

தமிழ்நாடு உடற்கல்வியியல் மற்றும் விளையாட்டுப் பல்கலைக்கழகம்

TAMILNADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY, CHENNAI

Accredited with "B++" Grade by NAAC

India's First State University in Physical Education and Sports

Melakottaiyur Post, Chennai - 127 TENDER NOTICE

Tender No.3404/TNPESU/R5/Tender dates/27.12.2024

Tender invited under Two-Bid system for the Supply of Equipment and Accessories for the High-Performance Centre for Sports at the Centre of Excellence in Biomechanics at the University campus and from the qualified firms for the following Services.

S.No

Tender invited for HPCS

1 Establishment of "High Performance Centre for Sports" at TNPESU

The Tender documents and further details can be had from the following website.

www.tnpesu.org

Dr.R. Ramakrishnan Registrar i/c

TENDER DOCUMENT

Establishment of High-Performance Centre for Sports (HPCS) under the funding of Tamil Nadu State Planning Commission (Innovative Initiative) at Centre of Excellence in Biomechanics, Tamil Nadu Physical Education and Sports University, Chennai - 600 127.

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Tamil Nadu Physical Education and Sports University

Melakkottaiyur Post, Chennai, Tamil Nadu - 600 127

Website: www.tnpesu.org Email: regtnpesu@gmail.com Phone No: 044-27477906

OPEN TENDER – TWO BID SYSTEM

The Registrar, Tamil Nadu Physical Education and Sports University, Chennai, Tamil Nadu – 600127 invites sealed tender (Whole or Part) TWO BID System (QCBS) for the SUPPLY OF EQUIPMENT and ACCESSORIES for the HIGH-PERFORMANCE CENTRE FOR SPORTS (HPCS) at the Centre of Excellence in Biomechanics at the TNPES university campus as follow.

1. List of Equipment

I. LIST OF E	90.0		I		
Tender No.	Item No	Description of Item	EMD in Rs.	Cost of Appl in Rs.	Due Date and Time of Submission of Tender
Tender No.3404-1 / 2025	I	Functional and Strength Training Station and lactate analyzer and Accessories	2,06,000/-		
Tender No.3404-2 / 2025	II	Speed gates with software and accessories for speed, agility and coordination test and training	60,000/-		
Tender No.3404-3 / 2025	III	Instrumented Treadmill with software and accessories (With tube based Vo2 max. SmO2 and ECG/HRV) integrated with eye tracker and accessories	3,60,000/-		
Tender No.3404-4 / 2025	IV	Full Body IMU system with (On field Biomechanics assessment) biomechanical modeling software and accessories for real time feedback	1,20,000/-		
Tender No.3404-5 / 2025	V	Performance Analysis system with software and accessories (Sports Video Analysis software with system (3D graphic rendering solution for sports video analysis with accessories)	45,000/-	3,000/-	19.02.2025 @ 16.30Hrs
Tender No.3404-6 / 2025	VI	Portable force and muscle testing system with software and accessories	1,40,000/-		
Tender No.3404-7 / 2025	VII	Mocap system and accessories, Ultrasound with elastography and accessories and Portable muscle stiffness unit and accessories with athlete management system	1,70,000/-		
Tender No.3404-8 / 2025	VIII	3D body scanner and accessories	45,000/-		
Tender No.3404-9 / 2025	IX	Pressure insole and accessories	45,000/-		
Tender No.3404-10 / 2025	Х	Gas Analyzer (Portable) and accessories	60,000/-		
Tender No.3404-11 / 2025	ΧI	3D foot scanner and accessories	1,02,000/-		
Tender No.3404-12 / 2025	XII	Cardio and Rehab Station and accessories	3,00,000/-		

- 2. Offers by fax / E-mail will be summarily ignored / considered as unsolicited tender in case of online tender.
- 3. Availability of Tender Forms: Tender forms are available in University website: www.tnpesu.org
- 4. Prebid meeting date, time and venue: 05.02.2025 @ 11.00Hrs at Syndicate Hall, Administrative Building, TNPESU, Chennai 600 127.
- 5. Last date for Submission of Tender: 19.02.2025 @ 16:30Hrs
- 6. Date, time and Place of opening of technical bid of the tender: 20.02.2025 @ 11:00Hrs at Syndicate Hall, Administrative Building, TNPESU, Chennai 600 127.
- 7. Date, time and place of opening finance bid will be intimated to the vendors who have been qualified in technical bid through email from the office of the Registrar, TNPESU.
- 8. Request for extension of due date **WILL NOT** be entertained under any circumstances.
- Notice for Inviting Tender (NIT) and Tender documents are available in university website: www.tnpesu.org
- 10. For detailed description and quantity refer tender document.
- **11.** The Registrar, TNPESU reserves the right to **ACCEPT / REJECT** any or all tenders without assigning any reason and also will not be responsible for postal delays.

Note:

- i. INDIAN FIRMS should quote only in Indian Currency.
- ii. FOREIGN COMPANIES HAVING AN INDIAN BUSINESS OFFICE REGISTRATION is advised to quote in INR for F.O.R / USD, EUR, GBP, CHF and SGD only for CIF. The Bidders opting CIF should bear the responsibility of clearing customs and excise formalities and transition of equipment to TNPESU. The necessary expenditure for equipment transit from airport / harbor (port) to TNPESU campus will be paid by TNPESU against the production of invoice.
- iii. The AUTHORIZED DISTRIBUTERS of FOREIGN FIRMS (ORIGINAL EQUIPMENT MANUFACTURERS) in INDIA are advised to quote in INR for F.O.R / USD, EUR, GBP, CHF and SGD only for CIF. The Bidders opting CIF should bear the responsibility of clearing customs and excise formalities and transition of equipment to TNPESU. The necessary expenditure for equipment transit from airport / harbor (port) to TNPESU campus will be paid by TNPESU against the production of invoice.
- iv. The application fee and Original EMD (in the form DD, in favour of The Registrar, TNPESU) should be sent to The Registrar, TNPESU along with the TECHNICAL BID. You are requested mention the Tender file No., Description of items, and Firm name on the cover containing the bid. THE DEMAND DRAFT OF APPLICATION FEE AND EMD SHOULD BE TAKEN SEPARATELY.



Tamil Nadu Physical Education and Sports University

Melakkottaiyur Post, Chennai, Tamil Nadu - 600 127

Website: www.tnpesu.org Email: regtnpesu@gmail.com Phone No: 044-27477906

INVITATION OF BIDS

Invitation of **Bids** for Supply / Service of **SUPPLY OF EQUIPMENT and ACCESSORIES** for **the HIGH-PERFORMANCE CENTRE FOR SPORTS (HPCS)** at the Centre of Excellence in Biomechanics at the TNPES university campus under State Planning Commission, TANII Scheme.

Tender / Request for Proposal (RFP) Reference No:

- Bids are invited for supply of items listed in <u>PART V</u> of this RFP as per TWO BID SYSTEM (QCBS). The bid (Both Technical and Price) should be submitted by the bidder before the due date and time.
- 2. The documents may be downloaded from university website: www.tnpesu.org
- 3. The address and contact number for seeking clarification regarding this **RFP** are given below:
 - a) All queries to be addressed to: The Registrar, TNPESU, Chennai, Tamil Nadu -600127
 - b) Postal address for sending the Bids: The Registrar, Tamil Nadu Physical Education and Sports University, Melakkottaiyur Post, Chennai, Tamil Nadu -600127
 - c) Designation, Contact Number and Email id of the contact Officers:
 - i. The Registrar, TNPESU / 044-27477906 / regtnpesu@gmail.com
 - ii. Project Head, HPCS, TNPESU / 9941923899 / rajinipkp88@gmail.com
- 4. This RFP is divided into VII parts as follows:
 - Part I contains General Information and Instructions for Bidders about the RFP such as the time, submission of tender, opening of tenders, validity period of tenders, etc.
 - ii. Part II contains Standard Terms and Conditions of RFP, which will form part of the Contract / Supply Order (herein after referred as the Contract) with the successful Bidder(s).
 - iii. Part III contains Special Term and Conditions applicable to this RFP and which will also form part of the Contract with the successful Bidder(s).
 - iv. Part IV contains Vendor Qualification Criteria.
 - v. Part V contains Details of the Store(s) / Service(s) Required e.g. Technical Specifications, Delivery Period, Mode of Delivery, Consignee details etc. (Specifications at Appendix -C)
 - vi. Part VI contains Evaluation Criteria of Bids.
 - vii. Part VII contains Format of Price Bid. The Price Bid Format as per BoQ form (Appendix –E) is to be filled by Bidder.

- 5. This RFP is being issued with no financial commitment and Buyer Reserves the right to change or vary any part thereof or foreclose procurement case at any stage. The Buyer also reserves the right to disqualify any vendor, should it be necessary, at any stage.
- 6. Vendors are advised to submit the bid well in advance to avoid last minute delay.
- 7. You may contact "The Registrar, Tamil Nadu Physical Education and Sports University, Melakkottaiyur Post, Chennai, Tamil Nadu, India 600127" related to bidding condition, bidding process, rejection of bids, specifications, terms and conditions or any other grievances related to purchase in writing.
- 8. Any Corrigendum / Addendum / Future announcements will be available ONLY in university website: www.tnpesu.org

Yours Sincerely,

Registrar, TNPESU

PART I (A) – GENERAL INFORMATION AND INSTRUCTIONS

- **1.1** If any queries or doubts regarding submission of proposals, bidders or their authorized representative may contact the following personnel for clarifications:
 - i) Registrar, TNPESU Contact No: 044-27477906
 - ii) Project Head, HPCS, TNPESU Contact No: 9941923899
- **1.2** Last Date and Time for Submission of the Bids: On 19/02/2025 at 16:30Hrs. Vendor should submit before Due Date and Time. Responsibility to ensure this lies with the Bidders.
- 1.2 A Date, Time and Place of Prebid Meeting: 05.02.2025 @ 11:00Hrs at Syndicate Hall, Administrative Building, TNPESU, Chennai, Tamil Nadu 600127.
- **1.3 Location of the Tender Receiving Office:** Registrar Section, Administrative Building, TNPESU, Melakkottaiyur Post, Chennai, Tamil Nadu, India 600 127.
- 1.4 Manner of Depositing the Bids: Postal / Courier / in person submission only.
- 1.5 Date, Time and Place of Opening of the Technical Bids: 20.02.2025 @ 11.00 am at Syndicate Hall, Administrative Building, TNPESU, Chennai, Tamil Nadu 600127. If due to exigency, the due date for opening of the bids is declared a closed holiday, the bids will be opened on the next working day at the same time or on any other day/time, as intimated by the Buyer. The financial Bid will be opened within 15 days from the date of opening of Technical bid. The communication regarding financial bid will be sent through email to the bidders who have been qualified in the technical bid.
- 1.6 The bidders can either bid any one of the individual items (listed item no: I to XII) or combination of any two or more items or as whole (All the items) in the listed items of equipment. Bidding any sub item alone in a single item is NOT permitted and liable to be rejected in technical evaluation.
- 1.7 Marking of Bids: Not Applicable.
- **1.8** Procedure for submission of Bid (Two Bid systems): As per standard procurement procedure system.
- 1.9 Forwarding of Bids Bids should be submitted by original bidders only, under their original memo / letter pad inter alia furnishing details like GST Identification Number, Bank address with EFT Account if applicable, etc. and complete postal and e-mail addresses, Telephone No. & Fax No. of their office failing which the bid would not be considered.
- **1.10 Clarification Regarding Contents of the RFP:** A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the buyer in

writing about the clarifications sought not later than **7 (Seven)** days prior to the date of opening of the Bids.

1.11 Submission of offer: Indian firms need to quote only in Indian Rupees. Foreign Companies having an Indian Business Office Registration / Authorized Distributers of Foreign Firms (Original Equipment Manufacturers) in India are advised to quote in the following currencies INR for F.O.R / USD, EUR, GBP, CHF and SGD only for CIF* with the understanding that payment in foreign currency is subject to regulation of the Reserve Bank of India.

(*Bidders quoting in foreign currency are vested with the responsibility of transit of equipment to TNPESU after clearing necessary customs duty formalities)

An Indian firm can quote in FE on behalf of their OEM only if they are either a 100% subsidiary of the OEM or an Indian Agent of the foreign OEM in accordance with their agency agreement. The firms claiming to be:

- **1.11.1** A 100% subsidiary would be required to produce documentary evidence in support of their claim along with their Techno-Commercial bid failing which their bid would be disgualified.
- 1.11.2 An agent of foreign OEM, for submitting the offer on behalf of OEM, would be required to produce a copy of their agency agreement with their principals and a copy of registration/enlistment as an Indian agent, if registered/enlisted, along with their Techno-commercial bid, failing which their bid would be disqualified. It would be mandatory for an Indian agent to get registered as an Indian agent of OEM prior to evaluation of their Price bid, failing which their bid also would be disqualified.
- **1.12** Validity of Bids: The Bids should remain valid for **90 days (Two Bid System) from** the date of Opening of the Bids.
- 1.13 Modification and Withdrawal of Bids: Not Applicable.
- 1.14 Earnest Money Deposit (EMD):
 - 1.14.1 Bidders are required to submit Earnest Money Deposit (EMD), The EMD amount should be submitted in Indian currency (INR) only (Indian Firm / Foreign companies having an Indian business office registration / Authorized distributer of foreign firms (original equipment manufacturers) in India). The EMD must be submitted in the form of Demand Draft drawn in the name of "The Registrar, TNPESU, Chennai" and should be enclosed with the Technical bid.
 - 1.14.2 Validity of EMD: EMD is to remain valid for a period of forty-five days (45 days) beyond the final bid validity period. The original EMD (Demand Draft) should be enclosed with the technical bid. The envelope must be clearly marked with tender Ref No., Due Date, Time of opening and Type of bid. EMD of the

unsuccessful bidders will be returned to them, without any interest whatsoever, at the earliest after expiry of the final bid validity and latest on or before the thirtieth day after the award of the Contract. EMD of the successful bidder would be returned without any interest whatsoever after the receipt of **PERFORMANCE CUM WARRANTY BOND (PCWB)** from them as called for in the Contract.

Note: EMD would be received and returned in INR only for all type of bidders.

- **1.15** Clarification Regarding Contents of the Bids: During evaluation of bids, the Buyer may, at his discretion, ask the bidder for clarification on his Bid. The request for clarification will be given in writing. No clarification on the initiative of the bidder will be entertained after opening of bid.
- 1.16 Rejection of Bids: Canvassing by the bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection with forfeiture of EMD. Conditional tenders will be rejected. Non-compliance of applicable General Information will disqualify your Bid.
- **1.17 Unsolicited Bids:** Unsolicited offers received as a result of e-publishing would not be considered for the instant procurement but the response would be given to the Vendor Registration Committee for consideration for future procurements.
- **1.18 Unwillingness to Quote:** Bidders unwilling to quote should ensure that intimation to this effect reaches before the due date and time of opening of the Bid, failing which the defaulting Bidder may be de-registered for the range of items in this RFP, as per the policy in vogue.
- **1.19** Bidders must submit Quotation pertaining to themselves only except in cases covered under Para 1.11 above.
- **1.20** Bids of debarred/blacklisted firms will not be considered for evaluation.
- **1.21** Tender acceptance letter **(Appendix "B")** needs to be filled, signed and submitted along with technical bid.

PART I (B) - INSTRUCTIONS FOR BID SUBMISSION

SEARCHING FOR TENDER DOCUMENTS

- i) The tender document is available in the university website www.tnpesu.org
- ii) The bidder should make a note of the unique **Tender File No assigned to each tender item**, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- Bidder should take into account any ADDENDUM / CORRIGENDUM published on the tender document before submitting their bids. Any Corrigendum / Addendum / Future announcements will be available ONLY in university website: www.tnpesu.org
- i) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

SUBMISSION OF BIDS

- i) Bidder should submit the bid on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- ii) The bidder has to sign and submit the required bid documents one by one as indicated in the tender document.
- iii) Bidder should pay the tender fee / EMD as applicable and mention the details of the payment.
- iv) Bidder should prepare the EMD as per the instructions specified in the tender document.
- v) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable.
- vi) Bidders are required to fill in the **BoQ** file given in **Appendix E** and complete the cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should submit the printed copy of **BoQ**. The **BoQ** file should be submitted as per the format given in the **Appendix E**.
- vii) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

TECHNICAL BID

The technical bid will be the first step in tender process and the technical committee will evaluate the specification, standard, and other necessary aspects.

