

DR. BHUBANESWAR BOROOAH CANCER INSTITUTE
A Grant-in Aid Institute of Department of Atomic Energy, Govt. of India
And a unit of Tata Memorial Centre (Mumbai)
A. K. Azad Road, Gopinath Nagar, Guwahati -781016, Assam
Tel: 09957033199/ 09957033212, Fax: 0361-2472636
Email: bbci_info@yahoo.co.in

NIT No. BBCI-TMC/Equip-432/NIT/ 1688 / 2021

Date: 02.06.2021

Tender Documents

1. Notice for invitation of Tender
2. Instructions to the Supplier.
3. Tender Form - Application
4. Schedule of Specification of the item tendered and Compliance report on the prescribed form and on CD.
5. Conditions of the tender (General as well as Special)
6. Valid Letter of authority from the Principal to the Indian agent duly signed, executed and stamped
7. Undertaking for installation, commissioning and providing training to the nominated staff and replacement of spare parts / consumables and supply thereof during the warranty as well as maintenance contract period.
8. Disclosure of existing customers to whom supply of equipment / service made available in India.
9. Certificate that only price bid (2 forms) are attached.
10. Commercial Offer form – Price Bid terms for arriving at lowest commercial bid.
11. Commercial offer /Price bid format of BBCI, Guwahati **qty. 2 Nos.**
12. Commercial offer/Price bid format of Site Preparation charges (Turnkey) for total cost of 2 Nos. for BBCI, Guwahati.

For getting information on finishes, Layout plan on Autocad, furniture etc. and other details the vendor to contact following officials of BBCI:

- i) Sr.Medical Physicist cum RSO, BBCI (Mob : 9864071570) *(for Technical Clarifications)*
- ii) HoD, Radiation Oncology, BBCI (Mob: 9864035015) *(for Technical Clarifications)*
- iii) Sr.Administrative Officer, BBCI (Mob : 8697034302) *(for tender or administrative issues)*
- iv) Asst. Executive Engineer, BBCI (Mob : 9864079410) *(for Turn Key scope of works)*

Vendor to submit BOQ without mentioning price in the technical bid.

Scope of turnkey works is enclosed as **SCHEDULE-II (for Unit-I) & SCHEDULE-III (for Unit-II)**.

13/6/21

Senior Administrative Officer
Dr B Borooah Cancer Institute, Guwahati

Instructions to Suppliers

Suppliers are requested to take note of the following instructions while filling the Tender form for submission of Technical and Commercial offer:

1. The tenderer should furnish the full contact details such as recent phone nos., mobile nos., email id, mailing address, office address which will be in operation for a period of two years. BBCI will send all communication preferably by e-mail. Non receipt of communication will not be our responsibility. So tenderer must ensure correct and operational email ID and fax Nos. If any changes in contact details, then ensure to submit to BBCI.
2. The bidder should be having a legal entity either of individual/partners or a body corporate which may sue or may be sued in India jurisdiction.
3. The bidder should be competent enough to deal with the business of the tendered item technically and financially and should have adequate man-power having prescribed qualification (Skilled & Technical) required for managing the business
4. The bidder should have necessary license under the prevailing laws of the land and competent to undertake import and export process of goods and services.
5. The bidder should have tax payment capability by producing 3 years Assessment Clearance Certificate as and when asked for in addition to PAN and TAN No.
6. The bidder should provide Service Tax No. and License No. as may be required for manufacturing of item and/or import from foreign origin.
7. Experienced bidder should attach certificate of their past experience in support of their capability in the field of dealing with the item tendered.
8. The successor / heirs in office will be responsible for the liabilities created by the bidder in respect to the item / services offered by bidder.
9. The risk of loss in transit of the goods / services shall be the responsibility of the bidder.
10. The bidder will be solely responsible for the activities, and if found fraudulent on the part of principal to cheat or swindling the Indian public by way of advance payment or breach of terms and condition of L/C established for import of tendered item.
11. The bidder will be responsible for abiding with international laws including rules relating to package etc. applicable to the item / services offered by the bidder.
12. The bidder will be responsible for ensuring compliance with international standards before the consignment of the item is dispatched from the godown of manufacturer of foreign origin to deliver into India at the place of the user.

13. The bidder will be responsible for safe transit of the goods under proper goods insurance coverage and under standard / appropriate conditions.
14. The supplier should have a team comprising of experts of the line for erection, installation, commissioning and maintenance of the equipment/article tendered for use in the public interest.
15. The bidder should inform in advance to the Institute about the requirement for the erection, installation and commissioning indicating the additional amount of charges/expenditure by the bidder. A separate turnkey proposal shall be submitted by the supplier to modify the existing infrastructure to suit the installation of the proposed equipment. In normal course the letter of intent will include the costs of the equipment and its installation.
For getting information on finishes, Layout plan on Autocad, furniture etc. and other details the vendor to contact following officials of BBCI, Guwahati:
 - i) Sr.Medical Physicist cum RSO, BBCI (Mob : 9864071570) *(for Technical Clarifications)*
 - ii) HoD, Radiation Oncology, BBCI (Mob: 9864035015) *(for Technical Clarifications)*
 - iii) Sr.Administrative Officer, BBCI (Mob : 8697034302) *(for tender or administrative issues)*
 - iv) Asst. Executive Engineer, BBCI (Mob : 9864079410) *(for Turn Key scope of works)*

Vendor to submit BOQ without mentioning price in the technical bid.

Scope of turnkey works is enclosed as **SCHEDULE-II (for Unit-I) & SCHEDULE-III (for Unit-II)**.

16. The bidder will be responsible for all the consequences legal or administrative with regard to the persons involved in erection, installation, commissioning & maintenance for compensation in case of any damage occurred to them while execution of the work.
17. The bidder will be under obligation to intimate to institute in advance about the assistance to be extended by the institute without involvement of expenditure or at the cost of the bidder in connection with the process of erection installation and commissioning.
18. The bidder is responsible for installation and commissioning of the equipment without damaging infrastructural image/face of our building/installation site. Temporary destruction and re-construction of existing structure in connection with the site preparation and installation of the equipment will be the vendor's responsibility. Charges/expenses involved for the same shall be borne by the supplier. If any damage takes place while the work is in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work, the bidder shall make good the same at his own cost.
19. The bidder should obtain clearance from structural consultant before starting the work (wherever applicable).
20. The installation certificate will have to be issued by the concerned head of the Dept. after final AERB approval for clinical commissioning and the warranty period will commence from that date.
21. The bidder should ensure that the technical bid complete in all respect should be sealed in a separate cover and commercial/price Bid should be sealed in separate cover and both the envelopes should be kept and sealed in a suitable size cover which should be superscribed with name of the equipment, **tender No. & the EMD receipt number and date.**
22. The bidder is also advised to ensure that the Commercial offer and the Technical offer papers are signed by the authorized persons and rubber stamp should be put wherever asked for.

23. The offers should be submitted within the scheduled time limits and delay if any occurred in submission on account of any reason whatsoever shall not be condoned and such delayed offers received late shall be liable for rejection.
24. The bidder or his authorized representative will be entitled to participate in the tender opening Process to take note of the proceedings of disclosure.
25. The bidder may contact the following relating to any of the item published in Tender Notice;
 - i) Sr. Medical Physicist cum RSO, BBCI (Mob : 9864071570) *(for Technical Clarifications)*
 - ii) HoD, Radiation Oncology, BBCI (Mob: 9864035015) *(for Technical Clarifications)*
 - iii) Sr. Administrative Officer, BBCI (Mob : 8697034302) *(for tender or administrative issues)*
 - iv) Asst. Executive Engineer, BBCI (Mob : 9864079410) *(for Turn Key scope of works)*
 - v) Store, BBCI at Tel No. 6001029234 *for any other clarification*
26. Any change in policy decision made by the BBCI management before awarding the contract will be binding on the vendor.
27. **Conditional & incomplete offers will not be accepted.**
28. The Director, BBCI reserves the right of cancellation, adding, reducing or deferring the purchase without assigning any reason thereof at any stage in the processing of tenders received and no claim in this behalf from any tender in any way shall be entertained/tenable/entitled for compensation in one way or the other. In such case of cancellation the bidder will be refunded with the earnest money deposit without any payment of interest of original EMD receipt. The Director, BBCI on enquiry will disclose the reasons for rejecting a tender or non issuing a tender document.

Certified that I have read the above instructions carefully and taken note of them.

Signature

Name of authorized person for bidder with seal

**DR. B BOROOAH CANCER INSTITUTE
A.K. AZAD ROAD, GOPINATH NAGAR
GUWAHATI-781016, ASSAM**

TENDER FORM

Application

Ref : Tender No :

Date :

1 Name of the Item / Work	
2. Due Date of the submission of the tender.	
3. Receipt No. for EMD Amount and Date	
4. Name / Title of the Bidder	
5. Full Address (recent)	
	E-Mail (recent)
	Tel. No & Mobile No. (recent)
	Fax (recent)
6. Name of the person authorized to deal / undertake business for and on behalf of the bidder	
	Tel. No & Mobile No. (Recent)
	Fax (Recent)
	E-Mail (Recent)
7. Legal entity of the bidder whether Firm / Society / Company / Other entity	
a. Registration No.	b. Authority with whom registered
c. License No. granted by	for

8. Main business of the bidder whether Manufacturer, Business Distributor, Wholesale Dealer, Retail trader or Service Agent	
9. Authorized Area of operation in India	
10. Name of the Principal Organization / Company for and on behalf working in India	
11. Origin of the Principal Organization / Company	
12. Address of the Principal Organization / Company	
	Tel. No. & Mobile No.
	Fax
13. Name & Address of the Bankers of the bidders.	
14. Authority / Delegation / Licence No. & Date granted by the principal to the representative bidder	
15. PAN No.	
TAN No.	
16. Registration No. granted by Central Excise Commissioner for Service tax	
17. GST No.	
18. Central Excise License No.	

