NEIGRIHMS

पूर्वोत्तरइंदिरागांधीक्षेत्रीयस्वास्थ्यएवंआयुर्विज्ञानसंस्थान

North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences

(भारतसरकार, स्वास्थ्यएवंपरिवारकल्याणमंत्रालय, स्वायत्तसंस्थान)

(An Autonomous Institute, under Ministry of Health and Family Welfare, Government of India)

निदेशकब्लॉक, मावड़ियांगड़ंग, शिलांग -793 018 (मेघालय) /Director's Block, Mawdiangdiang, Shillong -793 018 (Meghalaya)

Store & Procurement Section; Email: storeneigrihms@gmail.com; Tele Fax: (0364) 2538032; Website: neigrihms.gov.in

F. No: STOPRO –CTVS/4/2025 (CTVS)

Notice Inviting Tender

Online tendering through CPPP (https://eprocure.gov.in/cppp)

Tender Details:

Tender Enquiry No:	NEIGR/S&P/OT/E -03/2025-26
Tender Description:	Processing of Consumables /Implants /Devices/Accessories, etc, on case to case consignment basis, on rate contract for a period of three years, extendable upto 6 months or till the finalization of the next tender, whichever is earlier, for department of CTVS.
Bid Document Downloading Start Date:	14:00 hours of 01.08.2025
Pre-Bid Conference and Clarification Session:	16:00 hours of 08.07.2025
Last Date and Time for Submission of Bid Document Online:	14:00 hours of 28.08.2025
Last date and Time of Receipt of Earnest Money Deposit (Hard Copy):	14:00 hours of 28.08.2025
Date and Time of Opening of Techno -Commercial Bids:	14:30 hours of 29.08.2025
Cost of Earnest Money Deposit (EMD):	Rs 30,000.00
Tentative schedule after completion of Technical Commercial Evaluation subject to inputs from respective Committee /Authority:	60 days from the date of opening of Techno – Commercial Bid
Tentative schedule for awarding of contract including institutional requirement, justification of cost and on approval of the Competent Authority.	60 days from the date of opening of e- Price Bid /BOQ

Bidders /Tenderers can download the tender /bid document from Central Public Procurement Portal website at www.eprocure.gov.in Bidders /Tenderers are required to submit their bid online by uploading all the relevant documents through www.eprocure.gov.in.For further details regarding tender amendment /date extension, please visit website: www.eprocure.gov.in. Tender document can also be downloaded from the Institute's website at www.neigrihms.gov.in

SECTION I: NOTICE INVITING TENDERS (NIT)

Online tenders, in two-bid system, are invited by Director, NEIGRIHMS, Shillong for processing of stores /items for the Institute, as per enclosed specification and related terms and conditions.

1. Bidders /Tenderers would be required to register on the Central Public Procurement Portal at www.eprocure.gov.in, using a valid Digital Signature Certificate (DSC) and valid email address to be able to participate in the bidding process. On registration with the Portal they will be provided with a user id and password by the system through which they can submit their bids online.
2. Digital Signature Certificate (DSC) may be obtained from any authorized agencies registered with the Certifying Authority (CA), through National Informatics Center (NIC) in India.
3. Bidders /Tenderers can download the bid document from Central Public Procurement Portal website at www.eprocure.gov.in Bidders /Tenderers are required to submit the bid online by scanning and uploading all the relevant documents through www.eprocure.gov.in
4. Tender document can also be downloaded from the Institute's website at www.neigrihms.gov.inFor further details regarding Amendment /Addendum /Extension please visit website: www.eprocure.gov.in and www.neigrihms.gov.in
5. Earnest Money Deposit (EMD) and Performance Security:–
    - Earnest Money Deposit (EMD) of INR 30,000 (*Rupees Thirty thousand only*) in the form of Call deposit, Banker's Cheque, Fixed Deposit or Demand Draft, drawn in favour of EMD & Security Account, NEIGRIHMS, Shillong or Bank Guarantee of any Scheduled bank, shall be scanned and submitted online, along with the technical e-bid, within the period of e-tender online submission date and time.
    - In respect of Performance Security deposit, the percentage will be taken at 3% of the total value of contract, as indicated in the order or Institute may retain the EMD till the conclusion of contract, as may be decided by the Competent Authority.
6. Bidders/Tenderers need to scan and upload the required documents like Drugs License, Goods and Service Tax (GST) registration, PAN Number/Card, valid document regarding the existence and registration of the firm along with the Techno-commercial bid, as per Check List (Section XXI).
7. Should have BIS /CDSCO /State Drug Controller/WHO –GMP certification standard approved products.
8. The technical bids will be opened online by a committee of members duly constituted for the purpose at the time and date as specified in the tender document. All statements, documents, certificates, proof of EMD /Affidavits, etc uploaded by the bidders will be verified and downloaded for technical evaluation and the result of technical bid evaluation will be displayed on www.eprocure.gov.in.in which can be seen by all bidders who participated in the tender.
9. The bidders should download the **BoQ.xls** from CPP Portal and filled in the blank spaces provided for mentioning the name of bidder and rates. Bidders need not modify any other text or background shown in the BOQ template or replace it with any other copy of same **BOQ in .xls format**. NEIGRIHMS /Central Public Procurement Portal (www.eprocure.gov.in) will accept the BOQ template only and hence the rate should not be quoted in any other place except BOQ template.
10. The Financial bid (price bid) i.e. Bill of Quantity (BOQ) of only technically qualified bidders will be opened online by a committee of members and the result will be displayed on the www.eprocure.gov.inwhich can be seen by all bidders who participated in the tender.
11. No work will be allotted to Non-tribal bidder, contractors, Suppliers, stockists, bonded warehouse, private carriage contractors, cooperative societies etc except under a valid trading license issued by the Khasi Hills Autonomous District Council, Shillong.
12. Eligible Criteria:-
    a. Bidder can be a manufacturer having requisite manufacturing facility.
    b. The bidder shall have market standing continuously for the past 3 years in supplying similar stores with customers' satisfaction.
    c. Authorized dealers, distributors, stockist of a manufacturer or Indian agent of an overseas vendors or registered vendors are also eligible to participate in the bid, provided they furnish the authorization for the items.
    d. The e-bidder/contractor should have average annual financial turnover of Rs 10,00,000 (Rupees Ten lakh only) during the last three years, ending 31st March and Audited Balance Sheets /Turnover certificate from a Chartered accountant should be submitted along with the bidding document.
13. The bidder should have minimum 3 years manufacturing /marketing experience of substantial quantities for related stores in India duly supported by the documentary evidence and attested by their Chartered Accountant/or gazetted officer, as on the date of opening of techno-commercially bid. The bidder should have been in the business for a period of at least three years in the relation to the type of item for which the bid is being submitted.
14. The bidder must submit attested copies of manufacturing license and Good Manufacturing Practices (GMP) certificate complying with revised schedule M of Stores and Cosmetic Act 1940, for the manufacturing facility which should be valid on the date of bid opening and shall remain valid till the date of completion of supply. Bidder should not have been convicted.

15. Manufacturing organizations should have Quality assurance certification like BIS /CDSCO /State Drug Controller/WHO Good Manufacturing Practices (GMP) issued by the authorized organization, attested copies of the same are to be produced with the bid. Firms quoting on behalf of their manufacturer should also attach said certificate of their manufacturer to select reputed firms and quality products failing which their offers may be summarily rejected.
16. The firm has to give an affidavit duly attested by the Notary Public (in original) on a non-judicial stamp paper of Rs. 10/= that the firm is not supplying the same item at lower rates quoted in this tender to any Government/Private organization or any other institution during past one year, as per "FALL CLAUSE" adhered by DGS & D and other Government agencies.
17. The firm has to give an affidavit duly attested by the Notary Public (in original) on a non-judicial stamp paper of Rs. 10/= that there is no vigilance/CBI /FEMA case pending against the firm/supplier.
18. Bidders are required to sign and submit the Integrity Pact agreement, as per the prescribed format annexed.
19. At any time prior to the date of submission of bid, Director, NEIGRIHMS may, for any reason, whether at his own initiatives or in response to a clarification from a prospective bidder, modify the bidding documents by an amendment. All prospective bidders/tenderer who have received the bidding document will be notified of the amendment in writing and the amendment shall be binding on them. In order to provide reasonable time to take the amendment into account in preparing the bid. Director, NEIGRIHMS, may at his discretion, extends the date and time for submission of bids.
20. The tendered rates and the validity of bids shall be for a period of three years, extendable upto 6 months, or till the finalization of the next tender, whichever is later.
21. Processing of items/stores from this e-tender is subjected to condition of GFR 2017 wherein commonly used Goods & Services available on GeM are required to be procured mandatorily through GeM as per rule 149.
22. NEIGRIHMS reserves all rights to make any changes in terms and conditions of the tender and also to reject any or all bids without assigning any reason thereof.
23. Settlement of disputes – If there is any dispute or differences, the same may be referred to Director, NEIGRIHMS. Director, NEIGRIHMS or his authorized representative shall be the final authority in all disputes and decision taken by the authority will be binding on all concerned. Therefore, the jurisdiction in respect of settlement of disputes in Stores & Civil contracts shall be as per the Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts (Amendment) Ordinance 2018, wherein the provision for pre –institution mediation, has been made mandatory in respective cases by the parties to the disputes.The mediation shall be under the authorities constituted under Legal Service Authority Act, 1987. The Courts in Shillong shall have the exclusive jurisdiction over any disputes between the parties.

For any clarification and further details please contact @ Telephone No: 0364 -2538032 or contact in person during office hours.

Sd/-
Store Officer,
For and on behalf of Director, NEIGRIHMS, Shillong

SECTION – II
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 the organization purchasing goods and services as incorporated in the Tender Enquiry document.

(ii) "Tender" means Bids /Quotation /Tender received from a Firm /Tenderer / Bidder.

(iii) "Tenderer" means Bidder/ the Individual or Firm submitting Bids /Quotation /Tender

(iii) "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract.

(iv) "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.

(v) "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.

(vi) Deleted

(vii) "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.

(viii) "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.

(ix) "Consignee" means the Hospital/Institute/Medical College/ Depot 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.

(x) "Specification" means the document/standard that prescribes the requirement with which goods or service has to conform.

(xi) "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.

(xii) "Day" means calendar day.

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.

4. Language of Tender

4.1 The tender submitted online 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 online 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, cultivated, grown, manufactured, produced, or processed 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

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.

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 Quality Control and Sampling Plan Requirements
- Section VIII – Manufacturing and Quality Control Details

- 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
- Section XVI – Contract Form
- Section XVII _ Proforma of Consignee Receipt Certificate
- Section XVIII _ Instructions from Ministry of Shipping/ Surface Transport (Annexure 1 & 2)
- Section XIX – Check List for the Tenderers

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 online 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 notified /displayed in the website: www.eprocure.gov.in and www.neigrihms.gov.in

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 not later than fifteen days (unless otherwise specified in the SIT) prior to the prescribed date of submission of tender.

C. PREPARATION OF TENDERS

11. Documents Comprising the Tender

11.1 The tender to be submitted by tenderer shall contain the following documents duly filled in, as required :-

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 and Price Schedule in accordance with GIT clause 8.1

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 and signatory of Manufacturer's Authorisation Form

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.

viii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.

x) Questionnaire as per Section XII

Note:- The tenderers may also enclose in their tenders technical literature , brochures and other documents in addition to above, if any and required as per tender document.

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.

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 shall be ignored.

12. Tender currencies

12.1 Unless otherwise specified, the tenderer shall quote only in Indian Rupees.

12.2 Where the tender condition specifies acceptance of quotations in different currencies, then, for domestic goods, prices shall be quoted in Indian rupees only and for imported goods prices shall be quoted either in Indian rupees or in the currency of the country origin of goods, mentioning, inter-alia, the exchange rate adopted for converting foreign currency into Indian rupees. 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 (BOQ) should be filled up as required.

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. No bid will be considered responsive if the complete requirement covered in the Schedule is not included in the bid.

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 GST 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, 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;

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 FAS/FOB port of shipment, CIF port of entry in India or Free delivery at consignee's place in India as indicated in the List of Requirements and Consignee List;

d) wherever applicable, the amount of custom duty and import duty on the goods to be imported;

e) the charges for, Inland transportation, Insurance and other local costs, Incidental cost to delivery of the goods from the port of entry in India to Consignee Site, 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;

13.5.1 **Additional information and instruction on Duties and Taxes**

If a tenderer asks for GST, CGST, IGST and Works Contract Tax to be paid extra, the rate and nature of sales tax applicable should be shown separately. The GST, CGST, IGST 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 GST, CGST, IGST 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.

13.5.2 **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 **Goods and Service Tax (GST)**
If a tenderer asks for GSTto be paid extra, the rate and nature of sales tax applicable should be shown separately. The sales 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 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:**

In respect of imported stores offered from abroad, the tenderer shall specify the rate as well as the total amount of customs duty payable and also the customs duty payable with CDEC, if applicable, on the quoted goods in the Price Schedule. The tenderer shall also indicate the corresponding Indian Customs Tariff Number applicable for the goods in question.

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.

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 or make meeting the tender specifications of same or different manufacturer with single EMD.

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.

d) in case the tenderer is an Indian agent/authorized representative quoting on behalf of a foreign manufacturer for the restricted item and agency commission is to be paid out of the bid price of foreign principal ,the Indian agent/authorized representative is already enlisted under the Compulsory Enlistment Scheme of Ministry of Finance, Govt. of India, operated through Directorate General of Supplies & Disposals (DGS&D), New Delhi.

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 toother remedies available to the purchaser in this regard.

19. Earnest Money Deposit (EMD)

19.1 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) Fixed Deposit Receipt
iii) Banker's cheque and
iv) Bank Guarantee.(e-Bank Guarantee)

19.2 The demand draft, fixed deposit receipt or banker's cheque shall be drawn on any Nationalised Bank in India or country of the tenderer, in favour of the "EMD & SECURITY DEPOSIT ACCOUNT". In case of bank guarantee, the same is to be provided from any Nationalised Bank in India or country of the tenderer as per the format specified under Section XIII in these documents. 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 .

19.3 The Earnest money shall be valid for a period of Forty Five (45) days beyond the validity period of the tender.

19.4 Unsuccessful tenderers' earnest money will be returned to them at the earliest after expiry of the final bid validity and latest on or before the 30th day after the award of contract. However,in case of two stage bidding,Bid securities of unsuccessful bidders during first stage i.e technical evaluation etc will be returned within 30days of declaration of result of first stage i.e technical evaluation etc.Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.

19.5 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.

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 Twenty) after the date of tender opening prescribed in the TE document. Rate contract for procurement /supply of techno-commercially compliant stores, shall be valid for a period of three (3) years from the date of award and/or till the finalization of the next tender. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

20.2 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 three 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 shallbe 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 All 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 thedate & time of tender opening) are to be written on these envelopes. The inner envelopes are then to be putin a bigger outer envelope, which will also be duly sealed, marked etc. as above. If the outer envelope is notsealed and marked properly as above, the purchaser will not assume any responsibility for its misplacement,premature opening, late opening etc.

D. SUBMISSION OF TENDERS

22. Submission of Tenders

22.1 The tenderers are to submit the tenders online (Techno –Commercial bid and Finance bid) at www.eprocure.gov.in

22.2 The tenderers must ensure that they submit their tenders not later than the closing time and date specified.

22.3 The participating bidders in the tender should register themselves free of cost on e -procurement platform in the website www.eprocure.gov.in

22.4 Bidders can log-in to e-procurement platform in secure mode only by signing with the Digital Certificates.

22.5 The bidders who are desirous of participating in e- procurement shall submit their technical bids, price bids as per the standard formats available.

22.6 The bidders should scan and upload the respective documents in Technical Documentation as per the check list.

22.7 The rates should be quoted as per the BOQ downloaded for that particular tender.

23. Late Tender

Bidders should submit their tenders online within the specified date and time of submission.

24. Alteration and Withdrawal of Tender

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 online 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 may attend the online 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. Preliminary Scrutiny of Tenders

27.1 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 the meet the basic requirements, are liable to be treated as non – responsive and will be summarily ignored.

27.2 The following are some of the important aspects, for which a tender shall be declared unresponsive and 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.
(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 and if the indicated affidavit related to non-blacklisting is not submitted.
(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.

28. Minor Infirmity/Irregularity/Non-Conformity

28.1 If during the preliminary examination, the purchaser find any minor informality and/or irregularity and/or non-conformity in a tender, the purchaser may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the tenderers. Wherever necessary, 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 The prices offered by the bidders in the given BOQ will be taken as final. Claims, if any, in respect of any changes in the offered prices shall not be acceptable at any point of time.

29.2 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

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

To be quoted in Indian Rupees only

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

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 Free delivery to consignees place basis inclusive of all duties, taxes, freight and incidental charges. (DDP i.e Delivery Duty Paid up to consignee's place)

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 The Purchaser reserves the right to give the price preference to small-scale sectors etc. and purchase preference to central public sector undertakings as per the instruction in vogue while evaluating, comparing and ranking the responsive tenders.

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 the quantity up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded ofto 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 ofto next whole number) without any change in the unit price and other terms & conditions mentioned in the contract, during the currency of the contract.

41. Notification of Award

41.1 Before expiry of the tender validity period, the purchaser will notify the successful tenderer(s) in writing 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.

41.3 Bidders/tenderer undertake to sign the contract agreement within 15 (fifteen) days from the issue of the letter of acceptance /order, failing which EMD/Security deposit may be forfeited and name may be removed from the list of suppliers at NEIGRIHMS, Shillong.

42. Issue of Contract

42.1 Promptly after notification of award, the purchaser 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 twenty one 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 by registered / speed post.

42.3 The purchaser reserves the right to issue the Notification of Award consignee wise.

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

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 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 19.4.

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 CPPP/notice board/bulletin/web site /Stores & purchase section 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:

(ii) "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

(iii) "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.

Section –III

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**

No Change

C **Preparation of Tenders**

No Change

D Submission of Tenders

GIT Clause 22.1

Tenderers shall ensure that their tenders, complete in all respects shall be scanned and submitted online at www.eprocure.gov.in within the stipulated date and time.

It is advised to all bidders to submit theirs bids well before the closing date/time to avoid any difficulties in bidding process during the closing hour.

E Tender Opening

No Change

F Scrutiny and Evaluation of Tenders

No Change

G Award of Contract

No Change

SECTION - IV
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 twenty one (21) days from date of the issue of notification of award by the purchaser, the supplier, shall furnish performance security to the purchaser for an amount equal to five percent (5%) of the total value of the contract, valid up to sixty days after the date of completion of all contractual obligations by the supplier, including the warranty obligations.

.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 Nationalised bank in India or Bank Guarantee issued by a Nationalised bank in India, in the prescribed form as provided in section XV of this document in favour of the purchaser. 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 .The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to 2 months beyond Warranty Period.

5.3 In the event of any loss due to supplier 's failure to fulfil its obligations in terms of the contract , the amount of the performance security shall be payable to the purchaser to compensate the purchaser for the same.

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.

5.6 Subject to GCC sub – clause 5.3 above, the purchaser will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations.

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 . 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 , 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.

8.2 The Technical Specification and Quality Control and Sampling 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.

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.

9. Terms of Delivery

9.1 Goods shall be delivered by the supplier in accordance with the terms of delivery specified in the contract.

10. Transportation of Goods

10.1 Instructions for transportation of imported goods offered from abroad:
Unless otherwise mentioned in SCC, the supplier shall follow the instructions mentioned below:

In case of FOB/FAS contracts, shipping arrangements shall be made by the Shipping Co-ordination and Chartering Division/Shipping Co-ordination and Officer, Ministry of Surface Transport, New Delhi, India. Notice about the readiness of Cargo for shipment shall be given by the supplier from time to time at least six weeks in advance for finalising the shipping arrangement, through Fax/Telex and courier, to the Chief Controller of Chartering, Shipping Co-ordination Officer, Ministry of Surface Transport, Government of India, New Delhi. Within three weeks of receipt of the advance notice, as above, the said Chief Controller of Chartering, Shipping Coordination Officer will advise the supplier, through Fax/Telex and courier when and on board what vessels, these goods or such part thereof are to be delivered.

If the advice for shipping arrangement is not furnished to the supplier within three weeks as aforesaid or if the vessel arranged is scheduled to arrive at the specified port of loading later than fifteen days of the date of readiness of cargo, as aforesaid, the supplier may arrange for such transport on alternative carriers with the prior written consent of the purchaser.

Where the supplier is required under the contract to deliver the goods on FOB/FAS basis and to arrange on behalf and at the expense of the purchaser for ocean transportation on Indian flag vessels or vessels of conference lines in which India is a member country, the supplier may arrange for such transportation on alternate carriers if the specified Indian flag vessels or conference vessels are not available to transport the goods within the time period(s) specified in the contract, with the prior written consent of the purchaser.

Should the goods or any part thereof be not delivered on the nominated vessel (except in case where prior written consent of the purchaser was obtained), the supplier will be liable for all payments and expenses that the purchaser may incur or be put to, by reason of such non-delivery including dead and extra freight, demurrage of vessels and any other charges, whatsoever incurred by the purchaser.

The supplier shall not arrange part-shipments and/or transhipment without the express/prior written consent of the purchaser. Where the supplier is required under the contract to deliver the goods under CIF/CIP 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.

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.

10.3 In the case of FOB/FCA contract, the date of issue of the Bill of Lading/Air Way Bill shall be considered the date of delivery.

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) Wherever necessary, the goods supplied under the contract shall be fully insured in a freely convertible currency in the manner specified in the contract. If considered necessary, the insurance may be done for coverage on "all risks" basis including war risks and strike clauses. The amount to be covered under insurance should be sufficient to take care of the overall expenditure, which may be incurred due to any such damage, loss etc.

ii) where delivery of imported goods offered from abroad is required by the purchaser on CIF/CIP basis, the supplier shall arrange for insurance for an amount equal to one hundred and ten percent of the CIF or CIP value of the goods from "warehouse to warehouse" (final destination) on "all risks" basis including war risks and strikes and pay for the insurance, making the purchaser as the beneficiary.

iii) Where delivery is on FOB/FAS basis, marine/air insurance shall be the responsibility of the purchaser.

iv) in case of supply of domestic goods on Delivery Duty Paid (DDP) basis, the supplier shall be responsible till the entire stores contracted for arrive 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 in its own name and not in the name of the Purchaser or its Consignee.