Technical Evaluation Committee

The Technical Evaluation Committee will evaluate the equipment listed by the various bidders and finalize the potential bidders. The committee will comprise of a technical expert from TNPE & Sports University, Sports Authority of India, and a subject expert from reputed government organization.

FINANCIAL BID

Financial bid is the second step of tender process and financial bid will be opened only for those bidders whose technical bid is found to be eligible by the technical evaluation committee.

It will be 2 cover tender.

First sealed cover relating to specification details of equipment document.

Second sealed cover should have price details of equipment.

These two covers should be enclosed in the third sealed cover addressed to the Registrar, TNPESU, Melakkottaiyur Post, Chennai, Tamil Nadu, India – 600 127.

ASSISTANCE TO BIDDERS

- i) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- ii) Any queries relating to the process of online bid submission or queries relating to tender in general may be directed to

a) The Registrar, TNPESU

Contact No: 044-27477906 Email: regtnpesu@gmail.com

b) Project Head, TNPESU

Contact No: 9941923899 Email: rajinipkp88@gmail.com

PART II - STANDARD TERMS AND CONDITIONS

The Bidder is required to give confirmation of their acceptance of the Standard Terms and Conditions if the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder as selected by the Buyer. Failure to do so may result in rejection of the Bid submitted by the Bidder.

2.1 Effective Date of the Contract (Acceptance of Contract/SO):

In case of placement of a supply order, the date of acceptance of the Supply Order would be deemed as effective date or as agreed by both the parties. In case a contract is to be signed by both the parties, the Contract shall come into effect on the date of signatures of both the parties on the Contract (Effective Date) or as agreed by both the parties. The deliveries and supplies and performance of the services shall commence from the effective date of the Contract.

Note: If any discrepancies should be brought to notice within 07 days from the date of Contract/Supply Order else it will be presumed as Contract/Supply Order is accepted.

2.2 Law:

The Contract shall be considered and made in accordance with the law of the Govt. of Tamil Nadu / Republic of India and shall be governed by and interpreted in accordance with the law of the Govt. of Tamil Nadu / Republic of India. **The courts at Kanchipuram District, Tamil Nadu, India** shall have exclusive and sole jurisdiction over any disputes, differences or questions arising out of or in connection with or in relation to the tender / contract.

2.3 Arbitration:

All disputes or differences arising out of or in connection with the Contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the Contract or relating to product or performance, which cannot be settled amicably, shall be resolved by arbitration in accordance with Indian Penal Code. The courts at Kanchipuram District, Tamil Nadu, India shall have exclusive and sole jurisdiction over any disputes, differences or questions arising out of or in connection with or in relation to the tender / contract.

. 2.4 Penalty for Use of Undue influence:

The Seller undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the Buyer or otherwise in procuring the Contract or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the Contract or any other contract with the government of India for showing or forbearing to show favor or disfavor to any person in relation to the Contract or any other contract with the Government of India. Any breach of the aforesaid undertaking by the Seller or anyone employed by him or acting on his behalf (whether with or without the Knowledge of the Seller) or the commission of any offers by the Seller or anyone employed by him or acting on his behalf, as defined in Chapter ix of the Indian Penal Code, 1860 or the Prevention of Corruption Act 1986 or any other Act enacted for the prevention of corruption shall entitle the Buyer to cancel the contract and all or other contracts with the Seller and recover from the Seller the amount of any

loss arising from such cancellation. A decision of the Buyer or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Seller, Giving or offering of any gift, bribe or inducement or any attempt at any such act behalf of the Seller toward any officer/employee of the Buyer or to any other person in a position to influence any officer/employee of the Buyer for showing any favour in relation to this or any other contract, shall render the Seller to such liability/penalty as the Buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the bank Guarantee and refund of the amount paid by the Buyer.

2.5 Agent / Agency Commission:

The Seller confirms and declares to the Buyer that the Seller has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommend to the TNPESU or any of its functionaries, whether officially or unofficially, to the award of the contract to the Seller; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that the Seller has engaged any such individual / firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the Seller will be liable to refund that amount to the Buyer. The Seller will also be debarred from entering into any contract with the TNPESU for a minimum period of five years. The Buyer will also have a right to consider cancellation of the Contract either wholly or in part, without any entitlement or compensation to the Seller who shall in such an event be liable to refund all payments made by the Buyer in terms of the Contract along with interest at the rate of 2% per annum above Prime Lending Rate of State Bank of India for all type of bidders. The applicable rates on the date of opening of bid shall be considered for this. The Buyer will also have the right to recover any such amount from any contracts in vogue with the Government of India.

Or

The Seller confirms and declares in the Techno-Commercial bid that they have engaged an agent, individual or firm, for performing certain services on their behalf. The Seller is required to disclose full details of any such person, party, firm or institution engaged by them for marketing of their equipment in India, either on a country specific basis or as a part of a global or regional arrangement. These details should include the scope of work and responsibilities that have been entrusted with the said party in India. If there is non-involvement of any such party then the same also be communicated in the offers specifically. Without prejudice to the obligations of the vendor as contained in various parts of this document, appointment of an Agent by vendors will be subjected to the following conditions:

- 2.5.1 Details of all Agents will be disclosed at the time of submission of offers and within two weeks of engagement of an Agent at any subsequent stage of procurement.
- 2.5.2 The Seller is required to disclose termination of the agreement with the Agent, within two weeks of the agreement having been terminated.

- 2.5.3 Buyer / TNPESU reserves the right to inform the Seller at any stage that the Agent so engaged is not acceptable where upon it would be incumbent on the Seller either to interact with Buyer / TNPESU directly or engage another Agent. The decision of Buyer / TNPESU on rejection of the Agent shall be final and be effective immediately.
- 2.5.4 All payments made to the Agent 12 months prior to tender submission would be disclosed at the time of tender submission and thereafter an annual report of payments would be submitted during the procurement process or upon demand of the Buyer / TNPESU.
- 2.5.5 The Agent will not be engaged to manipulate or in any way to recommend to any functionaries of the TNPESU, whether officially or unofficially, the award of the contract to the Seller or to indulge incorrupt and unethical practices.
- 2.5.6 The contract with the Agent will not be a conditional contract wherein payment made or penalty levied is based, directly or indirectly, on success or failure of the award of the contract.
- 2.5.7 On demand, the Seller shall provide necessary information/inspection of the relevant financial documents/information, including a copy of the contract(s) and details of payment terms between the Seller and the Agent engaged by him.
- 2.5.8 If the equipment being offered by the Seller has been supplied /contracted with any organization, public/private in India, the details of the same may be furnished in the technical as well as commercial offers. The Sellers are required to give a written undertaking that they have not supplied/is not supplying the similar systems or subsystems at a price lower than that offered in the present bid to any department of the Tamil Nadu State / Central government and if the similar system has been supplied at a lower price, then the details regarding the cost, time of supply and quantities be included as part of the commercial offer. In case of non disclosure, if it is found at any stage that the similar system or subsystem was supplied by the Seller the above departments at a lower price, then that very price, will be applicable to the present case and with due allowance for elapsed time, the difference in the cost would be refunded to the Buyer, if the contract has already been concluded.

Following details are also to be submitted in the Techno-Commercial bid:

- i. Name of the Agent
- ii. Agency Agreement between the Seller and the agent giving details of their contractual obligation
- iii. PAN Number, name and address of bankers in India and abroad in respect of Indian agent
- iv. The nature and scope of services to be rendered by the agent and
- v. Percentage of agency commission payable to the agent

2.6 Access to Book of Accounts:

In case it is found to the satisfaction of the Buyer that the Bidder/ Seller has violated the provisions of use of undue influence and/or employment of agent to obtain the Contract, the Bidder/ Seller, on a specific request of the Buyer, shall provide necessary information/ inspection of the relevant financial documents/ information/ Books of Accounts."

2.7 Non-disclosure of Contract Documents:

Except with the written consent of the Buyer/seller, other party shall not disclose the Contract or any provision, specification, plan, design, pattern, sample, or information thereof to any third party.

2.8 Withholding of Payment:

In the event of the Seller's failure to submit the Bonds, Guarantees and Document, supply the stores/goods and conduct trials, installation of equipment, training, etc. as specified in the Contract, the Buyer may, at his discretion, withhold any payment until the completion of the Contract.

2.9 Liquidated Damages (LD):

- 2.9.1 The Buyer reserves the right to impose LD in case of delay in supply attributable to the Seller at the rate of 1% per week or part thereof for stores which the Seller has failed to deliver within the period agreed for delivery in the contract subject to maximum of 10% of the total order value (excluding taxes & duties).
- 2.9.2 LD can also be levied on the Seller on the basic cost of the stores supplied partially within the scope of the order/ contract that could not be put to use due to late delivery of the remaining stores.

2.10 Termination of Contract:

The Buyer shall have the right to terminate the Contract in part or in full in any of the following cases:-

- **2.10.1** The store/service is not received/rendered as per the contracted schedule(s) and the same has not been extended by the buyer.
- 2.10.2 The delivery of store/service is delayed due to causes of Force Majeure by more than 6 months provided Force Majeure clause is included in the contract and delivery period has not been extended by the Buyer.
- **2.10.3** The Seller is declared bankrupt or becomes insolvent.
- **2.10.4** The Buyer has noticed that the Seller has violated the provisions of Para 2.4 and/or Para 2.5 above to obtain the Contract.
- **2.10.5** As per decision of the Arbitration Tribunal.

- **Notices:** Any notice required or permitted by the Contract shall be written in English language and may be delivered personally or may be sent by registered post / courier, addressed to the last known address of the party to whom it is sent.
- **2.12 Transfer and Sub-letting:** The Seller has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the Contract or any part thereof without written consent of the Buyer.
- 2.13 Use of Patents and other Industrial Property Right: The prices stated in the Contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payment for any other Industrial Property Rights. The Seller shall indemnify the Buyer against all claims from a third party at any time on account of the infringement of any or all the right mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use. The Seller shall be responsible for the completion of the supplies including spares, tools, technical literature and training aggregates irrespective of the fact of infringement of the supplies or any or all the rights mentioned above.
- **2.14** Amendments: No provision of the Contract shall be changed or modified in any way (including this provision) either in whole or in part except when both the parties are in written agreement for amending the Contract / Supply order.

2.15 Taxes and Duties:

2. 15.1 In respect of Foreign companies having an Indian business office registration / Authorized distributers of foreign firms (original equipment manufacturers) in India quoting in USD,EUR,GBP,CHF and SGD:

All taxes, duties, levies, and charges which are to be paid for the delivery of stores/services, including advance sample, shall be paid by the parties under the contract in their respective countries. However, the corporate/individual income tax, if applicable, will continue to be paid by the concerned party/individual.

2.15.2. In respect of Indian Firms / Foreign companies having an Indian business office registration / Authorized distributer of foreign firms (original equipment manufacturers) in India quoting in INR.

2.15.2.1 General

- 2.15.2.1.1 Bidders must indicate separately the relevant taxes/ duties likely to be paid in connection with delivery of completed goods specified in RFP. In absence of this, the total cost quoted by them in their bids will be taken into account in the ranking of bids.
- 2.15.2.1.2 The taxes levied by Central / State / Local Government on the final product will be paid by the Buyer on actuals, based on relevant documentary evidence, wherever applicable. Taxes and

duties on input items will not be paid by Buyer and they may not be indicated separately in the bids. Bidders are required to include the same in the pricing of their product.

- **2.15.2.1.3** TDS as Income Tax rules will be deducted and a certificate to that effect will be issued by the buyer.
- **2.15.2.1.4** The vendor should quote the GST Registration number in all as per the GST notification of Government of India.
- 2.15.2.2 Integrated Goods and Services Tax (IGST) (As Applicable)
 Integrated Goods and Services Tax at rates applicable will be paid in case where IGST is payable.
- 2.15.2.3 Goods and Services Tax (GST) (As Applicable)
 Goods and Services Tax at rates applicable will be paid in case where GST is payable.
- **2.15.2.4 Customs Duties:** Vendor should indicate basic customs duty & CESS (if any) separately in **BoQ**. However, TNPESU would explore the possibilities of getting the customs duty exempted through proper channel if possible.
- **2.16 Denial Clause:** "Variations in the rates of statutory levies within the original delivery schedule will be allowed if taxes are explicitly mentioned in the contract/ supply order and delivery has not been made till the revision of the statutory levies. Buyer reserves the right not to reimburse the enhancement of cost due to increase in statutory levies beyond the original delivery period of the supply order/ contract even if such extension is granted without imposition of LD."
- **2.17 Pre-Integrity Pact Clause:** Not Applicable.
- **2.18 Undertaking from the Bidders:** An undertaking will be obtained from the Bidder/firm/company/vendor that in the past they have never been banned/debarred for doing business dealings with Govt. of Tamil Nadu / Govt. of India / any other Govt. organization and that there is no enquiry going on by CBI/ED/any other Govt. agency against them.

PART III - SPECIAL TERMS AND CONDITIONS

The Bidder is required to give confirmation of their acceptance of Special Terms and Conditions of the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder as selected by the Buyer. Failure to do so may result in rejection of Bid submitted by the Bidder.

- 3.1 Apportionment of Quantity: Not Applicable.
- 3.2 Performance cum Warranty Bond:
 - 3.2.1 The successful bidder (All types of bidders) may be required to submit Performance cum Warranty Bond (PCWB) in the form of Bank Guarantee (BG), in favour of the "The Registrar, TNPESU, Chennai" for a sum equal to 10% of the Contract value (excluding taxes) at the time of acceptance of tender. The Bond submitted in the form of Bank Guarantee (BG) should be valid up to 60 days beyond the date of completion of all contractual obligations, including warranty obligation wherever applicable. The specimen of bond can be provided on request.
 - **Indemnity bond:** Indemnity bond will be accepted from Government Departments/ DPSUs/ PSUs in lieu of PCWB/BG in a favour of "The Registrar, TNPESU, Chennai".
 - 3.2.2 The Performance cum Warranty Bond will be forfeited by the Buyer, in case the conditions regarding adherence to delivery schedule and/or other provisions of the Contract/ SO are not fulfilled by the Seller."
- **3.3 Option Clause:** The Contract will have an Option Clause, wherein the Buyer can exercise an option to procure an additional <u>50%</u> of the original contracted quantity in accordance with the same terms and conditions of the Contract. This will be applicable within the currency of the Contract. It will be entirely the discretion of the Buyer to exercise this option or not.
- 3.4 Repeat Order Clause: Not Applicable.
- **3.5 Tolerance Clause:** To take care of any change in the requirement during the period starting from issue of RFP till placement of the Contract, Buyer reserves the right to increase or decrease <u>50%</u> of the tendered quantity of the required goods without any change in the terms and conditions and rates quoted by the Seller. While awarding the Contract, the Quantity ordered can be increased or decreased by the Buyer within this tolerance limit.
- **3.6 Purchase Preference Clause:** Purchase preference will be granted to the nominated agencies for the specified quantity as per the policy of Govt. of Tamil Nadu / Govt. of India in vogue.
- **3.7 Transfer of Technology (ToT):** Not Applicable.

3.8 Permissible Time Frame for Submission of Bills: To claim payment (part or full), the Seller shall submit the bill (s) along with relevant documents within 30 days from the completion of the activity/supply.

3.9 Payment Terms

- 3.9.1 Indian Firm / Foreign companies having an Indian business office registration / Authorized distributer of foreign firms (original equipment manufacturers) in India quoting in INR: The Payment will be made as per the following terms, on production of the requisite document:
 - 3.9.1.1 100% Payment will be released within 30 days through Registrar, TNPESU, Chennai after receipt, inspection, installation, training and acceptance of stores/equipment in good condition or the date of receipt of the bill whichever is later.
- 3.9.2 Foreign companies having an Indian business office registration / Authorized distributer of foreign firms (Original Equipment Manufacturers) in India quoting in USD, EUR, GBP, CHF and SGD: Payment to Sellers may be done through Letter of Credit (LC).
 - 3.9.2.1 80% of payment will be released through Registrar, TNPESU, Chennai on shipment of equipment in freight/airway after receipt of necessary documents before shipment from the vendor (LC Mode).
 - 3.9.2.2 The remaining 20% Payment will be released within 30 days through Registrar, TNPESU, Chennai after receipt, inspection, installation, training and acceptance of stores/equipment in good condition or the date of receipt of the bill whichever is later (LC Mode).

3.10 Advance Payment:

No advance payment will be made.