19. Import / Export Code No.	
License No. for import	
20. No. of manpower employed by the bidder	a. Scientific b. Technical
	c. Administrative d. Finance
21. Support facility equipment No.	
22. Experience of the bidder in dealing with the tendered item. Tenderer must have similar job done in the line of business / experience with 3 to 5 years will be considered	
23. Whether supply of any item / service to TMC in past; if yes indicate the Purchase Order No. & Date	
24. Any other relevant information for submission	

Certified that the above information is correct & true to the best of my knowledge and belief. Nothing has been concealed and fabricated and in case any information is found incorrect. I, the under signatory will be personally responsible.

Signature

Name of authorized person for bidder with seal

Date:

TECHNICAL COMPLIANCE FORMAT

Serial # 4

Technical Specification for supply, installation & commissioning of Advance Digital LINEAR ACCELERATOR”

Sr. No.	BBCI tender specification	Technical offer of the bidder	compliance	
			Yes/ No	Remarks

**DR. B BOROOAH CANCER INSTITUTE
A.K. AZAD ROAD, GOPINATH NAGAR
GUWAHATI- 781016**

GENERAL & SPECIAL CONDITIONS OF THE TENDER

1. Tender will be submitted or dropped in the drop box available in the purchase department in Two Bids in sealed cover super scribed with Tender No. **“BBCI-TMC/Equip-432/NIT/1688/ 2021 dtd.02.06.2021”** for **“Advanced Digital Linear Accelerator”**. The tender should contain the technical bid and the commercial bid which would be received **on or before 03.08.2021** in the **Administrative Department**, BBCI, at Guwahati-781016 **up to 2:00 PM. Technical Bids will be opened on 03.08.2021 at 3:00 PM** in the presence of the attending bidders. Time and date of opening of the Price Bid will be intimated only to the bidders who are technically qualified after evaluation of the Technical Bid.

2. **Tender Document Fee**

The tender document may be obtained during the office hours from the office of the Director, Dr B Borooah Cancer Institute on payment of **Rs.700/-** plus applicable GST (non-refundable) **either in cash or by A/c payee Demand Draft or banker’s cheque** drawn in favour of **‘Dr. B. Borooah Cancer Institute, Guwahati-16’**. **Photocopy of the document in support of the payment of the tender fee is to be submitted along with the Part-I of the tender invariably.**

The detail tender documents can also be downloaded from the website of the Institute **<http://www.bbcionline.org/tenders.php>**. The tender document downloaded from the website will be accepted only on furnishing of non-refundable tender fee in the form of crossed Demand Draft / Banker’s Cheque of **Rs.700/-** plus applicable GST separately drawn on any nationalized bank in favour of ‘Dr. B. Borooah Cancer Institute, Guwahati.’ Tender document charges for the tender forms downloaded from our website to be paid by DD in favour of Dr Bhubaneswar Borooah Cancer Institute **and should be enclosed in the Part-I Technical Bid of the tender documents.** The Tender Document Fee DD number and date should be mentioned on the envelope.

3. **Earnest Money Deposit :**

An Earnest Money Deposit of **Rs.10,00,000/-** (Rupees ten lakhs only) **is to be paid by DD** in favour of Dr Bhubaneswar Borooah Cancer Institute **and should be enclosed in the Part-I Technical Bid of the tender documents.** The EMD DD number and date should be mentioned on the envelope.

4. **The bids received without paying the tender document charges and EMD charges shall not be considered.**

5. The technically suitable offers shall be shortlisted and the commercial bid will be opened of such technically successful bidders only.

6. The concept of lowest commercial offer will be accepted subject to technical suitability.

7. The successful bidder will have to enter into an Agreement for the contract of supply, installation, commissioning and maintenance of the equipment including the supply and availability of the spare parts.

8. Successful bidder will be issued with a Letter of Intent if required which will be followed by a Purchase Order.
9. The bidder will also be under obligation to submit the technical specifications & Compliance of the specified item not only in the form of hard copy but also on CD detailing on the left side components and their technical specifications in the prescribed format.
10. A complete product catalogue, literature/publication/user information paper should be submitted in the Technical Bid along with the design, drawing etc. including the weight, volume and size of the equipment.
11. The bidder may separately quote and submit for other variants including those which are work in progress and likely to be marketed in the next couple of years, if they satisfy the requirement for the specified item / equipment.
12. The bidder will also have to certify that the equipment proposed to be supplied is not obsolete and that no new variants are likely to be marketed in the next 2 years. Vendor is responsible to maintain the equipment till the end of its life.
13. The bidder will have to submit the certificate of Disclosure stating that the Model has been supplied to the users with their details i.e. Name, Address and Tel. No. & E-Mail.
14. The bidder will be under obligation to provide training free of charge to the person/s deputed by the hospital for learning of operations and techniques and maintenance thereof in India or abroad as the case may be. The drawing schedule has to be specified in the technical bid.
15. Compliance to National standards of the country of origin of the manufacturer should be certified by the bidder.
16. Literature/Certificate containing the information of the life of the equipment should also be submitted. This criterion is very important and to be noted as a special condition for the tender acceptance.
17. The replacement of defective parts during the warranty period shall be **sole** responsibility of the supplier and the Indian agent will be solely responsible for replacement at their cost including the down time liquidation damage, **customs duty, octroi if applicable** etc. be noted as a special condition of the tender.
18. Replacement of 10% of spare parts in a period of **first year** will amount to the supply of defective equipment and the Principal company/ Indian agent shall be under obligation to replace the entire equipment at their cost.
19. The Indian agent / supplier shall be under obligation to ensure that the delivery of the item / equipment shall be treated as completed only on installation of the equipment on site/place decided by the hospital and commissioning is done at the entire satisfaction of the authorized officer / user scientist. In case the equipment or the item is to be shifted from the place on which it was off-loaded to the site of installation & commissioning, it shall be the responsibility of the agency and no cost in this regard shall be payable by the hospital.

20. The principal supplier or their Indian agent shall be responsible for making the consumable / spares available throughout the life of the equipment at the prescribed discounted rate as may be mutually agreed by the user and denial or non-supply of required consumable / spares shall render the Indian agent liable for liquidated damages under the contract.
21. Technical strength of the bidder for providing supply, installation and commissioning and maintenance thereafter will be the one of the most important criteria for technical suitability.
22. The bidder has been authorized to inspect the site for installation of the equipment without payment of visiting fees to the Institute before submitting its tender, if found necessary, with prior permission.
23. The compliance report shall be properly filled up and duly signed.
24. Each and every page of the technical offer as well as the commercial offer to be submitted separately should be signed and sealed. No overwriting is permissible and such document having correction is liable to be rejected. However, cutting will be permissible on attestation by the authorized person.
25. If any dispute arises out of the transaction in any manner that shall be resolved by the sole arbitration which shall be appointed by the Director, BBCI. Director-BBCI shall be the final and sole arbitrator who shall undertake the exercise of arbitration to resolve the dispute and such award as may be given by Director-BBCI shall be final and binding on both the parties.
26. The Indian supplier on behalf of its Principal supplier / manufacturer of foreign origin shall be under obligation to inform the user from time to time about the innovations / changes made by the manufacturing company in the technique or the program of software to be used in the equipment by way of advancement and will be free to suggest for adoption of the changes at the lowest expenditure as may be acceptable to the users.
27. The damages if occurred to the item / equipment during transit up to its installation and commissioning shall be taken care by the supplier / Indian agent either himself or through second party obligation by way of goods insurance to be arranged with a reputed goods insurance company preferably Indian company. In case an insurance policy taken from insurance company of foreign origin that shall be the responsibility of the supplier / agent and no obligation will be there on the part of the purchaser and every step whatever is required to be taken shall be initiated and taken by the agent. The vendor has to arrange **Insurance till installation and commissioning of the equipment.**
28. **Forfeiture of the EMD:** If for any reason whatsoever any bidder withdraws his bid at any time prior to expiry of the validity period or after issue of the Letter of intent /work Order, Purchase order, refuses to execute the work order/ Purchase order or furnish the Performance Guarantee/Security Deposit for faithful Performance of the contract within the stipulated time, the amount of EMD shall be forfeited to BBCI.

29. Those vendors who have paid Security deposit / Performance bank guarantee must be taken back by the vendor within 3 months of expiry period. If not collected within 3 months the expired Bank Guarantee shall be destroyed.

Refund of E.M.D.

- a) EMD of the successful tenderer shall be refunded after the receipt of installation certificate and 10% Performance Bank Guarantee.
 - b) EMD furnished by all unsuccessful tenderers will be returned as early as possible after the expiry date of validity of their offer but not later than 30 days of award of the contract.
30. If the tenderer is not capable of quoting particular item Tenderer should clearly mention in the Technical bid in the compliance report. For the cases where the compliance report the tenderer not mentioned anything then management shall presume that it is inclusive of the cost quoted by the tenderer.
 31. Purchase order will be issued for first & second Linear Accelerator after obtaining AERB approval of the layout plan.

