2.1 above except for the sole purpose of performing this contract.

2.3 Except the contract issued to the supplier, each and every other document mentioned in GCC sub-clause 2.1 above shall remain the property of the purchaser and, if advised by the purchaser, all copies of all such documents shall be returned to the purchaser on completion of the supplier's performance and obligations under this contract.

3. Patent Rights

3.1 The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trade marks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.

4. Country of Origin

4.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.

4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.

4.3 The country of origin may be specified in the Price Schedule

5. Performance Security

5.1 Within thirty (30) days from date of the issue of notification of award by the Purchaser/Consignee, the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of minimum 30 months from the date of Notification of Award.

5.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:

a) It shall be in any one of the forms namely Account Payee Demand Draft or Fixed Deposit Receipt drawn from any Scheduled bank in India or Bank Guarantee issued by a Scheduled bank in India, in the prescribed form as provided in section XV of this document in favour of the Purchaser/Consignee. The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to sixty (60) days beyond Warranty Period.

5.3 In the event of any failure /default of the supplier with or with out any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful to cover any failure/default of the supplier with or without any quantifiable loss to the Government.

5.4 In the event of any amendment issued to the contract, the supplier shall, within twenty-one (21) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.

5.5 The supplier shall enter into Annual Comprehensive Maintenance Contract as per the 'Contract Form – B' in Section XVI with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CMC will commence from the date of expiry of the Warranty Period.

5.6 Subject to GCC sub – clause 5.3 above, the Purchaser/Consignee will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of Consignee wise bank guarantee for CMC security in favour of Head of the Hospital/ Institute/ Medical College of the consignee as per the format in Section XV.

6. Technical Specifications and Standards

6.1 The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' and 'Quality Control Requirements' under Sections VII and VIII of this document.

7. Packing and Marking

7.1 The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transhipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

7.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications and Quality Control Requirements under Sections VII and VIII and in SCC under Section V. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.

7.3 Packing instructions:

Unless otherwise mentioned in the Technical Specification and Quality Control Requirements under Sections VII and VIII and in SCC under Section V, the supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following with indelible paint of proper quality:

a. contract number and date
b. brief description of goods including quantity
c. packing list reference number
d. country of origin of goods
e. consignee's name and full address and
f. supplier's name and address

8. Inspection, Testing and Quality Control

8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, & if same is accepted by purchaser / consignee / PSA/ PA, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro. Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period.

8.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.

8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.

8.4 In case the contract stipulates pre-despatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.

8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.

8.6 The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.

"On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser / consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser / consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for.".

8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.

8.8 Principal/ Foreign supplier shall also have the equipment inspected by recognised/ reputed agency like SGS, Lloyd or equivalent (acceptable to the purchaser) prior to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

9. Terms of Delivery

9.1 Goods shall be delivered by the supplier in accordance with the terms of delivery and as per the delivery period specified in the schedule of requirement. Please note that the time shall be the essence of the contract.

10. Transportation of Goods

10.1 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments and/or transhipment without the express/prior written consent of the purchaser. The supplier is required under the contract to deliver the goods under CIP (at Consignee site) basis terms; the shipment shall be made by Indian flag vessel or by vessels belonging to the conference lines in which India is a member country through India's forwarding agents/coordinators. In case the forwarding agent/coordinators are unable to provide timely adequate space in Indian flag vessel or by vessels belonging to the conference lines, the supplier shall arrange shipment through any available vessel to adhere to the delivery schedule given in the contract.
In case of airlifting of imported goods offered from abroad, the same will be done only through the National Carrier i.e. Air India wherever applicable. In case the National Carrier is not available, any other airlines available for early delivery may be arranged.

10.2 Instructions for transportation of domestic goods including goods already imported by the supplier under its own arrangement:

In case no instruction is provided in this regard in the SCC, the supplier will arrange transportation of the ordered goods as per its own procedure.

11. Insurance:

11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:

i) in case of supply of domestic goods on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.

ii) In case of supply of the imported goods on CIP (at Consignee site) Basis, the additional extended Insurance (local transportation and storage) would be borne by the Supplier from the port of entry to the consignee site for a period including 3 months beyond date of delivery.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will be got extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actuals will be reimbursed.

12. Spare parts

12.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:

a) The spare parts as selected by the Purchaser/Consignee to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and

b) In case the production of the spare parts is discontinued:

i) Sufficient advance notice to the Purchaser/Consignee before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and

ii) Immediately following such discontinuation, providing the Purchaser/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.

12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the goods so that the same are used during warranty and CMC period.

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13. Incidental services

13.1 Subject to the stipulation, if any, in the SCC (Section – V), List of Requirements (Section – VI) and the Technical Specification (Section – VII), the supplier shall be required to perform the following services.

i) Installation & commissioning, Supervision and Demonstration of the goods
ii) Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
iii) Training of Consignee's Doctors, Staff, operators etc. for operating and maintaining the goods
iv) Supplying required number of operation & maintenance manual for the goods

14. Distribution of Dispatch Documents for Clearance/Receipt of Goods

The supplier shall send all the relevant despatch documents well in time to the Purchaser/Consignee to enable the Purchaser/Consignee clear or receive (as the case may be) the goods in terms of the contract.
Unless otherwise specified in the SCC, the usual documents involved and the drill to be followed in general for this purpose are as follows.

A) For Domestic Goods, including goods already imported by the supplier under its own arrangement

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post (or as instructed in the contract):

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
(iii) Two copies of packing list identifying contents of each package;
(iv) Inspection certificate issued by the nominated Inspection agency, if any.
(v) Certificate of origin;
(vi) Insurance Certificate as per GCC Clause 11.
(vii) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.

B) For goods imported from abroad

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post (or as instructed in the contract). Any delay or demurrage occurred during the customs clearance on account of the non-availability of technical support/ clarifications /documents from the supplier shall be borne by the supplier:

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Original and four copies of the negotiable clean, on-board Bill of Lading/Airway bill, marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;
(iii) Four Copies of packing list identifying contents of each package;
(iv) Insurance Certificate as per GCC Clause 11.
(v) Manufacturer's/Supplier's warranty certificate;
(vi) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd or equivalent (acceptable to the purchaser) prior to despatch
(vii) Manufacturer's own factory inspection report;
(viii) Certificate of origin
(ix) Port of Loading;
(x) Port of Discharge and
(xi) Expected date of arrival.

15. Warranty

15.1 The supplier warrants comprehensively that the goods supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials (*except when the design adopted and / or the material used are as per the Purchaser's/Consignee's specifications*) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.

15.2 The **warranty** shall remain valid for the period as mentioned in the list of requirement/ General Technical specification, after the goods or any portion thereof as the case may be, have been delivered, installed and commissioned at the final destination and accepted by the purchaser / consignee (s) in terms of the contract, unless specified otherwise in the SCC

a. No conditional warranty like mishandling, manufacturing defects etc. will be acceptable.
b. Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work
c. Replacement and repair will be under taken for the defective goods.
d. Proper marking has to be made for all spares for identification like printing of installation and repair dates.

15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.

15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non rectification will be applicable as per tender conditions

15.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be extended till the completion of the original warranty period of the main equipment.

15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.

15.7 During Warranty period, the supplier is required to visit at each consignee's site **at least once in 6 months** commencing from the date of the installation for preventive maintenance of the goods

15.8 The Purchaser/Consignee reserve the rights to enter into Annual Comprehensive Maintenance Contract between Consignee and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.

15.9 The supplier along with its Indian Agent and the CMC provider shall ensure continued supply of the spare parts for the machines and equipments supplied by them to the purchaser for 10 years from the date of installation and handing over.

15.10 The Supplier along with its Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipments/machines/goods etc. and shall always give the most competitive price for its machines/equipments supplied to the Purchaser/Consignee.

16. Assignment

16.1 The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the Purchaser's prior written permission.

17. Sub Contracts

17.1 The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.

17.2 Sub contract shall be only for bought out items and sub-assemblies.

17.3 Sub contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").

18. Modification of contract

18.1 If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:

a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
b) Mode of packing,
c) Incidental services to be provided by the supplier
d) Mode of despatch,
e) Place of delivery, and
f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.

18.2 In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the supplier doesn't agree to the adjustment made by the Purchaser/Consignee, the supplier shall convey its views to the Purchaser/Consignee within twenty-one days from the date of the supplier's receipt of the Purchaser's/Consignee's amendment / modification of the contract.

19. Prices

19.1 Prices to be charged by the supplier for supply of goods and provision of services in terms of the contract shall not vary from the corresponding prices quoted by the supplier in its tender and incorporated in the contract except for any price adjustment authorised in the SCC.

20. Taxes and Duties

20.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. incurred until delivery of the contracted goods to the purchaser.

20.2 Further instruction, if any, shall be as provided in the SCC.

21. Terms and Mode of Payment

21.1 Payment Terms

Payment shall be made subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner.

A) Payment for Domestic Goods Or Foreign Origin Located Within India.

Payment shall be made in Indian Rupees as specified in the contract in the following manner:

a) On delivery:

75 % payment of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents:

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
(iii) Two copies of packing list identifying contents of each package;
(iv) Inspection certificate issued by the nominated Inspection agency, if any.
(v) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
(vi) Certificate of origin.

b) On Acceptance:

Balance 25 % payment would be made against 'Final Acceptance Certificate' as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. In case where the installation & commissioning or final inspection and test at site is delayed for any reasons for which consignee is responsible, 25% of the contract price shall become payable, after the expiry of six months from the date of arrival of the last consignment at site subject to submission of a Bank Guarantee by the supplier for the said amount valid initially for the period of six months. The supplier shall get the validity of the Bank Guarantee extended for the further period as and when asked for the purchaser.

B) Payment for Imported Goods:

Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner:

a) On Shipment:

Seventy Five (75) % of the net CIP price (CIP price less Indian Agency commission) of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder:

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
(ii) Original and four copies of the negotiable clean, on-board Bill of Lading/ Airway bill , marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;

(iii) Four Copies of packing list identifying contents of each package;
(iv) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
(v) Manufacturer's/Supplier's warranty certificate;
(vi) Inspection certificate issued by the nominated inspection agency, if applicable as per contract;
(vii) Manufacturer's own factory inspection report and
(viii) Certificate of origin by the chamber of commerce of the concerned country;
(ix) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd or equivalent (acceptable to the purchaser) prior to despatch.
(x) Certificate of origin

b) On Acceptance:

Balance payment of 25 % of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVIII to be issued by the consignees to the supplier. The supplier shall submit the original final acceptance certificate to the Purchaser (HSCC India Ltd) who shall issue no objection certificate to the banker for payment through irrevocable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any.

In case where the installation and commissioning or final inspection and test at site is delayed for any reason for which consignee is responsible, 25% of the contract price shall become payable, after the expiry of six months from the date of arrival of the last consignment at site subject to submission of a bank guarantee by the supplier for the said amount valid initially for the period of six months. The supplier shall get the validity of the bank Guarantee extended for the further period as and when asked for by the purchaser.

c) Payment of Incidental Costs till consignee site & Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) will be paid in Indian Rupees to the Indian Agent on proof of final installation, commission and acceptance of equipment by the consignee.

d) Payment of Indian Agency Commission:

Indian Agency commission will be paid to the manufacturer's agent in the local currency for an amount in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

C) Payment of Turnkey, if any:

Turnkey payment will be made as indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.

D) Payment for Annual Comprehensive Maintenance Contract Charges:

The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the consignee on receipt of bank guarantee for an amount equivalent to 2.5 % of the cost of the equipment as per contract in the prescribed format given in Section XV valid till 2 months after expiry of entire CMC period.

21.2 The supplier shall not claim any interest on payments under the contract.

21.3 Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.

21.4 Irrevocable & non – transferable LC shall be opened by the respective consignees. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser/consignee, the charges thereof shall be borne by the supplier.

21.5 The payment shall be made in the currency / currencies authorised in the contract.

21.6 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.

21.7 While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract.

21.8 While claiming reimbursement of duties, taxes etc. (like sales tax, excise duty, custom duty) from the Purchaser/Consignee, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, it (the supplier) shall refund to the Purchaser/Consignee forthwith.

21.9 In case where the supplier is not in a position to submit its bill for the balance payment for want of receipted copies of Inspection Note from the consignee and the consignee has not complained about the non-receipt, shortage, or defects in the supplies made, balance amount will be paid by the paying authority without consignee's receipt certificate after three months from the date of the preceding part payment for the goods in question, subject to the following conditions:

(a) The supplier will make good any defect or deficiency that the consignee (s) may report within six months from the date of despatch of goods.
(b) Delay in supplies, if any, has been regularized.
(c) The contract price where it is subject to variation has been finalized.
(d) The supplier furnishes the following undertakings:

"I/We, _____ certify that I/We have not received back the Inspection Note duly receipted by the consignee or any communication from the purchaser or the consignee about non-receipt, shortage or defects in the goods supplied. I/We _____ agree to make good any defect or deficiency that the consignee may report within three months from the date of receipt of this balance payment.

22. Delivery

22.1 The supplier shall deliver of the goods and perform the services under the contract within the time schedule specified by the Purchaser/Consignee in the List of Requirements and as incorporated in the contract. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed not later than the date (s) as specified in the contarct.

22.2 Subject to the provision under GCC clause 26, any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:

(i) imposition of liquidated damages,
(ii) forfeiture of its performance security and
(iii) termination of the contract for default.

22.3 If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform the Purchaser/Consignee in writing about the same and its likely duration and make a request to the Purchaser/Consignee for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser/Consignee shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

22.4 When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, interalia contain the following conditions:

(a) The Purchaser/Consignee shall recover from the supplier, under the provisions of the clause 23 of the General Conditions of Contract, liquidated damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.
(b) That no increase in price on account of any ground, whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of customs duty, excise duty, sales tax/ VAT, Service Tax and Works Contract Tax or on account of any other tax or duty which may be levied in respect of the goods and services specified in the contract, which takes place after the date of delivery stipulated in the contract shall be admissible on such of the said goods and services as are delivered and performed after the date of the delivery stipulated in the contract.
(c) But nevertheless, the Purchaser/Consignee shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, excise duty, sales tax/ VAT, Service Tax and Works Contract Tax or any other duty or tax or levy or on account of any other grounds, which takes place after the expiry of the date of delivery stipulated in the contract.

22.5 The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser/Consignee for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the purchaser.

22.6 Passing of Property

22.6.1 The Property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the conditions of the contract.

22.6.2 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.

22.6.3 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

23. Liquidated damages

23.1 Subject to GCC clause 26, if the supplier fails to deliver any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser/Consignee may consider termination of the contract as per GCC 24.