12. Spare parts

Deleted

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 completion of the installation.

iii) Training of Consignee's 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 to enable the purchaser 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; &
(vii) Manufacturer's/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):

(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;
(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;
(viii) Certificate of origin
(ix) Port of Loading;
(x) Port of Discharge and
(xi) Expected date of arrival.

15. Warranty

Deleted

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, the supplier shall convey its views to the purchaser within twenty-one days from the date of the supplier's receipt of the purchaser'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 The detailed terms and mode of payment shall be as provided in the SCC.

21.2 Unless specified otherwise in the SCC, the following general conditions will apply for payment to the supplier.

21.3 The payment shall be made in Indian rupees.

21.4 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.

21.5 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.

21.6 The important documents, which the supplier is to furnish while claiming payment, are:-

i) Original invoice
ii) Bill of lading/Airway Bill/ Rail Receipt or any other dispatch document issued by a government agency (like postal department) or any other agency authorised by the concerned Ministry/ Department.
iii) Packing list identifying contents of each package;
iv) Manufacturer's/Supplier's warranty certificate;
v) Inspection certificate issued by the nominated inspection agency, if applicable as per contract;
vi) Manufacturer's own factory inspection test certificate.
vii) Certificate of country of origin of the goods.
viii) Port of Loading and Port of Discharge as applicable.
ix) Consignee's receipt certificate confirming receipt and acceptance of goods
x) Any other document specified.

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

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

21.9 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.

21.10 While claiming reimbursement of duties, taxes etc. (like sales tax, excise duty, custom duty) from the purchaser, 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 forthwith.

21.11 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. Delay in the supplier's performance

22.1 The supplier shall deliver of the goods and perform the services under the contract within the time schedule specified by the purchaser in the List of Requirements and as incorporated in the contract.

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 in writing about the same and its likely duration and make a request to the purchaser for extension of the delivery schedule accordingly. On receiving the supplier's communication, the purchaser 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 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, CST / VA, 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 shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, excise duty, GST 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 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.

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 shall, without prejudice to other rights and remedies available to the purchaser 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 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, without prejudice to any other contractual rights and remedies available to it (the purchaser), 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 pursuant to GCC sub-clauses 22.3 and 22.4.

24.2 In the event of the purchaser terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the purchaser 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 for the extra expenditure, if any, incurred by the purchaser for arranging such procurement.

24.3 Unless otherwise instructed by the purchaser, 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.

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 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 in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the purchaser 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 is unable to fulfil its contractual commitment and responsibility, the purchaser 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 reserves the right to terminate the contract, in whole or in part for its (purchaser'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. 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 following the contract terms, conditions and prices. For the remaining goods and services, the purchaser 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 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 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 Director, NEIGRIHMS, Shillong 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., Shillong, 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.

SECTION - V

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. These Special Conditions of Contracts will modify/supplement the corresponding General Conditions of Contract (GCC). The corresponding GIT clause numbers have also been indicated in the text below:

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

S/No.	GCC Clause No.	Topic	SCC Provision
2	10	Transportation of Goods	Clause 10.1 and 10.3 will not be applicable
3	11	Insurance	Clause 11.1 (ii) and (iii) will not be applicable.
4	14	Distribution of Dispatch documents	Clause 14(B) will not be applicable
6	21.1	Terms and Mode of Payment	The payment of 100% of the price of the stores of each consignment will be made after receipt of the goods at consignee's premises in good condition. The bills are to be supported with inspection note issued by the inspector and the consignee's receipt certificate on copy no. 1, 2 & 5 of the inspection note issued by inspecting officer. 2. The paying authority will be Director, Director's Block, NEIGRIHMS, Mawdiangdiang, Shillong-793018, Meghalaya Tel: 0364-2538032, 2538003, 2538031. 3. The bills in quadruplicate enclosing all the required documents Stores & Procurement Officer, Director's Block, NEIGRIHMS, Mawdiangdiang, Shillong-793018, Meghalaya Tel: 0364-2538032, 2538003, 2538031. For payment.
6.	23.0	Liquidated Damage	At the rate of 0.5% per week of delay, subject to maximum of 10%.

SECTION - VI

LIST OF REQUIREMENT

1. The goods are required to be delivered to the consignee within 60 days (Free delivery) to the under mentioned consignees (DDP i.e Delivery Duty Paid to consignee's place basis).
2. The quantity-wise details are as under: - (Quantity pcs.)

Schedule No.	Item	Quantity (In nos.)	Consignee	1st quarter	2nd quarter	3rd quarter	4rt quarter
I	Given below						
II							
III							
IV							

Section – VII

Technical Specifications

Note: Tenderer's attention is drawn to GIT clause 18 and GIT sub-clause 11.1(c). The tenderer is to provide the required details, information, confirmations, etc. accordingly failing which it's tender is liable to be ignored.

PART A: General Technical Specifications

PHARMACEUTICALS

1. Product and Package Specification

1.1 The required packing standard and labeling must meet the requirement of part B- "Item wise detailed specification of Stores".

1.2 The Goods should conform to standards specified in the following compendia: Standard Specifications as specified in the Technical Specifications, *The standards will the latest edition unless otherwise stated by the purchaser or other if applicable*. In case the product is not included in the specified compendium, the Supplier, upon award of the contract, must provide the reference standards and testing protocols o allow for quality control testing.

1.3 Not only the item, but also the packaging and labeling components (e.g., closures, and labeling) should also meet specifications suitable for distribution, storage and use in a climate similar to that prevailing in the country of the Purchaser. All packaging must be properly sealed and tamper-proof, and packaging components must meet the latest compendium standards and be approved for packaging by the manufacturer's national regulatory authority (RA)

1.4 All labeling and packaging inserts shall be in the English

1.5 Goods requiring refrigeration or freezing or those that should not fall below a certain minimum temperature for stability must specifically indicate storage requirements on labels and containers and be shipped in special containers to ensure stability in transit from point of shipment to port of entry.

1.6 Upon award, the successful Supplier shall, on demand, provide a translated version in the language of the bid of the prescriber's information for any specific goods the Purchaser may request.

2. Labelling Instructions

2.1 The label of the primary container for each products shall meet the requirement of Part – B and include:

(a) Deleted

(b) Deleted

(c) Deleted

(d) the applicable standards;

(e) the Purchaser's logo and code number and any specific color coding if required;

(f) content per pack;

(g) instructions for use;

(h) special storage requirements;

(i) batch number

(j) date of manufacture and date of expiry (in clear language, not code);

(k) name and address of manufacture

(l) any additional cautionary statement.

2.2 The outer case or carton should also display the above information.

3. Case Identification

3.1 All cases should prominently indicate the following:

(a) Purchaser's line and code numbers;

(b) the name of the product;

(c) Deleted

(d) date of manufacture and expiry (in clear language not code);

(e) batch number;

(f) quantity per case;

(g) special instructions for storage;

(h) name and address of manufacture;

(i) any additional cautionary statements.

3.2 No case should contain products from more than one batch.

4. Unique Identifiers

4.1 The Purchaser shall have the right to request the Supplier to imprint a logo, if the quantity so justifies it, on the labels of the containers use for packaging and in certain forms and this will in the Technical Specifications. The design and detail will be clearly indicated at the time of bidding, and confirmation of the design of such logo shall be provided to the Supplier at the time of contract award.

5. Standards of Quality Control for Supply

5.1 The Successful Supplier will be required to furnish to the purchaser:

(a) With each consignment, and for each item batch/ lot a certificate of compliance to the Part- B quality control test results concerning quantitative assay, chemical analysis, sterility, pyrogen content uniformity, and other tests, as applicable to the Goods being supplied and the manufacturer's certificate of analysis.

(b) Assay methodology of any or all tests if requested

(c) Deleted

(d) Evidence of basis for expiration dating and other stability data concerning the commercial final package upon requested

5.2 The Supplier will also be required to provide the Purchaser with access to its manufacturing facilities to inspect the compliance with the specification and quality control mechanisms.

QUALITY CONTROL AND SAMPLING PLAN REQUIREMENTS

1. When the products are ready for the shipment, supplier shall inform NEIGRIHMS, Shillong through an offer slip, which contains at least the following details, along with the certificate of Analysis (COAs) of each batch that are being ready for inspection.

(a) Description of the product

(b) Batch Number./ Lot Numbers.

(c) Batch Quantity/ Lot Quantity.

2. Personnel carrying out the inspection and sampling are having the right to verify the batch records or any other document which may bear impact on the product quality of offered batches/ to conduct and audit before commencing the inspection and sampling.

3. Three sets of sample of required quantity as per the sampling plan will be drawn at random from each batch by the personnel deputed by the NEIGRIHMS at the manufacture's premises.

4. One set of sealed sample shall be sent to an independent laboratory that is identified by the NEIGRIHMS to confirm whether the goods conform to the prescribed specification. One set of sealed sample shall be retained with the manufacturer as counter sample and another set another set shall be retained by NEIGRIHMS. The three sets of samples will be packed, sealed and duly signed by the inspecting personnel with the time and date of sampling.

5. Only after receiving the satisfactory reports from the testing laboratories, manufacturer shall be allowed to dispatch the goods that are confirming the product requirement as per the standards mentioned in the bid document.

6. Manufacturer shall arrange the extra products from each batch to replenish the batch quantity after taking the random sampling. The cost of the samples will be borne by the supplier

Section – VIII
Manufacturing and Quality Control Details

(Proforma for equipment and quality control employed by the manufacturer(s)

Tender Reference No.
Date of opening
Time
Name and address of the Tenderer:

Note: All the following details shall relate to the manufacturer(s) for the goods quoted for.

01 Name of the manufacturer
- a. full postal address
- b. full address of the premises
- c. telegraphic address
- d. telex number
- e. telephone number
- f. fax number

02 Plant and machinery details
03 Manufacturing process details
04 Monthly (single shift) production capacity of goods quoted for
- a. normal
- b. maximum

05 Total annual turn-over (value in Rupees)
06 Quality control arrangement details
- a. for incoming materials and bought-out components
- b. for process control
- c. for final product evaluation

07 Test certificate held
- a . type test
- b . BIS/ISO certification
- c . any other

08 Details of staff
- a. technical
- b skilled
- c unskilled

Signature and seal of the Tendere

Section – IX
Qualification Criteria along with proforma for performance statement

The qualification requirements of the bidder are:

The Bidder should submit documentary evidence on its qualification to perform the contract if its bid is accepted as detailed below:-

(i) that, in case of a bidder offering to supply goods under the contract which the bidder manufactures or otherwise produces (using ingredients supplied by primary manufacturers) that the Bidder:-

(a) is incorporated in the country of manufacture of the goods;

(b) has been licensed by the regulatory authority in the country of the manufacture to supply the goods covered in the invitation for tender.

c) The indegenous manufacurerer must possess BIS /CDSCO /State Drug Controller/WHO Good Manufacturing Practices (GMP) certificate complying to the revised Schedule 'M' of Drugs and Cosmetics Act 1940 , for the manufacturing facility which should be valid on the date of tender opening . While the foreign manufacurerer must possess a satisfactory GMP certicate in line with WHO certification in the country of manufacture of the goods for the factory where the goods are manufacturered and are being offered for supply or has been certified by the competent authority of a member country of Pharmaceuticals Inspection Convention (PIC) or has WHO PQS certification

d) In case of imported products, a bidder along with the bid must submit a copy of the registration certificate with National Regulatory Authority of India (Central Drugs Standard Control Organisation i.e CDSCO) of the goods for use in India. The information about the requirement for registration can be obtained from the Website www.cdsco.nic.in

(e) Has manufactured and marketed the specific goods covered by the bidding document, for at least two (2) years, and for the similar goods for at least (3) years (in support of this, data on past performance should be submitted as Performa 'A' given in section (IX)

The bidder will submit the following additional information:-

List of Health Sector Goods being manufactured by the Bidder with product licence number and date: and

(f) Has the necessary capability to meet with the standards and quality control assurance for supplies as detailed in paragraph no. 5 of general technical specification:

(g) Provides the evidence that if has the financial, technical and production capability necessary to perform the contract as under:

- that it has successfully completed at least two similar contracts within last five years (preceding two months before the date of tender opening) for supply of goods as specified in the schedule of requirement.
- that it has achieved an annual production rate of at least equivalent 1.25 times of the quantities specified for each schedule offered in any one of the last five years preceding two months before tender opening date.

(ii) when offering their bid for more than one schedule, the bidder or the manufacturer whose product is offered by the bidder must provide evidence that it meets or exceeds the sum of all the individual requirements for the schedules as per para (g) above.

In case the bidder or the manufacturer whose product is offered by the bidder fails to fully meet any of these criteria, it will be qualified only for those schedules for which the bidder meets the above requirement.

(iii) that, in case of a bidder offering to supply Goods under the Contract that the Bidder does not manufacturer or otherwise produce, the Bidder has been duly authorized by a manufacturer of the Goods that meets the above criteria, to supply the Goods in the Purchaser's country, as per authorization form given in Section XIV. They shall also submit the list of major supply order completed within last five years as per performa 'A' given in this section.

iv) The bidder shall also furnish the following documents along with its bid;

(a) a copy of its manufacture license and a statement of installed manufacturing capacity;

(b) copies of its audited financial statements for the past three fiscal years;

(c) a copy of achieved annual production rate certified by a chartered accountant/ internal auditor.

(d) details of on-site quality control laboratory facilities and services and range of test conducted;

(e) list of major supply contracts conducted within the last three years as performa given in Section IX;

(f) capacity and quality certification form in the specified format given in section VIII.

(h) The bidder shall disclose instance of previous past performance that may have resulted into adverse actions taken against the bidder during the last five years.

(i) A certificate or declaration form the Managing director/nominated representative/legal representative of the firm stating that:

None of the employee of the firm or its representative/ partner/ proprietor is convicted by a court of law following prosecution for offences involving moral turpitude in relation to the business dealing;

None of the employee of the firm or its representative/partner/ proprietor of the firm has been guilty of malpractice such as bribery, corruption, fraud, substitution of bids, interpolation, misrepresentation, evasion or habitual default in payment of any tax levied by law etc., and

The firm does not employ any government servant/non official who has been dismissed or removed on account of involving in corruption charges.

Note: - The bidder shall provide all documents regarding his meeting Qualification Criteria Schedule–Wise duly indexed and with proper flags.

PROFORMA 'A'

PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years)

Tender Reference No. : _____

Date of opening : _____

Time : _____

Name and address of the Tenderer : _____

Name and address of the manufacturer : _____

Order placed by (full address of Purchaser)	Order number and date	Description and quantity of ordered goods and services	Value of order (Rs.)	Date of completion of Contract		Remarks indicating reasons for delay if any	Have the goods been functioning Satisfactorily (attach documentary proof)**
				As per contract	Actual		
1	2	3	4	5	6	7	8

Signature and seal of the Tenderer

** The documentary proof will be a certificate from the consignee/end user with cross-reference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished. If at any time, information furnished is proved to be false or incorrect, the earnest money furnished will be forfeited

Section – X
TENDER FORM

Date_____

To
_____
_____
_____
(Complete address of the purchaser)
Ref. Your TE document No. _____dated _____

We, the undersigned have examined the above mentioned TE document, including amendment/corrigendum No. _____, dated _____ (*if any*), the receipt of which is hereby confirmed. We now offer to supply and deliver_____ *(Description of goods and services)* in conformity with your above referred document for the sum of _____ (total tender amount in figures and words), as shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a 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.

We agree to keep our tender valid for acceptance as required in the GIT clause 20, read with modification, if any in Section - III – "Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities.
We confirm that we fully agree to the terms and conditions specified in above mentioned TE document, including amendment/ corrigendum if any

_____
(Signature with date)
_____
(Name and designation)
Duly authorised to sign tender for and on behalf of
_____
_____

SECTION – XII
QUESTIONNAIRE

....

1. The tenderer should furnish specific answers to all the questions/issues mentioned in the Checklist. In case a question/issue does not apply to a tenderer, the same should be answered with the remark "not applicable"

2. Wherever necessary and applicable, the tenderer shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.

3. In case a tenderer furnishes a wrong or evasive answer against any of the question/issues mentioned in the Checklist, its tender will be liable to be ignored.

a) Offer is valid for acceptance up to .....

b) Your permanent Income Tax A/C No. as allotted by the income Tax Authority of Government of Indai.

4. Status

(a) Are you currently registered with the Directorate General of Supplies & Disposals ()DGS&D), New Delhi, and/ or the present purchaser and/or the Directorate of Industries of he concerned State Government for the goods quoted? If so, indicate the date up to which your are registered and whether there is any monetary limit imposed on your registration.

(b) Are you currently registered under the Indian companies Act, 1956 or any other similar Act?

Please attach certified copy(s) of your registration status etc. in case your answer (s) to above queries in affirmative.

5. Please indicate name & full address of your Banker (s):

6. Please state whether business dealings with you currently stand suspended/banned by any Ministry/Deptt. of Government of India or by any State Government.

(Signature with date)

.....

(Full name, designation & address of the person duly authorised on behalf of the tenderer)

For and on behalf of

.....

(Name, address and stamp of the tendering firm)

SECTION – XIII
BANK GUARANTEE FORM FOR EMD

Whereas _____ (hereinafter called the "Tenderer") has submitted its quotation dated _____ for the supply of _____ (hereinafter called the "tender") against the purchaser's tender enquiry No. _____ Know all persons by these presents that we _____ of _____ (Hereinafter called the "Bank") having our registered office at _____ are bound unto _____ (hereinafter called the "Purchaser) in the sum of _____ for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ 20_____. The conditions of this obligation are:

(1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.

(2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-

a) fails or refuses to furnish the performance security for the due performance of the contract.
or
b) fails or refuses to accept/execute the contract.
or
c) if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).
This guarantee will remain in force for a period of forty-five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

_____

(Signature of the authorised officer of the Bank)

_____

_____

_____

Name and designation of the officer

_____

Seal, name & address of the Bank and address of the Branch

SECTION – XIV
MANUFACTURER'S AUTHORISATION FORM

To
_____
_____
(*Name and address of the purchaser*)

Dear Sirs,

Ref. Your TE document No _____, dated _____

We, _____ who are proven and reputable manufacturers of_____(*name and description of the goods offered in the tender*) having factories at_____, hereby authorise Messrs_____(*name and address of the agent*) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We further confirm that no supplier or firm or individual other than Messrs. _____ (*name and address of the above agent*) is authorised to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also hereby extend our full warranty, as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

Yours faithfully,
_____
_____
[*Signature with date, name and designation*]
for and on behalf of Messrs_____

[*Name & address of the manufacturers*]

Note : 1. This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

2. Original letter may be sent.

SECTION – XV
BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

To

The President of India

WHEREAS _____ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no_____ dated _____ to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a Nationalised bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of. _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.
This guarantee shall be valid up to and including the _____ day of _____, 20____

.....
(Signature with date of the authorised officer of the Bank)
.....
Name and designation of the officer
.....
.....
Seal, name & address of the Bank and address of the Branch

SECTION – XVI
CONTRACT FORM

_____
(Address of the purchaser's office issuing the contract)
Contract No_____ dated_____
This is in continuation to this office's Notification of Award No_____ dated _____

1. Name & address of the Supplier: _____
2. Purchaser's TE document No_____ dated_____ and subsequent Amendment No_____, dated_____ (if any), issued by the purchaser
3. Supplier's Tender No_____ dated_____ and subsequent communication(s) No_____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this tender.
4. In addition to this Contract Form, the following documents etc, which are included in the documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:
   (i) General Conditions of Contract;
   (ii) Special Conditions of Contract;
   (iii) List of Requirements;
   (iv) Technical Specifications;
   (v) Quality Control Requirements;
   (vi) Tender Form furnished by the supplier;
   (vii) Price Schedule(s) furnished by the supplier in its tender;
   (viii) Manufacturers' Authorisation Form (if applicable for this tender);
   (ix) Purchaser's Notification of Award

   Note : The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under clause 1 of Section II - 'General Instructions to Tenderers' of the Purchaser's TE document shall also apply to this contract.

5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:
   (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

Schedule No.	Brief description of goods/services	Accounting unit	Quantity to be supplied	Unit Price	Total price	Terms of delivery

Any other additional services (if applicable) and cost thereof: _____
Total value (in figure) _____ (In words) _____

(ii) Delivery schedule
(iii) Details of Performance Security
(iv) Quality Control
   (a) Mode(s), stage(s) and place(s) of conducting inspections and tests.
   (b) Designation and address of purchaser's inspecting officer

(v) Destination and despatch instructions
(vi) Consignee, including port consignee, if any
(vii) Warranty clause
(viii) Payment terms
(viii) Paying authority

_____
(Signature, name and address of the purchaser's authorised official)
For and on behalf of_____

Received and accepted this contract
_____
(Signature, name and address of the supplier's executive duly authorised to sign on behalf of the supplier)
For and on behalf of _____
(Name and address of the supplier)
_____
(Seal of the supplier)

Date: _____

Place: _____

SECTION – XVII

CONSIGNEE RECEIPT CERTIFICATE

(To be given by consignee's authorized representative)

The following store (s) has/has been received in good condition:

1)	Contract No. & date	:_____
2)	Supplier's Name	:_____
3)	Consignee's Name & Address with telephone No. & Fax No.	: _____
4)	Name of the item supplied	:_____
5)	Quantity Supplied	:_____
6)	Date of Receipt by the Consignee	:_____
7)	Recoveries , if any	:_____
8)	Name and designation of Authorized Representative of Consignee	:_____
9)	Signature of Authorized Representative of Consignee with date	:_____
10)	Seal of the Consignee	:_____

SECTION – XVIII
ANNEXURES

Annexure 1

DETAILS OF SHIPPING ARRANGEMENT FOR LINER CARGOES IN RESPECT OF C & F/CIF/TURNKEY/F.O.R CONTRACTS FOR IMPORTS- As per instruction issued by Government of India

SECTION – XIX
CHECKLIST

Name of Tenderer:

Name of Manufacturer:

Sl No	Activity	Yes/ No/ NA	Page No. in the TE document	Remarks
1a.	Have you enclosed EMD of required amount for the quoted schedules?			
1b.	In case EMD is furnished in the form of Bank Guarantee, has it been furnished as per Section XIII?			
1c.	In case Bank Guarantee is furnished, have you kept its validity of 165 days from Techno Commercial Tender Opening date as per clause 19 of GIT?			
2a.	Have you enclosed duly filled Tender Form as per format in Section X?			
2b.	Have you enclosed Power of Attorney in favour of the signatory?			
3.	Are you a SSI unit, if yes have you enclosed certificate of registration issued by Directorate of Industries/NSIC			
4a.	Have you enclosed clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications?			
4b.	In case of Technical deviations in the compliance statement, have you identified and marked the deviations?			
5a.	Have you submitted satisfactory performance certificate as per the Proforma for performance statement in Sec. IX of TE document in respect of all orders?			
5b.	Have you submitted copy of the order(s) and end user certificate?			
6.	Have you submitted manufacturer's authorization as per Section XIV?			
7.	Have you submitted prices of goods in the Price Schedule as per Section XI?			
8.	Have you kept validity of 365 days from the Tender Opening date as per the TE document?			