PART-I
TECHNICAL BID

1. Tenderer name, address of headquarters, telephone number, fax number, and website
2. Tenderer contact name and title, address, telephone number, fax number, e-mail address and resume/CV
3. List of tenderer senior management and directors with brief resumes
4. Does the tenderer qualify as a diverse business? If yes, include a copy of relevant certification.
5. How many years has the firm, in its present form, been in business?
6. Describe tenderer's form of corporate organization and corporate governance with supporting documents. List and briefly describe lines of business.
7. (i) How many employees does the firm employ locally –
(ii) How many nationally –
(iii) How many internationally –
8. Describe authorization and signature process within the tenderer for any agreement that might result from this RFP. Identify the personnel authorized to sign contracts for the firm.
9. Provide audited financial statements for the past three (3) years and most current interim statements with any recommendations made by external auditors and discussion of any significant subsequent events or changes since the interim statement.
10. The bid should include the following:
 - Copy of PAN No.,
 - Copy of GST No.,
 - Income Tax Returns for last three years.
 - Latest Letter of Authority from the manufacturer if the supplier is dealer or agent of the firm.
 - Vendor Capability Proforma duly filled in.
 - **Declaration from foreign agency whether they have a Permanent Establishment or dependent agent in India or not.**
 - ***TRC (Tax Residential Certificate) of foreign party (Principals)***
 - ***PAN No. of the foreign agency***
 - ***Certificate of country of origin of the goods and services offered, to be confirmed by a certificate of origin at the time of shipment.***
- 11. Technical compliance in the enclosed format at Serial No#4**
12. Please identify and describe any significant outstanding or settled legal or non compliance matters for the previous 5 (five) years, including any penalties levied on the tenderer for defaults of any kind, by courts of law/ regulatory authorities. This is restricted to business involving the tenderer equipment only.
13. Has the company been cited for or does the company have business activities that contribute to the violation of human rights? If yes, describe in detail.

14. References

Provide a minimum of four references (preferably hospitals) including client name, address, contact person, phone, contract period, and scope of services provided.

15. Terms and financing

Quoted prices must be valid for at least 180 days (extendable by 3 months at the request of purchaser) from the date the RFP responses are due.

16. Quality

Service and quality are extremely important to the success of BBCI. Describe how the tenderer will monitor the service and quality of products and services provided.

17. **Network (if any)** – The requirement of network facility is different for every equipment. Please attach the separate annexure as per the requirement of installation site and vendors to visit the site before submission of tender documents. We need open network facility that has free talk with all available machines.

18. In case the offer is submitted by an Indian Agent on behalf of foreign principal, the following documents should be submitted failing which their offer is liable to be ignored:

- a) Photocopy of agency agreement between foreign principals and Indian agent showing the percentage or quantum of agency commission and a letter of authority authorizing them to submit tender on their behalf.
- b) The type and nature of after sales service to be rendered by the Indian Agent.

19. The bidders having their warehouses/service center and facilitation center nearby will be desirable and advantageous for attending the calls to reduce the down-time.

20. At the time of opening of Part –I Technical Bid if a tenderer has included price or any other charges in Part –I or has failed to submit Part-II separately in a sealed envelope, such tenders will be disqualified. The tender opening officer shall make a clear mention regarding the above aspects on the front page of the tender.

PART - II

COMMERCIAL BID

1. In the price bid tenderers should ensure to quote the prices in the prescribed form. **If a firm quotes "Nil" charges / consideration, the bid shall be treated as unresponsive and will not be considered. (as per Rule 160 (xiv) of General Financial Rules 2005 vide DAE letter No. 1/5(3)/2012-Budget/ 2483 dated February 20, 2014).**
2. The detailed price of the equipment should be quoted in Part II of the tender in separate envelope indicating:
 - a) Ex-works cost of the entire equipment with 2 years of warranty and **essential** accessories and optional accessories separately.
 - b) F.O.B. cost (including handling, inland freight & documentation charges) of the entire equipment and **essential** accessories and optional accessories separately.
 - c) The freight & insurance charges (up to installation, commissioning and testing).
 - d) Total amount of the equipment on **Dr B Borooah Cancer Institute, Guwahati**
 - e) The delivery period of the equipment and the time required for installation / commissioning of the equipment must be mentioned.
 - f) The offer would be **Dr B Borooah Cancer Institute, Guwahati** as per the International Commercial Terms, applicable at present. All essential spares, consumables, labour and any other incidental costs required for delivering the equipment up to the site of installation and for the startup of the equipment must be included in the commercial bid.
 - g) In case the offer is in INR – terms of supply shall be FOR Destination including applicable taxes duties, government levies (taxes and duties shall be indicated separately).
 - h) It shall be responsibility of the tenderer to arrange for customs clearance and delivery of equipment at his own cost, risk and consequences. However, at the time of clearance, online custom duty will be paid by BBCI. The vendor has to confirm the custom duty amount in time.
3. **Turnkey** – Separately quote for a turnkey completion of the existing site approved by AERB including AHU, firefighting infrastructure. Any repair / damages which may occur due to faulty turnkey work shall be to the account of the successful tenderer.
For getting information on finishes, Layout plan on Autocad, furniture etc. and other details the vendor to contact following officials of BBCI, Guwahati :
 - i) Sr.Medical Physicist cum RSO, BBCI (Mob : 9864071570)
 - ii) Asst. Executive Engineer, BBCI (Mob : 9864079410)
 - iii) Sr.Administrative Officer, BBCI (Mob : 8697034302)Vendor to submit BOQ without mentioning price in the technical bid.
Scope of turnkey works is enclosed as **SCHEDULE-II (for Unit-I) & SCHEDULE-III (for Unit-II)**.
4. **Validity :** The tender shall be valid for a period of **180 days** from the date of the opening of the technical bid. Validity of the tender shall be extended if required.
5. **Mode of Payment :**
 - a) **Terms of payment for offer in foreign currency:** Unconfirmed irrevocable letter of credit for 100% payment. All bank charges within India to buyer's account and Outside India it will be on the sellers account. 80% payment will be released through Letter of Credit on receipt of all required original documents. Balance 20% payment will be released on i) successful installation and commissioning ii) acceptance and certification by the user dept. and iii) submission of 10% performance bank guarantee in INR for warranty period plus three months from date of installation.

b) Terms of payment for offer in INR : 80% payment against delivery at purchase's site and preliminary inspection and balance 20% after commissioning and final acceptance and submission of 10% performance bank guarantee in INR for warranty period plus three months from date of installation.

6. Warranty : 2 YEARS WARRANTY AND 8 YEARS CMC

Warranty period and terms of warranty including accessories, details of preventive / periodic maintenance, frequency and task description must be specified. Vendors are required to provide 02 years warranty **plus quote separately for 8 years CMC** after the warranty period. CMC charges shall be quoted exclusive of taxes (if any). Tenders not confirming to this clause are liable to be rejected. CMC shall cover the entire scope of supply without any exclusions.

7. Uptime Guarantee:

The supplier and/or its Indian agent will be required to give the guarantee towards the performance of the equipment during the warranty period and in case of comprehensive annual maintenance contract period for maintaining the equipment in good working condition for a period of at least 300 days out of a period of 365 days a year (i.e. 95% uptime) 24X7. The ten hours non-functioning of the equipment or any part thereof will be considered as one day down time. Total 3000 hours in a year will be considered as Uptime guarantee. Working time is 8.00 a.m. to 6.00 p.m. on week days and 8.00 a.m. to 4.00 p.m. for Saturdays. The equipment shall be fully functional as part of the uptime and if it is partly functional it shall be considered as downtime and deduction shall be made on Pro-rata basis i.e. if the equipment is 70% functional 30% downtime shall be applicable. The decision of the TMC management or its representative in determining the % of the downtime shall be final and binding. Essential period to shut down the installation entirely or partially shall also be included in the down time while calculating the 95% guaranteed uptime i.e. all features as per specifications in purchase order should be functional for uptime. The supplier / agent shall be required to pay a penalty **Rs.3,000/-** per hour per machine excluding 150 hours permissible downtime. This rate shall increase commensurate with the rate increase of CMC. If the number of days downtime in each period of 365 days is more than the downtime permissible (which is to be calculated as defined above), the delay for not bringing the equipment in functioning order in any way, directly or even partially will be attributable to the firm. The bidder should provide the details of preventive maintenance to be undertaken through the year. Preventive maintenance to be done on holidays only. Preventive maintenance and breakdown will not be clubbed. The bills should be raised quarterly and will be paid at the end of every quarter only.

8. Spares parts (Applicable for AMC):

The supplier / Indian agent will be under obligation to provide the price list of all the spare parts required to be replaced after warranty period and should certify that the rates indicated in the price list shall be applicable for the period of **8 years** after the warranty period.

9. Consumables :

- a) Consumables as may be required for installation, commissioning, start up and trial runs shall be supplied by the supplier with the equipment without any extra charges.
- b) The price list of such consumables which shall be required for running of the equipment thereafter shall be submitted with validity for the period of 2 years warranty and **8 years** thereafter.
- c) Consumables not covered under CMC shall be listed separately and prices either in INR or foreign currency shall be indicated during the period of CMC.

10. **Liquidated damages** : In event of failure to supply within the stipulated delivery period, the purchaser reserves the right to levy liquidated damages @ 2% per month or part thereof for the delayed supplies.
11. The amount / rate of taxes as may be levied should be indicated separately in the commercial offer.
12. The term “without charges or free of cost” will imply as providing goods or services to the purchaser at no extra charges/cost including tax liability thereon and that the Octroi exemption will not be provided.

Special General terms and conditions :

Please refer page **serial # 10** regarding conditions to identify the lowest tenderer.