During the above-mentioned delayed period of supply and / or performance, the conditions incorporated under GCC sub-clause 22.4 above shall also apply.

24. Termination for default

24.1 The Purchaser/Consignee , without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of

the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser/Consignee pursuant to GCC sub-clauses 22.3 and 22.4.

24.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement.

24.3 Unless otherwise instructed by the Purchaser/Consignee, the supplier shall continue to perform the contract to the extent not terminated.

25. Termination for insolvency

25.1 If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Purchaser/Consignee.

26. Force Majeure

26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.

26.2 For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of , the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, acts of the Purchaser/Consignee either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees , lockouts excluding by its management, and freight embargoes.

26.3 If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.

26.5 In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

27. Termination for convenience

27.1 The Purchaser/Consignee reserves the right to terminate the contract, in whole or in part for its (Purchaser's/Consignee 's) convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of the Purchaser/Consignee. The notice shall also indicate interalia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.

27.2 The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the supplier's receipt of the notice of termination shall be accepted by the Purchaser/Consignee following the contract terms, conditions and prices. For the remaining goods and services, the Purchaser/Consignee may decide:

a) To get any portion of the balance completed and delivered at the contract terms, conditions and prices; and / or

b) To cancel the remaining portion of the goods and services and compensate the supplier by paying an agreed amount for the cost incurred by the supplier towards the remaining portion of the goods and services.

28. Governing language

28.1 The contract shall be written in English language following the provision as contained in GIT clause 4. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in that language.

29. Notices

29.1 Notice, if any, relating to the contract given by one party to the other, shall be sent in writing or by cable or telex or facsimile and confirmed in writing. The procedure will also provide the sender of the notice, the proof of receipt of the notice by the receiver. The addresses of the parties for exchanging such notices will be the addresses as incorporated in the contract.

29.2 The effective date of a notice shall be either the date when delivered to the recipient or the effective date specifically mentioned in the notice, whichever is later.

30. Resolution of disputes

30.1 If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.

30.2 If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India. In the case of a dispute or difference arising between the Purchaser/Consignee and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration of an officer in the Ministry of Law and Justice, appointed to be the arbitrator by the Director General (Health Services). The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in reference exceeds Rupees One lakhs (Rs. 1,00,000/-)

30.3 Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.

30.4 Jurisdiction of the court will be form the place where the tender enquiry document has been issued, i.e., New Delhi, India.

31. Applicable Law

The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

32. Withholding and Lien in respect of sums claimed

Whenever any claim for payment arises under the contract against the supplier the purchaser shall be entitled to withhold and also have a lien to retain such sum from the security deposit or sum of money arising out of under any other contact made by the supplier with the purchaser, pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred to above, by the purchaser, will be kept withheld or retained till the claim arising about of or under the contract is determined by the Arbitrator or by the competent court as the case may be, and the supplier will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention.

32. General / Miscellaneous Clauses

32.1 Nothing contained in this Contract shall be constructed as establishing or creating between the parties, i.e. the Supplier/its Indian Agent/CMC Provider on the one side and the Purchaser on the other side, a relationship of master and servant or principal and agent.

32.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.

32.3 The Supplier shall notify the Purchaser/Consignee /the Government of India of any material change would impact on performance of its obligations under this Contract.

32.4 Each member/constituent of the Supplier/its Indian Agent/CMC Provider, in case of consortium shall be **jointly and severally liable** to and responsible for all obligations towards the Purchaser/Consignee/Government for performance of contract/services including that of its Associates/Sub Contractors under the Contract.

32.5 The Supplier/its Indian Agent/CMC Provider shall at all times, indemnify and keep indemnified the Purchaser/Government of India against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under CMC or the Contract.

32.6 The Supplier/its Agent/CMC Provider shall, at all times, indemnify and keep indemnified the Purchaser/Consignee/Government of India against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the supplier/its associate/affiliate etc.

32.7 All claims regarding indemnity shall survive the termination or expiry of the contract

SECTION – V

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below.

These Special Conditions will modify/substitute/supplement the corresponding (GCC) clauses.
Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

1. Bidder must take into consideration in its bid, costs to be incurred for any additional work pertaining to civil, Electrical, Plumbing, sanitary, **Radiation protection as per Govt. regulation/or equivalent as per local statutory conditions ,** servo stabilisers, U.P.S. etc. if required for successful installation testing and commissioning of the system/ equipment in the "All inclusive lump sum price"/ turnkey work.
2. **The contract will be turnkey work**, bidder must take into consideration in its bid, costs to be incurred for supply of equipment from **ware house to consignee AIIA- sarita vihar,** installation, commissioning testing, training, third part inspection cost, packing & forwarding cost, all taxes, all duties, custom clearance charges, loading & unloading charges, site visit charges, two year compressive warranty cost including all spare , Indian agent charges, any other required for successful installation & commissioning of system/ equipment.
3. The pre delivery inspection carried out by **third party Inspection agency viz LLOYDS/SGS** or any other with same high status inspection agency. The suppler shall arrange III party Inspection agency approved by HSCC. All charges for III party inspection shall be borne by the supplier. Therefore same charges shall take into consideration in its bid.
4. Purchaser's / consignee's contractual right to inspect before issue despatch note.
5. The stores (both Indian & Import origin goods) should be despatched only after ensuring prudent inspection carried out by third party Inspection Agencies viz. LLOYDS/SGS and proof of such documents submitted to HSCC for the goods inspected. Inspection Agency shall carry-out testing of equipment and submit test reports along with confirmation of technical compliance of the equipment with respect to tender specifications. HSCC on receipt of such documents shall issue **Dispatch note**. The inference of the test report shall be as "the inspected quoted model meets tendered specification in all respect"

   To enable HSCC to issue Despatch note, supplier/manufacture is to furnish the following documents in two sets:

   1. Country of Origin Certificate.
   2. Quality & Quantity Certificate.
   3. Packing list as per tender terms.
   4. Internal factory Inspection report of manufacturer.
   5. Warranty Certificate as per tender terms.
   6. Third Party Inspection report confirming the inspected equipments & accessories meets tendered specification.
   7. Insurance certificate as per tender.

   After scrutiny, if the documents found in order, **Dispatch note** shall be issued to the supplier.

   No goods (both Indians & Import origin goods) shall be despatched before issue of Despatch note issued by purchaser / consignee.

6. The performance security shall be valid for a **period six (6) months beyond expire of two years warranty period.**

7. The Purchaser reserves the right to ask for a free demonstration of the quoted equipment at a

pre determined place acceptable to the purchaser for technical acceptability as per the tender specifications, before the opening of the Price Tender.

8. **Insurance:** For delivery of goods at site, the insurance including transit and installation & commissioning insurance shall be obtained by the supplier in an amount equal to **110%** of the value of the goods from "warehouse to warehouse" (final destination – designated consignee place) on "all risks" basis including war, risks, strikes, erection, storage etc. In any event the Goods are at the Supplier's risk until delivery and installation & commissioning at site.

10. For Import origin goods quoted, the Supplier or the Indian agent shall have to arrange at his own cost for all import/custom clearance handling formalities. Purchaser upon advance notice from supplier shall only provide the CDEC (Custom Duty Exemption Certificate), Octroi Exemption Certificate, etc. wherever required. Custom duty Exemption Certificate will be issued by AIIA, However, supplier will submit all relevant document and coordinate for the same to get clearance of the good from custom department in advance in order to avoid demurrage charges on the goods.

SECTION - VI

Required Delivery Schedule:

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 of delivery at consignee site (Tenderers may quote earliest delivery period). For equipment like CT, MRI, LINAC, 800mA/ 1000 mA X ray (DR), Cath Lab**,** the delivery period will be **180 days**, to delivery at consignee site.

Installation and commissioning shall be done **within two weeks** of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later. For equipment like CT, MRI, LINAC, 800mA/ 1000 mA X ray (DR), Cath Lab installation and turnkey work may be completed within **45 days from delivery at site** or within 45 days 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. (Tenderers may quote the earliest delivery period). For equipment like CT, MRI, LINAC, 800mA/ 1000 mA X ray (DR), Cath Lab**,** the delivery period will be 180 days from the date of Opening of LC.

Installation and commissioning shall be done **within two weeks** of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later. For equipment like CT, MRI, LINAC, 800mA/ 1000 mA X ray (DR), Cath Lab installation and turnkey work may be completed within 45 days from delivery at site or within 45 days 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.

Part III: Scope of Incidental Services:

Installation & Commissioning, Supervision, Demonstration, Trial run and Training etc. as specified in GCC Clause 13

Part IV:

Turnkey (if any) as per details in Technical Specification.

Part V:

Warranty period as per details in general technical specifications

Comprehensive Maintenance Contract (CMC) as per details in Technical Specification.

Part VI:

Required Terms of Delivery and Destination.

a) For Indigenous goods or for imported goods if supplied from India:

At Consignee Site(S)

b) For Imported goods directly from abroad:

The foreign tenderers are required to quote their rates on CIP (at Consignee Site) Basis giving breakup of the price as per the amended Proforma prescribed in the Price Schedule. Purchaser will place the order on CIP Named Port of Destination basis.

The shipping arrangements shall be made in accordance with the instruction of Ministry of Shipping

& Transport, New Delhi, India as detailed in Annexure 1 at Section XIX.

Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.

Destination/Consignee details are given in Section XXI

Section – VII
TECHNICAL SPECIFICATIONS

ANESTHESIA

Item No.1

PAEDIATRIC VENTILATOR

1. Microprocessor Controlled integrated suitable for neonate, infants and child ventilation.
2. Should have not less than 12 inch colored TFT screen for monitoring of the ventilation parameters, curves and loops to provide better view
3. Should have the automatic compliance, leakage compensation.
4. Should have the facilities for following setting for neonate to child
    a) Tidal Volume (2-1000ml or more)
    b) Flow Pattern
    c) Inspiration Plateau
    d) Pressure ramp
    e) SIMV Rate
    f) CPAP/PEEP
    g) Pressure Support
    h) FiO2
    i) Pause Time
    j) Inspiration trigger sensitivity to flow & pressure
    k) Base Flow
    l) Sensitivity for cycling to expiration
5. Should have the capability of monitoring of the following parameters,
    a) Airway Pressure
    b) Expired tidal Volume
    c) Minute Volume
    d) Spontaneous Minute Volume
    e) Total Frequency
    f) Fio2
    g) Auto PEEP
    h) Rapid Shallow Breathing Index
    i) Plateau Pressure
    j) Inspiratory & Expiratory Resistance
    k) Static Compliance
    l) Imposed Work of Breathing
    m) Peak, Plateau and mean airway pressure
    n) Plateau Pressure
6. Should have the Alarms (User Selector) for all the measured and monitored parameters.
7. Should have the following Modes of ventilations,
    a) Volume controlled
    b) Pressure Controlled
    c) Pressure Support
    d) SIMV (Pressure Control and volume control) with pressure support.
    e) CPAP/PEEP (0 – 50 CM H20)
    f) Auto mode /Auto flow preferable
    g) PRVC
    h) Biphasic preferable

8. Reusable and autoclavable sensors should automatically go for calibration every time it is switched on.

9. Should have the ability to calculate
    a) Intrinsic Peep
    b) Occlusion Pressure
    c) Negative Inspiratory force
10. Other Features
    a) Should have Nebuliser
    b) Should have the servo controlled Humidifier with digital monitoring of inspired gas temperature.
    c) Should have an imported stand-alone air compressor integrated with the Ventilator to provide an oil free Medical air.
    d) CVT as appropriate
    e) Should have silicone autoclave-able two sets of Pediatric hoses.
    f) Should be supplied with imported non-corrosive trolley and hinged arms.
    g) Demonstration is a must.
    h) Comprehensive guarantee as per bid.

Standards, Safety and Training

7.1 Certified to be compliant with ANS/IEC60601.2.12-01 Medical Electrical Equipment—Part 2-12; Particular Requirements for the Safety of Lung Ventilators—Critical Care Ventilators

7.2 Should be US FDA or European CE approved product (**Copy of certifications should be submitted with bid)**

7.3 Certified to be compliant with ISO-7767 for Oxygen monitoring.

7.4 Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs.

Item No. 2

ICU VENTILATORS

1. Microprocessor Controlled ventilator with integrated facility for Ventilation monitoring suitable for New born to adult ventilation.

2. Imported hinged arm holder for holding the circuit
3. Colored TFT screen, 12 Inch or more

4. Facility to measure and display
   a) End tidal CO2 with capnograpghy integrated in ventilator with display of values and EtCO2 waveform on the screen
   b) 3 waves- Pressure and Time, Volume and Time and Flow and Time.
   c) 3 loops- P-V, F-V, P-F with facility of saving of 3 Loops for reference.
   d) Graphic display to have automatic scaling facility for waves
   e) Status indicator for Ventilator mode, Battery life, patient data, alarm settings, clock etc.

5. Trending facility for 24 hours with minimum 5 minutes resolution.
6. Automatic compliance & Leakage compensation for circuit and ET tube
7. Following settings for all age groups.

   a) Tidal Volume
   b) Pressure (insp)
   c) Pressure Ramp
   d) Respiratory Rate
   e) SIMV Respiratory Rate
   f) CPAP/PEEP
   g) Pressure support
   h) FIO2
   i) Pause Time
   j) Pressure & Flow Trigger

9. Monitoring of the following parameters

   a) Airway Pressure (Peak & Mean)
   b) Tidal volume (Inspired & Expired)
   c) Minute volume (Inspired and Expired)
   d) Spontaneous Minute Volume
   e) Total Frequency
   f) FIO2 dynamic
   g) Intrinsic PEEP and/ or PEEPi Volume
   h) Plateau Pressure

i) Resistance & Compliance
j) Use selector Alarms for all measured & monitored parameters

10 Modes of ventilation

a) Volume controlled
b) Pressure Controlled
c) Pressure Support
d) SIMV (Pressure Control and volume control) with pressure support
e) CPAP/PEEP
f) Inverse Ratio Ventilation
g) Advanced mode like pressure controlled volume guaranteed
h) Non Invasive ventilation
i) APRV

11. Apnea /backup ventilation

12. **Two autoclavable expiratory blocks including flow sensors should be provided with each ventilator and** no routine calibration should be required.

- Permanent oxygen cell to be provided alongwith the machine, if not, then 10 oxygen sensors to be supplies along with the machine.
- Trolley, Hinged Arm and other parts and accessories should be from the same principal

company / same Manufacturer /same OEM.

13. Should have the ability to calculate / Procedure

a. Intrinsic Peep &/or Intrinsic PEEP Volume
b. Occlusion Pressure
c. Spontaneous Breathing trial
d. Facility to calculate lower and upper inflection point
e.