Sl No	Activity	Yes/ No/ NA	Page No. in the TE document	Remarks
9a.	In case of Indian Tenderer, have you furnished Income Tax Account No. as allotted by the Income Tax Department of Government of India?			
9b.	In case of Foreign Tenderer, have you furnished Income Tax Account No. of your Indian Agent as allotted by the Income Tax Department of Government of India?			
10.	Have you intimated the name and full address of your Banker (s) along with your Account Number			
11.	Have you fully accepted payment terms as per TE document?			
12.	Have you fully accepted delivery period as per TE document?			
13.	Have you submitted the certificate of incorporation?			
14.	Have you accepted the warranty as per TE document?			
15.	Have you accepted terms and conditions of TE document?			
16.	Have you furnished documents establishing your eligibility & qualification criteria as per TE documents?			
17	Have you furnished Annual Report (Balance Sheet and Profit & Loss Account) for last three years prior to the date of Tender opening?			

N.B.

1. All pages of the Tender should be page numbered and indexed.
2. The Tenderer may go through the checklist and ensure that all the documents/confirmations listed above are enclosed in the tender and no column is left blank. If any column is not applicable, it may be filled up as NA.
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.

_____
(Signature with date)

_____
(Full name, designation & address of the person duly authorised sign on behalf of the Tenderer)
For and on behalf of

_____
(Name, address and stamp of the tendering

SECTION – XI (D) CALCULATION OF LOCAL CONTENT

(In compliance to Public Procurement (Preference to Make in India) Order (PPO), 2017) – Guidelines for Public procurement of Medical Devices

(To be submitted by the Bidder /Vendor)

***Percentages of Minimum Local Content for various categories of Medical Devices for preference in Public Procurement to be declared by the Manufacturer:-

Category of Medical Devices	Percentage of Minimum Local Content
Medical Disposables and Consumables	50%
Medical Electronic, Hospital Equipment, Surgical Instruments	25%
Implants	40%
Diagnostic Reagents /IVDs	25%

***Calculation of Local Content: - *(to be submitted by the Bidder /Vendor along with the techno –commercial e-bid)*

Sl. No.	Name of the Make /Manufacturer	Unit	Calculation by Manufacturer (Cost per unit of product)			
			Cost of Domestic Product/ Component *(to be offered as Percentage of FOB /Ex-factory price of the particular item /stores)*	Cost of Imported Product /Component *to be offered as Percentage of FOB /Ex-factory price of the particular item /stores)*	Total Cost *(In Percentage)*	Percentage of Local Content
			(a)	(b)	(c = a + b)	[d = (a/c)*100]
1						
2						
3						

Note:

- Cost (Domestic Component): Sum of the costs of all inputs which go into the product (including duties and taxes levied on procurement of inputs except those for which credit/set-off can be taken) which have not been imported directly or through a domestic trader or an intermediary.
- Cost (Imported Component): Sum of the costs of all inputs which go into the product (including duties and taxes levied on procurement of inputs except those for which credit/set-off can be taken).

Abstract of the Order:

1) **Percentage of Minimum Local Content:** Medical Device Industry (MDI) is a multiproduct industry responsible for provisioning of wide variety of crucial medical products ranging from simple tongue depressors & glucometer strips to large radiology & electronic medical equipments. The medical devices industry can be broadly classified as consisting of (a) medical disposables and consumables; (b) medical electronics, hospital equipment, surgical instruments; (c) Implants; and (d) In-Vitro Devices/Diagnostic Reagents. Individually there are around 5000 different kinds of medical devices and it is not practical to prescribe the local content and percentage of preference in domestic procurement for each medical device.

   Moreover, DoP is in the process of collecting accurate and reliable data regarding total capacity and production of various categories of medical devices in India, regarding the level of competition in the market in different segment of medical devices and regarding the processes involved in the manufacture of medical devices for prescribing the percentage of minimum local content for each category of medical devices, for purchase of supplies only from local suppliers where the estimated value of procurement is Rs. 50 Lakhs or less and for determining the manner of calculation of local content in the medical devices to be procured by the public agencies. The percentage of local content,

the manner of calculation of the local content and the provision of supplies to be procured from local suppliers only where the estimated value of procurement is Rs. 50 Lakhs or less may be revised after one year or as soon as the relevant data in this regard becomes available whichever is earlier. However for the time being, based on the present level of the understanding of the medical device market in India and discussion with various industry representatives, the following percentages of minimum local content in domestic medical devices for public procurement are prescribed for the various segments of medical devices:

Category of Medical Devices	% of Local Content
Medical Disposables and Consumables	50%
Medical Electronic, Hospital Equipment, Surgical Instruments	25%
Implants	40%
Diagnostic Reagents /IVDs	25%

2) Manner of calculation of Local Content:

i. Local content of Medical Device shall be computed on the basis of the cost of domestic components in the device compared to the total cost of the device. The total cost of product shall be the cost incurred for the production of the medical device including direct component i.e. material cost, manpower cost and overhead costs including profit but excluding taxes and duties.

ii. The determination of local content cost shall be based on the following: a) In the case of direct component (material), based on the country of origin b) In the case of manpower, based on domestic manpower

iii. The calculation of local content of the combination of several kinds of goods shall be based on the ratio of the sum of multiplication of local content of each goods with the acquisition price of each goods to the acquisition price of combination of goods.

iv. Format of calculation of local content shall be as contained in Enclosure-I.

3) Requirement of Purchase Preference: Purchase preference shall be given to local suppliers by all procuring entities as per provisions laid down in para 3 of PPO, 2017 subject to the condition that para 3(a) of the PPO 2017 shell be applicable only when there are two or more than two local suppliers for any tender of value upto Rs. 50 Lakhs and they certify that they can supply the desired medical devices in the required quantities.

4) Verification of Local Content:

a) The local supplier at the time of tender, bidding or solicitation shall be required to furnish self-certification of local content in the format as contained in Enclosure-II.

b) In each tender, procuring entity shall clearly mention the details of its competent authority which is empowered to look into procurement related complaints and the fees for such complaints, relating to implementation of PPO, 2017.

c) In case a complaint is received by the procuring entity against the claim of a bidder regarding domestic value addition in medical device, the procuring entity shall have full rights to inspect and examine all the related documents and take a decision. In case any clarification is needed, matter may be referred to DoP.

d) Any complaint referred to the procuring entity shall be submitted along with all necessary documentation in support of the complaint regarding domestic value addition claimed in medical device and shall be disposed of within 4 weeks of the reference by the procuring entity.

e) In case, the complaint is referred to DoP by a bidder or procuring entity, the grievance redressal committee to be set up under DoPfor the purpose shall dispose of the complaint.

f) In case, the matter is referred to DoP, the grievance redressalcommittee shall dispose of the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking in consideration, the view of the procuring entity. The bidder shall be required to furnish the necessary documentation in support of the local content claimed in medical devices to the grievance redressal committee under DoP within 2 weeks of the reference of the matter. If no information is furnished by the bidder, the grievance rederessal committee may take further necessary action, in consultation with procuring entity to establish the bonafides of the claim.

g) In case of reference of any complaint to DoP by the concerned bidder, there would be a fee of Rs. 2 Lakh or 1% of the value of the medical devices being procured (subject to a maximum of Rs. 5 Lakh), whichever is higher, to be paid by way of a Demand Draft to be deposited with the procuring entity, along with the complaints by the complainant. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

Format for Self Certification regarding Local Content in a Medical Device

I_____S/o,D/o,W/o_____, Resident of _____do hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the policy of Government of India issued vide Notification No: That the information furnished hereinafter is correct to best of my knowledge and belief and I undertake to produce relevant records before the procuring entity or any authority so nominated by the Department of Pharmaceuticals, Government of India for the purpose of assessing the local content.

That the local content for all inputs which constitute the said medical device has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the domestic value addition of the product mentioned herein is found to be incorrect and not meeting the prescribed value-addition norms, based on the assessment of an authority so nominated by the Department of Pharmaceuticals, Government of India for the purpose of assessing the local content, action will be taken against me as per Order No. P45021/2/2017-B.E.-II dated 15.06.2017 and Notification No. 31026/36/2016-MD dated _____.

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority:-

i) Name and details of the Domestic Manufacturer (Registered Office, Manufacturing unit location, nature of legal entity)
ii) Date on which this certificate is issued
iii) iii) Medical devices for which the certificate is produced
iv) iv) Procuring entity to whom the certificate is furnished
v) v) Percentage of local content claimed
vi) vi) Name and contact details of the unit of the manufacturer
vii) vii) Sale Price of the product
viii) viii) Ex-Factory Price of the product
ix) ix) Freight, insurance and handling
x) x) Total Bill of Material
xi) xi) List and total cost value of inputs used for manufacture of the medical device
xii) xii) List and total cost of inputs which are domestically sourced. Value addition certificates from suppliers, if the input is not in- house to be attached.
xiii) xiii) List and cost of inputs which are imported, directly or indirectly

For and on behalf of (**Name of Firm/Entity)** Authorized signatory (To be duly authorized by the Board of Director)

INTEGRITY PACT

GFR 2017, Rule 175 ("Code of Integrity")

INTEGRITY PACT (*to be executed on a non-judicial Stamp Paper of Rs 100 and applicable for all tenders*)

This **INTEGRITY PACT** is made and executed at_____ on this _____day of _____ (Year).

BETWEEN

North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences (NEIGRIHMS), having its permanent campus located at **Mawdiangdiang, Shillong -793018** (hereinafter referred to as "NEIGRIHMS" which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the First Part;

AND

M/s _____ (Name and Address of Individual/Firm/Company), through _____, (insert name and designation of the Officer/Representative/Authorized Signatory), having its office at _____ (hereinafter referred to as "The Bidder /Contractor" which terms or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor in-office, administrators or permitted assignees) of the Second Part;

WHEREAS NEIGRIHMS has floated the Tender, vide No: _____ (hereinafter referred to as "Tender /Bid") and intends to award, under laid down organizational procedures, for _____ (Name of the Work /Goods /Services), vide No: _____(GeM Bid number with date) hereinafter referred to as "The Contract".

AND WHEREAS NEIGRIHMS values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness /transparency in its relations with its Bidder(s) and/or Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (herein referred to as "Integrity Pact" or "Pact"), the terms and conditions shall also be read as integral part and parcel of the Tender /Bid documents and Contract between the parties.

NOW THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under;

1. Commitments of NEIGRIHMS:-

1.1. NEIGRIHMS undertakes that no official of NEIGRIHMS, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organisation or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

1.2. NEIGRIHMS will, during the pre-contract stage, treat all BIDDER alike, and will provide to all BIDDER the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDER /TENDERER.

1.3. All the officials of NEIGRIHMS will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to NEIGRIHMS with full and verifiable facts and the same is prima facie found to be correct by NEIGRIHMS, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by NEIGRIHMS and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by NEIGRIHMS the proceedings under the contract would not be stalled.

3. Commitments of BIDDER:-

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:

3.1. The Bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of NEIGRIHMS, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.

3.2. The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of NEIGRIHMS or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.
3.3. BIDDER shall disclose the name and address of agents and representatives and Indian BIDDER shall disclose their foreign principals or associates.
3.4. BIDDER shall disclose the payments to be made by them to agents/ brokers or any other intermediary, in connection with this bid/contract.
3.5. The BIDDER further confirms and declares to NEIGRIHMS that the BIDDER is the original manufacturer / integrator/ authorized government sponsored export entity of the stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to NEIGRIHMS or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
3.6. The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of NEIGRIHMS or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
3.7. The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
3.8. The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
3.9. The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by NEIGRIHMS as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
3.10. The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
3.11. The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
3.12. If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of NEIGRIHMS, or alternatively, if any relative of an officer of NEIGRIHMS has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender.
The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act, 1956.
3.13. The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of NEIGRIHMS.

4. Previous Transgression:-

4.1. The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.
4.2. The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

5. Earnest Money (Security Deposit):-

5.1 While submitting commercial bid, the BIDDER shall deposit an amount _____ (as specified in the Bid /Tender document) as Earnest Money/Security Deposit, with NEIGRIHMS, as specified in the Bid /Tender document.
5.2. The Earnest Money /Security Deposit shall be valid for a period of (as specified in the Bid /Tender document) or the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and NEIGRIHMS, including warranty period, whichever is later.
5.3. In case of the successful BIDDER a clause would also be incorporated in the Article pertaining to Performance Bond /Security in the Purchase Contract that the provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Bond /Security in case of a decision by NEIGRIHMS to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
5.4. No interest shall be payable by NEIGRIHMS to the BIDDER on Earnest Money / Security Deposit for the period of its currency.

6. Sanctions for Violations:-

6.1. Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle NEIGRIHMS to take all or any one of the following actions, wherever required:
(i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.

(ii) The Earnest Money Deposit (in pre-contract stage) and / or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by NEIGRIHMS and NEIGRIHMS shall not be required to assign any reason therefore.
(iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
(iv) To recover all sums already paid by NEIGRIHMS, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from NEIGRIHMS in connection with any other contract for any other stores, such outstanding payment could also be utilised to recover the aforesaid sum and interest.
(v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by NEIGRIHMS, along with interest.
(vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to NEIGRIHMS resulting from such cancellation/rescission and NEIGRIHMS shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
(vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of NEIGRIHMS.
(viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
(ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by NEIGRIHMS with the BIDDER, the same shall not be opened.
(x) Forfeiture of Performance Bond in case of a decision by NEIGRIHMS to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
6.2. NEIGRIHMS will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal Code, 1860, or Prevention of Corruption Act, 1988, or any other statute enacted for prevention of corruption.
6.3. The decision of NEIGRIHMS to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.

7. Fall Clause:-

7.1. The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry / Department of the Government of India or PSU and if it is found at any stage that similar product/systems or sub system was supplied by the BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to NEIGRIHMS, if the contract has already been concluded.

8. Independent Monitors:

8.1. There shall be Independent Monitors (hereinafter referred to as Monitors) appointed by NEIGRIHMS for this Pact in consultation with the Central Vigilance Commission.
8.2. The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
8.3. The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
8.4. Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings.
8.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by NEIGRIHMS.
8.6. The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of NEIGRIHMS including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.
8.7. NEIGRIHMS will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.
8.8. The Monitor will submit a written report to the designated Authority of NEIGRIHMS, within 8 to 10 weeks from the date of reference or intimation to him by NEIGRIHMS /BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

9. Facilitation of Investigation:-

In case of any allegation of violation of any provisions of this Pact or payment of commission, NEIGRIHMS or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

10. Law and Place of Jurisdiction:-

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of NEIGRIHMS
11. Other Legal Actions:-

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

12. Validity:

12.1. The validity of this Integrity Pact shall be from the date of its signing and extend upto 5 years or the complete execution of the contract to the satisfaction of both NEIGRIHMS and the BIDDER/Seller, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.

12.2. Should one or several provisions of this Pact turn out to be invalid, the remainder of this pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

The Parties hereby sign this Integrity Pact as part of the contract at_____ on_____.

1. Signed, Sealed and Delivered by the _____

   (For and on behalf of NEIGRIHMS) In the presence_____

2. Signed, Sealed and Delivered by the _____ (For the Bidder)

   In the presence of: _____

List of Stores /Items:

[Note: Any mentioning of any brand /company may kindly be treated as 'deleted']

Sl. No.	Item Description	Manufacturer /Company	Remarks
1	**Ventilator, Invasive Pressure Monitoring, IV Drip sets, Anticoagulation Monitoring and Airway Consumables**		
1.01	Bain Circuit Adult Based on Mapleson "D" system, provided with a corrugated tube, expiratory valve and antistatic bag. Should have co-axial modification of the basic "T"-piece system, developed to facilitate scavenging of waste gases. The process should include patient inspiring fresh gas from the outer reservoir tube and expiring into reservoir tube. Lightweight anesthesia delivery system.		
1.02	Bain Circuit Pediatric Based on Mapleson "D" system, provided with a corrugated tube, expiratory valve and antistatic bag. Should have co-axial modification of the basic "T"-piece system, developed to facilitate scavenging of waste gases. The process should include patient inspiring fresh gas from the outer reservoir tube and expiring into reservoir tube. Lightweight anesthesia delivery system.		
1.03	Corrugated Tube Connector Should allow connection between all breathing circuits and the ET tube connector. Thecorrugatedtubeshouldbeexpandable. ShouldAllowmovementofbreathingcircuitatpatientend.Should be made of medical grade PVC. Should be compatible with ETT and tracheostomy tube.		
1.04	Micro Aggregate Blood Filter for Red Cell Transfusion Filter media should be 40 micron rated polyester screen media with uniform pore size Should have total filter surface area of 170 Sq.cm Should have average capacity of filtering 10 units of blood.		
1.05	Packed Red Cell & Whole Blood Leucocyte Reduction Filters. Bedside filtration of one & two unit of packed red blood cells or whole blood Should have universal spike with microbiological recovery vent Should be with attached straight administration set/automatic self leveling drip chamber Performance should consistently average less than 2x105 residual leukocytes per unit Red cell recovery should average greater than 90%. Filter housing hold up volume should be 25ml for one unit filter and 35ml for two unit filter It should be single use		
1.06	Forced Warming Blanket Should be disposable and two layered; • Should consist of non woven propylene fabric for body warming.• Should be usable with forced air warming units.• Material should be latex free and should meet flammability standard 16 CPR 1610 for safety.• The manufacturer must have all the below listed types of blankets and should quote the prices separately for separate blankets• Full Body Adult• Underbody Adult with Arm and Head Openings• Pediatric Full body• Pediatric underbody Blanket.• Should be compatible with common machines.• Should be CE certified		

1.07	Cuff Inflator and Pressure Gauge •Itisusedtoinflate& preciselymonitorthecuffpressureofET tube, Tracheostomy Tube and LMA Cuff. •Reducetheriskofpressurenecrosisandmucosal ischemia •Theriskofaspirationcanbeavoided Eliminatestheuseofsyringestoinflate&deflatethecuffs. Should have release valve to adjust the pressure. •GaugecalibratedincmH2Owiththedetachablelongconnecting tube. •Shouldhaveinflationbulbfortheinflationofthecuff Shouldhavethehookatthebackoffitsintostandardrail. Should have widely spaced scale markings with colour coded pressure ranges. Ergonomiconehadoperation		
1.08	Intubation Pillow •Reusable Intubation pillow for Head elevated laryngoscopy position (HELP) for airway management of Obese &l arge framed patients. •ShouldbemadeupofDenseFoam. •ShouldbesuppliedwithHeadCradle •ShouldbeVinylCovered •ShouldbeCEmarked		
1.09	Negative Insipratory Force Meter •Should be disposable, compact, Light Weight & amp;single patient use Negative Inspiratory Force Meter to check the Negative inspiratory Force of the Ventilated patients with the facility of memory indicator point ertore cord reset highest force achieved by the patient individually packed ready for use. •Shouldbe ,CE marked		
1.1	Capnography Co2 Sampling Mask •Shouldhavetheprovisionforbreathtobreathmonitoringforboth nose & mouth •Should have the facility to deliver oxygen; allow sampling of exhaled carbon dioxide from mouth & nose at the same time. •ShouldhaveattachedmicrofilterattheCO2samplingportend to protect the CO2monitor •ShouldbeabletoconnecttheLuerlockconnectortoanyside stream CO2 monitor.		
1.11	Colorimetric Disposable CO2 Detector For patients from 250gm to 15+kg. Body weight. Should have the facility of activation by pull tab Technique. Should be able to work for 24 hours once activated by pulling tab. Should be able to indicate- Blue green & yellow colour. •Should have larger CO2 viewing window. •Should have 15mm I.D. Standard Taper at Patient End & 15mm O.D. Standard Taper at Circuit End. Should be CE marked •Sizes Infant, Pediatric & Adult		
1.12	Single Lumen Catheter (Seldinger Technique) Should be polyurethane Single Lumen catheter with J Guide-wire non kinking kit should be radio opaque with fixation wing & integral extension tube with flexible & transparent extension tube (PUR) Size – Catheter 12-22G, Lengths- 10cm-20cm		
1.13	La Line Central Catheter (All Sizes) Should be long I.V Catheter with external needle and fixed proximal hub catheter in fully radiopaque polyurethane protected by a non touch-handling sleeve marking every cm 10 to 20cm. Should be made available in assorted sizes.		