3.11 Part Supply and Pro rata Payment

Part supply will not be acceptable.

3.12 Mode of Payment

- 3.12.1 For Indian firms / Foreign companies having an Indian business office registration / Authorized distributers of foreign firms (Original Equipment Manufacturers) in India quoting in INR: It will be mandatory for the Bidder to indicate their bank account numbers and other relevant e-payment details to facilitate payment through ECS/EFT mechanism instead of payment through Cheque, wherever feasible.
- 3.12.2 For Foreign companies having an Indian business office registration / Authorized distributers of foreign firms (original equipment manufacturers) in India quoting in USD, EUR, GBP, CHF and SGD: The payment will be arranged through Letter of Credit from Reserve Bank of India / State bank of

India / any other Public Sector Bank, as decided by the buyer, to the Bank of the OEM as per mutually agreed terms and conditions. The Letter of Credit will preferably be opened with validity of 90 days from the date of its opening, on extendable basis by mutual consent of both the parties. Letter of Credit opening charges in India will be borne by the Buyer. However, the extension charges, if any, will be borne by the party responsible for the extension.

3.13 Documents to be furnished for Claiming Payment

- 3.13.1 Indian Firms / Foreign companies having an Indian business office registration / Authorized distributer of foreign firms (original equipment manufacturers) in India quoting in INR: The payment of bills will be made on submission of the following document by the Seller to the Buyer:
 - 3.13.1.1 Ink –signed copy of Contingent Bill.
 3.13.1.2 Ink-signed copy of Commercial Invoice / Seller's Bill
 3.13.1.3 Bank Guarantee for Advance, if applicable
 3.13.1.4 Guarantee/ Warranty Certificate
 3.13.1.5 Performance Bank Guarantee/ Indemnity Bond, if applicable.
 - 3.13.1.6 Details for electronic payment viz. Bank name, Branch name and address, Account Number, IFS Code, MICR Number (if these details are not already incorporated in the Contract).
 - Original copy of the Purchase Order/Contract and amendments thereon, if any.
 - **3.13.1.8** Any other document/ certificate that may be provided for in the Contract.
 - **3.13.1.9** Self certification from the seller that the GST received under the contract would be deposited to the concerned taxation authority.
 - **3.13.1.10** ESI & EPF challan with individual details, salary statement with individual sign. (if Applicable)
 - **3.13.1.11** Against Job Completion Certificate from the user.
- 3.13.2 Foreign companies having an Indian business office registration / Authorized distributer of foreign firms (Original Equipment Manufacturers) in India quoting in USD, EUR, GBP, CHF and SGD:

The bidders will be paid through Letter of Credit. It is the responsibility of the bidders who quote in foreign currency to transit the equipment from Port / Airport to TNPESU after clearing necessary customs duty procedures and other procedures. The bidders should furnish the following documents along with the details of expenses for transit of equipment from Port / Airport to TNPESU.

- 3.13.2.1 Clean on Board Airway Bill/Bill of Lading
- 3.13.2.2 Original Invoice
- 3.13.2.3 Packing List

3.13.1.7

3.13.2.4	Certificate of Origin from Seller's Chamber of Commerce, if any.
3.13.2.5	Certificate of Quality and year of manufacture from OEM.
3.13.2.6	Dangerous Cargo Certificate, if applicable.
3.13.2.7	Insurance Policy of 110% value in case of CIF/ CIP contract
3.13.2.8	Certificate of Conformity and Acceptance Test at PDI, if any.
3.13.2.9	Physio-sanitary/ Fumigation Certificate, if any.
3.13.2.10	Performance Bond / Warranty Certificate.
3.13.2.11	Any other document as provided for in the Contract.

3.14 Exchange Rate Variation (ERV) Clause: Not Applicable.

3.15 Force Majeure Clause:

- 3.15.1 Neither party shall bear responsibility for the complete or partial non-performance of any of its obligations, if the non-performance results from such Force Majeure circumstances as Flood, Fire, Earth Quake and other acts of God as well as War, Military operation, blockade, Act or Actions of State Authorities or any other circumstances beyond the parties control that have arisen after the conclusion of the present contract.
- 3.15.2 In such circumstances the time stipulated for the performance of an obligation under the Contract is extended correspondingly for the period of time commensurate with actions or circumstance and their consequences.
- 3.15.3 The party for which it becomes impossible to meet obligations under the Contract due to Force Majeure conditions, is to notify in written form to the other party of the beginning and cessation of the above circumstances immediately, but in any case, not later than 10 (Ten) days from their commencement.
- **3.15.4** Certificate of a Chamber of Commerce (Commerce and Industry) or other competent authority or organization of the respective country shall be considered as sufficient proof of commencement and cessation of the above circumstances.
- 3.15.5 If the impossibility of complete or partial performance of an obligation lasts for more than 6 (six) months, either party hereto reserves the right to terminate the Contract totally or partially upon giving prior written notice of 30 (thirty) days to the other party of the intention to terminate without any liability other than reimbursement on the terms provided in the agreement for the goods received.
- **3.16** Buy-Back: Not Applicable.
- 3.17 Export License: The Bidder is required to furnish full details and formats of End Use Certificate required for obtaining export clearance from the country of origin. This information will be submitted along with Techno-Commercial bid. In the absence of

such information, it would be deemed that no document is required from the Buyer for export clearance from the country of origin

Note: Format of EUC should be submitted along with techno commercial bid.

- **3.18** Free Issue of Material (FIM): Not Applicable.
- 3.19 Terms of Delivery

The delivery of goods shall be on F.O.R. TNPESU basis (All type of bidders).

- 3.20 Packing and Marking Instruction:
 - 3.20.1 The Seller shall provide packing and preservation of the equipment and spares/goods contracted so as to ensure their safety against damage in the conditions of land, sea and air transportation, transshipment, storage and weather hazards during transportation, subject to proper cargo handling. The Seller shall ensure that the stores are packed in containers, which are made sufficiently strong. The packing cases should have provisions for lifting by crane/fork lift truck. Tags with proper marking shall be fastened to the special equipment, which cannot be packed.
 - **3.20.2** The packing of the equipment and spares/goods shall conform to the requirements of specifications and standards in force in the territory of the Seller's country.
 - **3.20.3** A label in English shall be pasted on the carton indicating the under mentioned details of the item contained in the carton. The carton shall then be packed in packing cases as required.

3.20.3.1	Part Number:	
3.20.3.2	Nomenclature:	
3.20.3.3	Contract annex number:	
3.20.3.4	Annex serial number:	
3.20.3.5	Quantity contracted:	

- **3.20.4** One copy of the packing list in English shall be inserted in each cargo package, and the full set of the packing lists shall be placed in Case No.1 painted in a yellow colour.
- **3.20.5** The Seller shall mark each package with indelible paint in English language as follows: -

3.20.5.1	Contract No.:
3.20.5.2	Consignee:
3.20.5.3	Port / airport of destination:
3.20.5.4	Ultimate consignee:
3.20.5.5	Package No :

3.20.5.6	Gross/net weight:
3.20.5.7	Overall dimensions/volume:
3.20.5.8	The Seller's marking:

3.20.6 If necessary, each package shall be marked with warning inscriptions: <Top>, <Do not turn over>, category cargo etc.

3.21 Inspection Instructions:

- **3.21.1** Pre-Delivery Inspection*
- **3.21.2** Factory Acceptance Test*

(*TNPESU / Buyer has the discretion to ask for Pre delivery Inspection and Factory Acceptance Test if needed)

- **3.21.3** Post Delivery inspection on receipt of store
- 3.21.4 Inspection Authority: The Inspection will be carried out by a representative of the TNPESU duly nominated by "The Registrar, TNPESU".
- **3.22** Acceptance: Conformance to specification.

3.23 Franking Clause:

- 3.23.1 In Case of Acceptance of Store(s): "The fact that the goods have been inspected after the delivery period and passed by the Inspecting Officer will not have the effect of keeping the contract alive. The goods are being passed without prejudice to the rights of the Buyer under the terms and conditions of the Contract".
- 3.23.2 In Case of Rejection of Store(s): "The fact that the goods have been inspected after the delivery period and rejected by the Inspecting Officer will not bind the Buyer in any manner. The goods are being rejected without prejudice to the right of the Buyer under the term and conditions of the contract."

3.24 Claim:

- **3.24.1** The quantity claims for deficiency of quantity/Quantum of work and/ or the quality claims for defects or deficiencies in quality noticed during the inspection shall be presented within 45 days of completion of inspection.
- **3.24.2** The Seller shall collect the defective or rejected goods from the location nominated by the Buyer and deliver the repaired or replaced goods at the same location, within mutually agreed period, under Seller's arrangement without any financial implication on the Buyer.
- **3.25** Warranty: Applicable (Refer point no. 8, part V of RFP for more details).
 - 3.25.1 The Seller will declare that the goods, store articles sold/supplied shall be of the best quality and workmanship and new in all respects and shall be strictly in accordance with the specifications and particulars contained / mentioned in the contract. The Seller will guarantee that the said goods/stores/articles would continue to conform to the description and quality for a period of, 3 Years

- standard warranty + 2 Years extended warranty from the date of installation, training and acceptance of the said goods stores/articles. If during the aforesaid period of 3 Years standard warranty + 2 Years extended warranty, the said goods/stores are discovered not to conform to the description and quality aforesaid, not giving satisfactory performance or have deteriorated, the Buyer shall be entitled to call upon the Seller to rectify the goods/stores/articles or such portion thereof as is found to be defective by the Buyer within reasonable period without any financial to implication on the Buyer.
- **3.25.2** "In cases of procurement of software, Seller shall issue/provide upgrades of the software free of cost during the warranty period."
- **3.26 Product Support:** Applicable. To be specified. The vendor who undertakes the task on behalf of the manufacturer shall provide a certification from the manufacturer that the vendor is authorized to supply, install and maintain the system for a period of **10 years** from the date of installation.
- **3.27** Annual Maintenance Contract (AMC) Clause: Supplier to declare in advance, the annual maintenance contract details and price per year after warranty expiry in the quote as an optional item.
- **3.28 Price Variation (PV) Clause**: Not Applicable.
- 3.29 Intellectual Property Rights (IPR): Not Applicable.
- 3.30 Pricing:
 - 3.30.1 Indian firms / Foreign companies having an Indian business office registration / Authorized distributer of foreign firms (original equipment manufacturers) in India should quote in INR on F.O.R. TNPESU, Chennai basis.
 - 3.30.2 Foreign companies having an Indian business office registration / Authorized distributers foreign firms (original equipment of following manufacturers) in India quoting in the currencies USD, EUR, GBP, CHF and SGD (only including handling, Packing forwarding and all other charges) should bear the whole responsibility of transition of equipment to TNPESU after clearing all the necessary customs formalities. Taxes must be shown separately which will be paid extra against declaration as above. Quotations indicating "taxes inclusive" are liable to be rejected.
- 3.31 Goods and Service Tax (GST): Goods and Service Tax may be shown separately in terms of percentage. If no GST is payable please show GST "Nil"). Quotation indicating "GST inclusive" is liable to rejection. For details refer point no. 2.16, part II of RFP.
- **3.32 Training: Required**. Please confirm this clause in your quotation. The supplier shall demonstrate the full functionality of the proposed system (i.e., the actual system which has to be delivered to TNPESU) at the manufacturer's site prior to shifting the system to

TNPESU. The FAT and critical training shall be carried out at the vendor's premises in the presence of TNPESU representatives. Any factory specific training shall be given for at least 2 persons for five days at vendor premises. The necessary approval by the TNPESU is essential before shifting the system to TNPESU. After formal ATP, the vendor shall also provide the requisite maintenance training for the TNPESU team (consisting of at least 4 members) at the TNPESU site, for at least one week on installation, software, operation, trouble shooting and maintenance aspects of the system with appropriate manuals

3.33 Insurance:

Transit Insurance: In case of procurement of item from foreign firm (By the Foreign companies having an Indian business office registration / Authorized distributer of foreign firms (Original Equipment Manufacturers) in India, insurance has to be covered as per INCO terms.

- **3.34 Installation & Commissioning:** Required. Please confirm this clause in your quotation (Refer point no. 5, part V of RFP).
- 3.35 General: No correspondence/discussions will be entertained on the subject unless specifically called for by The Registrar, TNPESU after opening of the tenders for technical discussions/price negotiations. Any violation of this will render the quotation invalid and the firm is liable to be blacklisted. The Registrar, TNPESU reserves the right to call for techno- commercial/price negotiation. The company should depute competent authorized representative for discussions/negotiations whenever called for and he shall be competent to take on the spot decisions. Drawing/specification must be returned along with your quotation/regret letter.
- 3.36 Purchase order will be placed on the vendor offering the lowest quote (Basic Cost) and meets all the technical & commercial requirements as per the RFP. The lowest quote of AMC will also be taken in to consideration in finalizing L1.
- 3.37 The Registrar, TNPESU reserves the right to accept or reject any or all offers in part or in full without assigning any reasons and also will not be responsible for any postal delay.
- 3.38 The commercial terms and conditions are summarized at Appendix "A" of this tender document. Same needs to be filled signed and sent along with technical bid.

PART IV - VENDOR QUALIFICATION CRITERIA

The broad criteria for qualifications of bidders should be in the following terms:

1) CUSTOMER REFERENCES

The **OEM** should have a minimum of **5 years** of experience in designing, developing and supplying such identical class of systems and supplier must have supplied these systems to reputed High Performance Centre for Sports / universities / institutes / R&D organizations and the OEM should give full customer reference and a copy of the supply order must be furnished.

2) FINANCIAL AND STATUTORY DETAILS

The vendor should furnish their financial results for the last **3 years** and also state if there has been a change in the board of directors including merger/takeover in the last 10 years.

3) OEM OR VENDOR AUTHORIZED BY THE OEM FOR EXECUTION OF THE PROJECT & PRODUCT SUPPORT FOR NEXT 10 YEARS

The vendor who undertakes the task on behalf of the manufacturer (OEM) shall provide a certification from the manufacturer that the vendor is authorized to supply, install and maintain the system for a period of 10 years from the date of installation.

4) AUTHORIZED DISTRIBUTORS/ RESELLERS ETC

In case authorized distributors, resellers etc. in India representing any OEMs from abroad wants to quote against this tender, they can do so only if they possess complete technical knowledge / competence in providing technical support to users in the installation and integration activities of the complete system. The local vendors should have a complete insight into the complete system. The technical evaluation committee will fully evaluate the capabilities of all vendors including the local vendors.

The local vendor should get the letter of guarantee from the OEM for carrying out these activities. It is also required that the OEM should provide the product support for at least 10 years from the date of placement of Purchase Order. Supplier should clearly specify their category/status like dealer /distributor/ OEM/ reseller/ system integrator.

5) CERTIFICATION

OEM (High Performance Centre for Sports) should have the ISO / International approved Sports Body / Any authorized international organization / Relevant authorized sports science body certification and submit a valid certificate for the same along with the proposal.

PART V - ESSENTIAL DETAILS OF ITEMS / SERVICES REQUIRED

5.1 Schedule of Requirements: List of items / services required (Details of specification is given in Appendix – C)

Item No	Description
Item – I	Functional and Strength Training Station with Lactate Analyzer and Accessories
Item - II	Speed Gate with Software and Accessories for speed, agility and coordination test and training
Item - III	3D Instrumented Treadmill and Accessories
Item - IV	Full Body IMU system with (On field Biomechanics assessment) biomechanical modelling software and accessories for real time feedback
Item – V	Sports Performance analysis system and accessories
Item - VI	Portable force and muscle testing system with software and accessories
Item - VII	Mocap system and accessories, Ultrasound with elastography and accessories and Portable muscle stiffness unit and accessories with athlete management system
Item - VIII	3D Body Scanner and accessories
Item - IX	Pressure Insoles and accessories
Item – X	Gas Analyzer (Portable) and accessories
Item – XI	3D Foot Scanner and accessories
Item – XII	Cardio and Rehab Station and accessories

1) TECHNICAL INSTRUCTIONS FOR BIDDERS

- i) The Instrumented treadmill bidders should submit a layout of the equipment location, data and power cable location and a demo of treadmill working model and assessment (preferably live / video demo) before the submission of their bid and the final layout and Video CD should be enclosed with technical bid.
- ii) The selected bidders of Instrumented treadmill should mutually work together to install the equipment with at most perfection under the supervision of university authorities.
- iii) The bidders may bid for **ANY INDIVIDUAL ITEM** enlisted separately with the respective item number and tender number.