14. Inbuilt/Online Nebuliser with capability to deliver particle size of < 3 micron
15. Automatic Patient Detection facility preferable
16. Reusable silicone autoclavable sets of each Pediatric and adult hoses-2 sets of each with each ventilator.
17. In built Medical Air Compressor to be offered as standard part of equipment

18. Technical Specifications for reusable face mask & nasal mask.
Reusable face & nasal mask with textured dual flap silicone cushion flap for easy fit.
Removable forehead support and pad to match the angle of patient's forehead

Stability Selector for easy fit and angle.

Ball & Socket headgear attachments.
Should be autoclavable.
2 sets of all sizes (Small, Medium, Large) with each machine.

19. General conditions
    a) Demonstration of quoted model is a must
    b) Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/ literature
    c) Should have local service facility
    d) Battery back up for minimum 60 min
    e) Must submit user list & performance report within last 5 years from major Hospital.
    f) Back to back warranty to be taken by the supplier from the principal to supply spares for minimum 10 years
    g) Comprehensive warranty as per bid
    h) Annual Maintenance contract (AMC) as per bid

Standards, Safety and Training

7.1 Certified to be compliant with ANS/IEC60601.2.12-01 Medical Electrical Equipment—Part 2-12; Particular Requirements for the Safety of Lung Ventilators—Critical Care Ventilators

7.2 Should be US FDA or European CE approved product **Copy of certifications should be submitted with bid**

7.3 Certified to be compliant with ISO-7767 for Oxygen monitoring.

7.4 Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection, water ingress.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs.

Item No. 3

SPECIFICATIONS OF BLOOD GAS ANALYSER

1. Fully automatic, upgradeable, fast electrolyte & Blood Gas anlyser.
2. Essential Measured parameters; pH, pCO2, pO2, SaO2 with Co-oximetry, tHb, Na+, K+, Ca++, BUN, Cl-, Hemotocrit Lactate. All these parameters should be measured simultaneously
3. Calculated parameters should include BE, BE ecf, HCO3, Anion Gap etc.
4. Sample volume-less than 100ul.
5. Fast analysis time – less than 60 sec.
6. Maintenance free electrodes with individual electrodes ON/OFF facility.
7. Fully automatic liquid calibration of all parameters at user-defined intervals without the use of Gas calibrated reagents, external gases, tanks or regulators.
8. Continuous reagent level monitoring with graphic display. should have inbuilt quality control program (user defined / auto)
9. Data display on well-illuminated, adequate size screen display.
10. Data print out on built in graphic printer.
11. Built in auto Quality control facility.
12. Suitable UPS with 30 min backup.
13. Reagents for one year@ 20 samples/day should be provided along with the machine.
14. Cost of reagents to be quoted for comparative evaluation.
15. Stand by blood gas cum electrolyte analyzer in case of breakdown.
16. Should have local service facility
17. Back to back warranty to be taken by the supplier from the principal, to supply spares for minimum 10 years.
18. Must submit User list and Performance report
19. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet
20. Demonstration is required.
21. Guarantee as per bid.
22. It must be US-FDA and CE (Conformité Européenne) approved.

Item No. 4

SPECIFICATIONS FOR PATIENT WARMING SYSTEM

1. Should be suitable for intra-operative applications for adult & pediatric Patients.
2. Should consist of active warming arm-cum-shoulder section, pair of leg segments and abdominal segment to cover the entire body.
3. Should be based on semiconductor/carbon fiber polymer foil for precise warming of
   entire patient body during & after surgery.
4. All Sizes for Adult & Paediatric patients
5. Control unit should be capable of warming minimum two segments at a time.
6. Control unit should display for easy operation.
7. Control unit should have touch screen/ key pad display to select & display temperature of all four segments at a time.
8. Control unit should automatically detect the number of segments which are connected to the unit and display the same on the screen.
9. Should offer precise digital temperature control with selectable temperature range of 36 to 39º C in steps of 0.1ºC
10. Should have facility to measure & display the real time core body temperature of the
    patient continuously on the screen.
10. Should also have on screen graphical / Digital display of patient body temperature for the entire duration of surgery.
11. Should have facility to independently adjust the temperature of individual segme**nt**.
12. Should have a provision to connect whole body blanket & pediatric size blanket to the same control unit for future requirement.
13. Should have safety features such as Automatic check, Precise temperature control between warming system and patient, Autostop on detecting any problem
14. Should have non latex anti-bacterially coated, blood and fluid Resistant covers
15. Covers should be washable and replaceable
16. The control unit should be light weight and small in size, easily attachable to IV rod / OT table with fixing claw.
17. Should have low energy consumption and noiseless operation
18. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet.Any point ,if not substantiated with authenticated catalogue/manual, will not be considered.
19. US FDA or European Certified.

Item No. 5

SPECIFICATION FOR RESUSCITATION KIT

Resuscitation kit should designed to store and carry basic resuscitation equipment, intubation equipment and accessories including ampoules. The outer cover of bag is made of splashproof polyamide, straps and belts are made of polypropylene.

It should have resuscitation bag (adult) to deliver a max. tidal volume of approximate 1300 ml, the outer cover of resuscitation bag should be 100% latex free, along with reservoir bag.

It should have pneumatically powered portable transport ventilator for adult and children with a body weight down to approximate 15 kg (3 years), it should deliver 12 or 20 breaths per minute & tidal volume in the range of 200-1200ml. Oxygen concentration switch for ventilation at either 60% or 100% should be present.

It should have double chamber Suction Pump which can be operated mechanically (i.e. by foot/hand). It should have 10-mm suction tip through which maximum free airflow of 70 l/min and a vacuum of -600 mmHg can be achieved. All parts should be autoclavable at 121ºC.

It should have oxygen regulator and oxygen cylinder for connection to uni-suction pump and portable transport ventilator with a filling pressure of maximum 200 bar. It should have controlled flow in the range of 0.25-25l/min for manual resuscitation.

It should have adult intubation equipments - Disposable Endo-tracheal tube with cuff of sizes 6.5,7,7.5,8 & 8.5 mm (1 Nos. each), Suction catheters 3.3, 4.0 & 5.5mm (3 Nos. each), Guedel airway size 1,2 & 4, Laryngoscope handle with 2 macintosh blades of sizes 2 & 3, Spare lamp (1 no.) for laryngoscope, Magill forceps, Pair of bandage scissor, Artery forceps, Lister type dressing forceps, Roll of adhesive plaster (silk quality), Insulation foil (gold /silver), plastic syringe 10 ml for cuff inflation & 2 ml, 5ml, 10 ml with luer connector (2 no.each), Hypodermic needle 18G & 21G (12 Nos. each),

It should not weigh more than 20 kg.

It should be internationally reputed company.

ITEM NO. 6

VIDEO LARYNGOSCOPE

Description: Video laryngoscope is a device that aids in easy endotracheal intubation esp. inemergencies & difficult airway situations, under vision of high intensity illumination with provisions of capturing still image & recording videos.

System specs: unit should be

1. A mobile, compact portable unit containing Macintosh laryngoscope sizes 2, 3 and 4 and Miller blade for neonates and infants with inbuilt camera & light source with high intensity LED illumination.

2. It should aid in difficult intubation/airway with minimal neck maneuvering.

3. Handle & blade should be reusable, light weight & of quality finish.

4. Light should be bright with high illumination appox. more than 40000 LUX to provide a good visual field.

5. Camera should be digital with high resolution.

6. Fogging should not occur at laryngoscope or camera

7. Should have high enough memory (1 hour of video Approx.) of documented/recorded videos & still images that can easily be stored /transferred to computer/laptop through USB PORT.

8. There should be easy recall/display of the recorded video or images.

9. Screen/Monitor should be TFT COLOR digital, anti-reflective, with & projector capability

and integrated real-time recording facility

10. It should not necessitate stylet use

11. Desirable is to have provision for suction & O2 insufflations.

12. Display screen should be 7 inches. and more along with screen safety provisions.

13. Automatic/manual white balance facility should be available.

14. Complete set should be easily cleaned & withstand common disinfection (HLD)/sterilization methods.

15. Battery should be rechargeable having good shelf life with backup for at least 20 min.

16. Power input to be 220-240VAC, Current: 2 Amps, 50Hz

17. The unit shall be capable of operating continuously in ambient temperature of 10 -50 deg C and relative humidity of 15-90%

18. The unit shall be capable of being stored continuously in ambient temperature of 0 -50 C and relative humidity of 15-90%

19. The equipment should be USFDA or European CE approved.

20. Company should have service centre in Delhi/ NCR and should provide service 24x7.

21. Demonstration is essential

22. Company shall provide at least 2 years warranty & 5 yrs comprehensive CMC on expiry of warranty with rates to be quoted separately.

23. Certified for meeting IEC 60601-1-4 Medical electrical equipment - Part 1-4: General requirements for safety - Collateral Standard: Programmable electrical medical systems

24. List of important spare parts and accessories with their part number and costing.

25. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered.

Item No. 7

Equipment Specifications for Spectrophotometer, UV Visible,Dual Beam

1 Description of Function	
1.1	UV/Vis spectroscopy is routinely used in the quantitative determination of solutions of transition metal ions and highly conjugated organic compounds.The instrument used in ultraviolet-visible spectroscopy is called a UV/vis spectrophotometer. It measures the intensity of light passing through a sample (I), and compares it to the intensity of light before it passes through the sample (Io)In a double-beam instrument, the light is split into two beams before it reaches the sample. One beam is used as the reference; the other beam passes through the sample. Some double-beam instruments have two detectors (photodiodes), and the sample and reference beam are measured at the same time.
2 Operational Requirements	
2.1	System should provide for for analysis of Protein, DNA / RNA & Enzyme kinetics etc.
2.2 Microprocessor controlled Double beam spectrophotometer with scanning, kinetic and multi wave length facility ,Self check & self diagnostic facility and Auto wavelength calibration facility	
3 Technical Specifications	
3.1	Spectral: Wavelength Range 190-1100 nm Wavelength Accuracy:+/- 1 nm Bandwidth < 2.0 nm Wavelength Reproducability:+/- 0.5 nm
3.2	Photometric: Photometric Accuracy + 0.005A at 1A Photometric Reproducibility + 0.002A at 1A Stability < 0.001A/nm Absorbance Range -3.000 to 3.000 Scanning Speed 6000 nm/min or better Stray light < 0.1% at 340 nm
3.3	Light Source Deuterium (D2) & Tungsten (W) Halogen lamp
3.4	Dual Detector: Photo Diode
3.5	Detection Mode %, Transmission & Absorbance
3.6	Large LCD display to view complete graphics
3.7	Multi position(six positions preferable) cell holder/chamber.
3.8	Must be supplied with 4 pairs of micro Quartz cuvettes (volume 400 ul or less), with suitable software for nucleic acid quantification, protein quantification and determination
3.9	Advance version of compatible computer & printer
3.10	Monochromator: 1200 lines/mm grating.
4 System Configuration Accessories, spares and consumables	

4.1	As specified		

5 Environmental factors

5.1	Shall meet IEC-60601-1-2 :200(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
5.2	The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
5.3	Thu unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of less than 70%

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	Resettable overcurrent breaker shall be fitted for protection
6.3	Suitable Servo controlled Stabilizer/CVT
6.4	UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system

7 Standards, Safety and Training

7.1	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
7.2	Should be US FDA , CE,UL or BIS approved product
7.3	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.

8 Documentation

8.1	User manual in English
8.2	Service manual in English
8.3	Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job descriptin of the hospital technician and company service engineer should be clearly spelt out.
8.4	Certificate of calibration and inspection.
8.5	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
8.6	List of important spare parts and accessories with their part number and costing.
8.7	Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet.Any point ,if not
8.8	substantiated with authenticated catalogue/manual, will not be considered. Warranty as per bid document .

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and

running of the Equipment and the "All inclusive lump sum price" should include all such costs.

Item No. 8

Equipment Specifications for Refrigerated Centrifuge for Blood Bank

1 Description of Function	
1.1	The Refrigerated Centrifuge (RC) is a mechanical device used to separate biological substances of differing densities.
2 Operational Requirements	
2.1	Programmable microprocessor control system with self-diagnostic feature
2.2	Operation: Unlimited and defined programming of all parameters , automatic programming sequence controlled by microprocessor, digital display of nominal and actual values.
2.3	Use-friendly Equipment . Easy to read digital display for controlling basic functions and equipped with an automatic lid lock
3 Technical Specifications	
3.1	Max. Speed: 4,200 rpm or more
3.2	Capacity should accommodate 350 or more unit's blood and storage internal volume should be 600 litres or more
3.3	Memory with tamper proof facility
3.4	Max. Volume: 12 quadruple blood bag systems each 800 ml
3.5	Temperature range: -10°C / + 40°C.
3.6	Temperature adjustable within 1 deg C regardless of the centrifuge speed.
3.7	Timer 1 - 99 minutes and hold position
3.8	Motor imbalance detection: Automatic shut down of centrifuge if rotor load is out of balance with appropriate indicator.
3.9	Stain steel chamber: Easy to clean, corrosion resistant with provision of both drain and condensed water collection container.
3.10	Totally CFC free refrigerant fluid and insulation Minimum noise production preferably less than 58 dBA. Optional: delay function permitting the users to delay system start up.
3.11	Drive unit: Directly and maintenance free induction drive
3.12	Program memory: Capacity to store at least 30 centrifugation programs
3.13	Digital display and adjustment parameters: Acc/Deceleration: 9 acceleration/10 deceleration profiles Centrifugal time :3 digits, in hr and min, range 1 min – 99 hr operation Preliminary running time:3 digit, adjustable 0-99 hr for the period before starting Temperature:2 digits, adjustable in 10 intervals Temp. control range:- 20degC to 40degC

	Min. temp. at max. rcf: -50C Interference display: Program error, imbalance, lid open, internal interference

4 System Configuration Accessories, spares and consumables

4.1	System as specified-
4.2	Wind shielded swing-out rotor with 6 buckets for altogether 12 units of quadruple blood bags Volume per bucket:2 x 800 ml
4.3	Plastic insert, complete with spacers to spin triple blood bags for Red Blood Cells , Plasma (PRP or FFP)
4.4	Plastic insert, to spin quadruple blood bags, for Red Blood Cells, Plasma (PRP or FFP) platelets
4.5	Inserts with hook adapter, to spin buffy coat or small volumes of blood
4.6	Balancing weights for inserts

5 Environmental factors

5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
5.2	The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
5.3	Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)

7 Standards and Safety

7.1	It should have a security lock to prevent unintentional switch off and also unauthorised opening of the instrument.
7.2	Should incorporate Safety Features for Imbalance detection, lid interlock, over temperature, rotor over speed etc
7.3	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
7.4	Should be US-FDA or CE (European directive) approved product
7.5	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.
7.6	Should comply with IEC/TR 61010-3-020 :Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 3-020: Conformity verification report for IEC 61010-2-020:1992 Particular requirements for laboratory centrifuges"
7.7	Protection of data: In event of power interruption or complete failure, data should remain stored Warranty –as per bid.