1.14	Swan Ganz Pa Catheter Introducer Kit Set Percutaneous Sheath introducer set should have bonded hemostasis valve & side port along with 0.035 x 45 cm straight & "J" tip guide wire for introducing 7.5 Fr, 8.0 Fr PA Catheter. It should have sheath diameter of 8.5 F & sheath length of ≈11 cm. It should be made of radiopaque polyurethane & should have a coating of Heparin as well as antimicrobial material (Benzalkonium Chloride) on entire sheath surface. It should come with 1 catheter contamination shield, ≈80 cm in length. It should have one 4-waystopcock, one vessel dilator & four 4x 4gauze pads.0ne disposable scalpel, # 11 blade & one 18 ga x 2 ½ thin wall needle.		
1.15	Swan Ganz Thermodilution Vip Catheter Flow directed 5-lumen balloon tipped pulmonary artery catheter. 7.5 Fr in diameter &≈110 cm in length• It should have a coating of Heparin as well as antimicrobial material (Benzalkonium Chloride) on entire catheter surface.• Should be able to give Cardiac output using Thermodilution method• Should be able to give PA pressure, PAWP & RA Pressure when connected to transducer.• Should have proximal infusion & proximal injectable ports at ≈31 cm &≈30 cm respectively.• It should come with one volume-limiting syringe of 1.5cc for balloon inflation		
1.16	Swan Ganz Pa Catheter Flow directed 3 lumen balloon tipped pulmonary artery catheter, 7 Fr in diameter & ≈110 cm in length Should be able to give PA pressure, PAWP & RA Pressure when connected to transducer. Should have proximal infusion port at 30 cm. Recommended guide wire size 0.89 mm. It should come with one volume-limiting syringe of 1.5cc for balloon inflation		
1.17	Pressure infusion bag Should be made up of durable plastic to prevent the rip & tear of bag Should have clear sleeve around the bag to see the contents of the fluid bag. Should have convenient IV pole loop hanger. Should have I.V Bag holder to hang the fluid bag inside. Should have double sealing to prevent the rip or tear of pressure bag Should have stopcock valve. Should have efficient palm fitted bulb for the inflation of bag. Pressure gauge should have 360-degree window to see pressure from all sides. Should have built in bleed valve to check the over inflation of the bag. Sizes- 3000ml. Each bag should have aneroid pressure gauge with inflation capacity of 400 to 700mmHg.		
1.18	Closed Circuit (Pediatric) ISO marked. Length-1.75mtr. double tubing with a Y connector with least dead space. Y connector adopter 15mm to 20 mm connector. Latex free medical plastic material, disposable, non-irritant to tissue, and should not react to anesthetic gases and volatile agents. Outer diameter (OD) 10-12mm. Bag-1L. capacity, natural latex medical grade rubber, antistatic, soft and should not react with anesthetic gases and agents. Expandable type, corrugated, non-kinkable tube.		
1.19	Piece with APL Valve Should be good quality, light weight, non conductive disposable T piece with corrugate tubing 1.8m circuit length, low resistance, 500 ml bag with APL valve with 15F/22F connector, safety cap.		
1.2	Anesthetic Circuit Holder of Adult, Pediatric and Neonatal Circuits •Anesthetic Circuit Holder of Adult, Pediatric and Neonatal Circuits		

1.21	Endotracheal Tubes with Cuff (Disposable) Pre-sterilized, single use• Siliconized PVC non-toxic to tissues.• Implantation tested marking on the tube.• Thermo-sensitive to adapt to tracheal anatomy.• Non-kinkable.• Bevel with Murphy eye.• Radio-opaque line all along the length of the tube to detect the correct position on X-ray.• Should adopt universal connector of 15mm and should be compatible with all circuits.• Cuff should be bonded, non-herniating.• Size range- 2.5 to 8.5 mm in 0.5mm increments.• Inflation of the cuff balloon via a one-way valve with a pilot balloon and should be on the concave aspect of the tube.• Depth marker at the proximal cuff end, 3 cm from the cuff.• Cuff should be smooth, non-traumatic, low-pressure high volume.• ETT opening should be beveled type, rounded edge, facing to the left end of the tube with an angle of 38 +/- 10 0• Markings on the tube to know the depth of insertion and fixation at mouth.• Specified mention on the tube- o Nasal/oralo Outside diameter OD in mm.o Inside diameter ID in mm.a. Made of medical grade PVC. Left and right sided.c. All sizes.d. Bronchial cuff should be of blue color and its pilot balloon should be also of blue colorfor the ease of differentiating between tracheal & bronchial cuffs.e. Pre- sterilized, ready for use.f. Should have pre-inserted stellate to help maintain the shape and curve of the tube.		
1.22	Double Lumen Endotracheal Tube Made of medical grade PVC Left and right sided. All sizes. Bronchial cuff should be of blue color and its pilot balloon should be also of blue color for the ease of differentiating between tracheal & bronchial cuffs. Pre-sterilized, ready for use. Should have pre-inserted stellate to help maintain the shape and curve of the tube.		
1.23	Thermoplastic Supra-Glottic Airway Device Should have soft non inflatable anatomical seal, epiglottis blocker; buccal cavity stabilizer, integrated bite block; integrated gastric channel for passage of nasogastric tube Size: 1, 1.5,2,3,4,5		
1.24	Percutaneous Tracheostomy Set with Tracheostomy Tube: Should be with tracheostomy tube. Should have multiple dilators of different sizes- 14Fr., 21Fr., 24Fr., 27Fr. Guiding catheter over which the dilator is introduced. The guide wire should have position markings. Should have introducer needle with sheath. Should be supplied with essential accessories.		
1.25	Corrugated tube connector Should allow movement of breathing circuit at patient end. Should allow connection between all breathing circuits and the ET tube connector. The corrugated tube should be expandable. Should be made of medical grade PVC. Should be compatible with ETT and tracheostomy tube.		
1.26	Catheter Mounts With Bronchoscopy Port: Should be flexible & Extendable Should be having bronchoscopy port. Should be 360 degree rotating head.		
1.27	Suction Tube 7 mm 30M COIL, 7 MM ID with Bubble Non Conductive		
1.28	Suction tube 5 mm 30M COIL 5 MM ID with Bubble Non Conductive		

1.29	HME filters for neonatal: Low dead space, hydrophobic filtration incorporated with heat and moisture exchange filter and with retainable gas sampling port, disposable good quality.		
1.3	Anti Microbial Breathing System Heated Wire Should be light weight and flexible to minimize drag on circuits, 1.5m heated inspiratory tubing, Silver impregnated 0.5m humidifier connection tube, Auto float humidification chamber with dual float Sizes: Adult, pediatric, Neonatal.		
1.31	Suction Catheter Thumb Controlled Working length should be at least 50cms (working length without Connector) for 10Fr.& above; should be at least 40 cm. in length below 10 Fr.• Should be color-coded and should have open end with lateral eye with length marked in centimeters with male connector with vacuum control device as ISO specifications.• Should be in straight soft blister packing.• Should have markings on the full length of the tube• Should have markings on the catheter.• Sizes 5,6,8,10,12,14,16, and 18 Fr.		
1.32	Leucocyte Reducing Blood Transfusion Set: Blood set should have drip chamber and filter with proven leucocyte reduction properties for leucocyte free blood transfusion for organ transplant use. It should have filter size 40 microns and 180 sq. cm of filter area and should have attached IV set with a luer lock tip.		
1.33	Measured Volume Set (ISO/CE) Should be made up of PVC material Should have soft cylindrical type measure volume chamber with float valve to prevent air embolism The set should have transparent tubing and chamber. Should have capacity of 100ml and 150 ml. Should have drip nozzle with reduced size of drop that has to be uniform at 60 drops/ml. Should have molded bubble latex bulb for extra medication or Y port for injection. Should be sterile ready for use. Should be double packed. Should have short bevel 23 G Vein needle. Should have built in airway for bottle perforating spike (air vent).		
1.34	Surgical Tape Polyethylene Material without Dispenser Sizes: 3 X 9.10 mtrs.		
1.35	Spiral (Polyethylene) Tubing Should be spirally coiled tubing (polyethylene) for drug infusion (Drug compatible). Size – 100,150,200,300 & 400cm. Should be US FDA APPROVED		
1.36	Polyethylene Pressure Extension Tube Should be polyethylene high pressure extension tube (drug compatible) Size – 11, 30, 50, 100, 150, 200 cm. Sh0uld be US FDA APPROVED.		
1.37	Extension Line For Light Sensitive Drugs Extension line for light Sensitive drugs (anti UV). Size – 100,150,200cm. Should be US FDA approved. It should have 200 cm long multichannel tubing to ensure continuous supply		
1.38	Basic Parallel Ventilator Circuit FDA & CE marked should incorporate with in-line nebulization T Valve with automatic closer preventing pressure drop. Must be clear construction		

1.39	Flexible Tubing – Silicone Highly flexible medical grade silicone tubing, autoclavable, can be sterilized by EO. Sizes : 6mm & 8mm; Length of tube roll should be 60.0mtr.		
1.4	Disposable Shoe Cover Should be of good quality (thick) Made from non-toxic non-woven, thick fabric. Well stitched in universal regular size. Skid resistant & dust proof. Hard elasticated for better grip and easy to wear. Should cover the ankles. Size: Assorted- (Std. size of shoe from 7 to 12) & blue color.		
1.41	Disposable Foley's Catheter (2 way) – Adult & Paed Disposable 2 way latex Foley catheter Should be manufactured from natural rubber latex coated with silicone so as to eliminate the risk of encrustation. Should have symmetrical large capacity balloon to ensure a straight tip and proper flow for good sphincter action to prevent bladder leakage. Should have coned distal end with burr free eyes for atraumatic insertion. Should have hard valve to ensure easy inflation and deflation of balloon. Balloon capacity- 3-5 ml for pediatric and 30 to 50 ml for adult catheter. Length- 20-30 cm. Should have colour coded for instant size identification. Should be sterile and should be individually packed in peel-able pack. Sizes-5 Fr to 22Fr only ISO 9002 CE marking, should confirm to ASTM- F623-99 Guideline specification for Foley's catheter.		
1.42	50ml Syringe(with Luer Lock) Should be made of clear PVC. Should have rubber seal in the piston Should have a luer lock		
1.43	Absorbable Disposable Pillow Cover for Standard Size 75 X 55CM		
1.44	Disposable chamber for bal Collection with adapter Disposable sterile container for Bronchoscopy application.		
1.45	Bite Block Size 4: Bite block size 4 for oral fixation of ETT size 6.5-8.0mm, Laryngeal Tube size 2 & 2.5 tube should clip into the bite block for protection against occlusion.		
1.46	Bite Block Size 5 Bite block size 5 for oral fixation of ETT size > 8.5mm, Laryngeal tube Size 2 & 2.5 LMA 2 & 2.5 tube should clip into the bite block for protection against occlusion.		
1.47	Bite Block Size 6 Bite block size 6 for oral fixation of laryngeal Tube size 3,4,&5 and LMAs, Tube should clip into the bite block for protection against occlusion.		

1.48	Pediatric Bronchial Blocker Should have a catheter with a bifurcated distal end resembling the bifurcation of the trachea. During insertion through a standard endotracheal tube, both distal ends easily find their way into the two main stem bronchi. Under bronchoscopic vision the lung can be isolated by inflating the balloon. The inflated balloon will always be located at the entrance of the main bronchus. The EZ-Blocker should not dislocate after inflation of the isolated lung. If renewed isolation is required the balloon can be re-inflated without the need to reposition the balloon. Size - 7mm.		
1.49	Medical Grade Soda Lime CO2 Absorbent Granules Medical grade best quality soda lime granules. Hardness, moisture and absorption should be international agency certified. Should be good quality for closed circuit. There should be high contrast pink to white color change after absorbent capacity is exhausted. Pack size should be 5 liter/container.		
1.5	Disposable DVT Sleeve Calf & Thigh design		
1.51	Disposable DVT Sleeve Calf design		
1.52	BIS Sensors It should have four sensors element to capture, recognize and discard artifact. Connector should provide secure click-in connection with push button release It should include an additional above eye element, which captures critical eye motion data, along with other important physiological signals. It should have flexible design adjusts to different head sizes It should have FDA approval Should be supplied by authorized channel partner from principal company/manufacture. Electrode Gel: Potassium Chloride (KCl) , latex free. Sizes ADULT and PEDIATRIC		
1.53	NIRS Sensors Adult and Pediatric for Casmed NIRS Machine		
1.54	Disposable Pulse Oximeter Sensors (SP02) Should be compliant with the equipment intended to continuously estimate and display non-invasively a patient's arterial blood oxygen saturation and pulse rate Proposed sensors must comply with Philips Technology. Digit sensors should be available in Adult, Pediatric, Neonatal and Infant sizes to accommodate diverse patient sizes, weights and needs. Seller must have all types of sensors available (e.g., finger, forehead, and ear). Sensor must be available in Adult, Pediatric, Infant and Neonatal Sizes. Sensor extension cables must be available in 4' and 9' lengths. The sensors must be compatible with all generations of Philips Technology in Philips Oximeters and OEM/Licensee Multi-para meter systems with all generation of Philips technology. The sensor shall resist inadvertent displacement. The sensor shall resist interference from ambient light. The sensors shall not be adversely affected by fluid spills or common disinfectant solutions.		

1.55	Infant Feeding Tube Size: 3-10 Fr., color-coded. Silken smooth tube, medical grade siliconized PVC. X-ray opaque line. Fitted with female luer mount with built-in stopper/ lid. Packed in peel-off pouch, not coiled packing. Sterilized ready to use. Length of tube minimum- 50 +/- 5 cm. Smooth rounded tapered distal end with two lateral eyes.		
1.56	Urine Collection Bag with Transparent Volume Chamber Sterile ready for use. Bag should be manufactured from clinical grade transparent PVC. Capacity- 2000ml.marked in increments of 50 ml. Fitted with non-return valve to avoid spillage. One-meter long super smooth, highly flexible non-kinkable tube which should provide approx. 6.5 mm diameter with universal male connector. Leak proof, single piece/ wielded manufacture. Provided with hanging device to be fitted on to the bed. Stopper drain should be attached with the bag.		
1.57	Clinical thermometer: Good quality. Digital For oral temperature measurement.		
1.58	ACT Cartridges Should have double cell measurement to increase accuracy of results, Should use liquid kaolin activator for real time efficient clot detection, Should allow room temperature storage Hemochron Signature Elite compatible		
1.59	I.V. Set with Flow Controller (DEHP Free) Specially designed I.V. set for controlling the flow rate of fluid made of medical grade DEHP free polymer nonreactive to water- soluble materials. Gravity drive infusion set with wide dial, which operates as thumb wheel like roller clamp. Security door to prevent the accidental change of flow rate. Low cost disposable set. Sterile, individually packed in blister pack		
1.6	Snugger Set All sizes: Three pairs of smooth snuggers with Yellow, Blue & Pink colors for vessel identification. Each snare set should consist of thumb holder handle for easy maneuverability. Specially designed for putting purse string sutures, made of medical grade PVC. Sizes Adult & Pediatric.		
1.61	Disposable Suction Tube & Tip Yankauer Type, Medical grade PVC molded handles with kink resistant tube for per operative suctioning. Tip of Handle should be crown/ standard shape. Vent port to be provided in handle which should be closed with tight sleeve. Soft flexible adaptors at both end of the tube for connection with secure fitment between suction source& handle. Tube Length 2500mm, OD: 9 mm, ID: 6 mm. Sterile packed in poly pouch pack.		
1.62	Ventilator circuit Plain		
1.63	Ventilator circuit with Humidifier Sizes- Adult, Pediatric, Neonatal		

1.64	Ventilator circuit Double water Trap		
2	**CABG Consumables and CABG Heart Postioners**		
2.01	Aortic Punch Should have Sharp, dual cutting edge for clean, precise removal of aortic tissue should have a conical tip for easy insertion by straight or button- hole technique Punch should be available with tapered cutting blade to increase visibility. Should be available in all functional sizes (2.5-6mm) Should have long and short handle configuration		
2.02	Coronary artery retraction clips Should be designed to improve exposure to a coronary anastomosis site. Should be able to small prongs and gently hold tissues away from the vessel to improve vision. Sizes 3mm and 5mm		
2.03	Temporary pigtail pacing wire Should include unipolar atrial and ventricular pacing, pediatric unipolar pacing, and the bipolar pacing lead		
2.04	Tissue Stabilizer for Minimally invasive beating heart surgery. Should be stabilizer to be used via thoracotomy with detachable shaft and should have fully rotating pods.		
2.05	Heart positioner for Minimally invasive beating heart surgery Should be a positioner with detachable shaft for MICS via thoracotomy.		
2.06	Mist Blower Should have specialized nozzle utilizing a micro orifice for fluid delivery and a separate orifice for gas delivery. Should have the malleable shaft and on/off control on the hand piece.		
2.07	Arteriotomy shunts (Intra Coronary Shunts) Sizes 1.0,1.25,1.5,1.75,2.0,2,5,2.5, 2.75 3.0mm. Teal color for easy detection within the operative site Beveled, ultra-soft tip for easy insertion Single-mold, kink-resistant silicone design for easy insertion and atraumatic removal Radiopaque shunt and radiopaque, non-slip tab with asymmetrically placed tether		
2.08	Intra Aortic Balloon Catheter IAB Catheter should be of 7.5 Fr with displacement volume of 30cc, 34cc, 40 cc. and 8Fr with volume displacement 50cc. It should be abrasion resistant and have good fatigue resistance Should immediately inflate at start up without manual filling of the catheter. It should be compatible with Maquet IABP pump It should have exact 7.5Fr size sheath and dilator set. It should have 0.025 3mm J PTFE stainless steel guide wire. It should be approved by US FDA.		
2.09	Heart Stabilizer- Octopus type Cardiac wall conforming malleable bifid arms with vacuum suction cups to hold and position the heart in off pump CABG. Should have a thin mount with a constant low profile design for an optimized work area. Stabilizer should allow a vertical drop of the arm into the chest cavity. Should provide 180º side-to-side range of motion of the arm. Integrated channels secure tubing away from the work area		

2.1	Heart Stabilizer- Urchin type The tissue-conforming suction cup with gentle vacuum to securely lift and hold the heart in off pump CABG. Should be designed for apical and non-apical placement of the heart. Should have a flexible arm and mount should be compatible with a range of adult sternal retractors. Should have integrated channels to secure tubing away from the work area		
2.11	Tissue Stabilizer With Canister Tubing Set (For Off pump CABG) - Metallic Titan Flex and Titan Stabilizers provide optimal positioning, stabilization and coronary artery isolation during beating heart. USFDA Approved		
2.12	Arm for Tissue Stabilizer With Canister Tubing Set (For Off pump CABG) - Metallic Arm Titan Flex and Titan Stabilizers provide optimal positioning, stabilization and coronary artery isolation during beating heart. USFDA Approved		
2.13	Endoscopic Vessel Harvesting System The Endoscopic Harvesting System should be designed for use in In conjunction with the 7mm Endoscope. Harvesting Cannula should have four lumens to house the Endoscope, C-Ring, Distal Lens Washer Tube & BiSECTOR Bipolar Ligating Forceps for ligation & division of vessel branches. C-Ring/Distal lens washer should be independently controlled by a C-BiSECTOR can be extended/retracted through the main cannula by inserting it into the Tool Adapter Port, and rotated independently. Bipolar coagulation should be achieved using electrosurgical energy.Short Port Blunt Tip Trocar (BTT) should be provided which is used to provide a port of access for insertion of endoscopic instruments into an incision site. Syringe should be provided for inflation/deflation of the Balloon.		
2.14	7mm Extended Length Endoscope vasio view Hemopro-2 The 7 mm Endoscope (Zero Angle) should be a reusable product, which consist of a stainless steel Shaft housing optical and illumination components. Proximal end should have an Eyepiece for camera adapter attachment,7 mm Endoscope should be designed to be used in conjunction with the removable Dissection Tip for blunt dissection of tissue and isolation of structures in the cavity.		
2.15	Suture Organizer Device to organize Valve sutures / VSD / graft sutures easily in a non-traumatic way. Should organize a minimum of 8 suture sets.		
3	**Cardio Pulmonary Bypass Oxygenators, ubings and Cannilae**		
3.01	LV Vent with stylet Left ventricular vent should consist of round tipped dual lumen tube with lateral eyes, suture collars & proximal funnel connectors used for emptying the Left Ventricle for clearer view during surgery. All sizes- neonatal, pediatric, adult		
3.02	Antegrade Ostial Cardioplegia Cannula - All Size: Antegrade-cardioplegia cannula should be made of soft 100% silicone conduit with distal bulbous end & should have luer lock connector at the proximal end for administration of cardioplegia solution into the coronary ostia. Sizes: 3.5, 4, 4.5, 5, 5.5, 6 mm.		
3.03	Antegrade Ostial Cardioplegia Cannula- Neonatal Antegrade-cardioplegia cannula should be made of soft 100% silicone conduit with distal bulbous end & amp; should have luer lock connector at the proximal end for administration of cardioplegia solution into the coronary ostia, suitable for doing neonatal arterial switch surgery		

3.04	Cardioplegia Cannula Size Infant: Cardioplegia cannula should be made of soft 100% silicone & should be tapered conduit with distal open tip having adjacent lateral eyes, followed by a flange for secure positioning. It should have proximal luer lock & a SS needle with hub. Size: Infant.		
3.05	Arterial cannula for arch cannulation Sizes 20FR -24 Fr. Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings		
3.06	Axillary artery one piece cannula with central arterial pressure measurement Sizes 18 Fr.-24Fr. Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings. Should have integrated pressure monitoring port at tip		
3.07	One piece Pediatric Aortic cannula Vented Should be beveled with thin wall tips and should be elongated one piece wire wound body. Size 6FR-16 Fr.		
3.08	Straight Tip Arch cannula Sizes 8Fr-24 Fr vented and Non vented; Pediatric and Adult Should be beveled thin wall tips attached to tapered cannula bodies. Should be available in pediatric and adult sizes.		
3.09	Angled tip Arterial cannula Should be beveled thin wall tips attached to tapered cannula bodies. Should have kink resistant wire wound bodies. Sized 8 Fr - 24 Fr		
3.1	Arterial cannula angled with diffused flow tip Sizes 18 Fr-24Fr Should be one piece wire wound body with integrated flutes for diffused flow.		
3.11	Femoral one piece Arterial and venous cannula kit Sizes 8-21 Fr. arterial and 8-29 Fr. Venous cannula Should be one piece wire wound body.		
3.12	Femoral Multistage venous cannula Sizes: 29/29/29 Fr and 29/46/37 Fr Should be one piece wire wound multiple side holes body with percutaneous kit.		
3.13	Standard insertion kit for femoral cannulation a. Kit for femoral cannulation should contain 12-14 Fr, Scalpel # 11 blade, Introduce needle 18 ga, vessel dilator 8-10 Fr, vessel dilator Guidewire .038 in X 180 cm, catheter tip , Syringe		
3.14	Carpentier Bi-caval femoral venous cannula Sizes : 24/29 Fr, 30/33Fr Should have wire wound kink resistant two stage design.		
3.15	Single stage venous cannula with Metal tip Sizes 12-31 Fr Should have kink resistant wire wound taper body with beveled metal tip.		
3.16	Single stage Venous cannula with right angle Sizes 12-40 Fr Should have kink resistant wire wound taper body with tapered multiport tips. Should be right angled with plastic tip.		