1. **Network (if any)** – The requirement of network facility is different for every equipment. Please attach the separate annexure as per the requirement of installation site and vendors to visit the site before submission of tender documents. We need open network facility that has free talk with all available machines.
2. **Turnkey** – Separately quote for a turnkey completion of the existing site approved by AERB including AHU, firefighting infrastructure. Turnkey charges will not be considered for identifying the lowest bidder. The detailed scope of turnkey work for “**Advance Digital LINEAR ACCELERATOR**” will be discussed after finalizing equipment with the vendor.
3. **Please quote all the models including state of the art. Bidder not quoting their high end model shall be rejected.**
4. **Pre Bid meeting will be held on 16.06.2021 (Wednesday) at 10:00 AM through video conferencing considering the present situation due to COVID-19 pandemic. The authorized representatives of the bidder may participate in the Pre-Bid meeting either from TMH, Mumbai or BBCI, Guwahati.**
5. Queries from the vendor should reach to the Purchase Dept. before two days from date of pre bid meeting. Please send your queries to the following e-mail address:
 - **bbcinfo@yahoo.co.in**
6. BBCI reserves the right to purchase all OR any of the quantities tendered.
7. Delivery site:
1) DR. BHUBANESWAR BOROOAH CANCER INSTITUTE, A. K. AZAD ROAD, GOPINATH NAGAR, GUWAHATI-781016 – 2 Nos.
8. Conditional & incomplete offers will not be accepted.
9. Offers with conditions / ambiguity shall be liable to be rejected.
10. Rules and regulations of BBCI will be deemed to have been incorporated in this tender and shall form part of the contract.
11. Tenderers having a services centre locally will be preferred.

12. The tenderer /contractor/company should furnish along with tender an affidavit duly notarized on Non judicial stamp paper of Rs.100/- affirming as under:
13. That the firm or any of its Directors/ partner / proprietor / Agent, is never blacklisted/penalized/defaulted/disqualified by any government institution/ Hospital or Court of law or any Regulatory Authority within last 5 years or that no such action is pending or in process within last 5 years. The price quoted is the lowest for the configuration quoted.

Registered company shall furnish CIN No. as well as DINs of Director, and shall update the information from time to time. Director's office and permanent residential address shall be furnished.

N.B. The affidavit must be as per the details mentioned above. Any change in the text matter is not accepted and BCCI reserves the right to reject such offers.

14. Tenders / offers with conditions like discount / rebate / waiving off some charges etc. Subject to some condition will not be considered.
15. Vendor to submit "BLANK PRICE BID FORMAT (without mentioning price/value) in the technical bid.
- 16. At the time of opening of Part –I if a tenderer has included price or any other charges in Part –I or has failed to submit hardcopy / print copy of Part- I (Technical Bid) in a sealed envelope, such tenders are liable to be disqualified. The tender opening officer shall make a clear mention regarding the above aspects on the front page of the tender.**

Certified that I have gone through the above stated general as well as special terms and conditions of the tender and taken note of them for compliance in toto.

Signature

Date :

Name of authorized person for bidder with seal

To be printed & executed on Letter head of the principal supplier/manufacturer of the equipment of foreign origin

LETTER OF AUTHORIZATION

I, Mr. _____ Chairman / Managing Director / President / Vice-President / General Manager hereby certify and declare that M/s. _____ having its registered office at _____ is an organization dealing with the manufacturing and assembling of the equipment _____ which is meant for scientific use for research/diagnostic/treatment and having business operations in India.

It is also certified that our representation and operations in India is done & executed by M/s. _____ which is a organization constituted under the provisions of _____ and having their registered office at _____ who has been fully authorized by us to act as our representative in whole or part of India to deal, undertake, participate in the business proceedings, quote rate for supply, installation, testing and commissioning, after sales services of our products / equipment's and their spare parts together with consumables and procure purchase orders to pass to us on such rates and conditions as may be negotiated by them for and on behalf of us.

The Indian Agent M/s. _____ has also been authorized to provide after sales services, supply spare parts and consumables on the authorized rates as indicated in the price list of the company for the period of the currency of warranty and Comprehensive annual maintenance contract thereafter for a period of 8 years. They have also been authorized to negotiate the rate for allowing special discount to the hospital.

Signature

Name of authorized person for bidder with seal

Date :

To be printed & executed on Letter head of the supplier company / Indian agent

UNDERTAKING

To,

The Director,

1. I, the under signatory hereby undertake to supply, install and erect, testing & commission and maintenance of the equipment namely _____ for and on behalf of bidder on agreed terms and conditions as have been stipulated and mentioned in the Purchase order on acceptance of my offer for the above equipment / item.
2. I, the undersigned also hereby undertake to assure and promise to provide the spare parts within reasonable time for operation of the aforesaid equipment without any charge during the warranty period of 2 years and thereafter I will make available all the spare parts and consumables on the agreed price during the period of annual maintenance contract at least for the period of 8 years from the date of completion of the warranty period at the negotiated rate allowing discount on the price list of the company, authenticated copy of which will be submitted for your record.
3. Further also, I undertake to assure and promise to provide technical operational training to the scientific and technical staff members of the user Institute without any charge after commissioning of the equipment and condition thereof. In case training experts are not available in India the necessary operational training not exceeding to one week shall be arranged by the manufacturing company of the equipment in the manufacturing / assembling unit of the equipment in the foreign country of origin.

Signature

Name of authorized person for bidder with seal

Date :

To be printed & executed on Letter head of the supplier company / Indian agent

Schedule of disclosure of existing customers to whom supply of similar equipment / service made available in India

CERTIFICATE

This is to certify that M/s. _____ having manufacturing factory / unit at _____ and having registered office at _____ is a company registered and incorporated company under the Law of the land of _____, is our the principal company manufacturing the equipment namely _____. The said equipment has been supplied, installed and successfully commissioned with the users as are listed with their addresses in annexure hereto.

This is also to certify that we have not supplied above named equipment to any of the users in India at the cost less than the price quoted by us to Director, BBCI, within the period of last six months.

Signature

Name of authorized person for bidder with seal

Date :

To be printed & executed on Letter head of the supplier company / Indian agent

CERTIFICATE

This is to certify that the price bid contains only Form No. **Serial # 11 & Serial # 12**. And there are no other values and conditions attached.

Signature

Name of authorized person for bidder with seal

Date :

COMMERCIAL OFFER / PRICE BID (terms for arriving at Lowest commercial bid)

Name of the equipment : ADVANCE DIGITAL LINEAR ACCELERATOR

Total cost of equipment for a period of Ten years.

10.1 Following points shall be considered for arriving at the lowest quoted bidder amongst the technically acceptable offers. :

10.1.2 The total cost of equipment shall be calculated as under:

The total cost of equipment for comparative purpose shall be calculated as under:

- For foreign currency quote CIF cost of the equipment with standard & essential accessories CIF value converted in INR (conversion factor of the day when the financial bids are opened will be considered) + applicable taxes, duties, govt. levies as imposed from time to time + clearance charges + 2 years warranty + 8 years CMC – Buyback offer (if any).
- For INR quote FOR Destination basis which shall be inclusive of applicable taxes, duties, govt. levies etc. without octroi will be considered + 2 years warranty + 8 years CMC – Buyback offer (if any).
- **Total cost shall mean and include all taxes, duties and levies by Government for total qty. 2 Nos.**

10.1.3 If the CMC values are not mentioned, then offer will be disqualified.

10.1.4 Tenderers are strictly advised to submit price bid in the enclosed prescribed format.

10.1.5 Prices / discounts offered by the vendors must be unconditional and without ambiguity.

10.1.6 Special General terms and conditions:

10.1.7 Please quote all the models including state of the art. Bidder not quoting their high end model is liable to be rejected.

10.1.8 BBCI reserves the right to purchase all OR any of the quantities tendered.

10.1.9 Conditional & incomplete offers will not be accepted.

10.1.10 Rules and regulations of BBCI will be the part of contract.

COMMERCIAL OFFER / PRICE BID FORMAT – PART II

i) Name of the equipment : ADVANCE DIGITAL LINEAR ACCELERATOR Qty. 2 Nos. for BBCI, Guwahati

Name of the item/equipment/ service (complete in all respect i.e. Basic equipment with necessary accessories and consumables) _____

Sr. No.	Particulars	Quantity	Unit Rate (indicate currency clearly)	Amount (indicate currency clearly)
1.	Ex-works cost of the complete item with 2 year of warranty (including training as per tender)	2 Nos.		
2(a)	Discount offered on the price of the basic equipment			
2(b)	Buy back offer for Siemens's PRIMUS LA (one machine) including the cost of decommissioning & dismantling, and removing the parts to a designated place as directed by the user department. Buy back does not include UPS of the unit (<i>third party item</i>), it means only for buyback of the LA machine.			
3.	Add : Inland handling, Packing and forwarding charges upto the Port of shipment/boarding			
4.	Total FOB cost BBCI			
5.	Agency Commission charges to be paid to Indian agent (if any to be paid in Indian rupees)			
6.	Freight & Insurance charges etc. from the country of Origin to the port in India			
7.	Total CIF Price, BBCI			
8	INR price for indigenous supply (if any)			
9.	Comprehensive Maintenance charges (CMC) for the period of 8 years payable periodically after warranty (<i>exclusive of taxes</i>) (No exclusion). CMC charges should be quoted in INR only. <i>Net of discounts</i>			
10	Total cost of equipment for 10 years (excluding customs duty) for arriving at L1 (i.e. Equipment cost with 2 year warranty and 8 years CMC charges)			

11	Customs duty and other statutory levies to be added by the Purchaser (not to be filled by the tenderer)			
12	Shifting charges from the place of off-loading i.e. airport / seaport in India to the place of installation (e.g. clearing charges, insurance charges in India etc.) to be added by the Purchaser (not to be filled by the tenderer)			
13	Total cost of equipment (Sl.No.10 + 11 + 12) to be taken for arriving at the final price (after converting the currency to INR)			
14	Site preparation charges (in INR) of ADVANCE DIGITAL LINEAR ACCELERATOR (Location) as per Turnkey BOQ enclosed. (will not be considered for arriving at lowest tender)			

Signature

Name of authorized person for bidder with seal

COMMERCIAL OFFER / PRICE BID FORMAT – PART II

SITE PREPARATION CHARGES (TURNKEY OFFER) OF ADVANCE DIGITAL LINEAR ACCELERATOR. QTY. 2 nos. for BBCI, Guwahati as per Turnkey BOQ enclosed. (Site preparation charges (Turnkey Offer) will not be considered for arriving at lowest tender)