- iv) The bidders should enclose the LIST OF DELIVERABLES with the technical bid.
- v) The HPCS floor plan is given in **Appendix D** for the reference of bidders to prepare the layout of Strength training and Cardio and Rehab station.

2) DOCUMENTS, MANUALS, DRAWINGS AND INSPECTION REPORTS

The supplier shall submit 2 copies each of drawings, test certificates of all bought out components, inspection reports, manufacturer's test reports and 2 sets of installation, operating, maintenance manuals both in soft and printed form. The documents shall be with full clarity.

3) INSTALLATION & OPERATION

The supplier is totally responsible for configuration, design, fabrication, installation testing and commissioning of the entire system and will execute project under a project director of High-Performance Centre for Sports (HPCS). The vendor shall provide a Schedule of all the tasks to be carried out along with the proposal. The system shall be accepted based on the conduct of a formal ATP. The ATP document shall be provided by the vendor prior to the conduct of ATP and the document shall address all the specification requirements specified in the tender document and any other features claimed by the supplier. The document shall be approved by the TNPESU with the mutual consent prior to the conduct of formal ATP.

The required civil works, if any, along with the power requirement has to be given along with the space required in the quotation.

The supplier is responsible for any equipment damage during transportation, installation and commissioning. After completion of installation, the system will be inspected for complete and smooth functioning.

4) FACTORY ACCEPTANCE TEST (FAT) & ON-SITE ATP

*The supplier shall demonstrate the full functionality of the proposed system (i.e., the actual system which has to be delivered to TNPESU) at the manufacturer's site prior to shifting the system to TNPESU. The FAT and critical training shall be carried out at the vendor's premises in the presence of TNPESU representatives. Any factory specific training shall be given for at least 2 persons for ten days at vendor premises. The necessary approval by the TNPESU is essential before shifting the system to TNPESU. After formal ATP, the vendor shall also provide the requisite maintenance training for the TNPESU team (consisting of at least 4 members) at the TNPESU site, for at least 2 weeks in two phases (1-week duration each in first phase and second phase. The date of second phase training may be decided mutually by vendor and buyer but not sooner than 3 months and later than 6 months from the date of installation) on installation, software, operation, trouble shooting and maintenance aspects of the

system with appropriate manuals. (*TNPESU / Buyer has the discretion to ask for Pre delivery Inspection and Factory Acceptance Test if needed).

5) PRE-INSTALLATION SITE VISIT

Visit to the TNPESU for inspection & civil works (if any) is permitted. In case of visit by foreign nationals, 30 days advance notice has to be given to TNPESU. The Bio data of the personnel shall be provided by the supplier for necessary security clearance.

6) WARRANTY

From the date of commissioning of the system at TNPESU, the equipment supplied by the supplier must be warranted for all systems and subsystems for a standard period of 3 years and extended period of additional 2 years.

During the warranty period, all the defective parts should be replaced free of cost by the firm to TNPESU's satisfaction and necessary software updates / upgrades shall be provided at free of cost. The supplier shall bear the cost of collecting faulty items and also the cost of returning fixed items. The supplier shall provide remote assisted training including unlimited phone, email, web tech support, access to discussion forum, online help files and videos. The supplier shall allow access to unlimited trial licenses of new software.

The supplier shall quote the cost per unit against each item listed in the list of deliverables (including spares) and shall agree to supply these items on need basis at the same negotiated cost if order is placed within two years from the date of purchase order.

7) SINGLE POINT OF CONTACT FOR PROJECT EXECUTION

During the start of the project execution, the supplier shall declare a single point of contact (Project manager from supplier side). The Project Manager (supplier side) shall be the single contact point with whom the TNPESU will interact for the implementation of the project. The Project Manager shall ensure that the requisite Quality standards are fully met and shall be responsible to ensure that all contractual, technical, schedule requirements are met in total.

8) SOFTWARE UPDATES & AFTER SALES SET-UP

Supplier to clearly indicate annual update charges, if any and same must be supported by history of updates to give an idea about the software improvement with time. Supplier to give full details of their after-sales set up in India including call centre contacts and location.

9) CUSTOMER REFERENCES

The OEM should have a minimum of 5 years of experience in designing, developing and supplying such identical class of systems and supplier must have supplied these

systems to reputed High Performance Centre for Sports / universities / institutes / R&D organizations and the OEM should give full customer reference and a copy of the supply order must be furnished.

10) FINANCIAL AND STATUTORY DETAILS

The firm should furnish their financial results for the last 3 years and also state if there has been a change in the board of directors including merger/takeover in the last 10 years.

11) OEM OR FIRM AUTHORIZED BY THE OEM FOR EXECUTION OF THE PROJECT & PRODUCT SUPPORT FOR NEXT 10 YEARS

The vendor who undertakes the task on behalf of the manufacturer shall provide a certification from the manufacturer that the vendor is authorized to supply, install and maintain the system for a period of 10 years from the date of installation.

12) AUTHORIZED DISTRIBUTORS/ RESELLERS ETC

In case authorized distributors, resellers etc. in India representing any OEMs from abroad wants to quote against this tender in local currency, they can do so only if they possess complete technical knowledge / competence in providing technical support to users in the installation and integration activities of the complete system. The local vendors should have a complete insight into the complete system. The technical evaluation committee will fully evaluate the capabilities of all vendors including the local vendors. The local vendor should get the letter of guarantee from the OEM for carrying out these activities. It is also required that the OEM should provide the product support for at least 10 years from the date of placement of Purchase Order. Supplier should clearly specify their category/status like dealer /distributor/ OEM/ reseller/ system integrator.

13). CERTIFICATION

OEM should have the ISO / Any reputed International body of Sports Science / Relevant authorized professional / sports body and submit a valid certificate for the same along with the proposal.

14). MAKE MODEL & COMPLIANCE CHART

Supplier should clearly mention the make and model / part no of all the items proposed and submit relevant technical brochures / product catalogue. The supplier should include a specification compliance chart to indicate the compliance of each specification of the system that is being quoted. The technical bid should consist of details of customers using such systems worldwide and the complete technical literature.

Supplier should submit all necessary supporting documents as requested above along with the technical proposal, in original, duly signed by authorized signatory.

5.2. DETAILED SPECIFICATION

{GIVEN IN APPENDIX – C}

5.3 Bidders are required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any. Bidders are advised to submit compliance statement for the technical parameters separately in the following format along with the Techno-Commercial Bid:

Para of RFP specifications (item – wise)	Specifications of item offered	Compliance to RFP specifications - whether Yes / No	Remark (In case of non-compliance, deviation from RFP to be specified in unambiguous terms. In case of compliance, catalogue/brochure reference, if available, to be indicated)

For Commercially-Off-The-Shelf (COTS) items, it is mandatory to enclose catalogue/technical brochure to support the claims of compliance.

- 5.4 Delivery Period: Expected delivery Period for supply of item/rendering services would be 6 months from the Effective Date of Contract. Please note that the Contract can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period. Extension of contracted delivery period with/ without LD clause will be at the sole discretion of the Buyer.
- 5.5 INCOTERMS for Delivery and Transportation (for Foreign Bidder only): Unless otherwise specifically agreed to by the Buyer and the Seller and incorporated in the Contract, the applicable rules and regulations for transportation of goods from foreign countries will be as per the contemporary version of International Commercial Terms (INCOTERM 2010) evolved by International Chamber of Commerce, Paris.

5.6 Consignee details:

Name: The Registrar, Tamil Nadu Physical Education and Sports University.

Address: Melakkottaiyur Post, Chennai, Tamil Nadu – 600 127.

Contact Details: **Telephone: 044 - 27477906** Email: regtnpesu@gmail.com

PART-VI EVALUATION OF BIDS

- 1. Technical Qualification Criteria
 - I. Only those bidders who qualify all Pre-Qualification/Minimum Eligibility Criteria requirements shall be qualified for technical bid evaluation.
 - II. The Tender Committee (TC) reserves the right to reject a Service in case the offered service does not match the technical requirements/ objectives specified in Technical Bid Buyer's Requirements.
 - III. The technical bid shall first be reviewed for determining the Compliance of the Technical bids with the RFP terms and conditions, Minimum/ mandatory Technical requirements, and the scope of work as defined in this RFP.
 - IV. Any bid found to be non-compliant to the mandatory Technical Requirements, RFP terms, conditions, and work scope shall be rejected and shall not be considered for further evaluation. Bids that are technically compliant would only be taken up for commercial evaluation.
 - V. Bidder is required to submit all the supporting documents as per the criteria mentioned in the RFP. However, Buyer reserves the right to summarily reject any bid which does not contain all the mandatory supporting document or may ask the bidder to resubmit documents, the decision of Buyer shall be final and binding in this regard.
 - VI. A score would be given to each bidder by Tender Committee based on the scoring criteria.
 - VII. Bids that are technically qualified would only be taken up for financial / commercial evaluation.
 - VIII. Buyer reserves the right to disqualify any bidder based on any relevant criteria, and its decision is final.
 - IX. The Bidder should submit following documents as a documentary proof:
 - a) In case of Completed Projects: Firm should submit Copy of Work Order / Contract Agreement and any document justifying the completion of the assignment from the client.
 - b) In case of Ongoing Projects: Firm should submit Copy of Work Order / Contract Agreement and ii. Self-Certification.
 - X. The bidder reserves the right to renegotiate any terms (Price / Technical) further with the successful Bidder.
 - XI. Technical Bids shall then be evaluated for the following broad parameters. The Bidders should have the following criteria for participating in the tender. The Bidders should enclose documentary evidence for fulfilling the following Evaluation Criteria. The technical committee consisting of members from State department will evaluate the bidders those who had qualified in the previous Minimum Eligibility criteria / Pre-Qualification Criteria.

Technical Evaluation Scoring Model: The committee will evaluate the qualified bidders as per the criteria set below:

	Criteria	Max. Score	Score
	I. Technical Capability		
1.	Legal Structure	5	
	Private Limited		3
	Public Limited		5
2.	Quality Certifications of the Products Provided	10	
	National Standards		5
	International Standards		10
3.	No. of technical peopleto be deputed exclusively for this project	5	
	4 to 5 persons		3
	Above 5 persons		5
	II. Financial capability (INR)		
4.	Average annual turnover of the firm for the period 2021-2022, 2022-2023, 2023-2024	5	
	1 mark for minimum Rs.1 Crore and each additional crore will be given 1 mark to a maximum of 5 marks (i.e. 1 mark for 100 lakhs to 199 lakhs and 2 marks for 200 lakhs to 299 lakhs)		5
	sports science or Strength & Conditioning solutions for high performance sports to the other Government Academy / High Performance Centre / reputed Universities, for the preceding three accounting years between 2021-2022, 2022-2023, 2023-2024.		
	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a		5
	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark		5
	mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment.	nent	5
6.	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment of the Bidder relevant to the Bidde	nent 10	
6.	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment of the Bidder relevant to the Bidder relevant	nent 10	10
	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment of the Bidder relevant to the B	nent 10	10
	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment of the Bidder relevant to the Bidder relev	nent 10	10
	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment of the Bidder relevant to the Bidder relevant to the assignment of the Bidder relevant to	nent 10	10
	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment Projects have been undertaken and successfully delivered so far in the last 3 years. National level / International level (University / Sports training centers / Clinical and Rehabilitation / Any relevant organization) 1 mark for National level and 2 marks for international level to a maximum of 10 marks. Number of Years Experience in Similar Project Min. 3 years More than 3 years to 5 years More than 5 years	nent 10	10
	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment of the Bidder relevant to the Bidder relevan	nent 10	10 5 7
7.	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignm Projects have been undertaken and successfully delivered so far in the last 3 years. National level / International level (University / Sports training centers / Clinical and Rehabilitation / Any relevant organization) 1 mark for National level and 2 marks for international level to a maximum of 10 marks. Number of Years Experience in Similar Project Min. 3 years More than 3 years to 5 years More than 5 years IV. Solution Approach and Methodology Presentation & Demonstration	nent 10	10 5 7
7.	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignmer Projects have been undertaken and successfully delivered so far in the last 3 years. National level / International level (University / Sports training centers / Clinical and Rehabilitation / Any relevant organization) 1 mark for National level and 2 marks for international level to a maximum of 10 marks. Number of Years Experience in Similar Project Min. 3 years More than 3 years to 5 years More than 5 years IV. Solution Approach and Methodology Presentation & Demonstration Product Specification	10 10	10 5 7
7.	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignm Projects have been undertaken and successfully delivered so far in the last 3 years. National level / International level (University / Sports training centers / Clinical and Rehabilitation / Any relevant organization) 1 mark for National level and 2 marks for international level to a maximum of 10 marks. Number of Years Experience in Similar Project Min. 3 years More than 3 years to 5 years More than 5 years IV. Solution Approach and Methodology Presentation & Demonstration	10 10	10 5 7 10
6. 7. 8.	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignmer Projects have been undertaken and successfully delivered so far in the last 3 years. National level / International level (University / Sports training centers / Clinical and Rehabilitation / Any relevant organization) 1 mark for National level and 2 marks for international level to a maximum of 10 marks. Number of Years Experience in Similar Project Min. 3 years More than 3 years to 5 years More than 5 years IV. Solution Approach and Methodology Presentation & Demonstration Product Specification	10 10	10 5 7 10
7.	1 mark for minimum 10 lakhs and each additional 10 lakhs will get 1 mark to a maximum of 5 mark III. Specific Capability / Experience of the Bidder relevant to the assignment of the projects have been undertaken and successfully delivered so far in the last 3 years. National level / International level (University / Sports training centers / Clinical and Rehabilitation / Any relevant organization) 1 mark for National level and 2 marks for international level to a maximum of 10 marks. Number of Years Experience in Similar Project Min. 3 years More than 3 years to 5 years More than 5 years IV. Solution Approach and Methodology Presentation & Demonstration Product Specification Ease of Integration with multiple technologies	10 10 50	10 5 7 10 25 15

2. Evaluation Criteria of Technical Bid

- The Technical Evaluation would be done for only those bidders, who comply with the prequalification criteria mentioned in – Minimum Eligibility Criteria/Pre-Qualification Criteria.
- ii) Tender Scrutiny Committee shall evaluate all the evidences/documents to determine the substantial responsiveness. Detailed technical evaluation shall be carried out by a technical evaluation committee along with other conditions in the tender document to determine the substantial responsiveness of each tender. The substantially responsive bid is one that confirms to all the eligibility and other conditions of this tender document without any material deviation.
- iii) The Technical Evaluation Committee may call the responsive bidder(s) who comply with all the eligibility and other conditions of this tender document for discussion and presentation to facilitate and assess their understanding of the scope of work and its execution. The bidder should give a detailed presentation on how their technology is best suited for the requirements of CEB-HPC. However, the committee shall have sole discretion to call for discussion/presentation based on the fulfillment of the eligibility conditions.
- iv) Quality and Cost based Selection (QCBS) 70:30 (Technical: Commercial).
- v) Only those bids which have a minimum technical score of 70% of total marks as in table above shall be considered qualified. However, the Buyer reserves the right to lower the minimum required marks.
- vi) The Bidder has to submit the clarifications / additional particulars to the office of the Registrar, TNPESU within the time limit mentioned in the tender document / official communication from the Registrar, TNPESU. The Bidder's offer will be disqualified, if the clarifications / additional particulars sought are not submitted within the specified date and time.

3. Evaluation of financial/commercial bids (As per Commercial Bid Template/BOQ Form)

- i) Commercial bids submitted by only those bidders, who have qualified both prequalification and Technical evaluation, shall be eligible for further evaluation.
- ii) Only those Service Providers that have achieved at least minimum qualifying score (70% in this case) will be treated as qualified and only their financial proposals will be opened.
- iii) Commercial Bids that are not as per the provided format shall be liable for rejection.
- iv) In the case of a tie between two or more bidders (i.e. equal commercial quote), the bidder with higher score under technical evaluation shall be ranked first in order
- v) If Bidder quotes NIL charges, the bid shall be treated as unresponsive and shall not be considered for evaluation.