3.17	Single stage straight venous cannula malleable Sizes 12-40 Fr Should have kink resistant malleable wire wound taper body with tapered multiport tips		
3.18	Double-stage venous cannula round and oval shape Should be two-stage cannula with oval body in various sizes. Should be two-stage cannula with round body in various sizes. Should have cannula body with thin walled with depth markings. Sizes 28/36,36/46,32/46, 36/51, 32/40, 36/46 Fr.		
3.19	Three stage venous cannula Should be three stage venous cannula for Vacuum Assisted Venous Drainage(VAVD)/Kinetic Assisted Venous Drainage(KAVD). Sizes 29/29/29 Fr 29/46/37 Fr		
3.2	Multiple Stage Venous cannula Should have polyurethane wire wound body with radiopaque markers and multiple holes at distal end. Sizes 23 Fr and 29 Fr		
3.21	Aortic root cannula Should have radiopaque tips attached to clear PVC bodies. Additional features: aortic root pressure monitoring and left heart venting. Can be used to aspirate air emboli as well administer cardioplegia. Sizes 4 Fr-11 Fr		
3.22	Aortic root cannula with Vent line Should have radiopaque tips attached to clear bodies with separate vent line. Sizes 5 Fr-11 Fr		
3.23	Aortic root cannula pediatric Neonatal Sizes 4 Fr Should be able to aspirate air from Aorta, Should have radiopaque tip and standard 50.5 in length or a shortened 2.5 in.		
3.24	Cardiopleiga needles Should have stainless steel tip with plastic depth stop, Needle should be attached to Flexible PVC tubing which should include a drape clamp and female luer. Neonatal, Pediatric and Adult. Sizes: 5Fr -8 Fr		
3.25	Silicon Ostial cannula for continuous perfusion Should have a silicon body with soft bulb shaped tips, should have a female luer connection site. Sizes 15Fr,17Fr and 20 Fr		
3.26	Ostial perfusion cannula with basket tip and soft convex tip Should have flanged, radiopaque basket tips/soft tips attached to malleable stainless steel shafts. Sizes 10 Fr, 12 Fr and 14 Fr.		
3.27	Minimally invasive antegrade Aortic root cannula Should have more than 30 cm long body to allow insertion during MICS		
3.28	Minimally invasive retrograde cardioplegia cannula with deflecting tip Should have tip deflecting models for sinus placement through thoracotomy should be able to allow minimum 10mm sweep. Should be auto/ manual inflatable. Sizes 13 and 15 Fr		

3.29	Retrograde cardioplegia cannula with Auto inflate Should have silicon/ PVC bodies with auto inflatable cuff and pressure monitoring lines; should have multiport tip/ integral stopcock. Sizes 13 Fr and 15 Fr		
3.3	Multiple perfusion set Should have silicon/ PVC bodies with auto inflatable cuff and pressure monitoring lines; should have multiport tip/ integral stopcock.		
3.31	Distal perfusion kit Should be able to perform simultaneous perfusion of Aortic root and upto 3 or more vein grafts		
3.32	Left Heart Vent Catheters Should be of PVC or silicon, could be used for direct and indirect venting, should have perforated tip, malleable bodies with depth mark. Should have a choice of either PVC or Silicone along with straight body with depth marking. All vents should terminate with a vented or non vented ¼" connector. Sizes 10 Fr,13Fr,15Fr,16Fr,18Fr,20Fr,24Fr		
3.33	Pericardial Sumps Sizes 20 Fr Should feature a fluted tip, should be encased in a stainless steel spring and should have weight at the end.		
3.34	Intra-cardiac sump Size 20 Fr Should feature a perforated pool tip to maximize suction and minimize tissue trauma. The tip design should be ideal for atraumatic suction within the heart chambers.		
3.35	Suction Tube Sizes 6 Fr,10Fr and 20 Fr Should have variety of cardiac suction tubes, intracardiac suction tubes & rigid suction tubes.		
3.36	Micro Suction tubes Sizes 9 Fr Should have a vacuum control port, malleable shaft, should equipped with a length of tubing and clamp terminating with a ¼ in (0.64cm) connector		
3.37	Macro Rigid suction tubes Sizes 20 Fr Should have tip made up of stainless steel, should have fluted pool tip to maximize suction and minimize tissue trauma, should offer gentle suction.		
3.38	PA vent cannula Should have a soft, pliable tip with female luer end; should have movable depth marker and an introducer needle should be included.		
3.39	Tourniquet Sets Should have color coded tubes with varying lengths for adults and pediatric, should have wire snares included with the tube set. Sizes 12 Fr, 16 Fr and 19 Fr.		
3.4	Vessel cannula with and without valve Should have clear and radiopaque bodies. These should terminate with a female luer. Should have tips in various sizes and shapes. Sizes 2mm,3mm, 4mm		

3.41	Coronary Arteriotomy Cannula Should have polyurethane tube with a bulb shaped tip connected to winged female luer. Sizes1mm,1.25mm, 1.5mm, 1.75mm, 2mm, 2.5mm 3mm,		
3.42	Rapid priming set Length 35cm and 40cm These should facilitate the transfer of fluid during the priming of the circuit. Should have large bore spikes attached to flexible tubing with a clamp. Should terminate with either an open end tube or a male luer.		
3.43	Rapid Priming "Y" Set Length around 1 m These should facilitate the transfer of fluid during the priming of the circuit. Should have large bore spikes attached to flexible tubing with a clamp. Should attach to a " Y" adapter with a length of tubing and another clamp.		
3.44	Adult Oxygenator Priming volume should be less than 300 ml. Blood flow range should be 0-7lts/min. Oxygen transfer should be at least 400ml/min. Heat exchange efficiency should not be less than 0.50. Housing material should be of polycarbonate. Surface area of the fibers should be from 1.8m 2 to 2.4m 2 Heat exchanger should be made of stainless steel and surface area should be approx. 20cm 2 Blood inlet port (from pump) 3/8 Blood outlet port 3/8 Cardioplegia port ¼ Gas Inlet port 1/4 Gas Outlet port 1/4 Water Ports ½ Maximum Pressure Blood inlet 1000 mmHg water Inlet 42 PSI Blood storage capacity of hard shell reservoir should be approx. 4000ml Minimum operating volume of reservoir should be 200ml. Hard shell reservoir should have cardiotomy filter and de-foaming part Hard-shell reservoir should have venous filter with pore size 452mm The hard-shell reservoir should have Venous blood inlet port ½ Blood outlet port (to pump) ⅜ Suction ports (six) ¼ Water Inlet 42 PSI Vertical port to CR Filter ¼ Quick Prime port ¼ Auxiliary port ¼-⅜ Sustainable negative pressure should be 15010mmHg		
3.45	Pediatric Oxygenator • Priming volume should be less than 150ml. Blood flow range should be 0.40.01ltrs/min. Oxygen transfer should not be less than 250ml/min. Pressure drop should be least-up to 100mmHg or less. Heat exchange efficiency should not be less than 0.65. Housing material should be of polycarbonate. Surface area of the fibers should be approx 1.0m 2 . Heat exchanger should be made of stainless steel and surface area should be approx 1300cm 2 . Blood inlet port 3/8 Blood outlet Port 3/8 Cardioplegia port 1/4 Gas Inlet Port 1/4 Gas Outlet port 1/4 Water Port ½ Maximum Pressure Blood inlet 1000mmHg, Water Inlet 42 PSI Blood Storage capacity of hard shell reservoir should be max 3000ml. Minimum operative volume of hard shell reservoir should be 100ml. Hard-shell reservoir should have cardiotomy filter and defoaming part. Hard-shell reservoir should have venous filter with pore size should be 20mm The hard-shell reservoir should have Venous blood inlet port 3/8 rotatable Blood outlet port (to pump) 3/8 Suction port(six) ¼ Vertical port to CR filter 3/8 Quick prime port ¼ Auxiliary port 3/8 Water Inlet 42 PSI		

3.46	Neonatal Oxygenator Blood flow range should be 0.1 – 2 liters/min. Priming Volumes should be around 40 ml. Oxygen transfer should be minimum 100 ml/min. Pressure drop should be least up to 100mmHg or less. Heat exchange efficiency should not be less than 0.65. Housing material should be of polycarbonate. Surface area of the fibers should be ≈0.5m 2 and material should be micro porous polypropylene. Heat exchanger should be made of stainless steel and surface area should be approx 0.035m2 . Blood inlet port (from pump) ¼ Blood outlet port ¼ Luer port (for recirculation or blood cardioplegia) one luer lock on blood outlet Gas inlet port ¼ Gas outlet port 5/16 Water ports ½ Maximum pressure Blood inlet 1000mmHg Blood storage capacity of hard shell reservoir should be 1000ml Minimum operating volume of hard-shell reservoir should be 15ml Hard-shell reservoir should have cardiotomy filter and defoamer The hard-shell should have Venous blood inlet port ¼ Blood output port (to pump) ¼ Suction port (five) 3/16 Quick prime port ¼ Vent port ¼ Auxiliary port ¼-3/8 Maximum sustainable negative pressure in reservoir -150mmHg Water inlet 2Kgf/cm 2		
3.47	Pediatric Arterial Filter with Bypass Loop The Arterial Filter should be for pediatric use. Priming volume should not be more than 90ml Filter pore size should be 30- 40 micron. The outlet and inlet blood posts should be 3/8 or ¼".The filter should allow maximum blood flow rate of 5.0L/min. The filter should be provided with a bypass loop at the inlet and outlet port.		
3.48	It should have priming volume less than 50 ml. Blood flow rate should be between 0-600 ml/min Filter screen should be around 100 um. Inlet connection should be ¼and outlet connection should be 3/16. Heat exchange surface area should be ≈0.20m2 . Heat exchange should be of stainless steel corrugated/ convoluted pipes. Bubble trap should be integrated for highly efficient de-bubbling Integrated by pass manifold for easy de-bubbling Exchangeable water in /water out Blood flow path bottom up It should have a Stopcock Prime/ Perfusion for easy priming. It should have tip in the surgeon pack so that it can be connected to cardioplegia cannula. It should be available in 4:1 configuration.		
3.49	Cardioplegia Heat Exchanger (BCD) del Nido It should have priming volume less than 50 ml. Blood flow rate should be between 0-600 ml/min Filter screen should be around 100 um. Inlet connection should be ¼and outlet connection should be 3/16. Heat exchange surface area should be ≈0.20m2 . Heat exchange should be of stainless steel corrugated/ convoluted pipes. Bubble trap should be integrated for highly efficient de-bubbling Integrated by pass manifold for easy de-bubbling Exchangeable water in /water out Blood flow path bottom up It should have a Stopcock Prime/ Perfusion for easy priming. It should have tip in the surgeon pack so that it can be connected to cardioplegia cannula. It should be available in 1:4 configuration		

3.5	Pedaitric Hemo Concentrator It should have priming volume approx 35ml. Effective surface area of the Fibers should be approx 0.5m2 . Blood port should be ¼with Luer locks. Filtrate port should be ½. Maximum Trans-membrane Pressure should be 500mm Hg. It should have tubing lines along with reservoir Bag.		
3.51	Adult Hemo Concentrator The priming volume should be 70 ml Effective surface area of the fibers should be ≈1m2 . Blood port should be ¼ With Luer locks Filtrate port should be ½ (1/4adapter). Blood flow range should be 100-500ml. Maximum Trans-membrane pressure should not be more than 500mm Hg. It should have tubing with reservoir bag.		
3.52	Neonatal Hemo Concentrator It should have priming volume less than 20 ml. Membrane surface area should be ≈0.2m2 . Max Membrane pressure should not be more than 600mm Hg. Capillary wall thickness should be ≈50um. It should have inlet/outlet lines, male luer lock connections, filter safety cap, filtrate line and additional filtrate bag (200ml).		
3.53	Adult Custom Tubing Pack Custom Tubing Pack Adult. Custom Tubing Pack with arterial filter with PVC tubing medical grade -6 as per NEIGIRHMS CTVS design. Filter/Tubing should be CE/USFDA Approved.		
3.54	Small Adult Custom Tubing Pack Custom Tubing Pack Small Adult. Custom Tubing Pack with arterial filter with PVC tubing medical grade -6 as per NEIGIRHMS CTVS design		
3.55	Pediatric Custom Tubing Pack Custom Tubing Pack Pediatric. Custom Tubing Pack with arterial filter with PVC tubing medical grade -6 as per NEIGIRHMS CTVS design		
3.56	Neonatal Custom Tubing Pack Custom Tubing Pack with neonatal arterial filter with PVC tubing medical grade-6Filter/Tubing should be CE/USFDA Approved.		
3.57	Small Neonatal Custom Tubing Pack Custom tubing packs with 3/16arterial and ¼ venous lines for small neonates. Made from medical grade-6 PVC. Filter/Tubing should be CE/USFDA approved		
3.58	Extra Corporeal Membrane Oxygenator (Neonatal) ECMO should have a validation for 14 days and should be phthalate free (NO DOP). Membrane used should be of polymethylpentene fibers. Priming volume should be 100 ml. Should have contact surface area ≈0.70 square meters. Should cater for blood flow from 0.2 to 1.5 L/min. Heat exchanger surface area should be ≈0.4 square meter. Heat Exchanger performance factor should be of 0.77 (1.5 liter /min). Oxygenator and tubing should have coating of Phosphorylcholine. Inlet and outlet connector preferred is 1/4 (6.35 mm).		

3.59	Extra Corporeal Membrane Oxygenator (Paediatric) ECMO should have a validation for 14 days and should be phthalate free (NO DOP). Membrane used should be of polymethylpentene fibers.		
3.6	Should have priming volume 200 ml. Should have contact surface area of around1.4 square meters. Should cater for blood flow from 0.3 to 4 liter /min. Heat exchanger should have surface area of ≈0.8 square meter. Heat exchanger performance factor should be of ≈0.6 (@ 4 liter /min). Oxygenator and tubing should have coating of Phosphorylcholine(PC). Inlet and outlet connections preferred is 3/8(9.53 mm)		
3.61	Extra Corporeal Membrane Oxygenator (Adult) ECMO should have a validation for 14 days and should be phthalate free (NO DOP). Membrane used should be of polymethylpentene fibers. Should have priming volume of≈250ml. Should have contact surface area of 1.7-1.9 square meters. Should cater for blood flow from 0.4 to 7 liters/ min. Heat exchanger should have surface area of ≈0.8square meter. Heat exchanger performance factor should be ≈0.6 (@ 4 liters /min). Oxygenator and tubing should have coating of Phosphorylcholine.(PC) Inlet and outlet connections preferred is 3/8 (9.53 mm)		
3.62	Adult Oxygenator (Integrated with arterial filter & heat exchanger) Oxygenator should have integrated arterial filter with cardiotomy/ venous reservoir.• Should have integrated arterial filter with self venting technology.• Heat exchanger surface area should be no more than 0.2m 2 .• Venous filter should be 50micro meter.• Priming volume should not be more than 300ml.• Blood flow range should be 0.5 to 7 LPM.• Heat exchange efficiency should not be less than 0.50 at max flow.• pressure drop should be minimum, up to 110 mmHg or less.• Arterial filter should be 35micron meter.• Membrane surface area should be 2-2.5 m2 .		
3.63	Small Adult Oxygenator (Integrated Filter and Heat Exchanger) Oxygenator should have integrated arterial filter with cardiotomy/venous reservoir. Should have integrated arterial filter with self venting technology. Heat exchanger surface area should be no more than 0.14m 2 . Venous filter should be 50micro meter. Priming volume should not be more than 150ml Blood flow range should be 0.5 to 5 LPM. Heat exchange efficiency should not be less than 0.5 max flow @ 5 LPM Pressure drop should be minimum up to 110 mmHg or less. Arterial filter should be35micro meter.		
3.64	Paediatric infant Oxygenator (Integrated Filter and Heat Exchanger) Oxygenator should have integrated arterial filter with cardiotomy/ venous reservoir. Should have integrated arterial filter with self venting technology. Heat exchanger surface area should be no more than 0.035m 2 . Venous filter should be 50micro meter. Priming volume should not be more than 45ml. Blood flow range should be 0-1.5Ltrs/min. Heat exchange efficiency should not be less than 0.6 at max flow. Pressure drop should be minimum up to 100mmHg or less @ 1.5 LPM Arterial filter should be35micro meter.		

3.65	Oxygenator infant- Pediatric Infant- paeditric oxygenator totally coated phosphorylcholine coating, prime volume 99ml, surface0.84m2, blood flow 0.5-3.0 l/min		
3.66	Oxygenator infant- Pediatric with filter Infant- paeditric oxygenator totally coated phosphorylcholine coating with modular cascade filtration (with interated arterial filiter) prime volume 130ml, surface0.84m2, blood flow 0.5-3.0 l/min		
3.67	Oxygenator Adults The Lowest Prime Adult Oxygenator phosphorylcholine coating, Oxygenator is specially designed to have the lowest priming volume (190 ml) surface area 1,35m2, max blood flow 7,0 l/min with low contact surface area, combining excellent gas transfer performances with clinical flexibility for small adult and adult Patients. OPTIMAL ERGONOMIC DESIGN FOR PERFUSION COMFORT. Improved ease of use thanks to the top venous inlet port and a large variety of connector adapters for enhanced customization capabilities.		
3.68	Cardioplegia Delivery System The Cardioplegia Heat Exchanger aims to meet all the performance expectations with the following product features: Priming between 20-30 ml k) A flow dynamic engineering system which can effectively mix the blood and crystalloid solution to the desired preparations (1:4& 4:1 ratios) Complete blood for warm shot also Allows delivery in any ratio either Delnido 4 part Crytalloid:1 blood) or Microplegia(1 part crystalloid and 4 part blood) Ports available for infusion, sampling, temperature reading, and the inlet/outlet connector easily adapt 1/4" tubes for infant, paediatric and adult patient use. While priming, the perfusionist can easily purge air through the one port between the inlet and outlet with minimal holdup volume. The pleated anodized aluminium heat exchanger hasminimum surface area ,delivery froth –free, to allow the excellent mixing of blood with cardioplegia. An air trap column at the entry port provides additional safety by trapping any micro air bubbles going out. Thebottom-in,top-outflowpathenablescompletedrainagewith minimal blood holdup volume. The PVC recirculation lines are preconnected with their respective connectors to ensure easy setup and use. Available individually packed or preconnected with recirculation line Product has double protective packing that can be pealed easily when assembling A cardioplegia Heat exchanger which can infuse the contents to the patient as and when the surgeons wants instantly without any delay . An in-built 200 µ Filter to prevent micro air bubbles.		
3.69	Membrane Oxygenator Efficient Heat Exchanger with Surface coating with Hardshell Venous Reservoir, Cardiotomy Filter and Integrated Arterial Filter. 7 Ltr Recommended Max Blood flow rate: 5001 to 8000 ml/min, Static priming vol: 180 to 350 ml, Maximum Hardshell Reservoir Capacity: 4000 to 4500 ml, Minimum Hardshell Reservoir Capacity: 200 to 300ml, Venous Reservoir filter: 20 to 47 µ, Suction inlet No.: minimum 4, Filtered quick prime No.: minimum 1, Filter luer No.: minimum 2, Venous blood flow: 7000 to 8000 ml/min, Membrane Surface area: 1.8 to 2.5 m^2. Specifications of Arterial Filter: Maximum Blood flow rate: 6 to 8 lit/min, Low Priming Volume, Inlet and Outlet 3/8 For Adult		
3.7	Membrane Oxygenator Efficient Heat Exchanger with Surface coating. Small Adult 5 Ltr Cardiotomy filter and integreated arterial filterRecommended Max Blood flow rate: 4000 to 5000 ml/min, Static priming vol: 120 to 175 ml, Maximum Hardshell Venous Reservoir Capacity: 3000 to 4200 ml, Minimum Hardshell Reservoir Capacity: 70 to 150 ml, Venous Reservoir filter: 20 to 47 µ, Suction inlet No.: minimum 4, Filtered quick prime No.: minimum 1, Filter luer No.: minimum 2, Venous blood flow: 4000 to 5000 ml/min, Membrane Surface area: 1.0 to 1.5 m^2. Specifications of Arterial Filter: Maximum Blood flow rate: upto 5 lit/min, Low Priming Volume, Inlet and Outlet 3/8 For Small Adult CE Approved		

3.71	Membrane Oxygenator Efficient Heat Exchanger with Surface coating. Ped. 4 Ltr Cardiotomy filter Recommended Max Blood flow rate: 2000 to 3000 ml/min, Static priming vol: 90 to 145 ml, Maximum Hardshell Reservoir Capacity: 1600 to 3000 ml, Minimum Hardshell Reservoir Capacity: 15 to 70 ml, Venous Reservoir filter: 20 to 47 µ, Suction inlet No.: minimum 4, Filtered quick prime No.: minimum 1, Filter luer No.: minimum 2, Venous blood flow: 2000 to 3000 ml/min, Membrane Surface area: 0.6 to 1.5 m². Specifications of Arterial Filter: Maximum Blood flow rate: 3.2 to 5 lit/min, Low Priming Volume, Inlet and Outlet 3/8 For Paediatric CE Approved		
3.72	Membrane Oxygenator Efficient Heat Exchanger with Surface coating with Hardshell Venous Reservoir, Cardiotomy Filter and Integrated Arterial Filter. Neonatal 1.5 Ltr Recommended Max Blood flow rate: 800 to 2000 ml/min, Static priming vol: 35 to 70 ml, Maximum Hardshell Reservoir Capacity: 700 to 1500 ml, Minimum Hardshell Reservoir Capacity: 15 to 30 ml, Venous Reservoir filter: 20 to 47 µ, Suction inlet No.: minimum 4, Filtered quick prime No.: minimum 1, Filter luer No.: minimum 2, Venous blood flow: 800 to 2000 ml/min, Membrane Surface area: 0.3 to 0.7 m². Specifications of Arterial Filter: Maximum Blood flow rate: 0.7 to 2.5 lit/min, Low Priming Volume, Inlet and Outlet 1/4 For Infant and Neonatal CE Approved		
3.73	Arterial Perfusion Cannulae Adult. Wire reinforced beveled tip Size 18Fr, 20Fr, 22Fr and 24 Fr. Overall length should be approx.15cm with suture bump		
3.74	Arterial Perfusion Cannulae Pediatric Sizes: 8Fr, 10Fr, 12Fr,14Fr and 16Fr. Wire reinforced bevel tip. Overall length 18cm with suture bump		
3.75	Venous Cannulae Single Stage. (neonate) Thin Flexible wire reinforced straight open light house tip. Overall length approx.28cm with ¼ acceptance size 12Fr, 14Fr and 16Fr		
3.76	Venous Cannulae Single Stage(pediatric) Thin Flexible wire reinforced straight open light house tip. Overall length approx. 35cm with ¼and 3/8 acceptance Size 18Fr, 20Fr, 22Fr and 24Fr.		
3.77	Venous Cannulae Single Stage(small adult) Thin flexible wire reinforced straight open lighthouse tip. Overall length 35cm with 3/8 acceptance Size 26Fr and 28Fr.		
3.78	Venous Cannulae Single Stage(adult) Thin Flexible wire reinforced straight open lighthouse tip. Overall length should be approx.40cm with 3/8 acceptance Size 30Fr, 32Fr, 34Fr, 36Fr, 38Fr and 40Fr.		
3.79	Venous Cannulae Right Angled Wire reinforced 900 angled plastic tip 10Fr, overall length approx.28cm and ¼ acceptance		
3.8	Venous Cannulae Right Angled Wire reinforced 90 0 angled plastic tip 12Fr, 14Fr and 16Fr. Overall length should be approx. 33cm with ¼& 3/8 acceptance		
3.81	Venous Cannulae Right Angled Wire reinforced 90 0 angled plastic tip 22Fr, 24Fr and 28Fr. Overall length should be approx.38cm with 3/8 acceptance		