Sr. No.	Particulars	Qty.	Unit Rate in INR only	Total Amount in INR
1.	Ex-works cost of the entire bill of material with 2 year of warranty	2 Nos.		
2.	Discount offered on the price of the basic equipment			
3.	Add : Inland handling, Packing and forwarding charges upto the Port of shipment/boarding			
4.	Total FOB cost BBCI			
5.	Agency Commission charges to be paid to Indian agent (if any to be paid in Indian rupees)			
6.	Freight & Insurance, loading, unloading charges etc. from the manufacturing plant till the installation site.			
7.	Total FOR Destination (installation site at BBCI, Guwahati)			

Signature

Name of authorized person for bidder with seal

Schedule – I (A)

Technical Specification for supply, installation & commissioning of Linear Accelerator on buy back basis (UNIT – I)

Please quote the model which includes latest state of the art equipment and meets the basic minimum specifications. The quoted model should be latest introduced with end of life not before 12 years from the date of installation at TMC (BBCI).		
	NAME OF THE VENDOR	
		Model :
		Make :
		Year of introduction :
		Year of Up-gradation :
		Expected End of support (H/w & S/w) :
		Work in progress & Future models :
A	ESSENTIAL PARAMETERS	
	Parameters	Specifications
1	Photon Energy	FF- 6MV,10MV,15 MV
		FFF – 6x & 10x
	Electron Energy	6, 9, 12, 15 & 18 MeV
2	RF Source	Magnetron / Klystron. Please specify
3	Waveguide Type	Standing / Travelling wave Please specify
4	Electron Gun	Sealed / Unsealed
5	Treatment Modes	Normal - TSD / TAD
		Rotation - CW / CCW
		ARC - CW / CCW
		Dose rate - MU/degree
6	Dose-Rate	Photons: 100 – 500 MU/min in steps or higher dose rates. Please specify
		FFF: Minimum 1000 MU/min or higher, specify for individual photon energy
		Electrons: Minimum 600 MU/ minutes at the isocentre or higher. 100 – 500 MU/min in steps or higher dose rates. Please specify Please specify including in TSET
7	Field Size (Photons)	40cm x 40 cm (or more) Please specify
		Minimum: 0.5cm x 0.5 cm Please specify.
		Penumbra: ≤10 mm for 10 x 10 cm ² field at 10 cm depth
8	Field Size (Electrons)	4-5 applicators, please specify
		A method to obtain irregular field shapes should be provided.
9	Beam Flatness	± 3% as defined in IEC 60976 / 60977 for entire range of field sizes.
		Stability of flatness with gantry rotation, please specify
10	Focal Spot size	≤3 mm dia. At the X-ray target
11	Beam Symmetry	±2 % for 10x10 cm ² and above
12	Beam Matching	Beam Matching for all energies
13	Gantry	Rotation ±180° (360° total)
		Read out – Digital and Mechanical
		Accuracy dig-readout 0.5°
		Control – Hand pendent and control-console

		Target – Axis Distance : 100 ± 0.2 cm
		ODI Range : 75 cm to 150 cm
		ODI Accuracy ± 0.1 cm
		Gantry Rotation Isocentre within 2 mm dia. Sphere. Please specify.
14	Collimator	Rotation: ± 95° about mid position
		Control: Hand pendent and control- console
		Readout accuracy : ± 0.5°
		Collimator Rotation Isocentre within 2 mm dia. Sphere
		Collimator Motorized wedges/ Dynamic Wedge
15	Asymmetric Collimators	X & Y both Asymmetrical
		Travel ranges & over travel range. Please specify
16	Photon Arc Therapy	Bi-directional arc therapy should be included with Automatic calculation of Dose per Degree based on the Dose Rate selected and the Arc angle set.
		Rotational (Arc based) IMRT
17	Multi-leaf collimator (MLC)	No. of Leaves (120 leaves and above)
		Independent drives for each leaf
		Maximum field size 40cm x40 cm
		Please specify MLC motor specifications and endurance test report
		Capable of performing Conformal therapy (IMRT, Rotational IMRT, SRT,SBRT) procedures.
		Interface between MLC & latest R&V System should be provided.
		Work Station HW/SW – Specify details
		In-Room flat monitor: please specify numbers and type
		Integration (full Networking) with Planning System and Simulator / CT Simulators / PET CT / MRI etc.
		IGRT delivery please specify
		Specify following parameters:
		Max. leaf retracting position
		Over travel (jaws)
		Over center travel of MLC leaves (>10 cm) for IMRT treatments
		Max. field length
		Leaf width, height & material.
		Coincidence of light & x-ray field
		Penumbra
		Transmission
		Interleaf leakage
		Leaf position accuracy
		Max. carriage speed
		Max. leaf speed
		Positional accuracy of the leaves during treatment.
		Inter-digitation of leaves if available
18	Auto Field Sequencing	AFS should be available
19	Portal Imaging :	Should fully integrate with Accelerator
		Should be able to take images at any Gantry angles with variable X-Y-Z movements,
		Flat panel (aSi) Imaging area should be 40cm x 40 cm with all available energies, with Pixel Matrix of min 1024 X 1024 or more

		Integrated Portal dosimetry or exit dosimetry feature capable for FFF highest dose rate available, please specify details for all available energies
20	IGRT System	Retractable arms
		X- ray tube: radiography, fluoroscopy, CBCT
		Flat panel (aSi) detectors of min 40 X 40 cm or more, with Pixel Matrix of min 1024 X 1024 or more
		CBCT reconstruction, registration (MV-MV, KV-KV, KV-MV), PI specify the analytical tools
		Fully integrated with latest R & V system and TPS, pl specify the report generation tools
		3D image data should be reconstructed from series of 2D projection images acquired as the linear accelerator gantry is rotated, please specify all acquisition & review modes
		Adaptive radiotherapy: Deformable Image Registration software (DIR) and Deformable Dose Accumulation & Adaptation.
		QA / Phantoms tools for IGRT, including Deformable phantom.
21	Treatment Couch (6D Robotic)	6D robotic couch made of full carbon fibre top with Indexing capability.
		Longitudinal, Lateral, Vertical and Rotation: please specify range of movements
		Electrical / Mechanical Control
		The system for robotic control of couch in all 6 dimensions (all 3 cardinals translational and all 3 rotational).
		It should have the capability for remote controlled robotic positional correction facility in three translational and rotational axes with respect to the 6D shifts derived from the integrated to KV cone beam CT and Orthogonal KV images acquisition system.
		Electrical backup & Mechanical Control (in case of power failure). Please specify
		Minimum height from floor – specify
22	Networking	Record & Verify System (State-of-the-art) one per site.
		Transfer of all parameters from existing Simulator, CT-simulators, MRI, PET-CT, USG, DSA etc. & Treatment Planning System, and other TPS to the accelerator (existing and new) for automatic treatment setup & delivery should be provided.
		Transfer of DRR/ Fluoroscopy images etc. through R&V system for comparison with portal imaging
		Transfer & Execution of Conformal & IMRT, Rotational IMRT treatment plans from Existing and new Treatment Planning System should be provided.
		Should be Networked with R & V and Existing Hospital Information System (HIS) Network System (PACS, Images, structures, RT plan). All required interfaces should be provided. Provision for future networking options should be specified in detail.
		Transfer and execution of MLC position parameter for normal and IMRT treatment including step & shoot and/or dynamic and/or rotational IMRT techniques from TPS.
		Comprehensive Antivirus software for linac, TPS and networking for 10 years

		Single Unified Comprehensive Database server with storage capacity of at least 7TB with expandable storage capacity.
23	Accessories	Mechanical Front pointer (SSD indicator)
		Accessory mount – Electron tray
		Side Rails on both sides of Couch for Mounting Accessories.
		CCTV HD Camera (Three nos). One wide angle & two remote control with remote zoom & focus facility.
		Two way audio communication system
		One digital camera for patient position photograph
		In-room Colour flat Monitor LED 27” or higher
		Laser Alignment System (3 cross and one Sagittal) Green laser system
		Manual retraction tool (manual crank) for couch in case of power failure
24	Dosimetry System	Built-in chambers. Two separate sealed chambers
		Precision : $\pm 1\%$ or 1 MU
		Linearity : $\pm 1\%$ or 1 MU
		Reproducibility $\pm 2\%$ or 1 MU
		Dose Rate Dependence :please specify
25	Safety System as per IEC / AERB standards	x-ray absorbed dose due to leakage radiation (excluding neutrons) out side useful beams (As per AERB)
		Emergency switches
		Door interlocks
		Collimator transmission: as per AERB specification- please specify
		Neutron dose inside the treatment area and outside the treatment area, as per international standards
		Last Man Out Switch
		Various Beam off interlocks
26	Leakage Radiation as per IEC/ AERB standards	Head leakage. Please specify.
		Collimator transmission. Please specify.
		Neutron Dose: Please specify
27	Treatment Planning System	Four workstations which includes two dose calculation engines (with individual licence for each system) and Two contouring stations (<i>with Enterprise wide licences</i>) per LA. All should be with medical grade monitors. The pixel size should be minimum as 1800 X 1200 pixel. Please specify.
		Latest HW/SW, upgradable at no cost to TMC (BBCI) for next 10 years
		DICOM3 and full DICOM family
		DICOM RT Import/export from all existing CT/MR/PET/PACS/C-ARM etc.
		Multi-modality (CT, MR, PET etc.) Image registration (rigid and deformable). PI specify the solutions.
		Manual and Atlas based contouring both should be available
		Fixed field and Rotational IMRT Optimization algorithms.
		Specify dose calculation algorithms for 3DCRT/IMRT/Rotational IMRT/Electrons/other techniques. Monte Carlo/Acurus or Equivalent dose calculation algorithm.
		Adaptive radiotherapy: Deformable Image Registration software (DIR) and Deformable Dose Accumulation/adaptation.