8 Documentation			
8.1	User/Technical/Maintenance manuals to be supplied in English.		
8.2	Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out		
8.3	Certificate of calibration and inspection from factory.		
8.4	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.		
8.5	List of important spare parts and accessories with their part number and costing. available in stock with the supplier.		
8.6	Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point ,if not substantiated with authenticated catalogue/manual, will not be considered.		
8.7	Documentation: Possible connection to a computer, upgrading with monitoring system should be possible		

NOTE:

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Item No.09

Equipment Specifications for Microplate Shaker

1 Description of Function	
1.1	Microplate shaker provides reliable,regulated shaking for two or four microplates.
2 Operational Requirements	
2.1	Suitable for holding 4 micro plates at a time
3 Technical Specifications	
3.1	Shaking speed 100-1400 rpm.
3.2	Motion: exact orbital motion
3.3	Should have adjustable regulator for time & speed.
3.4	Timer: 0-20 min/ continuous
3.5	Stroke: 3 mm
3.6	Max load: 2 kg or more.
4 System Configuration Accessories, spares and consumables	
4.1	System as specified-
5 Environmental factors	
5.1	Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.or should comply with 89/366/EEC; EMC-directive.
5.2	The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
5.3	The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
6 Power Supply	
6.1	Power input to be 220-240VAC, 50Hz
6.2	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.
6.3	Resettable overcurrent breaker shall be fitted for protection
6.4	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)
7 Standards and Safety	
7.1	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
7.2	Should be US FDA , CE,UL or BIS approved product
7.3	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design

	activities.
7.4	Comprehensive warranty for as per bid.
8 Documentation	
8.1	User/Technical/Maintenance manuals to be supplied in English.
8.2	Certificate of calibration and inspection from factory.
8.3	List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
8.4	List of important spare parts and accessories with their part number and costing
8.5	Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs.

Item No. 10

Equipment Specifications for Water Bath

1 Description of Function	
1.1	Water bath maintains a constant preset temperature for treating samples.
2 Operational Requirements	
2.1	General purpose water bath is required
3 Technical Specifications	
3.1	Small (app dimensions 40-45X 35-40X20-25 cms) light, stainless steel body
3.2	Microprocessor controlled programmable, digital display for temperature etc
3.3	Temp. Range: 37ºC to 56ºC +0.50ºC.
3.4	Should have a stirrer for circulation
3.5	Bath Capacity: 8-10 litres.
3.6	Should be easily cleanable as needs to be cleaned on daily basis
4 System Configuration Accessories, spares and consumables	
4.1	System as specified-
5 Environmental factors	
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
5.2	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
6 Power Supply	
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)
7 Standards and Safety	
7.1	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
7.2	Should be US FDA , CE,UL or BIS approved product
7.3	Comprehensive warranty as per bid.
8 Documentation	

8.1	User/Technical/Maintenance manuals to be supplied in English.		
8.2	Certificate of calibration and inspection from factory.		
8.3	List of important spare parts and accessories with their part number and costing		

Item No. 11
Micro Pipettes (Mechanical)

1. User friendly high performance air displacement pipettors with compression spring mechanism
2. Should have Comfortable hand grip
3. Should have Consistency in quality
4. Should have Quick Click with digital display of volume setting
5. Should have Separate tip ejector
6. Should have Light weight ergonomic design
7. Should have Auto clavable tip cone
8. Should have Non Metallic internal Part
9. Should have Volume range from 0.5-10ul, 5-50ul,20-200ul,100-1000ul
10. Should have Safe zone filter lock provider
11. Should have Tip cone filter lock
12. Should have Easy calibration and maintence
13. Should have Micro pippete holders
14. Should have Capacity and Reproducibility as under:

		ACCURACY	REPRODUCIBILITY
I	0.5-10 ul	± 1%	1% - 0.5%
Ii	5-50 ul	± 1%	1% - 0.5%
Iii	20 - 200 ul	± 1%	1.5% - 1%
Iv	100 - 1000 ul	± 1%	0.5% - 0.4%

NOTE: The combination of Micropipettes in terms of set has been given from 0.5 ul to 1000 ul, which is indicative in nature. Any other combination to cover this volume may be considered.

15. Should have Comprehensive warranty for 2 years and 3 years AMC/CMC with rates after warranty
16. Should have Comprehensive training for lab staff and support services till familiarity with the system.
17. Should have Documentation Certificate of calibration and inspection from factory.
18. List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

Item No. 12

MULTI-CHANNEL PIPETTE

1. Should have 8 channels for dispensing
2. Should have Comfortable and adjustable hand grip
3. Should have Consistency in quality
4. Should have Quick Click
5. Should have Separate tip ejector
6. Should have Ergonomic design
7. Should have Autoclavable tip cone
8. Should have Non Metallic internal Part
9. Should have adjustable volume range from 10 – 100 uL & 30 ul – 300uL – 2 each Should be supplied with 1000 disposal tips for all
10. Should be adjustable with all types of tip.
11. It should have pipette holders
12. Should have Comprehensive warranty as per bid.
13. Should have Comprehensive training for lab staff and support services till familiarity with the system.
14. Should have Documentation Certificate of calibration and inspection from factory.
15. List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

Item No. 13

Electronic Analytical Balance

1. Electronic top loading balances with transparent case having following specifications:

Readability	0.1 mg
Capacity	200g
Repeatability	0.1mg
Linearity	+ -0.2mg
Stabilization time	<5 sec.
Adjustment weight (Int. wt.)	200g
Adjustment weight (Ex. Wt.)	500 mg,1gm,10gm,50gm,100gm,200gm

2. The balance should have functions of piece counting, percent weighing, formulation , dynamic weighing with automatic and manual start and' provision for data interface should comply with ISO/GLP with auto validation with ink jet printer.
3. Calibration: Fully automatic temperature .controlled internal calibration & balance should be capable to adjust itself.
4. Balance should have additional features as LCD Display
5. Should have vibration adapter for damps influence due to vibration and minor shocks
6. Should have built in instructions for its operation
7. To be operational on 220 to 240 V at 50 Hz.
8. Compatible UPS and voltage stabilizer should be part of configuration
9. Warranty as per bid.
10. Basic set of spares should be provided with the machine as stand by.
11. Equipments should be complete in all respect so that it can be started from day one.

Item No. 14

FULLY AUTOMATED BLOOD BANKING SYSTEM BASED ON COLUMN AGGLUTINATION TECHNOLOGY

1. The analyzer shall be capable to do all Immunohematology tests like grouping, phenotyping, antibody screening & Identification, cross-matching in Blood samples.
2. It shall have the facility of random and continuous loading of samples and reagents.
3. It shall have the through-put of about 30 – 60 tests per hour.
4. It shall have the Random access, Continuous sample analysis capabilities to take care of the emergency sample analysis too.
5. It shall have the access to samples during operation with the ability to add or remove the samples from the system.
6. The loading sample capacity minimum of about 30-40 samples at a time.
7. The reagent loading capacity shall be 10-25 reagents with the facility of Liquid level detection, automatic agitation of red cells .
8. It shall have the facility to read bar-coded reagents and samples .
9. It should be able to verify presence of serum/plasma before centrifugation.
10. It shall have the facility for the preparation of required amount and concentration of red cell suspensions automatically.
11. There should be availability of complete panel of ready to use cells for antibody screening and identification, including anti D prophylaxis panel with minimum shelf life of 30 days.
12. It shall have the facility for centrifugation of cassettes with the minimum capacity of 24 cassettes.
13. System should be able to detect & differentiate double population cases
14. All reagents to be supplied with the system, free of cost till the equipment is standardized and calibrated for its effective performance.
15. All consumables/reagents required for at least additional 5000 tests to be provided.
16. System should be able to provide backup of results.
17. All the rates for the consumables and reagents should be provided

It shall have the facility for both room temperature incubation as well as 37°C incubation of cassettes with the minimum capacity of 24 -48 cards.

18. It shall have the facility for auto reading of cassettes using CCD Camera along with the calibration facility.
19. It shall have on board QC package system to monitor the process and the Quality of the results obtained.
20. It shall have continuous process verification to ensure precise and accurate results.
21. It shall have Bi-directional interface, compatible to the LIS or HIS system.
22. The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
23. The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
24. Power input to be 220-240VAC, 50Hz fitted with Indian plug
25. Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz) Resettable over current breaker shall be fitted for protection
26. UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system
27. Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
28. The system should be US FDA , CE, or BIS approved
29. Comprehensive warranty as per bid.
30. Comprehensive training for lab staff and support services till familiarity with the system.
31. Documentation Certificate of calibration and inspection from factory.
32. List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.
33. Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
34. User/Technical/Maintenance manuals to be supplied in English.

Item No. 15

Portable Refrigerated Blood Transport Box

1. Structure should be completely in undeformable (UVA resistant) plastic material both inside and outside
2. Should operate on Mains/Car battery and have a Battery back up of at least 4-6hrs.
3. All the internal corners should be rounded to make easy any cleaning operation
4. Insulation should be high density (40 Kg/m3) foamed-in-place polyurethane, with an average thickness of 50mm.CFC-free.
5. Should be high thickness value, the refrigerators should maintain the internal temperature for long time (also when it is not connected to any electrical source
6. Handles should be 2 in no , retractable, allowing an easy handling of the portable refrigerator
7. Lid should be hinged, fully insulated, realized in plastic material both inside and outside. The lid should be fitted up with a perimetric rubber gasket, with a special locking device (granting a perfect seal)
8. Internal equipment should have open wire basket made in sheet steel white coated, to make easy the handling of the stored materials
9. Thermostat should be external, digital, electronic, grouping both the function of displaying the present temperature and adjusting the internal temperature
10. Cooling unit should be compounded by a hermetically sealed compressor and a (both included in the refrigerator structure)and a perimetric evaporator(roll-bond type) in the whole internal chamber. All the used components should be industrial grade granting the maximum reliability
11. Refrigerant should be R134a CFC-free
12. Refrigeration should be static granting the maximum temperature uniformity and stability inside of the cabinet should be able to store 30-40 bags and available in different sizes.
13. Temperature range: infinitely adjustable between +10 C to –20C
14. Voltages: both 12/24 V and 220-230V/1 phase /50 Hz
15. Connecting cables (included): for both the voltage (12/24V and 220-230V)
16. Capacity: 65 litres
17. Warranty for 2 years AMC/CMC for Three years

Item No. 16

Equipment Specifications for ULTRASONIC CLEANING SYSTEM GLASSWARE / PLASTIC WARE

1 Description of Function	
1.1	Ultrasound cleaners can clean wherever the cleaning liquid can go and nearly perfect ultrasonic cleaning is achieved. It is particularly suitable for the cleaning of laboratory instruments and articles made of glass, plastic, or metal.
2 Operational Requirements	
2.1	System should have multistage cleaning system with provision of pre-cleaning, disinfection, ultrasonic chamber and rinsing chamber built in
3 Technical Specifications	
3.1	It should have drying heating facility
3.2	It should have facility to clean all type of glassware plastic ware and even stainless steel instruments
3.3	The tank & chamber should be made of Stainless Steel 316 grade 16 s.w.g. sheet metal fabrication of high quality, round corners, buffed and polished surface. All joints are argon arc welded. Lid fabricated out of stainless steel sheet is provided on top of the tank
3.4	Should have following four stages: Stage One - Ultrasonic/undersurface jet clean. Stage Two - Tap Water Rinse. Stage Three -Distilled Water Rinse. Stage Four - Hot Air Dryer
3.5	Digital timer control of approximately 60 minutes
3.6	Operating Ultrasonic frequency: 25-30 KHz and 35-40 KHz
3.7	Internal Tank Capacity: 18- 20 Litres
3.8	There should be digital temperature controller and thermostat cut off heater.
3.9	Should have buzzer for accurate temperature maintainance.
3.10	There should be hose pipes clamps connections provided free with installation, inlet water supply pipes from the tap to the unit and drainage pipes.
3.11	Drain in rear bottom.
3.12	Built in heater of 20 to 70 deg C
3.13	Digital temperature monitor
3.14	Variable temperature control/indication for ultrasonics and drying stages
3.15	Liquid level protection

3.16	To supply inset baskets made of SS, perforated for holding goods to be cleaned – 2 nos.		
4	**System Configuration Accessories, spares and consumables**		
4.1	System as specified-		
4.2	SS Basket – 02		
4.3	All integrated accessories like Recirculating Pump and Filter Acou Lid Under surface jet for stages 1,2 & 3. Water recirculation systems etc should be included.		
5	**Environmental factors**		
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%		
5.2	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%		
6	**Power Supply**		
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
6.2	Suaitable voltage corrector/stabilizer		
6.3	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.		
7	**Standards and Safety**		
7.1	Comprehensive training for lab staff and support services till familiarity with the system.		
7.2	Comprehensive Warranty as per bid.		
7.3	Manufacturer/Supplier should have ISO certification for quality standards.		
7.4	Should be US FDA or European CE		
8	**Documentation**		
8.1	User/Technical/Maintenance manuals to be supplied		
8.2	Certificate of calibration and inspection from factory.		
8.3	List of important spare parts and accessories with their part number and costing.		
8.4	Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out		
8.5	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.		

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs.

CARDIOLOGY

Item No.17

PREMIUM END TOP OF THE LIVE PORTABLE 2D-ECHOCARDIOGRAPHY COLOUR DOPPLER SYSTEM.

The offered system should be top of the line platform on a worldwide basis.
It should be light weight easily portable machine (less than 7 Kgs) with proper bag and storage facility.
A separate Cart (of the same company) should be provided for mobility of the portable machine.
System should have extremely high resolution 2D Imaging, Colour Flow Imaging, M-mode, PW Doppler, CW Doppler, and Duplex modes.

Should have advanced image processing algorithms to analyse between targets and artifacts so as to sharpen target anatomy and reduce speckle and artifacts for excellent image quality.

Should have flat panel high resolution display monitor minimum 15 inch.

Should have a dynamic range of 170 DB minimum.

Should have extended field of view imaging of structures, by continuously scanning and moving the probe over the area of interest.