4. Selection of Bidder

- i) The Selected bidder shall not be declared till the detailed commercial bid is not evaluated. During the evaluation if the Purchaser finds that the detailed commercial bid is not in order or incomplete etc. then Purchaser shall treat the bid as non-viable and same shall be rejected, and EMD shall be forfeited. In such case next ranked bidder shall be considered for further evaluation and so on till a bidder is selected.
- ii) If any bidder withdraws his bid, at any stage after the submission of the bid, till the final evaluation or declaration of the final selected bidder, it shall be declared

- a defaulting bidder and EMD of such defaulting bidder shall be forfeited and Purchaser reserves right to blacklist such bidders for next three years from participating in any Purchasers' tender. In such situation the tendering process shall be continued with the remaining bidders as per their ranking.
- iii) If the bidder backs out after being declared as selected bidder, it shall be declared a defaulting bidder and EMD of such defaulting bidder shall be forfeited and Purchaser reserves right to blacklist such organization for next three years from participating in any Purchaser Tender. In such case the detailed commercial bid of next ranked commercial bidder shall be evaluated.
- iv) Next ranked commercial bidder also backs out then Purchaser shall complete the tender process by following the same process again for other remaining commercial ranked bidders.
- 5. Final Evaluation Criteria -Quality and Cost based selection
 The formula for calculating a Quality and Cost Based Selection (QCBS) score is:
 Final Score (F) = (Technical Score x 0.7) + (Commercial score x 0.3)
 - i) QCBS calculations:
 - a) **Technical Score (T) = (**Bidder's Technical score / Highest Technical Score) x 100
 - b) **Financial Score (Commercial Score) (F)** = (Lowest Commercial Price / Bidder's Commercial Price) x 100
 - c) Technical score has a weightage of 70%
 - d) Financial score has as a weightage of 30%
 - e) FL1: The party quoting the lowest charges, with a score of 30 marks
 - f) Other bidders: Their financial score is calculated as FL1 * 30 / FL2

PART VII - PRICE BID FORMAT

7.1 Price Bid Format: The Price Bid Format as per **BoQ (Appendix - E)** to be filled by Bidder:

Note:

- 1. Any quotation received with cost included in Technical bid would be liable for rejection.
- 2. Vendor should quote as per BoQ format only otherwise bids will be rejected.

COMMERCIAL TERMS AND CONDITIONS – TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

Firms are requested to indicate their acceptance for under mentioned Standard Commercial Terms & Conditions of TNPESU

Tender No & Date

High Performance Centre for Sports (HPCS)

SI. No	Description	Standard TNPESU Terms for Indian Firms	Standard TNPESU Terms for Foreign companies having an Indian business office registration / Authorized distributers of foreign firms (original equipment manufacturers) in India	Confirmation By Firm (If Not Agreed give reasons)
1.	Currency	INR only	INR / USD, EUR, GBP, CHF and SGD only.	
2.	Goods and Service Tax (GST)	Indicate % of GST with supporting documents. For details refer point no. 2.15, part II of RFP.	Indicate % of GST with supporting documents. For details refer point no. 2.15, part II of RFP.	
3.	Customs Duty	Refer Part II (Point No. 2.15).	Refer Part II (Point No. 2.15).	
4.	Terms of Delivery	The prices quoted are F.O.R. TNPESU, Chennai. The prices are in INR	The prices quoted are F.O.R. TNPESU, Chennai. The prices are in INR Or The prices quoted are all inclusive in (USD, EUR, GBP, CHF and SGD) currency CIF/CIP duly customs cleared for transit to TNPESU	
5.	Packing & Forwarding Charges	Prices are all Inclusive	As per INCO terms 2020	
6.	Freight Charges	Prices are all Inclusive	As per INCO terms 2020	
7.	Insurance Charges	Prices are all Inclusive	As per Incoterms 2020	
8.	Validity of Quotation	90 days from the date of Tender opening.	90 days from the date of Tender opening.	
9.	Performance cum Warranty Bond	The successful bidder may be required to submit Performance cum Warranty Bond (PCWB) in the form of Bank Guarantee (BG), in favour of "The Registrar, TNPESU, Chennai" for a sum equal to 10% of the Contract value (excluding	The successful bidder may be required to submit Performance cum Warranty Bond (PCWB) in the form of Bank Guarantee (BG) in favour of the "The Registrar, TNPESU, Chennai" for a sum to 10% of the Contract value	

		taxes) at the time of	(excluding taxes) at the time of	
		acceptance of tender. The	acceptance of tender.	
		Bond submitted in the form	The BG should be valid up to	
		of Bank Guarantee (BG) should be valid up to 60	60 days beyond the date of	
		days beyond the date of	completion of all contractual	
		completion of all contractual	obligations, including warranty	
		obligations, including	obligation wherever	
		warranty obligation wherever applicable. The	applicable. The specimen of	
		specimen of bond can be	bond can be provided on request.	
		provided on request.	"The Performance cum	
		Indemnity bond: Indemnity	Warranty Bond will be forfeited	
		bond will be accepted from Government Departments /	by the Buyer, in case the	
		DPSUs / PSUs in lieu of	conditions regarding	
		PCWB / BG in a favour of	adherence to delivery	
		"The Registrar, TNPESU,	schedule and/or other	
		Chennai. "The Performance cum	provisions of the Contract/ SO	
		Warranty Bond will be	are not fulfilled by the Seller."	
		forfeited by the Buyer, in		
		case the conditions regarding adherence to		
		delivery schedule and / or		
		other provisions of the		
		Contract / SO are not fulfilled by the Seller."		
		Within 3 months from the	Within 3 months from the	
10.	Delivery Period	effective date of Supply	Effective date of Supply	
	Payment	Order. As per tender document	Order. As per tender document	
11.	Terms	(Point no.3.9 of Part III)	(Point no.3.9 of Part III)	
	Warranty from			
12.	the date of acceptance /	As per point no. 3.25, part III of RFP.	As per point no. 3.25, part III of RFP.	
	installation	III OF IXEF.	OF KIT.	
	Inspection	As per point no. 3.21, part	As per point no. 3.21, part III	
13.	stages &	III of RFP.	of RFP.	
	Place.	Liquidated Damage	Liquidated Damage (LD):	
		(LD): The Buyer	The Buyer reserves the	
		reserves the right to	right to impose LD in case	
		impose LD in case of delay in supply	of delay in supply attributable to the Seller at	
		attributable to the Seller	the rate of 1% per week or	
		at the rate of 1% per	part thereof for stores	
		week or part thereof for stores which the Seller	which the Seller has failed to deliver within the period	
4.4	I D elever	has failed to deliver	agreed for delivery in the	
14.	LD clause	within the period agreed	contract subject to	
		for delivery in the	maximum of 10% of the	
		contract subject to	total order value	
1		maximum of 10% of the	(excluding taxes & duties).	
		maximum of 10% of the total order value	(excluding taxes & duties).2. LD can also be levied on	
		total order value (excluding taxes &	LD can also be levied on the Seller on the basic	
		total order value (excluding taxes & duties).	LD can also be levied on the Seller on the basic cost of the stores supplied	
		total order value (excluding taxes &	LD can also be levied on the Seller on the basic	

	supplied partially within the scope of the order/ contract that could not be put to use due to late delivery of the remaining stores.	due to late delivery of the remaining stores.	
Product Support	As per point no. 3.26, part III of RFP.	As per point no. 3.26, part III of RFP.	
Training	As per point no. 3.32, part III of RFP.	As per point no. 3.32, part III of RFP.	
Installation & Commissioning	As per point no. 3.34, part III of RFP	As per point no. 3.34, part III of RFP.	
Supply of documents & conformity certificate	To be provided by the firm along with the supply	To be provided by the firm along with the supply	
Earnest Money Deposit (EMD)	For details refer point no. 1.14, part 1(A) of RFP.	For details refer point no. 1.14, part 1(A) of RFP.	
Export license.	TNPESU to provide end use statement, if required for obtaining export license.	TNPESU to provide end use statement, if required for obtaining export license. Format of EUC should be submitted along with techno commercial bid	
Agency Commission	Not Applicable.	We certify that this quotation is a direct transaction between TNPESU and us and no agent/agency commission is involved.	
Special Terms	It is noted that the "The Registrar, TNPESU" reserves the right to accept/reject our offer in part / full without assigning any reasons and also not be responsible for postal delays.	It is noted that the "The Registrar, TNPESU" reserves the right to accept/reject our offer in part / full without assigning any reasons and also not be responsible for postal delays.	
	We accept all the above terms & Conditions	We accept all the above terms & Conditions	
Ordering Information [Order to be placed on]	(Indicate Name and	I Address of the firm)	
):	Signature with name and Designation in block letters and company seal	Signature with name and designation in block letters	
			Designation in block letters designation in block letters

Important Note for Information

- i. This Form to be completed and submitted along with your Techno Commercial Offer and copy of the same to be provided along with your Price Bid.
- ii. A categorical confirmation of acceptance of all our terms and conditions in to will enable speedy processing of the offer.
- iii. It is also requested to note that no change is acceptable unless and until proper justification is provided.

Note:

- N-1: LC will be opened for a period of 90 days. In case of extension of LC or opening of New LC, the charges will have to be borne by the seller.
- N-2: Incase the item / Services provided are not working during warranty / extended warranty, for a period beyond Turn Around Time (TAT) the warranty / Extended warranty will be extended by a period equal to the idle time / downtime-TAT.
- N-3: Payment for warranty / Extended warranty will be paid annually after successful completion of Warranty / Extended Warranty (If Applicable).
- N-4: The Original EMD should be sent to "The Registrar, TNPESU" along with Technical bid. EMD would be received and returned in INR only.
- N-5: I / We certify that in the past we have never been banned / debarred for doing business dealings with Govt. of Tamil Nadu / Govt. of India / any other Govt. organization and that there is no enquiry going on by CBI / ED / any other Govt. agency against us.

TENDER ACCEPTANCE LETTER

Appendix - B

(Refer Para 1.21 of part I (A))

(To be given	on Company	Letter Head)
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Date:

To,	Date:
Sub: Acceptance of Terms & Conditions of Tender. Tender Reference No:	
Name of Tender / Work	
Dear Sir,	
 I / We have downloaded / obtained the tender document(s) for the Work" from the web site(s) namely: 	he above mentioned "Tender /

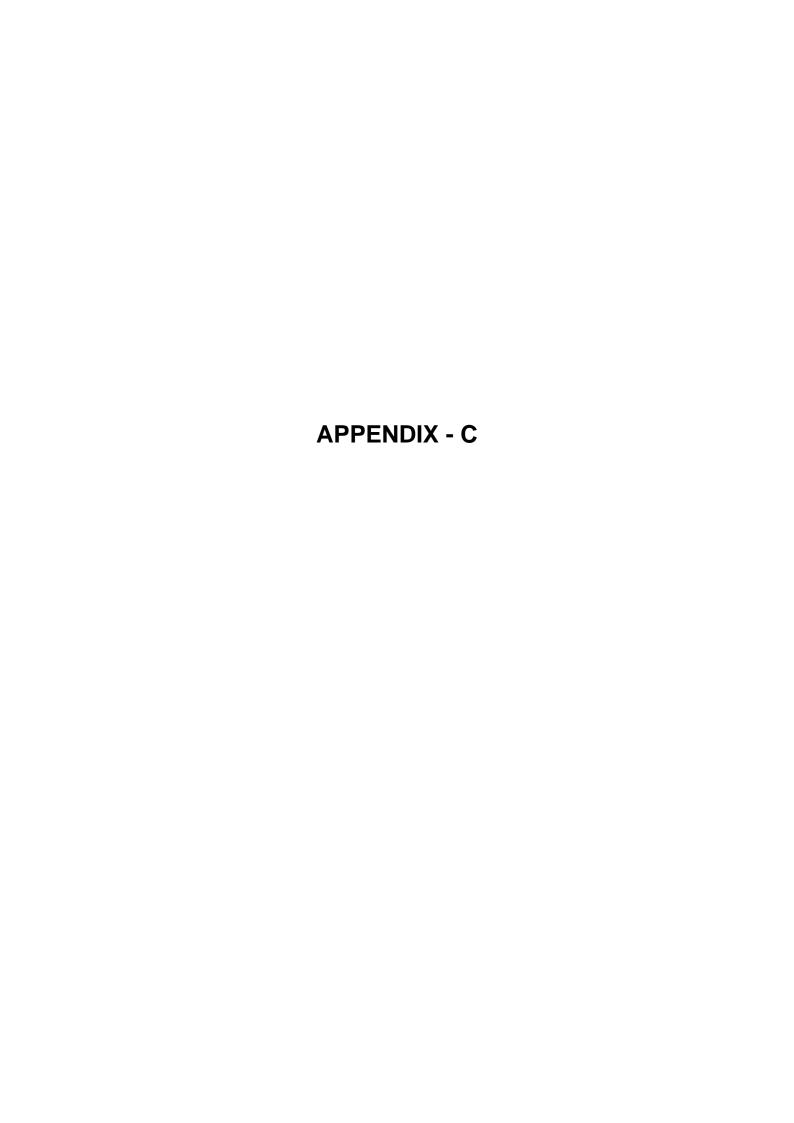
as per your advertisement, given in the above mentioned website(s).

- 2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to ____ (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
- 3. The corrigendum(s) issued from time to time by your department / organizations too have also been taken into consideration, while submitting this acceptance letter.
- 4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
- 5. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.
- 6. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect / untrue or found violated, then your department / organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.
- 7. I / We certify that in the past they have never been banned / debarred for doing business dealings with Govt. of Tamil Nadu / Govt. of India / any other Govt. organisation and that there is no enquiry going on by CBI / ED / any other Govt. agency against us.

Note: Giving or offering of any gift, bribe or inducement or any attempt at any such act behalf of the Seller toward any officer / employee of the Buyer or to any other person in a position to influence any officer / employee of the Buyer for showing any favour in relation to this or any other contract, shall render the Seller to such liability / penalty as the Buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the bank Guarantee and refund of the amount paid by the Buyer.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)



Tender No.3404-1 / 2025 Item 1: Functional and Strength Training Station wit Lactate Analyser and Accessories				
S. No	Item Name	Specifications	Qty	
1	Uni horn Sled	The product should have a single horn for weight plates.	1	
		b. The horn should be compatible with the standard Olympic-size plates.		
		c. The product should be made of high-grade		
		material and must be standardised for beginner to advanced workouts.		
		d. Unit Weight should be up to 30 kg or more.		
2	Squat high pull	 Multiple loading points and separate handle positions should be provided for many users. 	1	
		 b. The product should be made up for high durability. 		
		c. The product weight should be 70 Kg or more.		
		d. The product should have EN-957 or ASTM certification for stationary fitness equipment.		
3	Power Runner	Must have independent weight loading horns for each leg	1	
		b. Must have hd foam pads for shoulder support		
		c. Must have rubber coated hand grips		
		d. Must have ROM/start point adjustment		
		e. Must have atleast weight storage horns		
4	Stretch Pull	a. The structure should have a blended	1	
	Trainer	fabrication of all of 11 gauge thickness or more.		
		b. Seats should be made up of dye-punched HD		
		foam moulded over 1 " thick ply with		
		commercial grade rip-proof textured with minimum 4-layer vinyl fabric		
		c. The product should consist of moisture-		
		absorbing multi-grip handles & rollers for		
		transport		
		 d. Should be able to take up to a Maximum User Weight of 110 kg or more. 		
		e. Equipment Weight should be up to 25 kg or		
		more. f. The product should have EN-957 or ASTM		
		certification for stationary fitness equipment.		
5	Slant super squat	 Should have an ergonomic design and a solid steel core for repetitive use. 	1	
		b. Should have an oversized footplate,		
		comfortably padded shoulder pads & plate		
		storage horns. c. The product should include different strength		
		curves for different loading points and multiple		
		handle positions.		
		d. Product Weight should be up to 120 Kg or		
		more.		

		e.	The product should have EN-957 or ASTM certification for stationary fitness equipment.	
6	Variable ratio dual adjustable	a.	The product should have a deep groove and a minimum of 5-inch shrouded pulleys	1
	pulley	b.	The equipment should have an adjustable	
		_	pulley system of 1:2 & 1:4 weight ratios. The product should include a minimum 7	
		0.	pieces of related accessories.	
			It should have a minimum 35 pulley positions.	
		e.	Should have a dual-weight stack to accommodate multiple users at the same time.	
		f.	The equipment should come with a weight selector fork.	
		g.	The weight stack should be at least 100 kg for	
		h	each stack or more. The product should have EN-957 or ASTM	
		11.	certification for stationary fitness equipment.	
7	Weight lifting Platform	a.	The product should have rubber floor mats & minimum of 4 wooden boards	1
	Plationii	b.	The rubber mats & weightlifting/deadlift	
			platform should be enclosed in a secure iron	
			frame, with corner plates in each corner of the	
		С	platform. The material of the product should be rubber &	
		0.	wooden	
		d.	The tiles should have at least 25 mm or more	
		۵	thickness. The product should have EN-957 or ASTM	
		0.	certification for stationary fitness equipment.	
8	Adjustable	a.		1
	Resistance Sled	h	weight loading. The product should consist of soft wheels that	
		J.	are gentle on carpeting, hardwood, & natural	
			turf grass.	
		C.	The machine should be able to take up a load of 100 kg or more.	
		d.	The machine should also magnetic resistance.	
9	Independent	a.	Should have an independent movement that	1
	Convergent Overhead Press	 	allows for unilateral or bilateral movements.	
	Overneau Press	b.	Machine should have wide pulleys and Kevlar belt based weight stack movement.	
		c.	The machine should have rotating handles for	
		اء	natural movements and reduced wrist stress.	
		a.	The machine should have at least 2 microloading adjustments.	
		e.	Weight Stack should be up to 90 kg or more	
			with a fork type selector pin.	
		f.	The product should have EN-957 or ASTM certification for stationary fitness equipment.	
			ceruncation for stationary nuness equipment.	