3.82	Retrograde Cannula catheter Self-inflating smooth balloon with preshaped stylet and handle 14Fr. Overall length should be approx. 27cm & should have 18-20 mm sized smooth balloon.		
3.83	Aortic Perfusion Cannulae; Wire reinforced dispersion tip Sizes: 21Fr and 24Fr overall length approx.35cm and vent.		
3.84	Dual Stage Venous Cannulae; Wire reinforced 32/40Fr and 36/51Fr. Overall length should be approx. 40cm and ½acceptance.		
3.85	Femoral Arterial Cannulae; Wire reinforced overall length should be 19.5.2 cm with ¼ vented connector sizes: 8Fr, 10Fr, 12Fr and 14Fr.		
3.86	Femoral Arterial Cannulae; Wire reinforced overall length should be approx. 24cm with 3/8 vented connector sizes: 14Fr, 16Fr, 18Fr and 20Fr.		
3.87	Femoral Venous Cannulae; Wire reinforced overall length should be approx. 24cm with ¼ non vented connector. Sizes 8Fr, 10Fr, 12Fr and 14Fr.		
3.88	Venous Femoral Cannulae; Wire reinforced overall length should be 752 cm with 3/8 non vented connector sizes 18Fr, 20Fr, 22Fr,24Fr and 28Fr		
3.89	Antegrade Cardioplegia Cannulae with vent 12/14/16 Fr. with vent and without vent.		
3.9	Antegrade Cardioplegia Cannulae without vent 12/14/16 Fr		
3.91	Disposable connector all sizes: Y/ Straight with and without leur lock ½*3/8 st, ½*1/2 st, 3/8*3/8*1/2 Y, 3/8*3/8*3/8 Y, 3/8*3/8*1/4 Y, 3/8*1/4*1/4 Y, ¼*1/4 st, ¼*1/4*1/4 Y, 3/8*1/4 st, ¼*1/4 st, ¼*1/4*1/4 Y, ¼* 3/16 st inch, ¼ male Leur with side port, ¼*1/4 st with Leur lock, 3/8*3/8 inch male leur lock.		
3.92	Disposable Single Tubing Sizes (½,⅜,¼,3/16 inch)		
3.93	Wire enforced Arterial Cannula (6 Fr to 20 Fr)		
3.94	Intra-Aortic Balloon Fiber Optic Catheters Sizes 30 cc (Height 147-162 cm, BSA <1.8 m2), 40 cc (Height 162-182 cm, BSA >1.8 m2) Designed to capture and transmit the high-fidelity AP signal at the speed of light; Abrasion –resistant: Should have Cardiothane II abrasion resistant membrane with hydrophilic coating.		
3.95	Pruitt and Pruitt-Inahara Shunts Sizes 3Fr to 12 Fr		
3.96	Long, Flexible, wire-enforced cannula for ascending aortic & arch cannulation with Obturator		
3.97	Long Flexible, wire-enforced cannula for ascending aorta arch cannulation with guide wire.		
3.98	Long Flexible wire enforced cannula for ascending aorta and arch cannula angled with side holes.		

3.99	Balloon tip antegrade cerebral perfusion cannula. 8, 10, 12 Fr size		
4	Hemofilter Adult 0.8 m2		
4.01	Hemofilter Ped. 0.3m2		
4.02	Custom Tubing Pack Adult Made from non-toxic medical grade PVC tubing . It is used exclusively in combination with heart lung machine and other devices of the system such as oxygenator and blood cardioplegia delivery system. Options of clear or colorful stripes tubing i.e. RED/BLUE/YELLOW/GREEN and with arterial line filter and withouT filter is available.		
4.03	Custom Tubing Pack Semi Adult Made from non-toxic medical grade PVC tubing . It is used exclusively in combination with heart lung machine and other devices of the system such as oxygenator and blood cardioplegia delivery system. Options of clear or colorful stripes tubing i.e. RED/BLUE/YELLOW/GREEN and with arterial line filter and withour filter is available.		
4.04	Custom Tubing Pack Paediatric Made from non-toxic medical grade PVC tubing . It is used exclusively in combination with heart lung machine and other devices of the system such as oxygenator and blood cardioplegia delivery system. Options of clear or colorful stripes tubing i.e. RED/BLUE/YELLOW/GREEN and with arterial line filter and withour filter is available		
4.05	Custom Tubing Pack Neonatal Made from non-toxic medical grade PVC tubing . It is used exclusively in combination with heart lung machine and other devices of the system such as oxygenator and blood cardioplegia delivery system. Options of clear or colorful stripes tubing i.e. RED/BLUE/YELLOW/GREEN and with arterial line filter and withour filter is available.		
4.06	Blood Cardiolplegia Delivery Set Adult Adult and Paediatric Delivery system configurations Flow engineer with Axial, non turbulent, eddy free design prevents bubble formation and eliminates need for downstream filters Shortest blood flow path over smooth surfaces, yet best cooling efficiency Core flow without thinning of blood , reduces stress Priming Volume is just 40 ML, Mixing propositions of blood and cardioplegia 1:1,2:1 and 4:1		
4.07	Blood Cardiolplegia Delivery Set Paediatric Adult and Paediatric Delivery system configurations Flow engineer with Axial, non turbulent, eddy free design prevents bubble formation and eliminates need for downstream filters Shortest blood flow path over smooth surfaces, yet best cooling efficiency Core flow without thinning of blood , reduces stress Priming Volume is just 40 ML, Mixing propositions of blood and cardioplegia 1:1,2:1 and 4:1		
4.08	Hemofilter Adult Surface Area (Sq.m): 0.8 Priming Volume (cb.m) : 58 Max. Trans pre (mm/Hg) : 500 Max. Flow (ml/min) : 150 Blood Inlet & Outlet: 1/4"		
4.09	Hemofilter Paediatric Surface Area (Sq.m): 0.4Priming Volume (cb.m) : 58Max. Trans pre (mm/Hg) : 500Max. Flow (ml/min) : 150Blood Inlet & Outlet: 1/4"		

4.1	Pressure Transducer Kit Double Consists of high pressure monitoring lines , transducer domes with built in flushing device and three way stop cock. Close system design reduces the risk of leakage and infection to operators. Consistent and accurate reading during monitoring.		
4.11	Aortic Cannula Reinforced straight and Angled One piece body with straight or curved tip available with vented or non-vented connector. An adjustable or xed depth ring together with tip and depth line permits precise position of all cannula. Size 12, 14,16,18,20,22,24		
4.12	Aortic Cannula non-reinforced St. One piece body with straight or curved tip available with vented or non-vented connector. An adjustable or xed depth ring together with tip and depth line permits precise position of all cannula. Size 12, 14,16,18,20,22,25		
4.13	Aortic Cannula non-reinforced Curved Plastic Tip One piece body with straight or curved tip available with vented or non-vented connector. An adjustable or xed depth ring together with tip and depth line permits precise position of all cannula. Size 12, 14,16,18,20,22,26		
4.14	Aortic Cannula non-reinforced Curved Metal Tip One piece body with straight or curved tip available with vented or non-vented connector. An adjustable or xed depth ring together with tip and depth line permits precise position of all cannula. Size 12,14,16,18,20,22,27		
4.15	Venous Cannula straight One piece body with wire reinforced walls and MULTIPORT LIGHTHOUSE TIP. Sizes available: 12 FR-38 FR.		
4.16	Venous Cannula angled metal tip Venous cannula with right angled metal tip features kink resistant wire reinforced bodies. with beveled angled metal tip. This construction allows for higher flow rates with minimum pressure di erential. Metal tip orientation permits precise positioning of the cannula. Sizes 12-38 Fr		
4.17	Two Stage Venous Cannula These cannulae feature multiport tips with atrial baskets and kink- resistant, wirewound bodies with depth markings. The oval body presents a lower profile in the surgical field. All Sizes		
4.18	Arterial Line Filter Filter : 40 micron. Flow : 7 LPM. Priming : 179 ml. Port: 3/8"		
4.19	Arterial Line Filter Filter : 40 micron. Flow : 5 LPM. Priming : 90 ml. Port: 3/8"		
4.2	Arterial Line Filter Filter : 40 micron. Flow : 3.2 LPM. Priming : 35 ml. Port: 1/4"		
4.21	Aortic root Cannula / Antegrade These cannulae feature radiopaque tips attached to clear bodies with separate vent lines. Additional features available with these cannulae. include aortic root pressure monitoring and left heart venting. All cannulae are supplied with a stainless steel introducer needle. Sizes 12,14,16,18		
4.22	Cardiac Sump with steel tube tip This sump features a weighted perforated pool tip to minimize the possibility of tissue occlusion while maintaining an opportunity for drainage. The perforated steel tube tip is inside the tubing that terminates with a 1/4 inch (0.64 cm) connector. Adult, Paed. Infant		

4.23	L. V. Vent with stylet These vent catheters are for direct and indirect venting of the left ventricle and feature perforated tips. Catheter material is PVC, along with straight, preformed, or malleable bodies with depth markings. These vents are available in pediatric and adult sizes. Straight body models come with a malleable or stiff guidewire style introducer for easy insertion and placement. All vent catheters terminate with a vented or non-vented 1/4 inch (0.64 cm) connector. 12, 14, 17, 18, 20 Fr		
4.24	Femoral Aortic Cannula Features an introducer with blunt tip configuration that allows safe insertion for additional arterial access sites such as the aorta, axillary and subclavian A lock feature reduces push-back of the introducer during insertion Vent cap reduces back-bleed when no guidewire is used in the procedure Depth markings aid in placement 8 to 24 Fr		
4.25	Femoral Venous Cannula single stage Venous femoral cannulae, designed to drain from superior and inferior vena cava, available in given sizes , with full flow drainage capability. A high quality soft introducer features a smooth transition to the cannula to improve insertion and reduce vascular damage. Available for percutaneous insertion via Seldinger technique. 16 to 30 FR		
4.26	Femoral Venous Cannula three stage Multiple Stage Femoral Venous cannulae, designed to drain from superior and inferior vena cava, available in given sizes , with full flow drainage capability. A high quality soft introducer features a smooth transition to the cannula to improve insertion and reduce vascular damage. Available for percutaneous insertion via Seldinger technique. 16,18,24,26,28 Fr		
4.27	Cytokine Adsorber Maximum Blood Flow Rate: 700 mL/min Minimum Blood Flow Rate: 100 mL/min. Blood Priming Volume: 150 mL Adsorbent Material should ideally be crosslinked Divinylbenzene or polyvinylpyrrolidone. Should be compatible with CRRT, VV and VA ECMO Should be FDA approved		
5	**Prosthetic Cardiac Valves, Rings and Composite Conduits**		
5.01	Complete Bovine Aortic Pericardial Valve Should be bio engineered, computer optimized to ensure uniform thickness of leaflets and have tissue deflection test to ensure uniform flexibility in all three leaflets. Long term clinical data should be available, establishing more than at least 20 years expected durability in clinical study, long term follow up data on hemodynamic performance establishing consistency in low gradients. Should have standard low- pressure fixation & adequate treatment of tissues to preserve natural leaflet dimensionality & flexibility, while extracting phospholipids. Should have more than 20 yrs. Experience globally. Scalloped sewing ring for Aortic annulus conformity is preferable. Aortic Sizes 19/21/23/25/27 Should be FDA APPROVED E.g.; SJM- Trifecta / SJM Biocor / Edwards Inspiris / Edwards Perimount / Edwards Magna / Edwards Magna Ease / Medtronic Avalus / Medtronic Avalus Ultra		
5.02	Complete Bovine Mitral Pericardial Valve Bio- engineered: Computer optimized to ensure uniform thickness, with Tissue deflection tests to ensure uniform flexibility in all three leaflets, unique design mounting feature such as flexible stent& optimal tissue stent compatibility for greater reliability. Long term clinical data available, establishing more than & consistency in hemodynamic performance. Low-pressure fixation & chemical treatment of tissue to preserve natural leaflet dimensionality & flexibility, while extracting maximum phospholipids. Should have more than 20 yrs experience globally. Should have convenient deployment and LVOT markers for ease of Implantation at Mitral position. MITRAL SIZE 25/27/29/31/33 Should be FDA APPROVED		

5.03	Complete Bovine Mitral Supra Annular Pericardial Tissue Valve Bio mechanically engineered tissue valve with three leaflets of identical thickness, and identical Flexibility. Should be a True supra annular valve with a saddle shaped sewing ring with posterior flexibility & anterior rigidity for optimal conformity at Mitral position, Should have LVOTO markers for correct orientation, preventing any LVOT obstruction, with convenient deployment system to prevent suture looping and ease of deployment. Low profile tissue valve with asymmetrical sewing ring should preserve sub valvular apparatus and prevent LV impingement. Should have Tissue treatment to irreversibly extract both calcium binding sites Phospholipids, residual glutraldehyde, should have a flexible stent & optimal tissue stent compatibility for greater reliability. Clinical data to be available establishing long term durability and consistency in hemodynamic performance. Sizes: 25 to 33mm Should be FDA APPROVED		
5.04	Complete Bovine Aortic Supra Annular Pericardial Tissue Valve Bio-mechanically engineered tissue valve with three Leaflets of identical thickness and identical flexibility. Should be a true supra annular valve. Scallop shaped sewing ring for aortic position.Should be Low profile tissue valve. Should have Tissue treatment to irreversibly extract both calcium binding sites phospholipid, and residual glutraldehyde, should have Flexible and Durable Stent. Short term and long term clinical data should be available, establishing Durability & consistency in hemodynamic performance. Should have a sizer (barrel and replica end) for optimum sizing and placement. Size 19 to 29mm Should be FDA approved		
5.05	Complete Bovine Pericardial Low Profile Aortic Tissue Valve Bio-Mechanically engineered tissue valve with three leaflets of identical thickness, and Identical Flexibility.• Should be a true supra annular valve.• Should have a Scallop shaped sewing ring consistent with Aortic annulus.• Should have tissue treatment to Irreversibly extract both calcium binding sites phospholipid residual glutraldehyde,• Should have a flexible stent & optimal tissue stent compatibility for greater reliability.• Short and long term clinical data should be available, establishing Durability & consistency in hemodynamic performance.• Should have Low profile height for optimizing Coronary Ostial &sino- tubular junction clearance. Should have Three Mid commissure markers for correct orientation of the valve.• Should have a slick stent post & stent base allowing ease of implantation in small aortic root.• SIZES: 19/29mm• Should be FDA APPROVED.		
5.06	Tricuspid Repair Ring Sterile double packed tricuspid semi rigid ring with an anterior gap with polyester of PTFE cloth with marking for commissures. 3D waveform shape to restore tricuspid annulus to a systolic position Open segment around anteroseptal commissure to avoid conduction system Sizes 26, 28, 30, 32, 34, 36 mm.		
5.07	Mitral Repair Ring Sterile double packed complete semi rigid ring with polyester or PTFE cloth with marking for commissures. Kidney shaped for mitral position. Anterior saddle and smaller posterior saddle for apposition to the aortic root Cover sizes 26, 28, 30, 32, 34, 36, 38, 40mm		
5.08	IMR annuloplasty ring: Should have a complete rigid ring. To be constructed of a strong, durable alloy. Asymmetrical design to compensate in tethered P2/P3 region Dipped P3 segment to accommodate downward displacement of posterior annulus Should have a increased sewing margin in the P2-P3 region, Should be marked with suture and designed to accommodate a double suture row. Should have a Dipped P3 region to accommodate higher stresses from downward LV displacement. Should have a convenient holder/handle to increase ease of use & operative efficiency Sizes 24,26,38,30,32,34mm		

5.09	3-D Tricuspid Annuloplasty Ring: Should be a rigid annuloplasty ring with three-dimensional shape and with an incomplete ring shape to avoid the sensitive conduction system. Should have a downward angle in septal region to help reduce the stress on sutures and the risk of ring dehiscence. Sizes 26, 28, 30,32,34mm. Should be FDA approved. E.g. Medtronic Contour 3D		
5.1	Artificial Mechanical Heart Valve Bileaflet Mitral Rotatable with handle design, leaflets made up of pyrolytic carbon / standard durable alloy and polyester sewing cuff. Should have low profile height. Should have minimum vertical leaflet exposure to result in NO LVOT obstruction Should have greater posterior wall clearance Wide range of sizes from 23/24mm – 34/37mm Should have both CE and FDA approval E.g. SJM Master / Sorin Carbomedics / ONX		
5.11	Artificial Mechanical Heart Valve Bileaflet Mitral (for supra- annular implant) Rotatable with handle design, leaflets made up of pyrolytic carbon / standard durable alloy and polyester sewing cuff. Should have low profile height. Should have minimum vertical leaflet exposure to result in NO LVOT obstruction Should have greater posterior wall clearance Wide range of sizes from 24 mm – 34 mm Should have both CE and FDA approval SJM /ATS /Sorin Carbomedics		
5.12	Artifical Heart Valve Bileaflet Aortic Rotatable with handle design, leaflet made up of pyrolytic carbon and polyester sewing cuff, with pivot guard design. Should have low profile height. Should have minimum vertical leaflet exposure. Wide range of sizes from 19mm-31mm. Should have both CE and FDA approval SJM Regent / ATS/ Sorin Carbomedics / ONX		
5.13	Artifical heart valve bileaflet Aortic for Supra-annular implant Rotatable with handle design, leaflet made up of pyrolytic carbon and polyester sewing cuff, with pivot guard design. Should have low profile height. Should have minimum vertical leaflet exposure. Wide range of sizes from 16 mm- 28mm Should have both CE and FDA approval E.g. Sorin Tophat		
5.14	Bileaflet Mechanical Aortic Valve with Straight Conduit Should have double velour woven graft. Rotatable with handle design Should be collagen impregnated to control hemostasis and reduce the hemorrhagic complications. Should have mechanical heart valve with low-pressure gradients. With pivot guard design and leaflet opening and >75 degrees. Cuff design should enhance implantability. Should have minimum taper conduit to facilitate strong coronary anastomosis. Should not have any pleats to allow easier positioning and attachment of the coronary arteries. Wide range of sizes from 19mm- 33mm. Should have both CE and FDA approval. E.g. SJM Masters valved graft, On-X Ascending Aortic Prosthesis, Medtronic Open Pivot Aortic Valved conduit		

5.15	Bileaflet Mechanical Aortic Valve with Valsalva Conduit One piece design collagen coated VALSALVA graft with integrated mechanical aortic bileaflet valve for repair or reconstruction of the ascending aorta and aortic valve. Should mimic the anatomy and blood flow dynamics of the natural sinuses of Valsalva Wide range of sizes from 19mm- 33mm. Should have both CE and FDA approval. Should have the ability to be precisely trimmed and shaped in case of remodeling technique procedures. At least 3 References line at 120O intervals should act as a guide for prosthetic valve. Coated polyester fabric Cross linked Type I bovine collagen Water permeability < 5m * cm -2 min-1 @ 120mmHg		
5.16	Porcine Tissue Heart Valve Mitral / Aortic Should have stented, triple composite design with separate porcine leaflets to optimize leaflets cooptation and reduce stress. Should have anti-calcification treatment to reduce calcification. Low profile height. In aortic position should be available in sizes 19mm-31mm. In mitral position should be available in sizes 25mm to 33mm. Should have both CE and FDA approval. E.g. SJM Epic/ SJM Epic Plus / SJM Epic Max / Medtronic Hancock /SJM Mosaic /SJM Biocor		
5.17	Pericardial Externally Mounted Tissue Heart Valve (Aortic) Should have stented, pericardial single layered leaflet externally mounted to optimize hemodynamics. Should have tissue to tissue interface adding to durability. Should have anti calcification treatment to reduce calcification. Supra annular design. In aortic position should be available in sizes 19mm-29mm. Should have both CE and FDA approval. E.g. Sorin Perceval / Perceval plus		
5.18	Full Aortic Root Bioprosthetic Stentless Valve Sizes: 19 mm, 21mm, 23 mm, 25 mm, 27 mm Should be third generation stentless Native asymmetrical Porcine aortic root, Should have more than 12 years durability and hemodynamic clinical data, Should have AOA tissue treatment to mitigate calcification & Physiological fixation to preserve leaflet function which facilitates open leaflet in systolic position. E.g Medtronic Freestyle		
5.19	Monoleaflet Mechanical Heart Valve Mitral sizes 21-33 mm, Aortic 17-31 mm Should have smooth movement monoleaflet configuration with minimum 70 degrees opening angle. Should be easily implantable and rotatable. Should preferably be premounted on a handle. Sewing ring should be low profile; leaflet and housing should be made of strong , durable alloy. E.g. TTK Chitra		
5.2	Cardioroot Graft one piece-design collagen-coated VALSALVA GRAT. For ascending aorta. Should mimic the anatomy and blood flow dynamics of the natural sinuses of Valsalva. Anatomically correct shape. Unique uncrimped section that does not stretch: can be precisely trimmed and shaped. Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg. Coated polyester fabric Cross-linked Type I bovine collagen. sizes 24,26,28,30,32,34		