		Biological modelling and optimization solutions (EUD, TCP, NTCP etc.). PI specify.
		External beam and brachytherapy dose accumulation please specify
		Import /export- Image/structure set/plan/ dose etc.to all machines and integration with network. (HW/SW). Please specify the ability to integrate with Bhabhatron-II TAW.
		Advanced Server (safe and secured backup/restore) – latest HW/SW and upgradable at no extra cost to BCCI, Guwahati for next 10 years
		Remote secured and safe access of Server and TPS for contouring, planning, review, import, export etc. It should be a comprehensive solutions
		Latest Compact Network colour Printer. Please specify.
28	Software Service Agreement (SSA)	Comprehensive SSA for all software and related hardware for TPS, Networking & Linac for 10 years.
29	Manuals / Data book	Operator, System and Schematic manuals.
30	Essential Spare Parts	Provide the list of standard spare parts supplied with the machine.
31	Patient Immobilization - 3 sets	a)Carbon-fibre Universal Base Plate and Accessories b)Head & Neck Supports (Carbon Fiber) (Set of six A to F) c)Indexing Rod – 2 nos. d) MultiFix Prone Head Support e) Carbon Fibre Breast Board f) Knee Wedge g) Foot Positioner h) Arm support system compatible with Universal Base Plate i) Vacuum cushion for Head & Neck (5 nos.), half-body (10 nos.) and full-body (10 nos.)
B	RPM / ABC	
1	Respiratory Gating Solution	HW/SW and integration with 3 rd party imaging systems, 1 system should be provided
2	Patient video coaching for respiratory monitoring.	Video goggles, interface cables, software and related technology
3	Advanced Networking System	To provide & facilitate national and international collaborative data sharing on advanced networking solutions. PI specify
4	Advanced Image Guidance	PI specify all advanced Image guidance features.
5	Online adaptive Radiotherapy	Online plan adaptive solution. Please specify Image acquisition, DIR, Adaptive contouring, optimization, Dose calculation, Plan evaluation. Please specify all relevant analytical tools.
6	Advanced Plan optimization tools	Parieto optimization, please specify
7	4D CBCT	Acquisition, Registration, Analysis software. Provide details.
8	MR alone Treatment Planning Module	Please specify
9	Exit Dosimetry	Integrated Exit dosimetry feature, please specify details for all available energies
10	Integration with CT Simulator	Integration of the Linear Accelerator with the existing Philips Brilliance BigBore CT Simulator for motion management to perform SBRT. Required hardware & software must be supplied in both ends.
C	INSTALLATION REQUIREMENTS	
1	Physical Dimensions and Weights	Modulator
		Stand
		Gantry

		Auxiliary cabinet
		Patient Treatment Couch
		Control Console
2	Electrical Requirements	Load - Standby
		Ready
		Beam ON
		Input Voltage –Typical International:
3	Cooling Water	Temperature
	(please specify)	Flow
		Pressure difference (To specify)
4	Air Conditioning	Temperature
		Relative Humidity
		Air changes (To specify no. per hour)
5	Generator Set	<p>500 KVA DG set with Canopy and AMF Panel with standard warranty (Make : JACKSON Cummins)</p> <ul style="list-style-type: none"> -Base plate with shade -Pollution Control Board Certificate with high mounting exhaust -Cast iron earthing – 9 nos. -630 A, air-circuit breaker – 4 nos. -630A, power receiving panel – 1 no. -Busbar cubical panel (busbar size – 120 x 12 mm) – 1 no. -distribution panel (1 incomer, 6 outgoing), incomer – 630A, outgoing-250A-03, 160A-02 nos., 100 A – 01 no. -630A MCCB – 01 no. -250A MCCB – 03 nos. -160A MCCB – 02 nos. -100A MCCB – 01 no. -3 ½ Core, 400 sq.m. Al cable – 335 meter - 3 ½ Core, 630 sq.m. Al cable – 15 meter - 3 ½ core, 250 sq.m. Al cable – 170 meter
6	a) Turn Key Project	Vendor should visit the site and submit the quote of turnkey, as per actual scope of work to be finalised during pre-bid meeting. (Please refer to Schedule – II for Scope of work.)
	b) Buy Back of old existing Siemens Primus Linear Accelerator machine	Buy back offer for existing Siemens PRIMUS Linear Accelerator to be included in the offer. The buy-back offer must include the cost of decommissioning and dismantling of PRIMUS LA machine, and removing the parts to a designated place as directed by the user department. Buy back does not include UPS of the unit (<i>third party item</i>), it means only for buyback of the LA machine.
		Any requirements for installation of equipment should be mentioned during negotiation otherwise handing over fully functional machine will be the responsibility of the vendor.
D	FINANCIAL BID	Separately
	(specify separately for desirable items)	Cost
		Insurance up to installation & commissioning.
		Transport and rigging
		Installation
		Essential spare parts
		Up-gradation of equipment

E	Validity of Quotation	Please specify
F	Individual Warranty. Please specify No. of Years	Accelerator Guide (Beam Center Line).
		Bending Magnet
		Electron Gun
		Vacuum Pumps
		X-ray Target
		RF Source: Magnetron/Klystron
G	Local Service Support:	Should have local office and service support/service engineer for attending the breakdown calls.
H	Response Time:	Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.
I	Warranty from the date of commissioning	2 Years for complete System
J	CMC	CMC : 8 years CMC for complete system including UPS: Included 4 preventive maintenance/ year and all breakdown visits. All bought out items used in system should also be included in the warranty. CMC should include upgrades / update cost, no separate software licence fees will be payable. (Should include QA QC annually as per AERB norms.)
K	Uptime Guarantee (95 %) / Penalty Clause	The supplier and/or its Indian agent will be required to give the guarantee towards the performance of the equipment during the warranty period and in case of comprehensive annual maintenance contract period for maintaining the equipment in good working condition for a period of at least 300 days out of a period of 365 days a year (i.e. 95% uptime) 24X7. The ten hours non-functioning of the equipment or any part thereof will be considered as one day down time. Total 3000 hours in a year will be considered as Uptime guarantee. Working time is 8.00 a.m. to 6.00 p.m. on week days and 8.00 a.m. to 4.00 p.m. for Saturdays. The equipment shall be fully functional as part of the uptime and if it is partly functional it shall be considered as downtime and deduction shall be made on Pro-rata basis i.e. if the equipment is 70% functional 30% downtime shall be applicable. The decision of the TMC management or its representative in determining the % of the downtime shall be final and binding. Essential period to shut down the installation entirely or partially shall also be included in the down time while calculating the 95% guaranteed uptime i.e. all features as per specifications in purchase order should be functional for uptime. The supplier / agent shall be required to pay a penalty Rs. 3,000/- per hour per machine excluding 150 hours permissible downtime. This rate shall increase commensurate with the rate increase of CMC. If the number of days downtime in each period of 365 days is more than the downtime permissible (which is to be calculated as defined above), the delay for not bringing the equipment in functioning order in any way, directly or even partially will be attributable to the firm. The bidder should provide the details of preventive maintenance to be undertaken through the year. Preventive maintenance to be done on holidays only. Preventive maintenance and breakdown will not be clubbed. The bills should be raised quarterly and will be paid at the end of every quarter only.
L	Delivery Schedule	Please specify
M	Training of Staff	Module based training for at least 2 weeks
		Two Radiation Oncologists
		Two Medical Physicists

		Two Radiotherapy technologists
		Onsite training for radiation oncologist, medical physicist and radiotherapy technologist on various modules of Linac and TPS
N	Equipment certification	AERB type approval / NOC
		US FDA & CE approvals: please enclose certifications.
		If model quoted is introduced in year 2017 the above clearances shall be obtained by vendor before the installation of machine.
		Enclose certification of calibration and inspection
		Log book with instruction for daily, weekly, monthly, quarterly and yearly maintenance check list.
O	Other Information	Vendor to provide following :
		(i) No. of similar models: India / World (enclose list of institutions)
	-	(ii) No. of certified engineers in India (enclose list of names)
	-	(iii) Remote Diagnostics Facility (India / Abroad) availability
	-	All consumables required for installation, standardization testing of system should be included in the cost
	-	
	-	
	-	
P	Any other details	Please specify
1)	If 2 years warranty and 8 years CMC conditions are not adhered to, BCCI reserves right to reject the offer.	
2)	Please Provide Emerson / Riello make online UPS with isolation transformer of adequate capacity for the complete systems. With 30 min back up. Individual UPS for each TPS Workstation (including planning and contouring stations) & server.	
3)	Only Yes or No should be mentioned in compliance report and additional information should in remark columns.	

Note: Any software or hardware component required for proper functioning of the system which may be overlooked in the specification should be supplied by the vendor without any additional cost.