10	Flat Bench	Equipmer cushionsShould haThe prod	num weight should be 20 kg or more. It should have heavy-duty vinylow & double-stitched upholstery. It wheels for rollaway. It should have EN-957 or ASTM	1
11	Adjustable bench	Multi-use options.Should be and wheeShould had be unit Weig more.The prod	ave an adjustable seat. The should be a minimum of 45 kg or uct should have EN-957 or ASTM	1
12	Olympic Incline Bench	. Machine \ or more The equip height The bar natural pr back for u . The prod	on for stationary fitness equipment. Weight should be a minimum of 40 Kg whent should have an adjustable seat holder should pivot forward over a essing groove, with the ability to drop ininterrupted movement. uct should have EN-957 or ASTM on for stationary fitness equipment.	1
13	Back Hyperextension	. The product & have a . The product pads Unit Weig 40 kg or r The exercitor optima . The product is the product in the product is the product in the	uct should have a welded steel frame heavy-duty vinyl cushion. luct should have adjustable thigh the product should be at least	1
14	Unilateral Leg Press	The product of the pr	uct should provide Iso-Lateral motion a diverging path of motion. uct should be ideal for independent g for equal strength development. Should be angled for seated leg press Veight should be 120 Kg or more. uct should have EN-957 or ASTM on for stationary fitness equipment.	1
15	Reverse Hyper Extension	angled ell The equip entry/exit. Product V The prod	ave at least a reclined position and bow pads to secure user position. In the property of the	1

16	Pec Fly/Rear Delt	b. c. d.	The product should have a minimum 6-position seat adjustments to accommodate a wide range of users. The product should have a minimum 6-position arm adjustment to provide full ROM for both pec fly and rear delt exercises. Should have dual-position handles The equipment should have a weight Stack of 110 kg or more. The product should have EN-957 or ASTM certification for stationary fitness equipment.	1
17	Deadlift Bar	c. d.	Bar weight should be a minimum of 20 kg. Shaft Diameter should be at least 1 inch. The diamond-shaped knurling at the grip should be a minimum of 1.5 mm for a secure grip. Bar Length should be up to 2300 mm & Loadable Sleeve Length atleast 8 inches Should be able to take up a maximum Load of 320 kg or more.	1
18	Spring collar		Should be sturdy & come with a quick-release clamp design. The product should be made up of a durable material.	5
19	Professional Bar – Weight lifting Bar with Locks	b. c.	The product should have bearing-type ends. Dimensions & Diameter of the inner rod should be 1.1" and for ends 2". Should have knurled on the grip. The product should contain 1 bar each of 6ft, 7ft, 5ft, 4ft, and 3ft EZ and 4ft EZ	6
20	Buffalo Bar		The weight of the product should be 21 kg or more & Grip length should be a minimum of 32 mm. The product should have a Sleeve diameter of a minimum of 49.8mm. Length should be at least 2405 mm	2
21	Squat Bar	a. b. c.	Bar Weight should be at least 28 kg Shaft Diameter of the product should be 32 mm	2
22	Seal Row Bench		The product should be able to accommodate users of different shapes and sizes. The product has comfortable cushioning for an efficient workout.	1

23	Medicine Ball	a. Should be available in Sizes:1kg, 2kg, 3kg 5kg, 6kg, 8kg, 10kgb. Should be made up of a heavy-duty rubbe shell.	
24	Slam/Wall Ball	 a. Should be well-textured and have a thick surface. b. The material should be thick stiff rubbe material. c. 1 pc each of 3 Kg & 6 kg 	
25	Olympic Training Plate sets (Total weigh 350kg)	a. Should be heavy-duty and made of commercial-grade material runner on the outside and ms discs inside 1 kg - 10 pcs 2.5 kg - 8 pcs 5 kg - 8 pcs 10 kg - 4 pcs 15 kg - 4 pcs 20 kg - 4 pcs 25 kg - 4 pcs 25 kg - 4 pcs	
26	Dumbbells Rack 3-Tier	 a. The product should have a minimum of 3 tiers and an angled rack and should be suitable for mixed-size use. b. A floor bolt option should be included, with construction in at least 11 gauge pipe. c. The machine weight should be 75 kg or more. 	
27	Fixed Barbell 5 Kg to 20 Kg (100 Kg)	 a. Should be made up of solid steel with a welded head/handle joint. b. The diameter should be a minimum of 1" c. Grip Width should be a minimum of 36" d. The overall Width should be a minimum of 41' e. Should have Knurling for secure grip f. Should have 1 pc each straight fixed barbell of 5kg, 10kg, 15 kg, 20 kg, 1 pc each curled fixed barbell of 5kg, 10kg, 15 kg, 20 kg per set 	
28	Fixed Barbell Rack	 a. The product should have a large bar hold for easy racking. b. Should consist of an ergonomically upright angle and consist of a durable powder coaframe. c. Must be able to accommodate up to 8 barbells d. Should consist of J cup hooks for barbell storage e. Should have a rubber base on the legs of the stand that protects the floor as well as the equipment. 	
29	Plyometric Boxes Set	a. Should be made up of a strong foam core for heavy use.b. Should be optimal for plyometric exercises.c. Should be made of high-density EPE foam,	4

			Max User Weight should be 180 kg or more. Set should contain 1 pc each of 4 height/sizes	
30	Agility Ladder		The ladder should be at least 3.5 meters with a minimum of 7 rugs.	2
		b.	Should be designed for rough use.	
31	Weight Vest 20 Kg		Should be able to load up to 20 kgs.	5
32	Resistance Tube Varied Intensity - Heavy Duty	a.	Should contain 1 pc each of 2.2 Kg, 4.5 Kg, 6.8 kg, 9.0 kg & 13.6 kg (01 each)	3
33	Battle Rope	a. b. c. d. e.	Should have an Ergonomic grip. The rope should be made up of Polypropylene. Length should be a minimum of 15m Item Weight should be 7-8 kg approx. The diameter should be a minimum of 50 mm.	3
34	Balance Ball	a. b.	Should have elastic resistance bands with handles. Should be able to support 181 Kg or more weight.	5
35	Dumbbells	b. c. d.	Material should be PU. The exterior should be of hard rubber coat covering the weight. Knurling should be present on the grip. Weight distribution should be: 2.5 Kg x 6, 5 Kg x 8, 7.5 Kg x 4, 12.5 Kg x 4, and 15 Kg x 4 Total weight should be 195 Kg.	1
36	YOGA MAT 6mm	a.	The product should be made of lightweight and durable EVA (elastomeric polymer) Should be stress-crack-resistant, heat-resistant, and resistant to UV radiation. The minimum thickness should be at least 6 mm or more.	10
37	Accessories Kit		The kit should include foam rollers, resistance bands (minimum pack of 5) & foam yoga blocks (minimum 2 units) It also should have a foam balance pad & resistance loop (minimum pack of 3) along with cones (minimum pack of 25) and hurdles (minimum pack of 5)	2
38	Preacher Curl		The product should have a moulded, contoured seat with 5 or more position height adjustments to accommodate a wide range of users. Should include an arm pad angled at a minimum of 45 degrees for better ergonomic support. Should have custom moulded, non-skid foot support pads.	1

39	Glute Ham Bench	 d. Should be integrated with Floor anchor provisions into the frame. e. The product should have EN-957 or ASTM certification for stationary fitness equipment a. Should have adjustable foot support. b. The footplate should be adjustable with a linear bearing. c. 4-foot support for stability. d. Should have oversized pads for upper thigh support. e. Should have a minimum 85 kg weight of machine for stability. f. The product should have EN-957 or ASTM certification for stationary fitness equipment 	1
40	Upper Body Ergometer	 a. Equipment should provide bi-directional resistance for varied exercise and therapy sessions. b. The product should have a roll-away seat carriage for wheelchair-bound athletes. c. The product should have an adjustable ROM radius. d. It should offer a belt drive system for smooth operation with seamless forward and reverse motion. e. Equipment should weigh at least 120 kg or more. f. Equipment should offer the following workout programs such as Custom Interval, Random, Hill, Track, Iso Kinetic, Iso Strength, Custom HR, Cardio/Weight Loss, etc. 	1
41	Rotary Torso	 a. The machine should have a spring lock release knob for easy adjustment. b. Should include a convenient seat height adjustment to accommodate users of various heights. c. Weight Stack should be up to 80 kg or more with a fork type selector pin d. The product should have EN-957 or ASTM certification for stationary fitness equipment 	1
42	Independent Lateral Raise	 a. Resistance should be provided by a weight stack, allowing adjustment of the workload to suit different users. b. Handles should rotate naturally throughout the motion to reduce wrist stress. c. The product should have Gas-assisted seat adjustment to ensure users are positioned correctly for action. d. The footrest should help maintain a biomechanically correct exercise position.\ 	1

43	Pull Over	 e. Machine should have wide pulleys and Kevlar belt based weight stack movement. f. Weight Stack should be up to 80 kg or more with a fork type selector pin g. The product should have EN-957 or ASTM certification for stationary fitness equipment a. Equipment should have a range of motion limiter that ensures the user isolates the desired movement. b. Adjustable seat height, handle position, and movement arm should ensure a perfect fit for users of different sizes. c. Machine should have wide pulleys and Kevlar belt based weight stack movement. d. Weight Stack should be up to 80 kg or more with a fork type selector pin 	1
		e. The product should have EN-957 or ASTM certification for stationary fitness equipment	
	Triceps Pushdown	 a. The angled back pad should be contoured with a fixed 20° angle, providing support and proper alignment during exercise. b. Handles should easily adjust between wide and narrow positions to accommodate various grip preferences. c. The product should have a minimum 4 gas assisted seat position. d. Machine weight should be at least 190 kgs or more. e. The product should have a Weight Stack of 75 kg or more. f. The product should have EN-957 or ASTM certification for stationary fitness equipment 	
45	Hip Thruster	 a. Equipment should feature minimum 6 position torso pads with gas cylinder assist to accommodate a wide range of users. b. The back pad should pivot throughout the entire range of motion to encourage maximum hip extension. c. An oversized foot platform with a non-skid surface should be included for exercise variation. d. Equipment should have an integrated adder weight system that reduces increments to 2.5 kg e. Weight Stack: At least 110 kg or more f. The product should have EN-957 or ASTM certification for stationary fitness equipment 	1
46	Multi Hip Flexors	The machine should have a range of motion limiters.	1

		 b. The machine should be suitable for hip flexion/extension and abduction/adduction. c. The machine should have an adjustable pad for various exercises. d. The machine should have incremental microloading adjustments. e. Machine should have wide pulleys and Kevlar belt based weight stack movement. f. Weight Stack should be up to 100 kg or more with a fork type selector pin g. The product should have EN-957 or ASTM certification for stationary fitness equipment. 	
47	Hexa Pulley Machine	 a. The product should have a pivoting backpad and dual rubber coated foot placement. b. The machine should come equipped with four D handles, 2 long D handles and a thigh strap. c. The weight stack should be 110 kg or more d. The machine weight should be 265 kg or more. e. Resistance profile should be 2:1 with both handles and 4:1 with 1 handle. 	1
48	Recumbent Elliptical with Swivel Seat	 a. The seat should swivel at least +/- 210 degrees for easy access and comfort. b. The product should include side platforms for added stability and versatility allowing upper and lower body isolation for focused workouts. c. Active seat position should provide optimal comfort during use. d. Step-through design should be incorporated for easy entry and exit. e. Seat height adjustments should be available with a minimum of 20 different settings. f. Power Stroke technology should be integrated for smoother, more efficient movement. g. Equipment should be able to take up a max user weight of up to 180 kg. h. Product weight should be at least 140 kg or more. i. Equipment should have at least 30 resistance levels and 14 workout programs. j. The product should have EN-957 or ASTM certification for stationary fitness equipment 	1
49	Flywheel Platform	 a. The isoinertial flywheel platform should enable exercises by accelerating and decelerating a flywheel through rope pulling, making it ideal for sport-specific movements and muscle overload during eccentric contraction phases. b. The design should be versatile, with a quick and integrated resistance change system, 	1

50	Proprioceptive	suitable for professionals in the strength and conditioning sector. c. The patented resistance change system should allow a seamless transition between minimum and maximum loads by sliding a coloured sleeve along the rotational shaft without requiring the user to leave the platform. d. It should accommodate a maximum user weight of 160 kg or more. e. The exercise surface dimensions should be approx. 88 x 50 x 24 cm. f. The machine should weigh around 64 kg. g. It should provide a maximum resistance of 527 N (0.1575 Kg·m²) and a minimum resistance of 19 N (0.005 Kg·m²) at an exercise speed of 0.5 m/s². h. The belt and harness should be adjustable to fit various users with a one-size design. a. The equipment should enable monopodal	1
	Box	exercises with instability generated by horizontal oscillations of the surface. b. The mechanical system of the equipment should allow oscillations without requiring electricity. c. Should have a versatile design and a quick swing adjustment system for various exercises and users. d. Should consist of a minimum of two surfaces connected by chains to facilitate oscillation. e. A knob mechanism should allow adjustment of oscillation, enabling customized training difficulty based on user needs. f. Should naturally increase platform oscillation during more complex movements. g. Should improve balance by reducing center-ofmass movements in monopodal stability scenarios. h. Should assist in restoring somatosensory feedback critical for motor control. i. Should accommodate a maximum user weight of 140 kg or more. j. Dimensions should be 53 x 28 x 38 cm or more, with a platform surface of 53 x 38 cm or more. k. Device weight should be 15 kg or more.	
51	Functional Training Arms	a. Should have elastic resistance that is easily adjustable via knobs and enclosed within a safety arm.b. Should be mountable on any rack and usable in combination with barbells.	1

c. Should allow fast, explosive movements while providing complete freedom of motion. d. Should be built with solid steel arms and a specialized coupling mechanism for secure rack attachment. e. Should have internal springs that produce momentum-free. progressively increasing resistance to minimize joint strain. f. Should enable ropes to connect directly to barbells, allowing hybrid resistance to reduce unwanted momentum during exercises. g. Should have pulleys that allow ropes to move in both directions, supporting versatile athletic gestures with single or dual ropes. 52 a. Should be designed for performing sport-Pneumatic Cable 2 Machine specific exercises by pulling a rope that compresses air inside a pneumatic cylinder. b. The rope should allow pulling for over 28 meters, providing smooth and constant resistance throughout the range. c. Should consist of a pneumatic piston and a system of shafts and pulleys for compressing air in the cylinder, enabling constant and reactive resistance in both directions. d. Pneumatic resistance should minimize inertia during explosive movements and ensure muscles remain consistently activated, even at high speeds. e. Should function as a traditional cable machine with resistance adjustable by grams, providing smooth and constant resistance at any exercise speed. f. Should facilitate the development of explosive power and contraction speed during sportspecific movements. g. Should improve athletic gestures such as sprints, decelerations, changes of direction, and high-speed movements. h. Should have a height of 197 cm and weigh approximately 80 kg. i. Maximum base footprint should be approximately 48 x 37 x 40 cm. j. Rope height should range from a minimum of 86 cm to a maximum of 192 cm. k. Resistance should range from a minimum of 2.5 kg to a maximum of 20 kg. I. Rope length should be 28 meters. m. The recommended compressor should have an 8-bar capacity.