6	**Dacron Membranes, Conduits and Graft**		
6.01	ePTFE Conduit length 35 cm, sizes 16, 18, 20, 22 ringed		
6.02	ePTFE Conduit length 35 cm, sizes 16, 18, 20, 22 non ringed		
6.03	ePTFE BT Shunt carbon coated sizes 3.0mm, 3.5mm, 4.0mm, 4.5mm, 5.0mm		
6.04	Knitted Graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness** 0.49 mm Sizes 40cm length, Dia: 6,7,8,10 mm		
6.05	Knitted Graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness** 0.49 mm Sizes 40 CM length. Dia:12,14,16,18,20,22,24mm		
6.06	Knitted Graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness** 0.49 mm Sizes 70 CM length, dia: 6,7,8,10mm		
6.07	Silver Knitted Graft Type I Bovine collagen cross-linked collagen-coated polyester. Graft loaded with an antimicrobial agent: silver acetate Reverse lock-knit knitting technique External velour surface and non-velour inner surface Magnetic Resonance Safe Radially Supported grafts have a polypropylene supportive coil Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Validated intended use with rifampicin loading Water permeability ≤ 5ml/cm-2/min-1@120 mmHg Sizes 40 CM length, Dia: 6,7,8,10,		
6.08	Silver Knitted Graft Type I Bovine collagen cross-linked collagen-coated polyester Graft loaded with an antimicrobial agent: silver acetate Reverse lock-knit knitting technique External velour surface and non-velour inner surface Magnetic Resonance Safe Radially Supported grafts have a polypropylene supportive coil Validated intended use with rifampicin loading Water permeability ≤ 5ml/cm-2/min-1@120 mmHg Sizes 40 CM length, Dia.12,14,16,18,20,22,24		

6.09	Silver Knitted Graft Type I Bovine collagen cross-linked collagen-coated polyester Graft loaded with an antimicrobial agent: silver acetate Reverse lock-knit knitting technique External velour surface and non-velour inner surface Magnetic Resonance Safe Radially Supported grafts have a polypropylene supportive coil Water permeability: ≤5 mL × cm−2 × min−1/120 mmHg Validated intended use with rifampicin loading Water permeability ≤ 5ml/cm-2/min-1@120 mmHg Sizes 70 CM length, Dia: 6, 7, 8, 10		
6.1	Knitted Bifurgated Graft Type I Bovine collagen cross-linked collagen-coated polyester Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Bovine collagen cross-linked type. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness** 0.49 mm Sizes 12x6, 14x7, 16x8, 18x9mm		
6.11	Silver Knitted Bifurcated Graft Type I Bovine collagen cross-linked collagen-coated polyester Graft loaded with an antimicrobial agent: silver acetate Reverse lock-knit knitting technique External velour surface and non-velour inner surface Magnetic Resonance Safe Radially Supported grafts have a polypropylene supportive coil Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Validated intended use with rifampicin loading Sizes 12x6, 14x7, 16x8, 18x9mm		
6.12	Woven Graft Type I Bovine collagen cross-linked collagen-coated polyester Woven No suture hole bleeding. Bovine collagen cross-linked type. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Thickness** 0.38 mm. 15cm usable length, Dia: 12,14,16,18,20,22,24,26,28,30,32mm		
6.13	Silver Woven Graft Type I Bovine collagen cross-linked collagen-coated polyester Graft loaded with an antimicrobial agent: silver acetate Woven External velour surface and non-velour inner surface Magnetic Resonance Safe Radially Supported grafts have a polypropylene supportive coil Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Validated intended use with rifampicin loading Wall thickness: 0.38 mm. Sizes 12,14,16,18,20,22,24,26,28,30,32		

6.14	Woven Aortic Arch Graft Type I Bovine collagen cross-linked collagen-coated polyester Woven No suture hole bleeding. Pre-sewn and Anatomically correct angle of branches designed for total replacement of aortic arch to allow reduced cardiac ischemic time. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.38 mm. 45°suture retention: 2.53 kg. Sizes 20,22,24,26,28,30,32,34		
6.15	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Sizes 6mm to 16 mm, 30-35 cm long		
6.16	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Sizes 18mm to 28 mm, 30-35 cm long		
6.17	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Sizes 30mm to 38 mm, 30-35 cm long.		
6.18	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Sizes 6mm to 16 mm, 60-70 cm long		
6.19	Dacron straight woven Grafts . Type I Bovine collagen cross-linked collagen-coated polyester Woven Sizes 18mm to 28 mm, 60-70 cm long		
6.2	Dacron straight woven Grafts. Type I Bovine collagen cross-linked collagen-coated polyester Woven Sizes 30mm to 38 mm, 60 cm-70 long		
6.21	Dacron bifurcated woven grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Sizes: 12x6x6 mm, 14x7x7mm, 16x8x8mm, 18x9x9mm, 20x10x10mm with 40-50cm length.		
6.22	Knitted Dacron straight graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness: 0.49 mm Sizes: 6mm to 16 mm with 30-35 cm length.		

6.23	Knitted Dacron straight graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness: 0.49 mm Sizes: 18mm to 24 mm with 30-35 cm length.		
6.24	Knitted Dacron straight graft coated. Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness: 0.49 mm Sizes: 6mm to 16 mm with 60-70 cm length		
6.25	Knitted Dacron straight graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness: 0.49 mm Sizes: 18mm to 24 mm with 60-70 cm length		
6.26	Dacron bifurcated knitted grafts Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability ≤5 mL × cm−2 × min−1@120 mmHg. Wall thickness: 0.49 mm Sizes: 12x6x6 mm, 14x7x7mm, 16x8x 8mm,. 18x9x9mm with 40-50 Cm length.		
6.27	Dacron Woven 3 branch arch grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven 30cm usable length, 12-8-8mm and 14-10-10mm branch sizes		
6.28	Dacron Woven 4 branch arch grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven 50cm usable length, 24-30mm dia, with 12,10,8,8mm branch grafts		
6.29	Dacron Woven Thoraco- abdominal grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven 47cm usable length 20-32mm dia. with 10-10-8-8mm side branch grafts		
6.3	Dacron Woven graft with perfusion side branch Type I Bovine collagen cross-linked collagen-coated polyester Woven 50cm usable length with dia. 20-34mm with 10 mm perfusion side branch		
6.31	Dacron Woven extra length graft with offset branch graft Type I Bovine collagen cross-linked collagen-coated polyester Woven 50cm usable length with dia. 20-34 mm with 10mm perfusion side branch		

6.32	Dacron Woven pre-curved graft Type I Bovine collagen cross-linked collagen-coated polyester Woven 50cm usable length with dia. 22-32 mm with 8mm perfusion side branch.		
6.33	Woven Trifurcated graft Coated polyester fabric Cross-linked Type I bovine collagen Construction Knitted, reverse locknit Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.49 mm Burst strength: 32.7 kg/cm2 45°suture retention: 3.37 kg Sizes: 12mm X 6mm X 7mm, 14 mm X7mm X 7mm, 16mm X 8mm X 7mm, 40-50 cm in length		
6.34	Dacron Knitted axillo-bifemoral bifurcated graft with radial support Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Size 100cm usable length with 60cm side branch usable length sizes: 8x8mm Right, 8x8mm Left, 10x10mm Right, 10x10mm Left		
6.35	Dacron Knitted Axillo-bifemoral graft with radial support Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Angle 90 degrees angle with 60 cm usable length side branch 8mm and 10 with supported lengths 20-45cm		
6.36	Dacron Knitted Femoral-Femoral grafts Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes 6mm and 8 mm 30cm and 40 cm long		
6.37	Dacron Knitted straight Peel able support Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable lengths 6mm, 8mm and 10 mm		

6.38	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 6mm to 16 mm, 30-35 cm long.		
6.39	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 18mm to 28 mm, 30-35 cm long, Gelatin coated.		
6.4	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 30mm to 38 mm, 30-35 cm long.		
6.41	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 6mm to 16 mm, 60-70 cm long		
6.42	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 18mm to 28 mm, 60-70 cm long.		
6.43	Dacron straight woven Grafts Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 30mm to 38 mm, 60 cm-70 long.		
6.44	Knitted Dacron straight graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 6mm to 16 mm with 30-35 cm length.		
6.45	Knitted Dacron straight graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 18mm to 24 mm with 30-35 cm length.		

6.46	Knitted Dacron straight graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 6mm to 16 mm with 60-70 cm length.		
6.47	Knitted Dacron straight graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 18mm to 24 mm with 60-70 cm length, Gelatin coated.		
6.48	Dacron bifurcated knitted grafts Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 12mmX6 mm, 14mm X 7mm, 16mmX 8mm,.18mm X 9mm with 40-50 cms length.		
6.49	Dacron Woven 3 branch arch grafts Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 20mm to 34 mm.		
6.5	Dacron Woven 4 branch arch grafts Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 20mm to 34 mm.		

6.51	Dacron Woven Thoracoabdominal grafts Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 20mm to 30mm.		
6.52	Dacron Woven graft Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable sizes of 20 to 34mm with 8mm and 10 mm perfusion side branch, 40-50 cm length.		
6.53	Dacron Woven extra length graft with offset branch graft Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 22 to 32 mm with 8mm perfusion side branch.		
6.54	Dacron Woven pre-curved graft Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 22 mm to 32 mm with 8mm perfusion side branch.		
6.55	Woven Trifurcate graft Type I Bovine collagen cross-linked collagen-coated polyester Woven Usable lengths of 12mm X 6mm X 7mm, 14 mm X7mm X 7mm, 16mm X 8mm X 7mm, 40-50 cm in length.		
6.56	Dacron Knitted axillo-bifemoral bifurcated graft with extended support, Gelatin coated. Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg		
6.57	Dacron Knitted Axillo-bifemoral graft Type I Bovine collagen cross-linked collagen-coated polyester. Reverse locknit knitting technique for radial tensile strength. No suture hole bleeding. Water permeability: ≤5 mL × cm−2 × min−1@120 mmHg Wall thickness: 0.35 mm Burst strength: 35.3 kg/cm2 45°suture retention: 1.83 kg Usable sizes of 90 degrees angle with 60 cm side branch 8mm and 10 mm, Gelatin coated		
6.58	Dacron Marking Patch (Filamentous Fabric) Should be Nominal Thickness; around 0.6 mm Water permeability; approximately 1800ml Popularly known as ”MARKING PATCH” Markings arrow should indicate, in which direction the patch is to be stitched. Sizes 2” x 2”, 4 x4” and 6x6 ‘ inches		

6.59	Double Velour Fabric Should have Nominal Thickness; 1.4-1.6mm. With Water permeability of approximately 3800 ml. Should have No Reference markings. Used for Repair of Intracardiac defects and for VSD repair in Adults. SIZES: - 4"X4" & 6"X6"		
6.6	Ascending aortic reconstruction Valsalva graft One piece design collagen coated VALSALVA graft for repair or reconstruction of the ascending aorta. Should mimic the anatomy and blood flow dynamics of the natural sinuses of Valsalva Unique un-crimped section that does not stretch should allow easy sewing of valve remnants or prosthetic valve Should facilitate estimation of the length required for optimal placement of valve remnants or prosthetic valve to ensure optimal clinical outcomes. Should have the ability to be precisely trimmed and shaped in case of remodeling technique procedures. At least 3 References line at 120O intervals should act as a guide for prosthetic valve. Coated polyester fabric Cross linked Type I bovine collagen Water permeability < 5m * cm -2 min-1 @ 120mmHg		
6.61	Dacron Graft Straight Tube dilatation resistant ,gelatin sealed , Koper knitted polyester vascular graft 40 cm 6,7,8,10,12		
6.62	Dacron Graft Straight Tube dilatation resistant ,gelatin sealed , Koper knitted polyester vascular graft 70 cm 6,7,8,10,12		
6.63	Dacron Graft Silver coated Straight tube 40 CM 6,,7,,8		
7	**PTFE Membranes and Graft**		
7.01	Outflow Tract Fabric PTFE. Should have Nominal Thickness: around 0.9mm. with Water Permeability: 250ml. Used for Aortic repair, Pulmonary Outflow tracks patching & other Intracardiac Defects. SIZES: - 4X4 & 6"X6"		
7.02	Thin Wall Patch of PTFE Should have multidirectional node fiber structure, to accommodate cellular in growth & give uniform strength throughout the patch Surface. Should be soft & pliable for easy surgical positioning. No Pre clotting should be required. Should have excellent biocompatibility for cardiac& vascular repairs and peripheral vascular reconstruction. Should have Thickness around 0.4mm suitable for Aortic & Vascular repair SIZES:- 1CMX9CM,2X9CM & 3CMX6CM (OVAL SHAPED)		
7.03	Regular Wall Patch of PTFE Should have multidirectional node fiber structure to accommodate cellular in-growth. • Should be soft & pliable for easy surgical positioning. • No Pre clotting should be required. • Should have excellent biocompatibility for cardiac& vascular repairs and peripheral vascular reconstruction. • Thickness – 0.6mm • SIZES:- 3CMX 3CM,5CMX7.5CM,2.5CMX15CM & 10CM X 15CM (RECTANGULAR)		

7.04	Low Porosity Felts of PTFE Should have Thickness 1.5 to 1.8mm. Should have Low Porosity to control bleeding and for buttress for sutures. SIZES:-2' X 2", 4"X4' & 6"X6'		
7.05	PTFE Normal felt; Should have Thickness 1.5 to 1.8mm. To be used as a buttress for sutures and Friable tissue SIZES:- 2"x2 ,4"x4 & 6"x6		
7.06	PTFE Hard (Thick) FELTS Should have Thickness around 3 mm to provide added support to tissue. SIZES:- 4"X4" & 6"X6		
7.07	PTFE Felts Pledgets Shape:-Rectangle, Square Oval &Round. Should have Thickness around 1.6mm Sizes:- 4.8mm x 6.0mm (Rectangle), 9.5mmx4.8mm (Rectangle), 6.0x6.0mm (Square) & 4.8mm x 6.0mm (Oval)		
7.08	Regular & Thin wall e-PTFE graft All length and diameters (2-10mm)		
7.09	Ring reinforced PTFE graft All lengths and diameters (4-30mm)		
7.1	BT Shunt PTFE graft with carbon lining All length and diameters (2-5mm)		
7.11	Large Diameters e PTFE Grafts all sizes and length Sizes of all length and diameters (18-36mm)		
7.12	e-PTFE Stretch Large Diameter Reinforced Aortic Vascular Graft Sizes of all length and diameters (18-36mm)		
7.13	e-PTFE Cardiovascular Patch Sizes:- 5cm x 15cm x 0.6mm x10cm x 15cm x 0.6mm, 3cmx 6cm x 0.4mm		
7.14	e-PTFE Pericardial Membrane 0.1mm thick Sizes:- 5cm x 15cm x 0.6mm x10cm x 15cm x 0.6mm, 3cmx 6cm x 0.4mm		
7.15	e-PTFE Pericardial Membrane 0.1mm thick Size 6cm x 12cm/12cmx12cm/15cm x 20cm		
7.16	e-PTFE Stretch Reinforced Thin Wall Heparin Bonded Vascular Graft 10cms length Size: 3mm/3.5mm/4mm/5mm/6mm diameter		
7.17	e PTFE Stretch Reinforced Thin wall Non Ringed Heparin Bonded Vascular Graft 40/80cms length Size: 6/7/8/mm diameter		

7.18	e- PTFE Stretch Reinforced Removable Ringed Thin Wall Heparin Bonded Vascular Graft 50/70/80cm length size: 6/7/8mm diameter		
7.19	e-PTFE Stretch Reinforced Thin Wall limbed Bifurcated Vascular Graft Size :12/6x50cm, 14/7x40cm/50cm; 16/8x50cm; 18/9x50cm; 20/10x50cm; 22/12 x40cm; 24/12x40cm		
7.2	e PTFE Suture Size CVO/CV2/CV3/CV4/CV5/CV6/CV7/CV8		
7.21	e-PTFE Stretch re-in forced removable ringed thin wall pre configured axillo bi femoral vascular graft. Size: i) 8mm diameter x 70cm/40cm length ii) 8mm diameter x 90cm/40cm length		
7.22	e PTFE stretch re- in forced low profile integrated radially supported thin wall vascular graft Size 6mm/7mm/8mm diameter 40cm/60cm/80cm length		
7.23	e PTFE stretch re-in forced removable ringed thin wall vascular graft Size: 6mm/8mm diameter x 50cm/70cm/80cm length		
7.24	Pericardial Patch Cardiac and great-vessel reconstruction and repair and pericardial closure. soft, pliable tissue conforms to uneven surfaces and minimizes suture hole leaks for more reliable repairs. Glutaraldehyde and EnCap™ anti-calcification technology,promote host endothelialization . bovine pericardium resists shrinkage and aneurysm formation. Rinse less Preparation, Ready to use. Thinner patch		
7.25	Bovine Pericardial Patch Ready-to-use, rinseless preparation, glutaraldehyde fixed/ glutaraldehyde free, anticalcification treatment, size 8x8 cm, preferably USFDA approved		
8	**Vacuum Drainage Sets, Thoracic Drains and Tubes**		
8.01	Thoracic Catheter All Sizes: Extra soft thoracic drainage catheter, made of DEHP free medical grade polymer, gentle to body tissues & most suitable for thoracic drainage. Catheters are marked at every 2cm from the last eye. Sterile, double (straight) packed in peel able pouch pack. Sizes required: Sizes: 16, 20, 24, 28, 32, 36, 40 FG		
8.02	Thoracic Catheter Right Angled (90o) All Sizes: Extra soft angled thoracic drainage catheter, made of DEHP free medical grade polymer, gentle to body tissues & most suitable for thoracic drainage. Catheters are marked at every 2cm from the last eye. Sterile, double packed in peelable pouch pack. Sizes: 16, 20, 24, 28, 32, 36, 40 FG		
8.03	Thoracic Catheter with trocar – All Sizes Thoracic drainage catheter with trocar for thoracic drainage purpose. Catheters to be marked at every 5, 10, 15 & 20 cm from the last eye. Fitted with tapered connector. Sterile, packed in peelable pouch pack. Sizes: 12, 16, 20, 24, 28, 32, 36 FG		

8.04	Chest Drainage Bottle – 2000 ml Under water seal drainage system. Double chamber compact unit with 2000 ml capacity. Easy to read graduation on bottle to determine the drainage volume precisely. Clearly marked initial level to ensure the underwater seal. Separate suction port for connection with suction unit. Should have valve to prevent excess suction. Kink resistant large bore tubing to facilitate unrestricted flow. Unit to be provided with metal hangers and floor stand. Sterile, packed in peelable pouch pack.		
8.05	Chest Drainage Bottle – 1200 ml: Under water seal drainage system. Single chamber compact unit with 1200 ml capacity. Easy to read graduation on bottle to determine the drainage volume precisely. Should have valve to prevent excess suction. Clearly marked initial level to ensure the underwater seal. Specially designed positive pressure relief valve. Separate suction port for connection with suction unit. Kink resistant large bore tubing to facilitate unrestricted flow. Unit to be provided with metal hanger/ floor stand. Sterile, packed in peelable pouch pack		
8.06	Chest Drainage Bottle – 500 ml Under water seal drainage system. Single chamber compact unit with 500 ml capacity. Easy to read graduation on bottle to determine the drainage volume precisely. Clearly marked initial level to ensure the underwater seal. Separate suction port for connection with suction unit. Kink resistant large bore tubing to facilitate unrestricted flow. Should have valve to prevent excess suction. Unit to be provided with metal hanger/ floor stand. Sterile, packed in peelable pouch pack		
8.07	Vacuum Drainage Sets Device for close wound drainage under negative pressure post operatively with option to use one or two catheters. Drain catheters should be provided with radio opaque line and smooth eyes. Connecting tube should be kink resistant and should be provided with additional strength to withstand the suction. Chamber should be easy to depress so as to activate the suction of bellow unit. Should be available with different catheter. Should be sterile and individually packed. Sizes of 8, 10, 12, 14, 16, 18 FG.		
9	**Embolecomy Catheters**		
9.01	Fogarty Arterial Emblectomy Catheter Vinyl Latex Balloon tipped catheter for Arterial Emblectomy procedure. Usable length 60-80 cm, Size 2F to 8F. Recessed winding technique for balloon attachment for maintaining balloon symmetry for uniform contact with vessel wall, providing consistent clot removal		
9.02	Thru Lumen Fogarty Catheter Vinyl Latex Balloon tipped catheter for Arterial Embolectomy procedure. Usable length 80 cm. Size 2F-8F. Second lumen for guide wire compatibility facilitating crossing occluded, tortuous &stenotic arterial wall OR to be used for drug delivery & blood sampling. Stainless steel bushes under proximal & distal balloon windings for visualization under fluoroscopy. Recessed winding technique for balloon attachment for maintaining balloon symmetry for uniform contact with vessel wall, providing consistent clot removal		
10	**Cautery Accessories**		
10.01	Electro Cautery Return Plate with Cord All sizes should be available Disposable Sticky patient return split monitoring style. Pre attached cable (US FDA approved)		

10.02	Electro Cautery Return Plate without Cord All sizes should be available Disp. Sticky patient return split monitoring style. Cord should be provided separately. US FDA approved		
10.03	Cautrey Lead Disposable.• Hand control 2 button switch• Should be light weight• US FDA approved• Should be compatible with all standard brands of cautery machines. Smoke evacuation attachment compatible PTFE coated lead tip for easy cleaning of eschar Cautery tip cleaner should be supplied along with it.		
11	**Ligating Clips, Bull Dog Clamps and Aortic Punches**		
11.01	Titanium Ligating Clips "Size – Small" Wire of the clip should be ' Heart shaped for a firm grip on Vessels Clips should be of 'Chevron' shape for better closure Cartridge should have adhesive backing for better control while loading. Clips should be easy to lad with soft loading technique. Clip cartridges should be color coded for better identification. Clips quoted should be registered in India for selling. Should have all required documentations like from 10 A and Form 41 etc. Should be US FDA approved with clinic data backing for the same Reference size Liga clip LT 100		
11.02	TITANIUM LIGATING CLIP " SIZE MEDIUM Wire of the clip should be 'Heart shaped' for a firm grip on vessels Clips should be of 'Chevron' shape for better closure. Cartridge should have adhesive backing for better control while loading. Clips should be easy to load with soft loading technique. Clip cartridges should be color coded for better identification. Clips quoted should be registered in India for selling. Should have all required documentations like from 10A and form 41 etc. Should be US FDA approved with clinic data backing for the same Reference size Liga clip LT 200		
11.03	Titanium Ligating Clips"Size- Medium Large" Wire of the clip should be 'Heart shaped' for a firm grip on vessels. Clips should be of "Chevron' shape for better closure. Cartridge should have adhesive backing for better control while loading. Clips should be easy to load with soft loading technique. Clip cartridges should be color-coded for better identification. Clips quoted should be registered in India for selling. Should have all required documentation like form 10A and form 41 etc. Should be US FDA approved with clinic data backing for the same Reference size Liga clip LT 300		

11.04	Titanium Ligating Clips" Size- Large Wire of the clip should be 'Heart shaped for a firm grip on Vessels. Clips should be of 'Chevron' Shape for better closure Cartridge should have adhesive backing for better control while loading. Clips should be easy to load with soft loading technique. Clip cartridges should be color-coded for better identification. Clip quoted should be registered in India for selling. Should have all required documentation like from 10A and form 41 etc. Should be US FDA approved with clinic data backing for the same. Reference size Liga clip LT 400		
11.05	Open Applicator For Titanium Clips (Small, Medium, Medium-Large, Large) Should be available in three shapes :CURVED, ANGLED & RIGHT ANGLED Device to be compatible for titanium clips listed in the list above		
11.06	Bulldog Clamp Novaclip atraumatic spring clip,17mm straight,Blue		
11.07	Bulldog Clamp Novaclip atraumatic spring clip,12mm straight,Magenta		
11.08	Bulldog Clamp Novaclip atraumatic spring clip, 12mm angled, Yellow		
11.09	Bulldog Clamp Greyhound Adjustable spring clip, 6mm straight		
11.1	Applier Applicator for Sofia / Greyhound® Spring Clips		
11.11	Applier Applicator for NOVACLIP® spring clips		
11.12	Enclose II Proximal Anastomosis Assist Device (with Aortic Punch 3.5 mm)		
11.13	Enclose II Proximal Anastomosis Assist Device (with Aortic Punch 4.0 mm)		
11.14	Enclose II Proximal Anastomosis Assist Device (with Aortic Punch 4.5 mm)		
11.15	Aortic punch Long handle Should have sharp dual cutting edge for clean, precise removal of aortic tissue. A conical tip should be there for easy insertion by straight or button hole technique. Ten blade sizes for trimming to desired size and shape 2.5mm – 6.0mm		
11.16	Carotid Shunts Should have A Wide selection for Carotid Endarterectomy procedures. SHUNTS should be available in various sizes and lengths, including Straight, Tapered, "T", "H" Design to add versatility in use.		