Should have maximum colour Doppler Frame rate of 200 Hz should have an onboard workstation for storage and review of all exams i.e.2D Doppler, Loops etc.

Should have DICOM support to be able to connect to hospital network, Laser cameras etc.

Should have hard Disk capacity to store patient data into the hard drive.

Should be able to transfer images and clips to Drive/CD/DVD Media.

Should be offered with the following transducers without need for frequency selection:-

1. 1. Adult Echo Transducer: Transducer technology for audit probes should be clearly mentioned in technical bid. 1-5 Mhz

2. Paediatric Echo Transducer – Paediatric 3-8 Mhz

3. Tran esophageal probe 2-7 Mhz

System should be CE marked & US FDA approved.

It should have standard Electrical Safety Norms.

ACCESSORIES

Other accessories: Jelly Bottles (5 Nos.), Patient Examination Table, Doctor's chair, Patient Chair, curtains for changing room.

Guarantee: Comprehensive Guarantee as per Inq. Parts and labour. All software updates upto as per bid to be provided free.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings from the source, Electrical points of suitable ratings, water connection, water drainage, plumbing, air-conditioning & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs..

Item No. 18
DENTAL CHAIR (REGULAR)

1 **Description of Function**

1.1 Dental Chair Medium is the dental chair required for dental and surgical procedures.

2 **Operational Requirements**

2.1 Physiological dental chair operated by electricity

3 **Technical Specifications**

3.1. Dental unit should have latest overhead delivery system

3.2. It should have two 3 way syringes (tip autoclavable, with 6 spare tips) one on unit side and other on the assistant side.

3.3. It should have one high speed Air Rotor terminal with water control on coupling supplied with handpieces.

3.4. It should have one high speed fiber-optic air-rotor terminal with handpiece

3.5. One air motor terminal having straight and contra angle handpieces

3.6. It should have LED light cure unit on unit sides (Min. Intensity 800 mW/cm2 and wavelength range - 370 - 500 nm output)

3.7. It should have one in-built Piezon LED (fiber-optic) Ultrasonic Scaler (frequency 28-36 KHz) with 4 scaler tips and one set of perio-curette tips

3.8. It should have infection control system with non-retraction valves (Bio System/ equivalent)

3.9. All handpieces/terminals should be kept on Autoclavable pads. 6 spare autoclavable pads should be supplied

3.10. Arm of unit should be pneumatically locked

3.11. All air tubing of the delivery system can be disinfected internally after every dental procedure

3.12. Removable auxillary tray (stainless steel)

3.13. It should have latest foot operated LED/halogen Light (min 35,000 LUX)

3.14. It should have Rotatable Water System with removable spittoon

3.15. It should have Medium Vacuum Suction and High suction (Motorised Suction)

3.16. It should have following programmes –

- Two programmable working positions
- Spitting and last working position with light ON and OFF automatically
- Return to Zero position with light OFF automatically
- It should have option to Lock the movements of chair
- It should have emergency stop control**.**
- Programmable Bowl water and Cup filler water
- It should have LED based X-ray viewer

3.17. It should be provided with right arm (options for Fixed, Lateral 90 degree swivel available)

3.18. It should have multifunctional foot control base (fixed or mobile)
3.19. It should be provided with one doctor's stool and one assistant's stool with adjustable backrest tilt including an adjustable ring for foot rest.
3.20. Oil Free Air Compressor (Medical Grade) with Air moisture filter

4 **System Configuration Accessories, spares and consumables**
4.1 System as specified
4.2 All consumables required for installation and standardization of system to be given free of cost.
4.3 Provision for modular furniture with sink for dental operator 10feet x 2 feet or dimensions as required by the operator.

5 Environmental factors
5.1 The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
5.2 The unit shall be capable of operating continuously in ambient temperature of 10-40deg C and relative humidity of 15-90%
5.3 Complete installation of the system including water input and drainage system has to be installed

6 Power Supply
6.1 Power input to be 220-240VAC, 50Hz
6.2 Five KV Servo Voltage stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)

7 Standards, Safety and Training
7.1 Should be US FDA/ CE approved product
7.2 Manufacturer/Supplier should have ISO certification for quality standards.
7.3 Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450.

8 Documentation
8.1 User/Technical/Maintenance manuals to be supplied in English.
8.2 Certificate of calibration and inspection.
8.3 List of important spare parts, handpieces, and accessories with their part number and costing
8.4 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs.

Item No. 19

EQUIPMENT SPECIFICATIONS FOR DENTAL SCALER

1 Description of Function
1.1 Dental Scaler is required for removing the supragingival and subgingival calculus.
2 Operational Requirements
2.1 Microprocessor based system
3 Technical Specifications
3.1 Based on piezoelectric technology
3.2 Having torque tool for tightening of the tip
3.3 High power turbo mode and low power mode
3.4 Should have LED light in scaler handpiece
3.5 Automatic smart power feedback control
3.6 Minimum vibration frequency of 28-36 KHZ and
3.7 Ten tips for scaler, one endodontic kit and one set of perio-curette tips
3.8 Foot pedal
3.9 Separate control for water and tip vibration
3.10 Should be supplied with two autoclavable hand pieces.
3.11 It should have self contained tank of 300 ml capacity
4 System Configuration Accessories, spares and consumables
4.1 System as specified

5 Environmental factors
5.1 The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
5.2 The unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of less than 70%
6 Power Supply
6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2 Servo Voltage stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)

7 Standards, Safety and Training
7.1 Should comply with Medical Device class II type BF, in conformity to the requisites of Directive 93/842/CEE for the SCALER unit
7.2 Should be US FDA/ CE approved product
7.3 Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450
8 Documentation
8.1 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet
8.2User/Technical/Maintenance manuals to be supplied in English.
8.3 Certificate of calibration and inspection.
8.4 List of important spare parts and accessories with their part number and costing.
8.5 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.

The job description of the hospital technician and company service engineer should be clearly spelt out

Item No. 20

AUTOCLAVE

1 Description of Function

1.1 Autoclaves are required for sterilizing instruments in high temperature and high pressure steam.

2 Operational Requirements

2.1 Autoclave should be table top and front loading with fully automatic microprocessor based control

3 Technical Specifications

3.1 The autoclave should provide sterilization at 121^{o} C and 134^{o} C for both wrapped and unwrapped tools and also a flash cycle for rapid sterilization.

3.2 The autoclave should be equipped with a powerful vacuum pump to eject air pockets from the chamber at the beginning and at the end of cycle (Pre-vacuum and Post vacuum)

3.3 Water purification unit (based on reverse osmosis principle) should be supplied along with the autoclave, and it should be possible to connect the water purification unit directly to autoclave for continuous supply of high quality demineralized water.

3.4 It should have minimum four sterilization programs and two test program. Programs should be monitored by microprocessor.

3.5 Chamber volume 22 -25 liters.

3.6 Loading can be min. 4 Kg instrument/ 1 Kg textile.

3.7 It should be class B autoclave so that hollow bodied instruments, handpieces, and turbines can be fully autoclaved.

4 Environmental factors

4.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS)/ or EN61010-1-2 General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.

5 Power Supply

5.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug

5.2 Servo Voltage stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)

6 Standards, Safety and Training

6.1 Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450

6.2 Should be US FDA/ CE approved product

6.3 Manufacturer/ Supplier should have ISO certification for quality standards.

7 Documentation

7.1 User/Technical/Maintenance manuals to be supplied in English.

7.2 List of important spares and accessories with their part number and costing.

7.3 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

Item No. 21
INTRA ORAL CAMERA

1 Description of Function

1.1 Intra-oral camera is required for documenting video and still images of intra-oral procedures

2 Operational Requirements

2.1 High resolution Intra-Oral camera based on CCD technology

3 Technical Specifications

3.1. Should give true image (not a mirror image)

3.2. Light source integrated into handpiece

3.3. Sealed design and hygienic material for proper disinfection

3.4. The image live/freeze/save functions should be initiated by the station foot control

3.5. Ergonomical shape of handle

3.6. True imaging angle of 530 approx

3.7. Viewing orientation - 90o approx

3.8. Magnification – minimum 40X

3.9. Resolution – minimum 470 lines

3.10. Focal range – min. 6mm to infinity

3.11. Light source – four output halogen, 32,000 LUX at 10 mm

3.12. It should be supplied along with Desktop computer 20 inch screen, Intel Pentium Quad Core, 500 GB HDD, RAM 4 GB, DVD-RW, latest genuine windows version software and color laserjet printer.

4 Power Supply

4.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug

5 Standards, Safety and Training

5.1 Should be US FDA/ CE approved product

5.2 Manufacturer/ Supplier should have ISO certification for quality standards.

6. Documentation

6.1 User/Technical/Maintenance manuals to be supplied in English.

6.2 List of important spare parts and accessories with their part number and costing.

6.3 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet

6.4 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

ENT

Item No. 22

OESOPHAGOSCOPE

S.N	Name with specification	Quantity
1	Universal Oesophagoscope with Distal or Proximal illumination Adult 250mm length 12x8 mm diameter	1
2	Universal Oesophagoscope with Distal or Proximal illumination Adult 300mm length 14x10 mm diameter	1
3	Universal Oesophagoscope with Distal or Proximal illumination Adult 300mm length 16x12 mm diameter	1
4	Universal Oesophagoscope with Distal or Proximal illumination Adult 500mm length 12x8 mm diameter	1
5	Illumination system, cap, magnifier and telescope sealing cap for adult scopes	One set
6	Universal Oesophagoscope with Distal or Proximal illumination Child 270mm length 5.5 mm diameter	1
7	Illumination system, cap, magnifier and telescope sealing cap for child scope	One set
8	Optical forceps for Oesophagoscope Alligator Foreign body to fit in 300 mm Oesophagoscope	1
9	Optical forceps for Oesophagoscope biopsy forcep to fit in 300 mm Oesophagoscope	1
10	Telescope 0 degree wide angle to fit in above optical Biopsy forceps	1
11	Jackson esophageal forcep standard shaft, deep serrated upper moving jaw, 400mm length	2
12	Foreign body forcep for cutting of denture hooks with good cutting power 450mm length	2
13	Foreign body forcep alligator jaw with deep serration 350mm length 2.0mm shaft diameter	2
14	Peanut grasping jaw 350mm length 2.0mm shaft diameter	2
15	Cut biopsy forcep 350mm length 2.0mm shaft diameter	2
16	Aspiration tubes rigid 350mm length 2.5mm diameter	4
17	Aspiration tubes rigid 500 mm length 4.0mm diameter	2
18	Cotton carrier working length 350mm	2
19	Fiber optic cable 2.5mm Diameter 1.80 meter length	2
20	Cold light source 250 Watt	1
21	All accessories should be from the same manufacturer and should be European CE / US FDA approved.	

Note for Instruments sets

TITANIUM INSTRUMENTS:

1. All Instruments should be of international quality and made from surgical grade titanium.
2. The “Hinges” should be rust proof
3. The instruments should be guaranteed against metal fatigue and rust for atleast 02 years. Further repair should be available for next 5 years.
4. The instruments surface should be non-reflective.
5. The brand name along with catalogue number should be etched on the instruments.
6. The other instruments should be made of high grade titanium, they should not magnetize with use and the surface should be non-reflective and glare free under OT light.
7. The instruments might be call for demonstration and approval. It is the sole discretion of the department to approve or disapprove the quality.

STAINLESS STEEL INSTRUMENTS :-

1. All Instruments should be of imported and made from surgical grade stainless steel. Documentary evidence required for grade of material.
2. The “Hinges” should be rust proof
3. The instruments should be guaranteed against metal fatigue and rust for 02 years.
4. The instruments surface should be non-reflective.
5. The brand name along with catalogue number should be etched on the instruments.
6. The instrument should be CE or FDA approved.
7. The instruments might be call for demonstration and approval. It is the sole discretion of the department to approve or disapprove the quality

MICROBIOLOGY

Item No. 23

BINOCULAR MICROSCOPE COMPOUND

1. Optical system should be infinity corrected.

2. System complete with illumination system is required.

3. Body: Binocular, sturdy, stable base body with focus adjustment controls.

4. Eye piece: Paired, high quality, (the image of the object as seen through the binocular eyepiece should be well defined centrally in at least 2/3 field of view), achromatic, wide field, 10x with inbuilt pointer. The eyepiece should be aplanatic and have a minimum field number of 18. Diopter adjustment must be present on one/ both eye pieces or on the eye piece tube.

5. Objective: Three objectives10x,40x,100x,10x and 40x objectives should have numerical apertures,100x should be of oil immersion & spring loaded type. Suitable prominent marking should be provided on 100x for easy identification. All objectives shoule be wide field, achromatic & parafocal. Marking for the objectives. Each objectives should be engraved with the following information :-

- Name of the manufacturer
- Magnification and numerical aperture, for example,10x/0.25
  100x objective should be engraved with the word 'Oil'

6. Nose piece: Revolving nose piece to accommodate a minimum of three objectives with click stops. It should be provided with ribbed grip for easy rotation. Extra ports if any should be fitted with dust proof metallic/ebonite caps.

7. Stage Uniformly horizontal, mechanical stage having dimensions of length 140 mm (+/- 20mm) with fine vermier graduations (minimum reading accuracy of 0.1 mm). the stage should be provided with spring loaded slide holder for exact positioning of specimen/ slide. It should be designed with convenient sub-stage vertical coaxial adjustment for slide manipulation.

8. Sub-stage condenser: Abbe-type condenser, numerical aperture (N.A.) 1.25 focusable with rack and pinion arrangement incorporating an aspherical lens and an iris-diaphragm. The condenser should have a filter holder and removable/ swing in/ out blue filter (suitable for bright field Microscopy).

9. Sub-stage illuminator:
   Inbuilt Light Source – a LED / 20W, 6V-12V Halogen Lamp.
   2. Power Supply
      a. Voltage220V,50HzAC
      b. Should have one on-off power switch, 3 core power cord with a 3 point male plug.

   3. The system should have an inbuilt protective/ safety device to withstand fluctuations of voltage from 140 V to 280 V / Suitable Voltage Stabilizer.

   4. A plano-concave mirror should be supplied which would be attachable to the base for field use. (Where power is not available).

5. The Illuminator should have a build-in field diaphragm.

10. Eye piece tubes: Binocular eye piece tubes, inclined at 45 degrees, rotatable through an angle of 360 degrees, having inter-pupillary distance range of 54-74 mm or wider, covering the above mentioned range.

11. Focusing knob: Co-axial coarse and fine focusing knobs capable of smooth fine focusing movement over the full range of coarse travel. The fine focusing movement should have stop safety arrangement.