53	Infinity Rope	The product should have a dynamic magnetic	1
	I IIIIIII TOPO	brake system.	'
		The machine should have a resistance range	
		between 1 - 80 kgs or more.	
		The machine should allow for bidirectional rope	
		pulling.	
		The pulleys in the system should allow vertical,	
		diagonal, horizontal rope orientation.	
54	Kayaking	a. The equipment should replicate the inertia,	1
	Ergometer	hydrodynamic drag, and wave resistance of	
		Olympic-style K1 kayaking.	
		b. The system should track the	
		i. Paddling time	
		ii. Distance	
		iii. Speed / power	
		iv. Stroke rate / water-air ratio/max.	
		speed/power / Calories	
		v. Heart rate (Requires chest ribbon)	
		vi. Average speed/power	
		vii. Graphic left / right power	
		balance/power graph	
		viii. Pacer	
		c. It should have a minimum 70-point resolution	
		per stroke to ensure accurate power	
		measurement.	
		d. Should have the possibility to choose time	
55	Canoeing	from km / h and time / 1,000 m a. The equipment should replicate the inertia,	1
33	Ergometer	hydrodynamic drag, and wave resistance of	1
	Ligomotor	Olympic-style K1 Canoeing	
		b. The system should track the	
		Paddling time	
		Distance	
		Speed / power	
		Stroke rate / water-air ratio/max.	
		speed/power / Calories	
		Heart rate (Requires chest ribbon)	
		Average speed/power	
		<u> </u>	
		Graphic left / right power balance/power graph	
		graph • Pacer	
		c. It should have a minimum 70-point resolution per stroke to ensure accurate power	
		measurement.	
		d. Should have the possibility to choose time	
		from km / h and time / 1,000 m	

56	Smart Portable	a. The product should track speed, distance,	1
	Resistance Training Device	time, force and power.b. The system should be able to analyze peak speed, duration, acceleration, RMS and step performance.	
		c. The system should be portable and can be used indoors and outdoors.	
		d. Should have continuous resistance from 0 - 20 kgf, 30 kgf resistance for 10 seconds, 45 kgf resistance for 2, 2 seconds	
		kgf resistance for 2 - 3 seconds.e. Maximum supported speed upto 12 m/s or more.	
		f. Maximum supported continuous resistance should be 40 kgf, 60 kgf resistance for 10 seconds, 90 kgf resistance for 2 -3 seconds.	
		g. The equipment should have a line length of 110 m or more with upto 2 mm diameter.	
		 h. The load capacity should be 280 kgf or more. i. The machine should support bluetooth transmission. 	
		j. Should come with an ipad.	
57.	Projector and	a. Resolution: 4K or more resolution	1
	accessories	b. Lumen: Min. 10000 or more lumen	Unit
		c. Image size: Min. 200 inches or more at high resolution	
		The projector should be capable of remote	
		operational and function in the lab with lowest	
		latency and bright image.	
58.	Desktop	i. OS: Windows 11 Professional 64-bit	1
	Workstation and	Processor & Storage:14th Generation Intel	Unit
	accessories	Core i9-14900K, Motherboard Compatible	
		with PCIe 5.0 and DDR5 RAM 64 GB up to	
		128GB, 1 TB NVMe SSD + 2 TB HDD	
		(7200 RPM) or higher. Base clock speed	
		3.5 GHz to 4.0 GHz Boost Clock: Up to 6.0	
		GHz, Intel Killer BE Wi-Fi 7 + Bluetooth 5.4	
		ii. Graphics: NVIDIA GeForce RTX 4090	
		VRAM: 24 GB GDDR6X 64 Cores & 128	
		Threads, 288 MB Cache,	
		iii. Cooling technology: Liquid cooling (Corsair	
		iCUE H150i Elite), Ports: 4xUSB 3.2 Gen 1	
		and 2xUSB Gen 2, USB-C, audio jack,	
		Display Port outputs HDMI 4K, Full	
		HD,1080P, DP Ports, Integrated Gigabit	
		Ethernet port, Power Supply Unit (PSU)	
		850w.	
	1	I	

		 iv. Speaker: Dolby audio system v. Software: Microsoft Office latest version with lifetime subscription, systems with a 3-year warranty. vi. Monitor: min 85" 4k Full HD resolution Monitor with 240HZ refresh rates, 1.5 KVA UPS with dual HDMI port. vii. Accessories: Wireless keyboard and mouse. 	
59.	Networking (LAN)	Networking in the CEB-HPC to transfer / share the data from client to server and server to client (Note: The networking should e done with already existing line)	1 Unit

Tender No.3404-2 / 2025 Item - II Speed Gate with Software and Accessories for speed, agility and coordination test and training

S. No	Item Nar	ne	Specifications	Quantity
1	Speed System	Gate	 a. Colour display with graphical icons and onscreen instructions. Should be compact, ergonomic, and easy to use. b. Radio frequencies: Should use eight different radio frequencies, allowing multiple systems to work together in the same area. 	8 pairs
			c. Photocell recognition: Can remotely recognize the ID number of photocells, allowing the user to set the signal type on each photocell.	
			d. Redundant radio transmission to ensure that data is transmitted to the timer with maximum precision, even if the signal is disturbed.	
			 e. Unlimited Photocell addition can be added. f. Various preconfigured test types, as well as the ability to create customized test protocols. 	
			g. An accuracy of higher than 1/1000th of a second.	
			 h. A battery autonomy of 9-10 hours. i. Can quickly transfer data to a PC via a USB interface. j. Should be Water resistant and have a backpack for portability. 	
			k. Should be able to add two gates in a single tripod	

2	Cognitive	a.	To provide complete coverage for start,	8
	Trainer		split, interval, and finish timings.	
		b.	Ensure seamless synchronization	
			between speed gates and sensors for	
			accurate performance measurement.	
		C.	To combines the pinpoint accuracy of	
			Timing Gates with the precise cognitive	
			vision sensor technology, making it ideal	
			for detailed performance analysis.	
		d.	Suitable for a wide range of sports,	
			including track and field, team sports,	
			agility drills, and speed training.	
		e.	Adaptable to various indoor and outdoor	
			environments.	
		f.	Both systems integrate wirelessly,	
			ensuring effortless setup and real-time	
			data transmission.	
		g.	Supports live feedback for coaches and	
			athletes during training sessions.	
		h.	Timing Gates can be arranged in multiple	
			configurations for specific drills.	
		i.	cognitive vision sensor system to enhance	
			these setups with additional split and	
		_	reaction time measurements.	
		j.	Compact and lightweight components	
			make the combined system easy to	
			transport and set up.	
		k.		
			extensive use in diverse conditions.	
		I.	Provides detailed insights into athletes'	
			performance, enabling targeted training	
			improvements.	
		111.	Compatible with analysis software for advanced reporting and tracking over time.	
			, ,	
3	Advanced	a.	Provides precise measurement of gait	1
	Speed and		parameters such as step length, contact	(Min. 3m)
	Movement		time, flight time, and symmetry.	()
	Analysis	b.	Ideal for evaluating walking, running, and	
			other movement patterns.	
		C.	Advanced optical technology to deliver	
			millisecond precision in tracking dynamic	
			movements.	

- d. To Ensure consistent and reliable data for performance and rehabilitation purposes.
- e. Should be suitable for sports performance analysis, injury prevention, rehabilitation, and fitness assessments.
- f. Modular design for easy configuration to suit specific requirements, from small setups to larger, complex systems.
- g. Adaptable for different activities, including straight-line running, agility drills, and multidirectional movements.
- h. Provide instant feedback on movement patterns and performance metrics.
- i. Enables coaches and physiotherapists to make on-the-spot adjustments during training or rehabilitation.
- Have to track a wide range of metrics, including asymmetry, imbalances, and performance efficiency.
- k. Integrates with software for advanced analysis, reporting, and long-term tracking.
- Seamlessly integrates with other Speed gate system and cognitive vision sensor system for a complete performance analysis solution.
- m. Combines timing and biomechanical insights for a holistic approach to athlete development.
- n. Compact and lightweight, to make it easy to set up and transport.
- o. Intuitive user interface ensures ease of use for professionals and athletes.
- p. Built with robust materials for long-lasting performance in both indoor and outdoor environments.

4	Computer	a. Laptop	
-	Accessories	i. Processor: Intel i9-13980HX (up to	
	Accessories	5.60 GHz. 36MB Cache, 24 Cores)	
		RAM: 64GB, 2x32GB, DDR5,	_
		4800MHz	2
		ii. Storage: 1TB SSD,2TB HDD.	
		iii. Software: Windows 11 Home + Office	
		H&S 2021	
		iv. Display: 18.0" QHD+ Comfort View	
		Plus NVIDIA G-SYNC + DDS, 100%	
		DCI-P3, FHD IR Camera 165Hz 3ms	
		v. Graphics: NVIDIA GeForce RTX 4090,	
		16GB GDDR6,	
		vi. Ports: (1x) RJ-45, (1x) Global headset	
		jack, (1x) Type-A USB 3.2 Gen 1 Port	
		with Power Share, (1x) Type-C USB 3.2	
		Gen 1 Port, (1x) Power/DC-in Port, (2x)	
		Type-C (Thunderbolt 4.0, USB 4 Gen 2,	
		15W (3A/5V) Power Delivery and	
		DisplayPort 1.4) Port, (1x) Type-A USB	
		3.2 Gen 1 Port, Dual HDMI 2.1 Output	
		Port, (1x) mini-DisplayPort, (1x) SD	
		Card slot	
		vii. 1.5 KVA UPS.	
		b. PRINTER	
		i. A4, A3 Color Laser Multifunction	
		Printer, Perfect for Business, Print,	
		copy, scan, ADF, Duplex, Print speed	
		up to 25 ppm (black) and 25 ppm	
		(color), Dynamic security enabled	
		printer, USB, WiFi, Wireless, Duplex	
		Printing, Scan to email, Scan to PDF,	1
		Front USB flash drive port,	
		Touchscreen, Terrace cartridge,	
		Automatic document feeder, Print from	
		phone or tablet.	
		c. iPad Air	
		i. 13 inches (32.78 cm) Liquid Retina	
		Display	
		ii. 8GB RAM, 256GB ROM	
		iii. Apple M2 Chip, Octa Core	
		iv. iPadOS 18	
		v. Upto 10 Hours Battery Life	
		vi. 12 MP Primary Camera, 12 MP Front	
			2
		Camera	
		vii. Landscape Stereo Speakers, Touch	
		ID, Dolby Atmos	

Ten	Tender No.3404-3 / 2025 Item -III Instrumented Treadmill and Accessories				
S. No	Item Name	Specifications	Quantity		
1	Treadmill	 a. Single Belt: With Custom thickness to Sports Footwear Testing b. Speed range: 40-50 kmph c. Forward/reverse operation d. Acceleration/Deceleration rate: 0-35 m/s^2 e. Elevation capability: 0 to + 30% grade f. Treadmill surface dimension: Length > 175cm, Width > 80cm g. Aluminium honeycomb treadmill frame h. Cold rolled steel sub-frame with levelling feet and wheel casters for transport i. Overall dimensions: 100L" x 52W" x ~15H" j. Power requirements: 208-240V or 380-480V, 3 phase, 30amp k. Custom cable lengths and handrail configurations available l. Elevation capability: m. 0 to + 3% grade (non-incline model) n30% to +30% grade (incline model) o. Center axis Pivot— Change of Incline to Decline or vice versa max 10deg/sec. Grade range of ±15deg p. Emergency Stop button with harness support q. 10KVA UPS System 	1		
2	Force Plate	 a. 3D Force Plate (Strain gauge technology) b. Fz capacity: 4000-9000 N c. Fx, Fy capacity 2500-4500 N d. COPx/COPy accuracy: 2-4 mm static @ >80 N, 4-6 mm dynamic e. Noise level from treadmill (+/- 10 N) f. Natural resonant frequency (Fz> 150 Hz, Fy 85 Hz, Fx 125 Hz) g. Output type: Dual outputs: 12-channel analog/Gen5 USB 	1 Unit		

3 Software

- Software for data acquisition and transfer latency should allow real time data acquisition for fast movements, visualization, and biomechanical modeling and Analysis
- b. Data is acquired and recorded in real-time at the frame rate of the hardware (data is not down-sampled).
- c. Multiple kinematic technologies can be combined into a hybrid motion capture system to simultaneously take advantage of the strength of each technology for tracking and animating a single subject, i.e. use a camera system simultaneously with IMUs etc.
- d. Synchronizing triggers can be applied, either as input or output, for use with 3rd party systems.
- e. Capability to upgrade the system to add other data sources such as magnetic trackers, 3D motion capture cameras, Force Plates, VR Hardware like Haptic devices, HMD, Projectors, EMG/EEG Systems, Instrumented Treadmill in future by simply adding the hardware and required software plug-in to collect data synchronously.
- f. The software(s) must provide a way to acquire, record and integrate data from emg, eye tracker, forceplate etc.
- g. The recorded data format must be easily readable and analysable with prominent toolboxes.
- h. It must facilitate biomechanical modeling, kinematic analysis and kinetic analysis.
- It must be able to output data compatible with OpenSim, MATLAB models and musculoskeletal systems.
- j. It must have provision to stream data realtime data to another data processing software
- k. through TCP/P or other network protocols and must be scalable in the future to higher number detectors/sources.

		 I. Data and active animation windows displaying raw and/or processed should be available for m. viewing in both live streaming mode and during recording for quality check of data. n. Data can be collected from one, all or any combination of supported hardware and should be fully integrated and synchronized. o. Data should be easily displayed in multiple ways such as time-series graphs, bar graphs, x-y plots or text in an animation window. p. Finger movements can be tracked and analyzed with each individual bone instrumented with a 6-DoF tracker to animate and provide data from each phalange.Customized pipeline scripts for Immediate Report generation q. Standalone Instant comprehensive reporting software system for clinical gait, running gait and Footwear Analysis. 	
4	Hardware Accessories	 a. Three IR Depth Camera (Xbox Kinetic sensor) with wires and accessories b. Eye tracker (wearable) Gaze vector tracking with a minimum sampling rate of 100/120 Hz. Supports real-time capture of eye movement data (fixations, saccades, pupil dilation). Wireless connectivity via Bluetooth or Wi-Fi for seamless data transmission. Integrated onboard storage for data logging with easy data transfer capabilities. Real-time synchronization of motion data with eye-tracking input for combined analysis. High-precision motion tracking with configurable sensors (e.g., 3D motion capture, acceleration). vii. Data capture rates of at least 100 Hz or higher for motion metrics. c. Desktop Workstation 	1 Unit

- i. OS: Windows 11 Professional 64-bit Processor & Storage:14th Generation Intel Core i9-14900K, Motherboard Compatible with PCIe 5.0 and DDR5 RAM 64 GB up to 128GB, 1 TB NVMe SSD + 2 TB HDD (7200 RPM) or higher. Base clock speed 3.5 GHz to 4.0 GHz Boost Clock: Up to 6.0 GHz, Intel Killer BE Wi-Fi 7 + Bluetooth 5.4
- Graphics: NVIDIA GeForce RTX 4090 VRAM: 24 GB GDDR6X 64 Cores & 128 Threads, 288 MB Cache,
- iii. Cooling technology: Liquid cooling (Corsair iCUE H150i Elite), Ports: 4xUSB 3.2 Gen 1 and 2xUSB Gen 2, USB-C, audio jack, Display Port outputs HDMI 4K, Full HD,1080P, DP Ports, Integrated Gigabit Ethernet port, Power Supply Unit (PSU) 850w.
- iv. Speaker: Dolby audio system
- v. Software: Microsoft Office latest version with lifetime subscription, systems with a 3-year warranty.
- vi. Monitor: 85" 4k Full HD resolution Monitor with 240HZ refresh rates, 1.5 KVA UPS with dual HDMI port.
- vii. Accessories: Wireless keyboard and mouse.

d. PRINTER

 A4, A3 Color Laser Multifunction Printer, Perfect for Business, Print, copy, scan, ADF, Duplex, Print speed up to 25 ppm (black) and 25 ppm (color), Dynamic security enabled printer, USB, WiFi, Wireless, Duplex Printing, Scan to email, Scan to PDF, Front USB flash drive port, Touchscreen, Terrace cartridge, Automatic document feeder, Print from phone or tablet.