Schedule – I (B)

Technical Specification for supply, installation & commissioning of Linear Accelerator
(UNIT – II)

Please quote the model which includes latest state of the art equipment and meets the basic minimum specifications. The quoted model should be latest introduced with end of life not before 12 years from the date of installation at TMC (BBCI).		
	NAME OF THE VENDOR	
		Model :
		Make :
		Year of introduction :
		Year of Up-gradation :
		Expected End of support (H/w & S/w) :
		Work in progress & Future models :
A	ESSENTIAL PARAMETERS	
	Parameters	Specifications
1	Photon Energy	FF- 6MV,10MV,15 MV
		FFF - 6x & 10x
	Electron Energy	6, 9, 12, 15 & 18 MeV
2	RF Source	Magnetron / Klystron. Please specify
3	Waveguide Type	Standing / Travelling wave Please specify
4	Electron Gun	Sealed / Unsealed
5	Treatment Modes	Normal - TSD / TAD
		Rotation - CW / CCW
		ARC - CW / CCW
		Dose rate - MU/degree
6	Dose-Rate	Photons: 100 - 500 MU/min in steps or higher dose rates. Please specify
		FFF: Minimum 1000 MU/min or higher, specify for individual photon energy
		Electrons: Minimum 600 MU/ minutes at the isocentre or higher. 100 - 500 MU/min in steps or higher dose rates. Please specify Please specify including in TSET
7	Field Size (Photons)	40cm x 40 cm (or more) Please specify
		Minimum: 0.5cm x 0.5 cm Please specify.
		Penumbra: ≤10 mm for 10 x 10 cm ² field at 10 cm depth
8	Field Size (Electrons)	4-5 applicators, please specify
		A method to obtain irregular field shapes should be provided.
9	Beam Flatness	± 3% as defined in IEC 60976 / 60977 for entire range of field sizes.
		Stability of flatness with gantry rotation, please specify
10	Focal Spot size	≤3 mm dia. at the X-ray target
11	Beam Symmetry	±2 % for 10x10 cm ² and above
12	Beam Matching	Beam Matching for all energies
13	Gantry	Rotation ±180° (360° total)
		Read out - Digital and Mechanical
		Accuracy dig-readout 0.5°

		Control - Hand pendent and control-console
		Target - Axis Distance : 100 ± 0.2 cm
		ODI Range : 75 cm to 150 cm
		ODI Accuracy ± 0.1 cm
		Gantry Rotation Isocentre within 2 mm dia. Sphere. Please specify.
14	Collimator	Rotation: ± 95° about mid position
		Control: Hand pendent and control- console
		Readout accuracy : ± 0.5°
		Collimator Rotation Isocentre within 2 mm dia. Sphere
		Collimator Motorized wedges/ Dynamic Wedge
15	Asymmetric Collimators	X & Y both Asymmetrical
		Travel ranges & over travel range. Please specify
16	Photon Arc Therapy	Bi-directional arc therapy should be included with Automatic calculation of Dose per Degree based on the Dose Rate selected and the Arc angle set.
		Rotational (Arc based) IMRT
17	Multi-leaf collimator (MLC)	No. of Leaves (120 leaves and above)
		Independent drives for each leaf
		Maximum field size 40cm x40 cm
		Please specify MLC motor specifications and endurance test report
		Capable of performing Conformal therapy (IMRT, Rotational IMRT, SRT,SBRT) procedures.
		Interface between MLC & latest R&V System should be provided.
		Work Station HW/SW – Specify details
		In-Room flat monitor: please specify numbers and type
		Integration (full Networking) with Planning System and Simulator / CT Simulators / PET CT / MRI etc.
		IGRT delivery please specify
		Specify following parameters:
		Max. leaf retracting position
		Over travel (jaws)
		Over center travel of MLC leaves (>10 cm) for IMRT treatments
		Max. field length
		Leaf width, height & material.
		Coincidence of light & x-ray field
		Penumbra
		Transmission
		Interleaf leakage
		Leaf position accuracy
		Max. carriage speed
		Max. leaf speed
		Positional accuracy of the leaves during treatment.
		Inter-digitation of leaves if available
18	Auto Field Sequencing	AFS should be available
19	Portal Imaging :	Should fully integrate with Accelerator
		Should be able to take images at any Gantry angles with variable X-Y-Z movements,

		Flat panel (aSi) Imaging area should be 40cm x 40 cm with all available energies, with Pixel Matrix of min 1024 X 1024 or more
		Integrated Portal dosimetry or exit dosimetry feature capable for FFF highest dose rate available, please specify details for all available energies
20	IGRT System	Retractable arms
		X- ray tube: radiography, fluoroscopy, CBCT
		Flat panel (aSi) detectors of min 40 X 40 cm or more, with Pixel Matrix of min 1024 X 1024 or more
		CBCT reconstruction, registration (MV-MV, KV-KV, KV-MV), PI specify the analytical tools
		Fully integrated with latest R & V system and TPS, pl specify the report generation tools
		3D image data should be reconstructed from series of 2D projection images acquired as the linear accelerator gantry is rotated, pl specify all acquisition & review modes
		Adaptive radiotherapy: Deformable Image Registration software (DIR) and Deformable Dose Accumulation & Adaptation.
		QA / Phantoms tools for IGRT, including Deformable phantom.
21	Treatment Couch (6D Robotic)	6D robotic couch made of full carbon fibre top with Indexing capability.
		Longitudinal, Lateral, Vertical and Rotation: please specify range of movements
		Electrical / Mechanical Control
		The system for robotic control of couch in all 6 dimensions (all 3 cardinals translational and all 3 rotational).
		It should have the capability for remote controlled robotic positional correction facility in three translational and rotational axes with respect to the 6D shifts derived from the integrated to KV cone beam CT and Orthogonal KV images acquisition system.
		Electrical backup & Mechanical Control (in case of power failure). Please specify
		Minimum height from floor - specify
22	Networking	Record & Verify System (State-of-the-art) one per site.
		Transfer of all parameters from existing Simulator, CT-simulators, MRI, PET-CT, USG, DSA etc. & Treatment Planning System, and other TPS to the accelerator (existing and new) for automatic treatment setup & delivery should be provided.
		Transfer of DRR/ Fluoroscopy images etc. through R&V system for comparison with portal imaging
		Transfer & Execution of Conformal & IMRT, Rotational IMRT treatment plans from Existing and new Treatment Planning System should be provided.
		Should be Networked with R & V and Existing Hospital Information System (HIS) Network System (PACS, Images, structures, RT plan). All required interfaces should be provided. Provision for future networking options should be specified in detail.
		Transfer and execution of MLC position parameter for normal and IMRT treatment including step & shoot and/or dynamic and/or rotational IMRT techniques from TPS.

		Comprehensive Antivirus software for linac, TPS and networking for 10 years
		Single Unified Comprehensive Database server with storage capacity of at least 7TB with expandable storage capacity.
23	Accessories	Mechanical Front pointer (SSD indicator)
		Accessory mount - Electron tray
		Side Rails on both sides of Couch for Mounting Accessories.
		CCTV HD Camera (Three nos). One wide angle & two remote control with remote zoom & focus facility.
		Two way audio communication system
		One digital camera for patient position photograph
		In-room Colour flat Monitor LED 27" or higher
		Laser Alignment System (3 cross and one Sagittal) Green laser system
		Manual retraction tool (manual crank) for couch in case of power failure
24	Dosimetry System	Built-in chambers. Two separate sealed chambers
		Precision : $\pm 1\%$ or 1 MU
		Linearity : $\pm 1\%$ or 1 MU
		Reproducibility $\pm 2\%$ or 1 MU
		Dose Rate Dependence : please specify
25	Safety System as per IEC / AERB standards	x-ray absorbed dose due to leakage radiation (excluding neutrons) outside useful beams (As per AERB)
		Emergency switches
		Door interlocks
		Collimator transmission: as per AERB specification- please specify
		Neutron dose inside the treatment area and outside the treatment area, as per international standards
		Last Man Out Switch
		Various Beam off interlocks
26	Leakage Radiation as per IEC/ AERB standards	Head leakage. Please specify.
		Collimator transmission. Please specify.
		Neutron Dose: Please specify
27	Treatment Planning System	Five workstations which includes three dose calculation engines (with individual licence for each system) and Two contouring stations (<i>with Enterprise wide licences</i>) per LA. All should be with medical grade monitors. The pixel size should be minimum as 1800 X 1200 pixel. Please specify.
		Latest HW/SW, upgradable at no cost to TMC (BBCI) for next 10 years
		DICOM3 and full DICOM family
		DICOM RT Import/export from all existing CT/MR/PET/PACS/C-ARM etc.
		Multi-modality (CT, MR, PET etc.) Image registration (rigid and deformable). PI specify the solutions.
		Manual and Atlas based contouring both should be available
		Fixed field and Rotational IMRT Optimization algorithms.
		Specify dose calculation algorithms for 3DCRT/IMRT/Rotational IMRT/Electrons/other techniques. Monte Carlo/Acurus or Equivalent dose calculation algorithm.

		Adaptive radiotherapy: Deformable Image Registration software (DIR) and Deformable Dose Accumulation/adaptation.
		Biological modelling and optimization solutions (EUD, TCP, NTCP etc.). PI specify.
		external beam and brachytherapy dose accumulation please specify
		Import /export- Image/structure set/plan/ dose etc.to all machines and integration with network. (HW/SW). Please specify the ability to integrate with Bhabhatron-II TAW.
		Advanced Server (safe and secured backup/restore) – latest HW/SW and upgradable at no extra cost to BBCI, Guwahati for next 10 years
		Remote secured and safe access of Server and TPS for contouring, planning, review, import, export etc. It should be a comprehensive solutions
		Latest Compact Network colour Printer. Please specify.
28	Software Service Agreement (SSA)	Comprehensive SSA for all software and related hardware for TPS, Networking & Linac for 10 years.
29	Manuals / Data book	Operator, System and Schematic manuals.
30	Essential Spare Parts	Provide the list of standard spare parts supplied with the machine.
31	Patient Immobilization - 3 sets	a)Carbon-fibre Universal Base Plate and Accessories b)Head & Neck Supports (Carbon Fiber) (Set of six A to F) c)Indexing Rod – 2 nos. d) MultiFix Prone Head Support e) Carbon Fibre Breast Board f) Knee Wedge g) Foot Positioner h) Arm support system compatible with Universal Base Plate i) Vacuum cushion for Head & Neck (5 nos.), half-body (10 nos.) and full-body (10 nos.)
B INSTALLATION REQUIREMENTS		
1	Physical Dimensions and Weights	Modulator
		Stand
		Gantry
		Auxiliary cabinet
		Patient Treatment Couch
		Control Console
2	Electrical Requirements	Load - Standby
		Ready
		Beam ON
		Input Voltage -Typical International:
3	Cooling Water (please specify)	Temperature
		Flow
		Pressure difference (To specify)
4	Air Conditioning	Temperature
		Relative Humidity
		Air changes (To specify no. per hour)
5	Turn Key Project	Vendor should visit the site and submit the quote of turnkey, as per actual scope of work to be finalised during pre-bid meeting. (Please refer to Schedule – III for Scope of work.)