12. General

1. All optical parts including objectives, eye pieces and prisms should have anti-reflective coating which also gives anti-fungal property.
2. All metallic parts should be corrosion-proof, acid-proof and stain-proof
3.Working manual should be provided with each microscope
4.A bottle of at least 25 ml immersion oil, a roll of lens tissue paper and lens cleaning solution (100 ml) should be provided with each microscope.
5.One no.of anti static cleaning brush should be provided with each Microscope for cleaning purpose.

13. Microscope should be supplied with spare parts as under:
•100x oil immersion objective (as per the specifications given) – one.
•Halogen bulb, (6volts, 20w) – 6Nos.
- Fuses – 6 Nos.

14. All consumables including microscope cover required for installation and standardization of system to be given free of cost.

15. The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%.

16. Power input to be 220-240VAC, 50Hz fitted with Indian plug.

17. Suitable voltage corrector/stabilizer

18. Should be US FDA or CE or ISI approved product

19. Two years warranty, 3 yrs comprehensive AMC should be available with service centers in close proximity.

20. User/Technical/Maintenance manuals to be supplied.

21. Certificate of calibration and inspection from factory.

22. List of important spare parts and accessories with their part number and costing.

Item No. 24

AUTOCLAVE (VERTICAL)

- Description of Function: Steam Sterilizers or Autoclaves are required to sterilize objects under high temperature and pressured steam.
- Operational Requirements: Suitable for hospital dressings, linen, surgical instruments, glassware, culture media and laboratory ware etc.
- Technical Specifications:-
  - Single door high pressure steam sterilizer with double/triple walled, steam jacket and separate boiler
  - Material of construction:
    - **a.** Sterilizer chamber SS 316
    - **b.** Door SS 316
    - **c.** Jacket MS
    - **d.** Loading carriage SS 316
    - **e.** Transfer trolley: MS, painted
    - **f.** Door Gasket: Silicon or better
    - **g.** Insulation: fiber glass resin bonded wool or better
    - **h.** Insulation cover: SS sheets
  - Chamber capacity 100-200 ltrs
  - Operating temperature 121^0C - 138^0C pressure 1.1 to 2.2 kg/ cm^2 of steam pressure
  - Sterilizer should be provided with steam generator
  - Spring loaded safety valves and automatic vacuum breaker for jacket
  - Removable plug screen for chamber drain
  - SS baffle for even steam distribution in the chamber
  - Safety valve protection against poor pressure.
  - Safety lock for door :pressure lock safety device
  - Low water off
- System Configuration Accessories, spares and consumables:
  - System as specified-
  - Should provide available spares and consumables for at least 10 years
  - Should provide a sufficient quality of consumable along with the equipment
- Environmental factors: Shall meet IEC-60601-1-2 :200(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.
-
- Power Supply: Power input to be 220-240VAC, 50Hz,/440 V 3 Phase as appropriate and fitted with plug compatible with local sockets
- Standards and Safety:

- Comprehensive onsite training for lab staff and support services till familiar with the system.
- Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450 (BIS)
- Should be ISI /CE or equivalent standard approved product.

- Documentation:
  - User/Technical/Maintenance manuals to be supplied
  - Certificate of calibration and inspection from factory.
  - List of important spare parts and accessories with their part number and costing.
  - Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out
  - Should submit a report of quality checks using biological indicator.

    NOTE:

  - Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs.

Item No. 25

MICROSCOPE WITH PHOTOGRAPHIC ATTACHMENT / DIGITAL CAMERA

Item		Microscope with digital camera
Microscope frame	Optical system	US12 optical system
	Focus	Vertical stage movement: 25mm stage stroke with coarse adjustment limit stopper, Torque adjustment for coarse adjustment knobs, stage mounting position variable, high sensitivity fine focusing knob (minimum adjustment gradations: 1 μm).
	Illuminator	Built-in Koehler for transmitted light 12V100W halogen tube (pre-centered), light preset switch, and light intensity LED indicator, built-in filters.
Revolving nosepiece		Interchangeable reversed quintuple/sexuple/septuple nosepiece.
Observation tube	Wide field	• Wide field binocular, inclined 30^0C • Wide field tilting binoculars 5^0-35^0 • Wide-field trinocular, inclined 30^0 • Wide field ergo binocular, inclined 0^0 – 25^0.
	Super wide field	• Super wide field trinocular,, inclined 24^0 .
Stage	Ceramic-coated coaxial stage with left or right hand low drive control: with rotating mechanism and torque adjustment mechanism, optional rubber grips available.	
Condenser	• Abbe (N A. 1.1), for 4X – 100X • Swing out Achromatic (N A. 0.9), for 1.25X- 100X (swing-out: 1.25X-4X) • Achromatic Aplanatic (N A. 1.4), for 10X – 100X • Phase contrast, dark field (N.A. 1.1), (phase contrast: for 10X – 100X, dark field: for 10X-100X. • Universal (N.A. 1.4/0.9), for 2X – 100X • Dark field dry (N. A. 0.8 – 0.92), for 10X -1 • Dark field oil (N.A. 1.20 – 1.40) for 10X – 100X for 10X -1 • Ultra low (N.A. 0.16) for 1.25X – 4X.	
Camera Adapters	• Photo system • Video system • Microscope Digital Camera System & DP-BSW/software.	

- Image analysis systems for capture, morphometry, thresh holding (grey level profiling) and analysis, annotation etc.
- Latest configuration compatible computer with printer for image analysis and UPS with one Hour power back up.
- Facility for upgradation of the quoted model for epi fluorescence illumination system whenever required.

SPECIFICATION OF DIGITAL CAMERA FOR FIELD PHOTOGRAPHY.

1. Effective 5.1 Mega Pixel
2. 12xOptical Zoom (24x Precision Digital Zoom)
3. Super Steady shot (Optical Image Stabilizer)
4. Large 6.35 cms LCD (115K Dots)
5. 32 MB internal Memory
6. AF Illuminator.

Documents:

- Warranty as per bid.
- Should be US FDA/ CE/ ISI or other equivalent certificate approved product
- User/Technical/Maintenance manuals to be supplied

Item No. 26

AUTOCLAVE (FULLY AUTOMATIC, HORIZONTAL)

1. Horizontal rectangular high speed fully automatic steam sterilizer with capacity of 400-500 liters.
2. Normal working pressure should be 1.2 / 2.1 Kg/cm square.
3. Normal working temperature should be 121 degree Celsius / 134 degree Celsius.
4. Working on three phases for 440 Volts, 50 Hz
5. Machine should be made of good quality stainless steel like AISI 316L/304/316 Ti.
6. Machine should be made of good quality stainless steel like AISI 316L/304/316 Ti.
7. The chamber should be of good quality ISI stainless steel covered with glass wool insulation.
8. Safety valve protection against poor pressure.
9. Touch screen/Sensitive switches digital display at front panel to show the temperature of chamber, cycle number, batch number, time and date, alarm indicator, error code.
10. Should have powerful cooling system that does not need to be connected to water source.
11. Computerized recording device with printer should be provided that will automatically and continuously monitor and record dates, times of day, load, operating parameters.
12. The unit should be provided with Dual microprocessor based control panel.
13. Warning and error messages by microprocessor.
14. The unit should have indicator for maximum and minimum level of water.
15. Thermal fuse protection against overheating and against non permissible operation without water.
16. Safe, comfortable and easy to use.
17. Loading carriage of stainless steel with two numbers perforated, adjustable & removable shelves with suitable M.S. trolley moving on casters.
18. Carriage should have two stainless steel detachable arms for protection to load on three sides.
19. Trolley should have three locks one for locking carriage with trolley & second for locking trolley with sterilizer & third for trolley wheels.
20. The machine should be US FDA / European CE approved. Certificate should be provided

21. Installation free of cost with satisfactory biological indicator report.
22. Warranty as per bid.
23. Service centre should be located nearby.
24. User / Technical / maintenance manuals in English should be provided.
25. List of important spare parts and accessories with their parts number and costing.
26. List of user & performance report of the quoted model should be provided from Government hospitals /institute of repute.
27. Attach original manufacturer's product catalogue and specification sheet. Photocopy/ computer print will not be accepted. All technical data to be supported with original product data sheet.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs.

Item No. 27

AUTOMATIC AIR SAMPLER

- The High Volume Air Sampler utilize a precise and versatile, venture sampling system feature electronic flow control, and meets the most recent international methods for atmospheric particulate matter measurement.
- Should have the configurations: Total Suspended Particulates (TSP), PM10 and PM205.
- The instrument should have a speed controlled brushels blower for accurate, quiet operation and 2 filter holders for easy exchange in the field.
- Should have an integrated real time clock, wide graphic display and dedicated keypad allow for user friendly sample programming. The equipment should have the selection from automatic 3 and 6 day runs or creation their own program selectable from 1 min to 168 hours.
- The equipment should be microprocessor controlled system for measurement of ambient and orifice flow temperatures, ambient and venture pressures for true mass or volumetric flow standardized with selectable reference temperature.
- Measured parameters should be logged every five seconds and recorded as five minute averages for the 24 hours run period. Run time, averages flow and standard deviation are just some of the obtainable results from the Flow Choice allowing the user to validate the sample run. Data is accessible on the display should able to downloaded to a PC via Modem (optional).
- The Equipment should have:
  - TSP, PM10 or PM2.5 Configurations
  - Easy Programming – Automatic 3 or 6 day runs or user selectable programs.
  - Quality Assurance System – Flow rate, total volume, temperature and pressure are logged and data is available for download to your PC.
  - Brushless Blower – Provides a accurate flow and quiet operation.
  - Remote Control via Modem (optional).
- Measured parameters:
  - Flow rate (standard and actual condition)
  - Total volume (standard and actual condition)
  - Ambient temperature
  - Ambient pressure
  - Pressure drop on the filter
- Conditions should be measured every 5 seconds and condensed to 5 minute log files.
- Data Memory: More than 30 sampling reports should be saved, and should be accessible through the display or by download to a PC via RS232 or modem (optional).
- Electronic sampling flow rate should be controlled at standard or actual condition.
- Sample time programming: Resolution 1 minute, selectable from 1 min. to 168h. Automatic 3 or 6 day runs.
- There should be provision of retrofitted light graphic display, dedicated keypad, real time clock and date.
- The machine should have brushless blower which should control the speed to limit noise and provide extremely accurate flow control.
- Flow Range: 1000 – 1400 L/min
- Flow Stability: ± 1% of set flow rate
- Power Requirements: 220-240 Vac, 50 Hz, 15amp.

- Allowable environmental temperature operating range: 0-50^{0}C
- Dimensions 62cm x 43cm x 110cm (W x D x H) for TSP unit.(or as per user requirement).

- Detachable base: Inlet head should be easily attached on site.
- Should have dual filter cassettes to allow rotating of cartridge with filter changes in lab
- Warranty as per bid.

- Power Requirements: 230 – 240 V
- Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet

- **Accessories:**
  - Ambient Gas & Particulate Monitors
  - Meteorological Equipment
  - IH and IAQ Equipment
  - Reach-In and Walk-In Equipment Shelters
  - Process Stack Gas, Particulate & Velocity Systems
  - System Design, Installation & Commissioning

- **Optional accessories:**
  - Calibration Kit Including: Orifice plate, slack tube manometer and carry case
  - Remote control via Modem GSM
  - Muffler for further noise reduction
  - Filter Papers (200mm x 250mm)
  - Calibration Contracts (conducted by qualified technician)

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs.

Item No. 28 - HOT AIR OVEN

- Microprocessor based digitally controlled equipment suitable for daily usage.
- Should have double walled construction, special high quality insulated steel.
- Facility for adjustable shelves, 10 removable shelves to be provided.
- Size of inner chamber approx 55x55x70 cm (or as per user demand) with internal lighting facility
- Insulated door fitted with heavy hinges, mechanical door lock.
- Temperature range 30-250^{o}C, digitally temperature setting accuracy
- Separate PT 100 sensor and display for temperature (LCD).
- Forced uniform air circulation, Digital safety thermostat.
- Delayed start and stop function, high quality heating element
- Supplied with cord & plug, operate at 220V/50 Hz AC supply
- Training of laboratory staff for the purchased equipment

  Warranty as per bid.
- Availability of spares / disposables for at least 10 years.
- All consumables required for installation and standardization of system should be provided free of cost
- List of users and Satisfactory Report of quoted model from reputed institute / hospital
- Should have all the accessories required for the functioning of the equipment.
- CE / ISI mark or other equivalent quality certification.
- All electrical peripherals required for smooth functioning e.g. voltage stabilizer provided with the equipment
- There should be provision for demonstration before final approval of equipment
- Service centre should be closed proximity.
- Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet

NOTE:

- Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful

  installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs.

Item No. 29

SEROLOGICAL WATER BATH

- Temperature range from ambient temperature 0° to 100°C.
- Thermostatic control with an accuracy of plus minus 0.5°C
- Double walled inside stainless steel and outside mild steel sheet painted in epoxy powder coating.
- Bath consist two pilot lamp, temperature control knob and ON/OFF switch to work on 220/230 volts AC supplied with or without stirring arrangement without racks and thermometer.
- Lid of water bath is made of stainless steel 304 Qlty.

	L	M	D		
SBS-1	300mm	250mm	175mm	Suitable for 2 racks	14 Ltrs

(Or as per user requirement)

- Should be US FDA or CE / ISI or other equivalent approved.
- Audible warning safety signals should be there for high/low temperature warnings, and dry running protection.
- Instrument should have lift up bath cover.
- Carrier racks should be given for flasks and test tubes racks.
- A cock should be provided to facilitate draining of bath contents.
- Water bath protective media should be there to prevent contamination and formation of algae.
- Heating capacity - 2 KW.
- Training of laboratory staff for the purchased equipment
- Warranty as per bid.
- Availability of spares/ disposables for at least 10 years.
- All consumable required for installation and standardization of system to be given free of cost.
- List of users and satisfactory report of quoted model from reputed institute preferably Government institute/ hospitals.
- Should have all the accessories required for the functioning of the equipment.
- Equipment should be ISI certified or equivalent standard of repute.
- It should be ISO 9001:2000 or other equivalent quality certification.
- All electrical peripherals required for smooth functioning e.g. voltage stabilizer should be provided with the equipment.
- There should be provision for demonstration before final approval of equipment.
- Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet

Item no. 30

LAB REFRIGERATORS

- Capacity (as per user requirement) 280-400 Liters.
- Temperature 2-8^{o}C
- Preferably roller mounted
- Adjustable shelves
- Durable rust free exterior
- Durable unbreakable interior
- Control panel with temperature alarm, on/off switch and digital thermometer,
- Interior lighting, Drip tray and defrosting arrangement .
- Adequate circulation of air to ensure even cooling by DUCT system
- Door with lock. Inside of door provided with racks. Door hinges and latches should be chromium plated.
- Control panel with temperature alarm, ON /OFF switch with power on indicator, digital thermometer, temperature display.
- Electronic automatic temperature control,
- Operable at 220 V, 50 Hz, single phase AC supply.
- Compressor unit to be hermetically sealed with guarantee for at least five years.
- Training of laboratory staff for the purchased equipment
- Warranty as per bid document.
- Availability of spares/ disposables for at least 10 years.
- All consumables required for installation and standardization of system to be given free of cost.
- List of users and satisfactory report of quoted model from reputed institute preferably Government institute/ hospitals
- Should have all the accessories required for the functioning of the equipment.
- European CE / ISI mark or other equivalent quality certification.
- All electrical peripherals required for smoothes functioning e.g. voltage stabilizer provided with the equipment
- Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet
- There should be provision for demonstration before final approval of equipment.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs.