11.17	Bull Dog Clamps All Sizes Disposable' bull dog' clamps for temporary occlusion of vascular structures. Atraumatic. Made with standard quality plastic. Should be ETO sterlisable for repeated use.		
11.18	Plastic Bulldog All sizes, Curved or straight, one piece design		
11.19	Vessel Scraper Should be able to scape fat away from the coronary artery. Should be light weight. Should be pre mounted on a disposable handle		
11.2	Arteriotomy Knife Should have high quality, sharp pointed blade for precise incision. Should be suitable to make incision in 1mm artery. Should be pre mounted on a disposable handle.		
11.21	Titanium clip Metal ligation clip 1.91 mm width and 2.24 closed length with 30% smaller than small clips, USFD and CE approved, heart shaped wire with inner locking grooves f chevron shape for more vessel engulfing, Transverse Grooves, Micro white Cartidge of 6 Clip		
11.22	Titanium clip Metal ligation clip with 1.98 mm width and 3.63 closed length, USFD and CE approved, heart shaped wire with inner locking grooves , chevron shape for more vessel engulfing, Transverse Grooves, Lateral, Clip-restraining springs, small yellow Cartridge of 24 Clip		
11.23	Titanium clip Metal ligation clip with 2.08 mm width and 3.63 closed length, USFD and CE approved, heart shaped wire with inner locking grooves , chevron shape for more vessel engulfing, Transverse Grooves, Lateral, Clip-restraining springs, small wide Red Cartridge of 24 Clip		
11.24	Titanium clip Metal ligation clip with 3.02 mm width and 5.89 closed length, USFD and CE approved, heart shaped wire with inner locking grooves , chevron shape for more vessel engulfing, Transverse Grooves, Lateral Clip-restraining springs, medium blue Cartridge of 24 Clip		
11.25	Applier High quality stainless steel applier, compatible only with Weck Horizon clips, opens at box lock for cleaning purpose, jaws alignment to avoid clip fallout Angle shape and Straight shape		
11.26	Surgical Brush with Iodine Povidone and Chlorohexidine Should be sponge impregnated 12% povidone-iodine in a 15ml solution of Teepol, P.E.G and water supplied with nail cleaner. Should be sponge impregnated 20% chlorohexidine-iodine in a 15ml solution of ISO PROPYL Alcohol and water supplied with nail cleaner. Should be US FDA APPROVED		

11.27	Respiratory muscle exerciser (Inspiratory muscle trainer device) Should incorporate a flow-independent, one-way valve to ensure consistent resistance, Should feature an adjustable specific pressure setting to be set at a particular time. It should work via inhalation to exercise the respiratory muscles. It should have flow independent one-way valve, which should work at constant pressure regardless of patient's airflow. It should be easy to set at adjustable pressure, which can be used/held in any position. It should be easy to clean & should have the capacity to be used with mouthpiece. It should be individually packed in poly bag.		
11.28	Reusable Gel Pack Reusable Gel packs for pain management. It should be able to be kept in freezer for cold therapy. It should be able to be microwaved (for appx. 2mintues) / kept in boiling water to provide hot fomentation. Gel packs must be of a superior quality and non-toxic filling should be safe and hold temperatures for longer duration. Should be durable, burst & puncture resistant. Should have been designed to ensure even spread of gel inside the pack. Two sizes: Large: 15 x 30cm (6" x 12") & Medium: 10 X 25 cm (4" x10").		
11.29	Sternal band for sternal closure Polyethero-ether ketone material pack of 5		
12	**Central Venous Catheters**		
12.01	Quintuple Lumen Central Venous Catheter Set- Adult Base material of catheter should be polyurethane. The surface of the catheter should be modified with non-leaching technology with polymer surface modification, on both outer surface and internal luminal surface with Antimicrobial Effect Durable over 30 Days It should have Five (5) lumen Central Venous catheter with Straight Introducer Needle, Syringe, Dilator, Infusion valve and Scalpel should be available in the kit. It should have Nitonol Guide wire one soft J tip and one soft straight tip, printed with length markings and ECG mark Size: 12 Fr, No. of lumens: 5, Length: 15cm, Lumen dia (gauge): 16/18/18/18/12, Flow (ml/min): 55/28/28/28/185 Introducer needle: V type 18G, Guidewire length 50cm, 0.89mm dia.		
12.02	Quadruple Lumen Central Venous Catheter Set- Adult Base material of catheter should be polyurethane. The surface of the catheter should be modified with non-leaching technology with polymer surface modification, on both outer surface and internal luminal surface with Antimicrobial Effect Durable over 30 Days It should have Four (4) lumen Central Venous catheter with Straight Introducer Needle, Syringe, Dilator, Infusion valve and Scalpel should be available in the kit. It should have Nitonol Guide wire one soft J tip and one soft straight tip, printed with length markings and ECG mark Size: 8 Fr, No. of lumens: 4, Length: 15cm, Lumen dia (gauge): 14/18/18/16, Flow (ml/min): 50/20/20/50 Introducer needle: V type 18G, Guidewire length 50cm, 0.89mm dia.		

12.03	Tripe lumen Central Venous catheter Set- Adult Base material of catheter should be polyurethane. The surface of the catheter should be modified with non-leaching technology with polymer surface modification, on both outer surface and internal luminal surface with Antimicrobial Effect Durable over 30 Days It should have Three (3) lumen Central Venous catheter with Straight Introducer Needle, Syringe, Dilator, Infusion valve and Scalpel should be available in the kit. It should have Nitonol Guide wire one soft J tip and one soft straight tip, printed with length markings and ECG mark Size: 7 Fr, No. of lumens: 3, Length: 15cm, Lumen dia (gauge): 16/18/18, Flow (ml/min): 50/28/28, Introducer needle: V type 18G, Guidewire length 50cm, 0.89mm dia.		
12.04	Tripe lumen Central Venous catheter Set- Pediatric Base material of catheter should be polyurethane. The surface of the catheter should be modified with non-leaching technology with polymer surface modification, on both outer surface and internal luminal surface with Antimicrobial Effect Durable over 30 Days It should have Three (3) lumen Central Venous catheter with Straight Introducer Needle, Syringe, Dilator, Infusion valve and Scalpel should be available in the kit. It should have Nitonol Guide wire one soft J tip and one soft straight tip, printed with length markings and ECG mark Size: 5 Fr, No. of lumens: 3, Length: 13cm, Lumen dia (gauge): 20/22/22, Flow (ml/min): 30/15/15, Introducer needle: S type 21G, Guidewire length 50cm, 0.46mm dia.		
13	**Kt for Rotaflow ECMO Machine**		
13.01	ECMO PLS Kit Adult Centrifugal Pump. Max flows: 0 to 10 lits/min. Channel type. Priming volume: 20 - 32 ml. Max Flows: 0.5 to 7 lits/min. Surface area: 1.8 sq. mts. Diffusion membrane Oxygenator. Hollow fiber polymethylpentene. Heat exchanger: Integrated into oxygenator. Heat exchanger membrane type: Polyurethane. Coated with Bioline (Albumin + Heparin)		
13.02	ECMO PLS Kit Adult MECC Centrifugal Pump. Max flows: 0 to 10 lits/min. Channel type. Priming volume: 20 - 32 ml. Max Flows: 0.5 to 7 lits/min. Surface area: 1.8 sq. mts. Diffusion membrane Oxygenator. Hollow fiber polymethylpentene. Heat exchanger: Integrated into oxygenator. Heat exchanger membrane type: Polyurethane. Coated with Bioline (Albumin + Heparin) Modified to incorporate extra oxygenator , centrifugal pump and ECCO2		
13.03	ECMO PLS Custom Pack Adult Anti thrombotic Tubing for ECMO machine Coated with Bioline (Albumin +Heparin)		
13.04	ECMO cannulas Venous Bioline coated Sizes 19, 21, 23, 25, 29		
13.05	ECMO cannulas Arterial Bioline coated Sizes 13, 15, 17, 19, 21		
13.06	PiCCO Catheter PiCCO technology is based on two principles namely, trans pulmonary thermodilution and pulse Global End Diastolic Function contour analysis. Stroke Volume Variation(SVV).Pulse Pressure Variation(PPV),Global Ejection Fraction(GEF),Extravascular Lung water index (ELWI)Pulmonary Vascular Permiability Index (PVPI). Systemic Vascular Resistance index(SVRI)Temperature sensor at the catheter tip for trans pulmonary thermodilution		
14	**Dressing Kit**		

14.01	Advance IV Kit for positive patient. Peripheral IV line kit consisting of 1 pc of reinforced IV dressing advance size 7cm x 8.5cm, 1 pc of 2% w/v Chlorhexidine gluconate and 70% v/v isopropyl alcohol skin prep swab, 1 pc of Latex free disposable tourniquet and 1 pc of sterile gauze swab / 1 ml Sting Barrier Film. 20 Pcs in Pkt. It should be comfortable for positive patient.		
14.02	Dressing All Sizes Polyurethane film with acrylic adhesive dressings. Adhesive, surgical site dressing.• Sterile.• Individually packed.Should be waterproof, sterile barrier to external contaminants including liquids, bacteria and viruses. Complies with ISO-10993 standards for biocompatibility. Should be HRIPT and HCIPT Test compliant. High moisture vapour transmission rate MVTR 2760 g/m2/24hrs		
14.03	CVC dressing Neonates. Polyurethane film peripheral IV dressing with acrylic adhesive oval shaped with deep notch and tails reinforced. 3 extra sterile tape strips to additionally secure the dressing. Should be waterproof, sterile barrier to external contaminants including liquids, bacteria and viruses. Complies with ISO-10993 standards for biocompatibility. Should be HRIPT and HCIPT Test compliant. High moisture vapour transmission rate MVTR 2760 g/m2/24hrs. Size: 3.8cm x 4.5cm.		
14.04	CVC dressing Pediatric. Polyurethane film peripheral IV dressing with acrylic adhesive oval shaped with deep notch and tails reinforced. 3 extra sterile tape strips to additionally secure the dressing. Should be waterproof, sterile barrier to external contaminants including liquids, bacteria and viruses. Complies with ISO-10993 standards for biocompatibility. Should be HRIPT and HCIPT Test compliant. High moisture vapour transmission rate MVTR 2760 g/m2/24hrs. Size: 5cm x 5.7cm.		
14.05	CVC Dressing Adult Polyurethane film peripheral IV dressing with acrylic adhesive oval shaped with deep notch and tails reinforced. 3 extra sterile tape strips to additionally secure the dressing. Should be waterproof, sterile barrier to external contaminants including liquids, bacteria and viruses. Complies with ISO-10993 standards for biocompatibility. Should be HRIPT and HCIPT Test compliant. High moisture vapour transmission rate MVTR 2760 g/m2/24hrs. Size: 8.5cm x 10.5cm.		
14.06	Transparent Film Dressing Frame Dressings are made with a thin, semi-permeable film that enables long wear time and full site visibility to minimize unnecessary dressing changes. High moisture-vapour transmission rate (MVTR) for breathability and adhesion throughout the surgery. Size 4 inch x 10 inch (10 cm x 25 cm)		
14.07	Iodophor Impregnated Incise Drape Adult Adhesive with Iodophor coated incise drape It Should be USFDA approved. It Should be effective against methicillin-resistant Staphylococcus aureus (MRSA) at a depth of 1000 microns. Class III medical device. Should comply to NICE guidelines on the use of incise drapes in CTVS Surgery. High moisture-vapour transmission rate (MVTR) for breathability and adhesion throughout the surgery. Size 60x45cm		

14.08	Iodophor Impregnated Incise Drape Small Adult Adhesive with Iodophor coated incise drape It Should be USFDA approved. It Should be effective against methicillin-resistant Staphylococcus aureus (MRSA) at a depth of 1000 microns. Class III medical device. Should comply to NICE guidelines on the use of incise drapes in CTVS Surgery. High moisture-vapour transmission rate (MVTR) for breathability and adhesion throughout the surgery. Size 56x45cm		
14.09	Iodophor Impregnated Antimicrobial Incise Drape Pediatric Adhesive with Iodophor coated incise drape It Should be USFDA approved. It Should be effective against methicillin-resistant Staphylococcus aureus (MRSA) at a depth of 1000 microns. Class III medical device. Should comply to NICE guidelines on the use of incise drapes in CTVS Surgery. High moisture-vapour transmission rate (MVTR) for breathability and adhesion throughout the surgery. Size 34x55cm		
14.1	Canister 500 ML 500 ml Canister with Gel Company Should be having manufacturing or import License It should be DCGI and FDA & CE Certified Should be compatible to burst abdominal vac dressing veraflow and Abthera		
14.11	Vac Dressing Granufoam NPWT Dressing kits containing Small Polyurethane foam Dressing (10 x 7.5 x 3.2cm) with drape, ruler, trac tubing and 1-ltr canister for exudate collection.It should be DCGI and FDA & CE Certified & company having manufactutring or import license		
14.12	Vac Dressing Granufoam NPWT Dressing kits containing Medium Polyurethane foam Dressing (18 x 12.5 x 3.2cm) with with drape, ruler, trac tubing and 1-ltr canister for exudate collection.It should be DCGI and FDA & CE Certified & company having manufactutring or import license		
14.13	Vac Dressing Granufoam NPWT Dressing kits containing Large Polyurethane foam Dressing (26 cm x 15 cm x 3.2cm) with drape, ruler, trac tubing and 1-ltr canister for exudate collection.It should be DCGI and FDA & CE Certified & company having manufactutring or import license		
14.14	Pressure Garment Custom made Pressure Garment below Knee stockings Pair.		
14.15	Pressure Garment Custom made Pressure Garment Full Knee stockings Pair.		
14.16	Pressure Garment Custom made Pressure Garment Fore arm		
14.17	Pressure Garment Custom made Pressure Garment Full arm		
14.18	Pressure Garment Custom made Pressure Garment Fore arm with Guantlet		
14.19	Pressure Garment Custom made Pressure Garment Full arm with guantlet		

15	**Aortic Neocuspidization Kits**		
15.01	Aortic Valve Neocuspidisation Sizer Multiuse System Sizer Number 21, 23, 25, 27, 29, 31, 33, 35 (1 each- 9 total) Plates for fixation and trimming- One Petri Dish- One 0.6% Glutaraldehyde Soaking Tray- One Sterilization Container- one		
15.02	Aortic Valve Neocuspidisation Pediatric Sizer Multi use System Sizer No. 13, 15, 17 (One each- 3 total)		
15.03	Aortic Valve Neocuspidisation Sterile Templet Single-Use, individually packaged (Pack of 10)		
15.04	Aortic Valve Neocuspidisation Sizer Common Kit Disposable, Sizers 19, 21,23, 25, 27, 29 (Total 6 sizes) Templates for molding leaflets (one Each) Pericardium Fixation Plates (one) Petri Dish- One 0.6% Glutaraldehyde Solution Tray- One Leaflet Size Mark Sheet (One)		
15.05	Aortic Valve Neocuspidisation Sizer Disposable Kit AVNeo Small Sizer 13, 15, 17 (3 sizes) One each		
15.06	Aortic Valve Neocuspidisation Sizer Disposable Kit AVNeo Large Sizer 31, 33, 35 (3 sizes) one each		
16	**Gauze Pieces**		
16.01	Gauze Pieces with American Folding Sterile, Cotton Gauze swab with pack of 5 swab, 12 Ply, Folded in such a way that no loose thread should be found, Bleached with Hydrogen Peroxide. Radio-opaque Thread must be woven in the Gauze piece Size 7.5x7.5 cm		
16.02	Gauze Pieces with American Folding Sterile, Cotton Gauze swab with pack of 5 swab, 12 Ply, Folded in such a way that no loose thread should be found, Bleached with Hydrogen Peroxide. Radio-opaque Thread must be woven in the Gauze piece Size 10x10 cm		
16.03	Gauze Pieces with American Folding Sterile, Cotton Gauze swab with pack of 5 swab, 12 Ply, Folded in such a way that no loose thread should be found, Bleached with Hydrogen Peroxide. Radio-opaque Thread must be woven in the Gauze piece Size5x5 cm		
17	**Surgical Sealants and Glues**		
17.01	Fibrin glue with synthetic aprotinin 4ml		
17.02	Bovine Gelatin Matrix with thrombin 5000IU in 10ml		
17.03	Bovine Gelatin Matrix with thrombin 2500IU in 5ml		

17.04	Bovine Collagen matrix with PEG coating Sizes: 27x27mm		
17.05	Bovine Collagen matrix with PEG coating Sizes: 45x45mm		
17.06	Bovine Collagen matrix with PEG coating Sizes: 45x90mm		
17.07	Absorbable adhesion barrier composed of CMC and Sodium hyaluronate Sizes: 13x7.5cm		
17.08	Absorbable adhesion barrier composed of CMC and Sodium hyaluronate Sizes: 13x15cm		
17.09	Surgical Adhesive GLUE BSA (Bovine Serum Albumin) & glutaraldehyde in the ratio of 4:1 surgical glue • Thrombin Free • Biodegradable and Biocompatible • Simple, ergonomic design allows for unmatched preparation and ease of use. • No reconstitution or manual mixing needed. • Room temperature storage - No warming/thawing needed. • Open and use operability • Should reach full strength in just two minutes •Should seal, adhere, or reinforce soft tissue in adults. It should be able to be used along with the usual surgical ways to seal tissues, which can include sutures, staples, and/or patches. It should be used for soft tissues of the cardiac, vascular and lung Should seal anastomoses, reinforces friable tissue, and adheres dissected tissues together used for sealing, adhering and reinforcing tissue 2ml		
17.1	Surgical Adhesive GLUE BSA (Bovine Serum Albumin) & glutaraldehyde in the ratio of 4:1 surgical glue • Thrombin Free • Biodegradable and Biocompatible • Simple, ergonomic design allows for unmatched preparation and ease of use. • No reconstitution or manual mixing needed. • Room temperature storage - No warming/thawing needed. • Open and use operability • Should reach full strength in just two minutes •Should seal, adhere, or reinforce soft tissue in adults. It should be able to be used along with the usual surgical ways to seal tissues, which can include sutures, staples, and/or patches. It should be used for soft tissues of the cardiac, vascular and lung Should seal anastomoses, reinforces friable tissue, and adheres dissected tissues together used for sealing, adhering and reinforcing tissue nm5ml		
17.11	Surgical Adhesive GLUE BSA (Bovine Serum Albumin) & glutaraldehyde in the ratio of 4:1 surgical glue • Thrombin Free • Biodegradable and Biocompatible • Simple, ergonomic design allows for unmatched preparation and ease of use. • No reconstitution or manual mixing needed. • Room temperature storage - No warming/thawing needed. • Open and use operability • Should reach full strength in just two minutes •Should seal, adhere, or reinforce soft tissue in adults. It should be able to be used along with the usual surgical ways to seal tissues, which can include sutures, staples, and/or patches. It should be used for soft tissues of the cardiac, vascular and lung Should seal anastomoses, reinforces friable tissue, and adheres dissected tissues together used for sealing, adhering and reinforcing tissue 10ml		
17.12	Powder dressing(Altrazeal) Should be non resorbable. Should be oxygen permeable Impenetrable to exogenous bacteria and toxins Should be long lasting (>3 weeks)		

Note:

a) Component wise for all sizes to be offered by the Vendor
b) Vendor /Manufacturer to provide compatible implant specific instrumentation sets for each procedure with technical manpower support within 24 hours of intimidation by SMS /E –mail from concerned Faculty.
c) Consumables, Accessories, Implantable Devices, etc on consignment basis shall be recovered on case to case basis, as per notified prevailing rates.
d) The cost of Consumables, Accessories, Implantable Devices, etc on consignment basis shall be remitted by the beneficiary to Bank of Baroda, Mawdiangdiang, (S/B Account no. 30270100005127, IFSC Code: BARB0MAWDIA, Name: NEIGRIHMS Hospital revolving Fund") by Challan or RTGS, prior to the commencement of the procedure. Receipt / e-receipt shall be verified by the Nursing Officer/ senior most technicians on duty and concerned Faculty. The challans under "NEIGRIHMS Hospital Revolving Fund" shall be available with the stores, user department and on the website of the Institute. The same can be deposited with the consent of user department /stores to Bank of Baroda, NEIGRIHMS campus branch by Challan or RTGS. Copy of the receipt/ e-receipt of financial transaction shall be retained in the respective department and copy forwarded by the department to Central Medical Stores / MRD for records.
e) Component wise price
f) To give demonstration of loading and implantation
g) To give replacement in case there is damage /breakage during loading or implantation
h) Should be made available within 5 days of order
i) Fixed cost for all size