		Any requirements for installation of equipment should be mentioned during negotiation otherwise handing over fully functional machine will be the responsibility of the vendor.
C	FINANCIAL BID	Separately
	(specify separately for desirable items)	Cost
		Insurance up to installation & commissioning.
		Transport and rigging
		Installation
		Essential spare parts
		Up-gradation of equipment
D	Validity of Quotation	Please specify
E	Individual Warranty. Please specify No. of Years	Accelerator Guide (Beam Center Line).
		Bending Magnet
		Electron Gun
		Vacuum Pumps
		X-ray Target
		RF Source: Magnetron/Klystron
F	Local Service Support:	Should have local office and service support/service engineer for attending the breakdown calls.
G	Response Time:	Should not be more than 12 hrs from lodging a breakdown complaint on toll free or by email.
H	Warranty from the date of commissioning	2 Years for complete System
I	CMC	CMC : 8 years CMC for complete system including UPS: Included 4 preventive maintenance/ year and all breakdown visits. All bought out items used in system should also be included in the warranty. CMC should include upgrades / update cost, no separate software licence fees will be payable. (Should include QA QC annually as per AERB norms.)

J	Uptime Guarantee (95 %) / Penalty Clause	The supplier and/or its Indian agent will be required to give the guarantee towards the performance of the equipment during the warranty period and in case of comprehensive annual maintenance contract period for maintaining the equipment in good working condition for a period of at least 300 days out of a period of 365 days a year (i.e. 95% uptime) 24X7. The ten hours non-functioning of the equipment or any part thereof will be considered as one day down time. Total 3000 hours in a year will be considered as Uptime guarantee. Working time is 8.00 a.m. to 6.00 p.m. on week days and 8.00 a.m. to 4.00 p.m. for Saturdays. The equipment shall be fully functional as part of the uptime and if it is partly functional it shall be considered as downtime and deduction shall be made on Pro-rata basis i.e. if the equipment is 70% functional 30% downtime shall be applicable. The decision of the TMC management or its representative in determining the % of the downtime shall be final and binding. Essential period to shut down the installation entirely or partially shall also be included in the down time while calculating the 95% guaranteed uptime i.e. all features as per specifications in purchase order should be functional for uptime. The supplier / agent shall be required to pay a penalty Rs. 3,000/- per hour per machine excluding 150 hours permissible downtime. This rate shall increase commensurate with the rate increase of CMC. If the number of days downtime in each period of 365 days is more than the downtime permissible (which is to be calculated as defined above), the delay for not bringing the equipment in functioning order in any way, directly or even partially will be attributable to the firm. The bidder should provide the details of preventive maintenance to be undertaken through the year. Preventive maintenance to be done on holidays only. Preventive maintenance and breakdown will not be clubbed. The bills should be raised quarterly and will be paid at the end of every quarter only.
K	Delivery Schedule	Please specify
L	Training of Staff	Module based training for at least 2 weeks
		Two Radiation Oncologists
		Two Medical Physicists
		Two Radiotherapy technologists
		Onsite training for radiation oncologist, medical physicist and radiotherapy technologist on various modules of Linac and TPS
M	Equipment certification	AERB type approval / NOC
		US FDA & CE approvals: please enclose certifications.
		If model quoted is introduced in year 2017 the above clearances shall be obtained by vendor before the installation of machine.
		Enclose certification of calibration and inspection
		Log book with instruction for daily, weekly, monthly, quarterly and yearly maintenance check list.
N	Other Information	Vendor to provide following :
		(i) No. of similar models: India / World (enclose list of institutions)
	-	(ii) No. of certified engineers in India (enclose list of names)
	-	(iii) Remote Diagnostics Facility (India / Abroad) availability
	-	All consumables required for installation, standardization testing of system should be included in the cost
	-	
	-	
	-	

O	Any other details	Please specify
1)	If 2 years warranty and 8 years CMC conditions are not adhered to, BBCI reserves right to reject the offer.	
2)	Please Provide Emerson / Riello make online UPS with isolation transformer of adequate capacity for the complete systems. With 30 min back up. Individual UPS for each TPS Workstation (including planning and contouring stations) & server.	
3)	Only Yes or No should be mentioned in compliance report and additional information should in remark columns.	

Note: Any software or hardware component required for proper functioning of the system which may be overlooked in the specification should be supplied by the vendor without any additional cost.

Schedule – II

Scope of work for turn-key work for UNIT-I **to be procured on buyback basis :**

(The final detailing to be done after pre-bid meeting)

- 1) Civil work modification as per present AERB norms and as required for the selected machine.
- 2) Cover the duct by granite slab, floor ducting for cabling inside the bunker and console.
- 3) Ceiling finishing as required – sky view
- 4) Base plate pith as per machine's requirement.
- 5) Modification of chiller and UPS room as per requirement.
- 6) Aluminum doors- main room and machine room door.
- 7) Console table as per site requirement.
- 8) Public address system.
- 9) CC Camera for patient area.
- 10) Revolving chair 6 Nos. (middle height) (Godrej make – Steel Store Well)
- 11) Cupboards for document keeping (8 feet height) – 2 Nos.
- 12) Steel Store Well 2 Nos., cupboard – 2 nos. (wooden) 6' x 10' x 2 ½'
- 13) Powder coated steel rack for storage of moulds (size 6 ft x 2 ft x3 ft) – 6 Nos.
- 14) Dedicated cast iron earthing – 6 Nos.
- 15) False Ceiling light as per site requirement.
- 16) Console room power points, AC power point laser
- 17) All electrical wirings and power point accessories as per required specification.
- 18) All internal cable connection between UPS to machine and UPS to TPS.
- 19) Door inter-lock system machines. Quality – 2 units
- 20) Distribution box as per requirement
- 21) 2 ton split AC for machine room – 4 Nos with all accessories which should include starter, stabilizer, copper pipe, drain pipe, etc.
- 22) 2 ton split AC for console room – 2 Nos with all accessories which should include starter, stabilizer, copper pipe, drain pipe, etc.
- 23) 2 ton split AC for UPS room – 2 Nos with all accessories which should include starter, stabilizer, copper pipe, drain pipe, etc.
- 24) Chiller - baseplate, shade, chiller control panel.
- 25) Painting and colour washing as per requirement.
- 26) Dehumidifiers – as per room-size and humidity requirements.
- 27) Patient Attendant's Chair – 3 seater – 6 nos. Godrej make
- 28) Digital signage for machine & TPS room
- 29) TPS room turnkey (Furniture, fixers, AC, Chair as per requirement):
 - a) One TPS room (in the existing Physicist Room) (painting & color-washing)
 - b) 2 AC in TPS – 2 ton (for TPS)
 - c) Chairs – 6 nos. Godrej make (for TPS) - Mid back
 - d) Customized working table for TPS
 - e) Electrical works (PP, Light)
 - f) IT networking
 - g) Al. window – 2 nos.
 - h) View Box – 2 nos.

Schedule – III

Scope of work for turn-key work for UNIT-II

(The final detailing to be done after pre-bid meeting)

1. Civil work modification as per present AERB norms and as required for the selected machine.
2. Flooring - Granite slab
3. Cover the duct by granite slab, floor ducting for cabling inside the bunker and console.
4. Wall finishing as required – ply paneling design to be submitted before erection
5. Ceiling finishing as required – sky view
6. Base plate pith as per machine's requirement.
7. Modification of chiller and UPS room as per requirement.
8. Aluminum doors- main room and machine room door.
9. Console table as per site requirement.
10. Public address system.
11. CC Camera for patient area.
12. Revolving chair 6 Nos. (middle height) (Godrej make – Steel Store Well)
13. Cupboards for document keeping (8 feet height) – 2 Nos.
14. Steel Store Well 2 Nos. cup board – 2 nos. (wooden) 5' x 10' x 2½'
15. Powder coated steel rack for storage of moulds (size 6 ft x 2 ft x3 ft) – 6 Nos.
16. Dedicated cast iron earthing – 6 Nos.
17. False Ceiling light as per site requirement.
18. Console room power points, AC power point laser
19. All electrical wirings and power point accessories as per required specification.
20. All internal cable connection between UPS to machine and UPS to TPS.
21. Door inter-lock system machines. Quality – 2 units
22. Distribution box as per requirement
23. 2 ton split AC for machine room – 4 Nos with all accessories which should include starter, stabilizer, copper pipe, drain pipe, etc.
24. 2 ton split AC for console room – 2 Nos with all accessories which should include starter, stabilizer, copper pipe, drain pipe, etc.
25. 2 ton split AC for UPS room – 2 Nos with all accessories which should include starter, stabilizer, copper pipe, drain pipe, etc.
26. Chiller - baseplate, shade, chiller control panel.
27. Painting and colour washing as per requirement.
28. Dehumidifiers – as per room-size and humidity requirements.
29. Patient Attendant's Chair – 3 seater – 6 nos. Godrej make
30. Digital signage for machine & TPS room
31. TPS room turnkey (Furniture, fixers, AC, Chair as per requirement):
 - a) One TPS room (in the existing TPS Room) (painting & color-washing)
 - b) 2 AC in TPS – 2 ton (for TPS)
 - c) Chairs – 6 nos. Godrej make (for TPS) - Mid back
 - d) Customized working table for TPS
 - e) Electrical works (PP, Light)
 - f) IT networking
 - g) View Box – 2 nos.