Item - 31

DEEP FREEZER (-20 ^{o}C)

- Microprocessor controlled vertical Freezer
- Separate chamber racks can be pulled out for easy handling
- Refrigeration – Heavy duty CFC free with hermetically sealed compressor.
- Cabinet construction should be corrosion and rust free and resist chipping.
- Operational control – like temperature setting, temperature calibration, temperature display, temperature recording etc. shall all be microprocessor based.
- Freezer condition monitor – Alarm indicators, maintenance indicator to take care of eventualities like power failure, high or low temperature, door open, probe failure etc.
- Capacity 350-400 Litre. (or as per user requirement).
- Temperature adjustable from -10 to -30^{o}C.
- Digital display of set and actual temperature
- No condensation on storing material with automatic electric defrost
- With standard safety features
- Rechargeable battery backup including charger maintenance free.
- Training of laboratory staff for the purchased equipment
- Warranty as per bid document.
- Availability of spares / disposable for at least 10 years.
- All consumables required for installation and standardization of system to be given free of cost.
- List of users and satisfactory report of quoted model from reputed institute preferably Government institute/ hospital.
- Should have all the accessories required for the functioning of the equipment.
- European CE / ISI mark or other equivalent quality certification.
- All electrical peripherals required for smooth functioning e.g. voltage stabilizer and UPS should be provided with the equipment.
- There should be provision for demonstration before final approval of equipment.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs.

Item – 32

DEEP FREEZER (-80^{o}C) VERTICAL/ HORIZONTAL

- **Description of function**
  - Deep freezers are required to preserve blood and blood products, vaccinations etc at specified temperature.
- **Operational Requirements**
  - Internal minimum capacity 350 to 400 L net at least double door with adjustable at least 4 to 6 shelves
  - Range up to -65^{o}C to -85^{o}C (adjustable)
  - Vertical Cabinet (upright mode)
- **Technical Specifications**
  - Construction: Solid rust free cabinet to prevent corrosion and lockable castor wheels. Inner surface should be stainless steel.
  - Control System: Micro-processor based temperature controller with digital temperature display LED/LCD with seven days graphic temperature recorder with rechargeable battery backup including charger maintenance free and insensitive to vibration. Details of battery and battery charger shall be indicated.
  - Refrigeration System: Heavy Duty refrigeration system, maintenance free, below -85^{o}C (± 1^{o}C) with hermetically sealed dual compressor, noise free and vibration free, air cooled with security lock to prevent unintentional switch off shall be supplied. It should have maximum cooling time of 5 hours at maximum ambient temperature of 33^{o}C.
  - Alarm: It should also have audio visual Electronic Alarm System independent of power supply.
  - Insulation: High density polyurethane or equivalent Gaskets – Double seal silicon.
  - Door heating system for easy opening of door.
  - Availability of spares / disposable for at least 10 years.
  - All consumables required for installation and standardization of system to be given free of cost.
- **Environment factors**
  - The unit shall be capable of operating continuously in ambient temperature of 10 – 40^{o}C and relative humidity of 15-90%.
  - The unit shall be capable of being stored continuously in ambient temperature of 0 – 50^{o}C and relative humidity of 15-90%.

- **Power Supply**
  - Power input to be 220-240V AC, 50Hz, / 440V 3 Phase as appropriate fitted with Indian plug.
  - Resettable over current breaker shall be fitted for protection.
  - Suitable voltage Stabilizer / CVT should be provided.
  - Power backup / UPS.

- **Standards and Safety**
  - Should be US FDA or CE or ISI approved product.
  - Electrical safety conforms to standards for electrical safety IEC-60601/ IS-13450.
  - Manufacturer should have ISO or equivalent certification for quality standards.
- Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet

NOTE:

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Item - 33

SHAKING WATER BATH

- Should be based on advanced microprocessor technology with temperature control.
- Operation through key pad.
- Bath tanks and all parts in contract with the bath liquid should be made up of high grade stainless steel.
- Filling volume should be around 20 liters. (Or as per user requirements).9
- Working temperature range- room temperature to 90°C.
- There should be a multiplay (LED) with actual value, set point, high/low temperature, for shaking frequency and times with display resolution of 0.1°C.
- Temperature stability should be ± 0.2°C.
- Temperature uniformity in the bath should be ± 0.05°C.
- Should have provision to adjust shaking frequency up to 200 RPM.
- Audible warning safety signals should be there for high/low temperature warnings, and dry running protection.
- Instrument should have lift up bath cover.
- Carrier racks should be given for flasks and test tubes racks.
- A cock should be provided to facilitate draining of bath contents.
- Water bath protective media should be there to prevent contamination and formation of algae.
- Heating capacity - 2 KW.
- Training of laboratory staff for the purchased equipment
- Warranty as per bid document.
- Availability of spares/ disposables for at least 10 years.
- All consumable required for installation and standardization of system to be given free of cost.
- List of users and satisfactory report of quoted model from reputed institute preferably Government institute/ hospitals.
- Should have all the accessories required for the functioning of the equipment.
- Equipment should be US FDA / CE or equivalent standard of repute.
- It should be ISO 9001:2000 or other equivalent quality certification.
- All electrical peripherals required for smooth functioning e.g. voltage stabilizer should be provided with the equipment.
- There should be provision for demonstration before final approval of equipment.
- Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet

Item No. 34

ELECTRONIC BALANCE (0.001 GM – 500 GM)

- Digitally operated
- High contrast, large LCD display for easy viewing.
- Automatic external calibration
- Conforms GLP/GMP and ISO 9001 standard.
- Various weighing units like gm, mg etc should be provided.
- User selectable stability.
- Readability : 0.001 gm
- Linearity : 0.002 gm
- Pan size : > 80 mm diameter or as per user requirement.
- Response time : 2-3 sec
- Power back up should be provided / UPS with maintenance free batteries.
- Data acquisition and storage system.
- Should have printer facility if possible.

Item - 35

AUTOMATED BACTERIAL CULTURE SYSTEM

- Rapid and fully automated system capable to culture bacteria.
- Should process blood samples and other sterile body fluid.
- System should have, inbuilt calibration check, touch screen monitor.
- System should be capable of exporting data to the data management system for long-term storage, and should have the facility to analyze delayed specimens along with the routine bottles.
- Capacity: 300 bottles (minimum), or as per user requirement.
- Should include data management system and software to analyze and store the data.
- Easy to use software for patient information, entry and storage. Long term data storage facility, tracing patient by name, I.D. Hospital registration number.
- Should have inbuilt incubator with facility for decontamination.
- All consumables required for installation and standardization of system to be given free of cost.
- The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%.
- Power input to be 220-240VAC, 50Hz fitted with Indian plug.
- Resettable overcurrent breaker should be fitted for protection.
- Suitable voltage corrector/stabilizer.
- Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.
- Should be compliant with ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.
- Comprehensive training to lab staff and support services till familiarity with the system.
- Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450. Should be US - FDA or European CE approved product or equivalent standard approved product.
- Warranty as per bid.
- Certificate of calibration and inspection from factory.

- Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue.

- List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
- Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist.
- The job description of the hospital technician and company service engineer should be clearly spelt out
- List of important spare parts and accessories with their part number and costing.
- Non radiometric, rapid bacterial culture system with bar code sample ID

NOTE:

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Item - 36

FULLY AUTOMATIC BACTERIAL IDENTIFICATION AND SENSITIVITY SYSTEM

- Automated instrument for wide range of gram positive, Gram negative bacteria and yeasts, Neisseria, Haemophilus and anaerobes.
- Integrated software system with printer and inbuilt incubator.
- Biochemical identification strips/plates for at least 200 tests should be provided with long shelf life.
- Should give results of identification in two time frames – 4 hrs and overnight.
- Should have sample capacity of at least 25 – 30 samples at one go (or as per user requirement).
- Testing should be compliant with CLSI methods and option for both MIC & breakpoint testing.
- Instrument for Mc Farland adjustment of inoculum & pipette to be provided with the system.
- Special panel for ESBL, MRSA and MBL etc.
- List of closely related species on basis of the biochemical reactions to be given.
- All accessories required to make the equipment operational to be provided.
- Training of laboratory staff and support services till familiarity with the system.
- Warranty as per bid document.
- Availability of spares/disposables for at least 10 years.
- All consumables required for installation and standardization of system to be given free of cost.
- The unit shall be capable of operating continuously in ambient temperature of 10-40 degree Celsius and relation humidity of 15-90%.p
- List of users and satisfactory report of quoted model from reputed institute preferably government institute / hospitals
- European CE / ISI mark or other equivalent quality certification.

- All electrical peripherals required for smooth functioning e.g. voltage stabilizer and UPS should be provided with the equipment.
- There should be provision for demonstration before final approval of equipment.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs

Item No. 37

Equipment Specifications for Autoloading Urine Strip Analyzer

1 Description of Function	
1.1	Urine strip analyzer quickly analyses urine chemistry for diagnosis and screening
2 Operational Requirements	
2.1	Must have flexible user programmable option available to use lesser parameter strip as and when required
2.2	Measurement Principle: Reflectance Photometry (Inbuilt)
3 Technical Specifications	
3.1	Shelf life for the Urine Strips should be more than 12 months.
3.2	Measured Parameters:(i) Leucocytes, S.G, pH, Glucose, Nitrite, protein, Ketones, Urobilinogen, Blood, Billirubin
3.3	Throughput (Speed) :Should be more than 350 tests/hour with complete time monitoring be done by system
3.4	Strip Feeding :Must be automatic feeding and automatic strip detection
3.5	Reporting :Must have facility to enter sample ID and same should appear on printout
3.6	Memory :At least 1000 tests results stored automatically
3.7	Display: (i) LCD module to show all data on screen to show test results and operation status of system. (ii) Display size-approx 40 characters X 12 lines or 20 characters 6 lines.
3.8	Printer :Built in printer
3.9	Waste management:Automatic unloading of used strip to separate waste tray
3.10	RS 232C Interface for datacommunication.
3.11	At least one year shelf life.
4 System Configuration Accessories, spares and consumables	
4.1	System as specified-
4.2	Urine strip start up kit- 1000 strips
4.3	All consumables required for installation and standardization of system to be given free of cost.
5 Environmental factors	

5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
5.2	Thu unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of 80%.

6 Power Supply

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)
6.3	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.

7 Standards and Safety

7.1	Should be US FDA or CE or ISI approved product
7.2	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.

8 Documentation

8.1	User/Technical/Maintenance manuals to be supplied
8.2	Certificate of calibration and inspection from factory.
8.3	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
8.4	Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs.

Item No. 38

Equipment Specifications for Semi Automated ESR Analyzer

1 Description of Function	
1.1	ESR (erythrocyte sedimentation rate) is a nonspecific screening test for various diseases. This 1-hour test measures the distance (in millimeters) that red blood cells settle in unclotted blood toward the bottom of a specially marked test tube.
2 Operational Requirements	
2.1	semi-Automated ESR Analyzer for quantitative ESR by use of EDTA tube/capillary with kinetic photometry principle accept any size of sample tubes and works by using all kind of anticoagulant (EDTA).
3 Technical Specifications	
3.1	Thru-put:Over 50-80 sample/ Hours
3.2	Principle of Measurement: By infra-Red Kinetic photometry
3.3	Loading of sample: Semi-Automated sample aspiration one by one
3.4	Reading time for each sample : Maximum 20 to 30 Sec./Sample
3.5	Sample Collection:Any type of blood collection EDTA tubes / vials
3.6	Anti-Coagulant: should work with sample collected in EDTA
3.7	Reading Temperature : 37ºC
3.8	Safety Features (Blood Sample) :Closed Cycle no touch with blood sample
3.9	Waste collection: In Safety tank at the end of cycle
4 System Configuration Accessories, spares and consumables	
4.1	System as specified-
4.2	Compatible Barcode Scanner.
4.3	Vacuum Tubes-1.2 ml(box of 100)- 100 boxes
4.4	Printer paper- 10 packs.
5 Environmental factors	
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
5.2	Thu unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of 80%.
6 Power Supply	
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug

6.2	Resettable overcurrent breaker shall be fitted for protection
6.3	Suaitable voltage corrector/stabilizer
6.4	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.

7 Standards and Safety

7.1	Sample Reading :As per compliance with ICSH (InternationalCommittee for the Standardization of Hematology)
7.2	Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001applicable to manufacturers and service providers that perform their own design activities.
7.3	Should be compliant with IEC 61010-1:covering safety requirements for electrical equipment for measurement control and laboratory use.
7.4	Comprehensive training for lab staff and support services till familiarity with the system.
7.5	Should be US FDA or CE or ISI approved product

8 Documentation

8.1	User/Technical/Maintenance manuals to be supplied
8.2	Certificate of calibration and inspection from factory.
8.3	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.
8.4	List of important spare parts and accessories with their part number and costing.
8.5	Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out
8.6	Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs.

Item No. 39

EQUIPMENT SPECIFICATIONS FOR COAGULOMETER

1 Description of Function	
1.1	Cagulometer measures the blood clotting parameters.
2 Operational Requirements	
2.1	Complete system with printer is required.
3 Technical Specifications	
3.1	16 incubation positions for samples (4 cells x 4 columns).
3.2	2 measurement channels.
3.3	2-4 positions for reagents (one with magnetic stirrer) and 2 pipette wells
3.4	Four independent built in timers for incubation.
3.5	Measurement possible in plasma
3.6	Automatic pipette (electronically connected or manual start up)
3.7	Backlight LCD display, 4 lines of 40 characters with built in printer
3.8	Results in seconds and in various units (% INR, Ratio, Gm/ L mg/ds, IC/ml)
3.9	RS 232 interface
3.10	Incubation and measurement wells at 37ºC +/- 0.5ºC
3.11	Tests: PT, PTT, TT, FIB (Clauss and PT derived), Factor II, V, VII, VIII, IX, X, XI, XII, Fletcher, VT (Venom time), APCR, AT-III (clot), Protein C (clot), Protein S (clot), Heparin, STAT (PT/PTT)
4 System Configuration Accessories, spares and consumables	
4.1	System as specified-
4.2	The following set of accessories should be offered: Double Cuvettes: 1000 Pcs stage Autopipette: 1 Pc (25/50/100/200µl) Reagent Adaptor: 22,5mm, 1 Pc Reagent Adaptor 22,8mm, 1 Pc Reagent Adaptor 24,2mm, 1 Pc Reagent Adaptor 27,8mm, 1 Pc Reagent Adaptor 25,2mm, 1 Pc Stirring magnets, 4 Pcs Main cable -1 pc Reagent container 22,4mm- 200 Pcs Reagent tubes 16mm, 200 Pcs Thermal Printer, 1 Pc

	Thermal Paper, 10 rolls Printer Cable, 1 Pc		

5 Environmental factors

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%		
5.2	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%		

6 Power Supply

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
6.2	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.		

7 Standards and Safety

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
7.1	Comprehensive as per Bid.		
7.2	Manufacturer should have ISO certification for quality standards.		
7.3	Should be US FDA or CE or ISI approved product		

8 Documentation

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
8.1	User/Technical/Maintenance manuals to be supplied		
8.2	Certificate of calibration and inspection from factory.		
8.3	List of Equipments available for providing calibration and routine maintenance		

	support as per manufacturer documentation in service / technical manual.
8.4	Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs.

Item No. 40

Equipment Specifications for Automated Slide Stainers

1 Description of Function

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
1.1	Automatic Slide Stainer is used for staining histological and cytological slides.		

2 Operational Requirements

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
2.1	Should be programmable for routine H & E & other special stains with facility for imuno-histochemical stains & memory of various staining procedures		

3 Technical Specifications

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
3.1	Should hold about 80 slides per basket		
3.2	Basket chemical capacity 750-1000ml		
3.3	At least 2(two) water stations with 24 work stations,(Programmable) with timing in minutes & second & facility for single & double load.		
3.4	Agitational facility		
3.5	Can be connected with any make automatic cover-slipper		

4 System Configuration Accessories, spares and consumables

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
4.1	System as specified-		

4.2	Bio chemical baskets - 6 Nos.		
4.3	Slides Hangers - 4 Nos		
4.4	All consumables required for installation and standardization of system to be given free of cost.		

5 Environmental factors

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%		
5.2	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%		
5.3	A fume hood completely covering the slide plates to prevent hazardous fumes from entering the lab area and an activated charcoal filter to minimize solvent vapors should be provided.		

6 Power Supply

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
6.2	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)		
6.3	Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.		

7 Standards and Safety

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
7.1	Should be US FDA or CE approved or ISI marked product		
7.2	Comprehensive warranty for 2 years and 5 years AMC after warranty		

7.3	Should be compliant with IEC 61010-1:covering safety requirements for electrical equipment for measurement control and laboratory use.		
7.4	Should comply with International Electromagnetic Compliance standards like IEC OR EMC Directives.		

8 Documentation

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
8.1	Certificate of calibration and inspection from factory.		
8.2	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.		
8.3	User/Technical/Maintenance manuals to be supplied		
8.4	List of important spares and accessories with their part number and costing.		
8.5	Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job descriptin of the hospital technician and company service engineer should be clearly spelt out.		

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs.

Item No. 41

SPECIFICATIONS FOR AUTOMATIC TISSUE PROCESSOR 1 No.

- Fully automated Carousel type [stationary reagents with tissue baskets moving from station to station] with at least 12 stations (10 reagent stations, 2 wax baths).
- Desirable: Capability to add one more station.
- Computer controlled flow through tissue processor to automatically perform fixation, dehydration, clearing, and paraffin impregnation of tissue.
- Freely selectable and storable programming facilities at least ten should be available.
- Easy editing and changing of programmes should be possible, even during a processing run.
- Infiltration tie for each station should be separately programmable.
- Ergonomic control panel with fully protected key board and LCD.
- LCD Screen display of timings, warnings and errors.
- Audible warning/ error messages.
- Both immediate and delayed start functions should be available.
- Delayed start function at least up to 72 hours.
- Each reagent station should have metal containers for reagents.
- Capacity of each container should be 1.8 to 2 liters.
- Paraffin stations – Number: 2 (1.8-2 liters each)
- Temperature range of wax baths 45^0 C to 65^0 C.
- Excess temperature cut out 75^0C.
- Preferable: Can be configured for three.
- Metal tissue baskets – At least 2 nos to be run at one go.
- Capacity: Minimum 80 standard small steel cassettes [2.5cms size] and 60 standard larger steel cassettes [3.5 cms size] should fit into each basket.
- The tissue baskets should have firm bottom.
- The base diameter should be smaller as compared to upper diameter to avoid baskets getting stuck inside the containers.
- Bucket hangers should be made of hard steel.
- Equipment should have agitation function to ensure proper processing of tissues.
- Interrupting an automatic process for reloading or removing cassettes before the end of a run should be possible.
- Attached vacuum function device.
- The vacuum device should be attachable both to the whole instrument as well as to individual stations.

- Machine should also be able to cater to short time (quick) processing.
- There should be fume control system.
- Safety device for protection of drying of specimen in case of power failure
- The bucket should go back inside the respective solution when power fails and not hang in mid air,
- The system should have auto start function after power failure.
- UPS for the machine with minimum of two hours.

ACCESSORIES

Wax baths	3 Nos.
Reagent stations	4 Nos.
Metal tissue baskets	6 Nos.
Voltage stabilizers (Compatible to the equipment)	1 No.

Standards & Safety

- Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001applicable to manufacturers and service providers that perform their own design activities.
- Should be compliant with IEC 61010-1: covering safety requirements for electrical equipment for measurement control and laboratory use.
- Should be US FDA or CE (European directive) or ISI approved product
- Comprehensive training for lab staff and support services till familiarity with the system.

Uptime Guarantee: Minimum of 95% of total working hours, failing which penalty
will be imposed.

NOTE:

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Item No. 42

EQUIPMENT SPECIFICATIONS FOR MICROTOME

1 Description of Function

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
1.1	Rotary microtomes are precision instruments designed to cut uniformly thin sections of a variety of materials for detailed microscopic examination.The microtome operation is based upon the rotary action of a hand wheel activating the advancement of a block towards a rigidly held knife.		

2 Operational Requirements

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
2.1	Rotary microtome for histopathological section cutting specimen up to 32 x 27 mm		

3 Technical Specifications

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
3.1	Specimen advance 1 to 30 µm in 1 µm steps		
3.2	Integrated, smooth hand wheel that locks in any position		
3.3	Fine orientation of specimen with specimen tilt		
3.4	Quick charge for all specimen clamps		
3.5	Option to use both standard knife holder and disposable blade holder		
3.6	Section Waste tray		
3.7	Knife holder takes knives from 110 to 185 mm long by 28 to 35 mm wide and has guards for protection both inside and outside clamp		
3.8	Standard accessories to include the following: Object orientation set, Universal Cassette Clamp,		

	universak knief holding base, Std knief holdr,sharp blade holder, Waste tray, Dust cover, 50 each low and high profile disposable Microtome blades.		
3.9	Automatic and manual operation.		

4 System Configuration Accessories, spares and consumables

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
4.1	System as specified-		
4.2	All consumables required for installation and standardization of system to be given free of cost.		

5 Environmental factors

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%		
5.2	Thu unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of 80%.		

6 Power Supply

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug		
6.2	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)		

7 Standards and Safety

Sl	Name	Technical Specs quoted by bidder	Bidders Deviation if any
7.1	Should be US FDA or CE or ISI approved product		
7.2	Manufacturer should be ISO certified for quality standards.		

8 Documentation

Sl	Name	Technical	Bidders

		Specs quoted by bidder	Deviation if any
8.1	User/Technical/Maintenance manuals to be supplied		
8.2	Certificate of calibration and inspection from factory.		
8.3	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.		
8.4	List of important spare parts and accessories with their part number and costing.		
8.5	Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet		

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the "All inclusive lump sum price" should include all such costs.

Item No. 43

Equipment Specifications for Sperm Quality Analyzer

1 Description of Function	
1.1	Sperm quality analyzers (SQA) are used for assessing male fertility..
2 Operational Requirements	
2.1	System complete with printer and necessary software should Run on fresh, frozen and washed semen samples. Should not require any sample dilution.
3 Technical Specifications	
3.1	Fully automatic numerical readouts of separate integrated and totalized semen parameters
3.2	Results to be calculated and displayed within 50-75 seconds
3.3	Must have self testing and self calibrating facility
3.4	Built-in printer.
3.5	RS232/USB output for Printer, PC connectivity and Data acquisition should be there
3.6	Should report sperm count, motility, normal morphology and additional semen parameters.
3.7	A built-in memory capable of storing up to 1000 test results
4 System Configuration Accessories, spares and consumables	
4.1	System as specified-
4.2	All consumables required for installation and standardization of system to be given free of cost.
4.3	Cost of capillaries for1000 tests should be quoted.
4.4	Cost of quality control reagents required for 1000 tests.
4.5	Cost of other reagents required for 1000 tests
5 Environmental factors	
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
5.2	The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
6 Power Supply	

6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	UPS of suitable rating shall be supplied for minimum 1 hour backup for the entire system

7 Standards and Safety

7.1	Should be US FDA or CE or ISI approved product
7.2	Manufacturer should be ISO certified for quality standards.
7.3	Comprehensive warranty as per bid.

8 Documentation

8.1	User/Technical/Maintenance manuals to be supplied
8.2	Certificate of calibration and inspection from factory.
8.3	Inspection Certificate from manufacturer to be complying with WHO specification as specified above.
8.4	Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out
8.5	Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet
8.6	List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.

NOTE:

Bidders are requested to visit AIIA, Sarita Vihar, New Delhi to assess the site condition of Equipment placement and installation in this Section. Bidders must take into consideration in its bid costs to be incurred for any additional work viz. Electrical cabling of suitable ratings, Electrical points of suitable ratings, water connection, water drainage, plumbing & allied requirement for the equipment etc. required for successful installation, commissioning and running of the Equipment and the “All inclusive lump sum price” should include all such costs

Item No. 44

EQUIPMENT SPECIFICATIONS FOR TRANSPORT INCUBATOR

1 Description of Function	
1.1	Required for transportation of premature babies and neonates and it can be used for long distance transportation .
2 Operational Requirements	
2.1	It should be mobile intensive care station including transport ventilator, incubator, and power supply unit and infusion stand
3 Technical Specifications	
3.1	Technical Specifications 1 It should be mounted on collapsible trolley having lockable rust free castors of the size 4 inches or more and with two A type Aluminum oxygen cylinders on rack under the Incubator . 2 Single walled incubator with at least two large port holes for access. Iris ports for ventilator & other tubings. Bed level at least 80 cms. above ground level. Two shelves cabinet with door. 3 Width: app 80 cm+ 5 cms. , Depth 30 cm + 5 cm, height 115 + 5 cms, Mattress to hood distance at least 30 cms. 4.Air Mode: adjustable set temperatures between 20 – 39 C. Display of set temperatures with resolution of 0.1 C. Skin mode adjustable set temperatures between 34 – 38 C. Display of set temperatures with resolution of 0.1 C. 5. Alarms of High , Low and Probe failure for the set air mode up to +2.5 C and skin mode of + 0.5 C of temperatures 6. Oxygen monitor in incubator hood with display of 21 – 100% Oxygen alarms for high, low and probe failure. 7. Heart and Oxygen saturation monitor: Fixed, built monitors, dual wavelength probe for Oxygen saturation with Digital LED display for Heart rate and Oxygen saturation. Alarms for high and low for Heart Rate, Oxygen saturation and probe failure 8.The system should have an internal rechargeable maintainence free battery to ensure continued functioning of the unit for at east 4 hours during transport. It should have automatic switch circuit for change over from battery to AC and vice versa. 9.One suction apparatus with negative suction pressure of 5- 120 mm Hg should be provided. IV fluid stand should support two infusion bottles 10.One Syringe infusion pump with stand compatible with 10, 20, and 50 ml syringes compatible with locally available brand of syringes. Range of infusion rate 1 – 99 ml / hr.in steps of 0.1ml. Display infusion rates, Alarms for occlusions, end of infusion with internal rechargeable battery should be provided along with the quoted price 11. Height less than 60”, depth less than 30”, width 33”-36”. Weight 90-100 kg. With wheel mounted. (All dimensions in approximation of +/-10%) 12. Bacterial air filter to remove air born particles 13. Two 10 L integrated oxygen cylinders regulator and flow meters. 14. The incubator should be mounted on a collapsible trolley so that the same can be easily shifted in any ambulance requiring minimum manpower.

	15. Ventilator – basic ventilator with integrated compressor at least CPAP and IMV modes with controls for CPAP/PEEP. PIP, rate. Ti and FiO2 Supplied with: □ 5 x spare skin temperature probe. □ 1 x spare rechargeable battery. □ 2 x empty 10 L oxygen cylinders. □ 2 x spare set of fuses. Slot for X-Ray cassette for taking X-rays without removing babies		
4	**System Configuration Accessories, spares and consumables**		
4.1	System as specified		
5	**Environmental factors**		
5.1	Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.or should comply with 89/366/EEC; EMC-directive.		
5.2	The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%		
5.3	The unit shall be capable of operating continuously in ambient temperature of 10 - 40 deg C and relative humidity of 15-90%		
6	**Power Supply**		
6.1	Power input to be 220-240VAC, 50Hz		
6.2	Voltage corrector/stabilizer of appropriate ratings meeting ISI Specifications.(Input 160-260 V and output 220-240 V and 50 Hz)		
7	**Standards, Safety and Training**		
7.1	**Product should be US FDA or European CE approved."**		
7.2	Manufactures/Supplier should have ISO certificate to Quality Standard.		
7.3	Comprehensive warranty as per bid.		
7.4	Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450		
7.5	Electrical safety conforms to standards for electrical safety IEC-60601-2-19:Medical Electrical Equipment part 2 Particular Requirements of Safety of Baby Incubator.		
8	**Documentation**		
8.1	User/Technical/Maintenance manuals to be supplied in English.		
8.2	Certificate of calibration and inspection.		
8.3	List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.		
8.4	List of important spare parts and accessories with their part number and costing.		
8.5	Log book with instruction for daily , weekly, monthly and quarterly maintenance checklist.		