1 Unit

1 Unit

Tender No.3404-4 / 2025 Item -IV Full Body IMU system with (On field Biomechanics assessment) biomechanical modelling software and accessories for real time feedback

	accessories for real time feedback			
S.NO	PARTICULAR	SPECIFICATION	QUANTITY	
1	IMU System	 a. Should be able to measure movements at 15 g or more b. Should be able to measure full body kinematics (upper and lower body segments independently and simultaneously) c. Include inertial measurement unit with 3 axis magnetometer, 3 axis gyroscope and 3 axis accelerometers for data capture at low g and high g d. Gyroscope should be able to measure min ± 2000 deg/s or more e. The magnetometers should be immune to magnetic disturbances f. The system should have minimum inter tracker synchronization time to avoid error in joint angle calculations (preferably less than 10 milliseconds) g. Should have wireless working range of at least 40m to maximum 150m to capture data during various sport specific movements h. Recording at minimum min 1000 Hz i. Should have at least 6 hours battery backup j. Should be lightweight (less than 20 grams) k. Static and dynamic accuracy for roll, pitch and heading should be less than 1 degree l. Robust enough to be used on-field in various environmental conditions m. Can provide wireless data transfer including real time data n. System with software for data tracking and analysis along with report generation o. The system should be portable and easy to use in field for multiplayer applications p. Finger tracking – Absolute position with 3 axis rotation and Seamless Integration 	1 Unit	
		with full body motion capture system		

		a Lautan	
2	LAPTOP with PRINTER	a. Laptop i. Processor: Intel i9-13980HX (up to 5.60 GHz. 36MB Cache, 24 Cores) RAM: 64GB, 2x32GB, DDR5, 4800MHz ii. Storage: 1TB SSD,2TB HDD and 5TB external Hard disk. iii. Software: Windows 11 Home + Office H&S 2021 iv. Display: 18.0" QHD+ Comfort View Plus NVIDIA G-SYNC + DDS, 100% DCI-P3, FHD IR Camera 165Hz 3ms v. Graphics: NVIDIA GeForce RTX 4090, 16GB GDDR6, vi. Ports: (1x) RJ-45, (1x) Global headset jack, (1x) Type-A USB 3.2 Gen 1 Port with Power Share, (1x) Type-C USB 3.2 Gen 1 Port, (1x) Power/DC-in Port, (2x) Type-C (Thunderbolt 4.0, USB 4 Gen 2, 15W (3A/5V) Power Delivery and DisplayPort 1.4) Port, (1x) Type-A USB 3.2 Gen 1 Port, (1x) DUAL HDMI 2.1 Output Port, (1x) mini-DisplayPort, (1x) SD Card slot b. PRINTER i. A4 Color Laser Multifunction Printer, Perfect for Business, Print, copy, scan, ADF, Duplex, Print speed up to 25 ppm (black) and 25 ppm (color), Dynamic security enabled printer, USB, WiFi, Wireless, Duplex Printing, Scan to email, Scan to PDF, Front USB flash drive port, Touchscreen, Terrace cartridge, Automatic document feeder, Print from phone or tablet.	1 unit

Storage:14th Generation 9-14900K, Motherboard with PCIe 5.0 and DDR5
up to 128GB, 1 TB NVMe DD (7200 RPM) or higher. Deed 3.5 GHz to 4.0 GHz Up to 6.0 GHz, Intel Killer Bluetooth 5.4 IDIA GeForce RTX 4090 B GDDR6X 64 Cores & 288 MB Cache, nology: Liquid cooling E H150i Elite), Ports: en 1 and 2xUSB Gen 2, jack, Display Port outputs ull HD,1080P, DP Ports, gabit Ethernet port, Power PSU) 850w. by audio system rosoft Office latest version ubscription, systems with anty. 4k Full HD resolution
anty.

Tender No.3404 - 5 / 2025 Item - V Sports Performance analysis system and accessories

S.	Item Name	Specifications	Quantity
No 1	Sports Performance Analysis Software	 a. High resolution multi-camera capture should be able to simultaneously capture at least 4 live video feeds b. Video tagging (live and offline) c. Biomechanical analysis (live and offline) d. Should allow multiple users to tag the same live game simultaneously from different devices e. Video overlay for comparison between sessions 	1
		f. Trajectory tracking for calculation of kinematic parameters such as distance, velocity, and accelerations. 3D analysis for calculation of distance, velocity, and acceleration data.	
		g. Provide capabilities to understand & compare movements, identify tactics, configure custom replays, report statistics, build dynamic dashboards, breakdown and identify key events	
		h. Capable to merge data from multiple video sources, playback, slow motion, frame by frame analysis, annotate (basic drawings, text) on video, zoom, measure angles and times, split-screen, fast-forward, fast-rewind, voicenotes.	
		 Available offline, able to sync across multiple devices, enable sharing and collaboration online, provide the option for backup on cloud storage 	
		j. Provision for up-gradation	
		k. Integration with third party software and hardware	
		I. Data transmission by IP protocol	

		m. Permanent licence	
2.	Cameras	 a. IP / Camcorder for sports performance analysis cum 2D analysis b. High-performance outdoor-ready network box camera designed for advanced surveillance applications, featuring artificial intelligence (AI) capabilities with deep learning c. Image Sensor: 1/2.8" progressive scan RGB CMOS d. Resolution: HDTV 1080p (1920x1080) at up to 120 frames per second e. Lens: Focal Length: 2.8-8.5 mm i-CS varifocal lens Aperture: F1.3 Horizontal Field of View: 102° to 40° Vertical Field of View: 58° to 22° f. Network and Storage: Ethernet: 10/100/1000 Mbps Ethernet (RJ-45) Power over Ethernet (PoE): IEEE 802.3at, Class 4 Local Storage: MicroSD / microSDHC / microSDXC card slot 	4 Nos
3.	Computer Accessories	 a. Laptop Processor: Intel i9-13980HX (up to 5.60 GHz. 36MB Cache, 24 Cores) RAM: 64GB, 2x32GB, DDR5, 4800MHz Storage: 1TB SSD,2TB HDD. Software: Windows 11 Home + Office H&S 2021 Display: 18.0" QHD+ Comfort View Plus NVIDIA G-SYNC + DDS, 100% DCI-P3, FHD IR Camera 165Hz 3ms Graphics: NVIDIA GeForce RTX 4090, 16GB GDDR6, Ports: (1x) RJ-45, (1x) Global headset jack, (1x) Type-A USB 3.2 Gen 1 Port with Power Share, (1x) Type-C USB 3.2 Gen 1 Port, (1x) Power/DC-in Port, (2x) Type-C (Thunderbolt 4.0, USB 4 Gen 2, 15W (3A/5V) Power Delivery and DisplayPort 1.4) Port, (1x) Type-A USB 3.2 Gen 1 Port, (1x) DUAL HDMI 2.1 Output Port, (1x) mini-DisplayPort, (1x) SD Card slot 2-5 KVA UPS. 	1 Unit

	b. Android TV (85 inches or more) with DUAL HDMI	
	port with movable stand with wheel base.	

Tender No.3404-6 / 2025 Item – VI Portable force and muscle testing system with software and accessories

S.	Item Name	Specifications	Quantity
No			
No 1	Portable Force testing system	 a. Hardware: - i. It should be Portable and should have 4 load cell sensors per unit. ii. Sensors should have sample rate per sensor: up to 400 HZ, capacity per sensor: 100 kg/980-1000N, Safe overload per sensor: 150 Kg / 1500 N and Max Overload per sensor: 200 Kg/ 2000N with Resolution: 1N and sensitivity: 22.0+/mV/V iii. should have a rotating crossbar with 360 Degrees rotation and ability to measure data at 15,30,45,60 & 90 Degrees accurately to provide more testing options with sign system for replication of test position in each time. (important to redo test in same testing position every time). iv. Software should be able to recall the last test position, while conducting new test. v. Should be having Working temperature Range 5-40® C. (All Weather proof) vi. Should have a rechargeable battery & battery life should be 100 Active hours approx. vii. Should have dedicated Shoulder Brace to Standardize shoulder testing by limiting unwanted movement 	1
		viii. Should have both Wired & Wireless connectivity ix. Connectivity through USB (Wired) to laptop application x. Bluetooth Low Energy (BLE) for iPad & iPhone i.e. (Wireless Connectivity) xi. Should provide 5 Years Warranty on Hardware.	
		 b. Software i. Should be provided Latest upgradable software and free software updates. ii. Should have software available in Mobile & Laptop (Desktop) application with Cloud analytics platform Applications iii. Should have ability to collect data both Local i.e. laptop and on iOS devices. 	

	T		1
		iv. Should Local Software: - For Data	
		collection & data Analysis Locally	
		v. Should Cloud Software: - for Athlete Data	
		Management and analysis	
		vi. Compatible with Windows 10 Desktop	
		Application	
		vii. iOS 13 or later Application (iPad & iPhone)	
		,	
2	Hamstring	a. Hardware: -	1
	Muscle	i. It should be Portable and should have 4	
	Testing	load cell sensors per unit.	
	_	ii. Sensors should have sample rate per	
	System	sensor: up to 400 HZ, capacity per	
		sensor: 100 kg/980-1000N, Safe	
		overload per sensor: 150 Kg / 1500 N	
		and Max Overload per sensor: 200 Kg/	
		2000N with Resolution: 1N and	
		sensitivity: 22.0+/ mV/V	
		iii. should have a rotating crossbar with 360	
		Degrees rotation and ability to measure	
		data at 15,30,45,60 & 90 Degrees	
		accurately to provide more testing	
		, ,	
		options with sign system for replication	
		of test position in each time. (important	
		to redo test in same testing position	
		every time).	
		iv. Software should be able to recall the last	
		test position, while conducting new test.	
		v. Should be having Working temperature	
		Range 5-40® C. (All Weather proof)	
		vi. Should have a rechargeable battery &	
		battery life should be 100 Active hours	
		approx.	
		vii. Should have dedicated Shoulder Brace	
		to Standardize shoulder testing by	
		limiting unwanted movement	
		viii. Should have both Wired & Wireless	
		connectivity	
		ix. Connectivity through USB (Wired) to	
		laptop application	
		x. Bluetooth Low Energy (BLE) for iPad &	
		iPhone i.e. (Wireless Connectivity)	
		xi. Should provide 5 Years Warranty on	
		Hardware.	
		b. Software	
		i. Should be provided Latest upgradable	
		software and free software updates.	
	l .	1 Command and not continued appearation	<u> </u>

3.	Workstation	 ii. Should have software available in Mobile & Laptop (Desktop) application with Cloud analytics platform Applications iii. Should have ability to collect data both Local i.e. laptop and on iOS devices. iv. Should Local Software: - For Data collection & data Analysis Locally v. Should Cloud Software: - for Athlete Data Management and analysis vi. Compatible with Windows 10 Desktop Application vii. iOS 13 or later Application (iPad & iPhone) c. iPad Air (2 no) i. 13 inches (32.78 cm) Liquid Retina Display ii. 8GB RAM, 256GB ROM iii. Apple M2 Chip, Octa Core iv. iPadOS 18 v. Upto 10 Hours Battery Life vi. 12 MP Primary Camera, 12 MP Front Camera vii. Landscape Stereo Speakers, Touch ID, Dolby Atmos i. OS: Windows 11 Professional 64-bit 	1 Unit
	and accessories	Processor & Storage:14th Generation Intel Core i9-14900K, Motherboard Compatible with PCIe 5.0 and DDR5 RAM 64 GB up to 128GB, 1 TB NVMe SSD + 2 TB HDD (7200 RPM) or higher. Base clock speed 3.5 GHz to 4.0 GHz Boost Clock: Up to 6.0 GHz, Intel Killer BE Wi-Fi 7 + Bluetooth 5.4 ii. Graphics: NVIDIA GeForce RTX 4090 VRAM: 24 GB GDDR6X 64 Cores & 128 Threads, 288 MB Cache, iii. Cooling technology: Liquid cooling (Corsair iCUE H150i Elite), Ports: 4xUSB 3.2 Gen 1 and 2xUSB Gen 2, USB-C, audio jack, Display Port outputs HDMI 4K, Full HD,1080P, DP Ports, Integrated Gigabit Ethernet port, Power Supply Unit (PSU) 850w. iv. Speaker: Dolby audio system	

 v. Software: Microsoft Office latest version with lifetime subscription, systems with a 3-year warranty. vi. Monitor: 85" 4k Full HD resolution Monitor with 240HZ refresh rates, 1.5 KVA UPS with dual HDMI port.
Accessories: Wireless keyboard and mouse.

Tender No.3404-7 / 2025 Item - VII Mocap system and accessories, Ultrasound with elastography and accessories and Portable muscle stiffness unit and accessories with athlete management system

S. No	Item Name	1	Specifications (
1	Мосар	i.	HARDWARE – INFRARED 3D	Quantity 1 Unit
	system and		CAMERAS – 7 Nos + 1 HD video	1 01111
	accessories		Cameras.	
	40000001100	a	Motion capture system should consist of	
		a.	7 passive optical infrared motion capture	
			cameras and 1 HD video cameras.	
		h	Cameras Sensor and Resolution: CMOS	
		D.		
			type with resolution of at least 12	
			megapixels.	
		C.	Camera capture frame rate: at full	
			resolution and full field of view: 300 fps	
			or more.	
		a.	All infrared cameras should feature a	
			real-time on-board marker data	
			processing that calculates the centre	
			point of markers and outputs 2D	
			coordinates in real time.	
		e.	The system allows carrying out outdoor	
			measurements under the direct sunlight.	
			The software should have dedicated	
			outdoor real-time data software filtering	
			functionality easily activated by a single	
			click.	
		f.	Camera should be completely noiseless	
			to avoid any disturbance to the	
			measurement subjects.	
		g.	All infrared cameras should be equipped	
			with remotely controlled motorized optics	
			for convenience of adjustments during	
		.	outdoor use.	
		n.	All infrared cameras should have high	
			grade corrosion resistant die-cast	
		:	aluminium housing.	
		i.	All infrared camera strobes should	
			contain high-powered surface mounted	
			LED's.	
		j.	All infrared cameras should operate in	
			the 100% invisible infrared wave length	
			range. All infrared cameras should operate with	
		, r.	the electronic frame shutter.	
		l ,	Each infrared camera should be	
		".		
			equipped with a large, high-contrast	
L		<u> </u>	OLED display showing camera number,	

- number of visible markers, slave/master camera status and error indication.
- m. All infrared cameras should feature live video streaming mode to facilitate convenient and fast positioning of the cameras during initial setup as well as during further measurement volume adjustments.

ii. HARDWARE - CAMERA SYSTEM CONNECTIVITY & CAMERA CABLING

- a. Entire Camera System including highspeed video cameras should be designed in a minimalistic, convenient manner, while ensuring seamless synchronization, supply of power and transfer of data.
- b. Camera system communications with PC should be done through a set of intermediate Ethernet switches or, otherwise, directly from one of the cameras to PC.
- c. Camera cables should be equipped with dust-proof high-quality industrial ODU push-pull connectors suitable for heavyduty outdoor use.
- d. The camera system should be mobile and easy to relocate, with cables not exceeding 20 meters in length.
- e. The system should include 2 full sets of cables (1 set for permanent use in the main laboratory (Main Lab), 2nd set for use outside of the laboratory (Mobile Lab).

iii. HARDWARE - CAMERA MOUNTING

- Each camera shall be compatible to mount on a standard three-way tilt tripod head (20 Nos).
- b. 20 Nos of wall mounting brackets compatible with three-way tripod heads, screws and mountable to concrete walls (Main Lab)
- c. Each tripod head shall be mounted on a standard three-legged tripod.
- d. The system should include a set of sturdy heavy-duty tripods, extendable to 2.62 m (18 Nos) and to 2.2 (2 Nos) for

			the practical convenience of the Mobile Lab.	
			Deliverables: 1. IR cameras - 7 Nos 2. Sun filter - 7 Nos 3. Video camera - 1 No 4. Power kit + Injector and host cable - 3 Nos 5. Camera cable 25m - 4 Nos 6. Mounting device - IR cameras - 7 Nos 7. Tripod head Junior - 7 Nos 8. Camera sync device - 1 No 9. Mounting device super lamp - 7 Nos 10. Mounting device video camera - 1 No 11. Mocap suit - 2 Nos	
		e.	NOTE: The IR cameras should synchronise with the exiting mocap camera system of the biomechanics lab, TNPESU for extended	
		f.	analysis of movement increasing the capture volume. Any essential and vital accessories need for seamless capturing and analysis	
		g.	should be added in the list of deliverables by the bidders. The new mocap system should facilitate	
		h.	the integration of already existing mocap system with similar and lower features. The mocap system should be integrated with force plate, EMG, Eye tracker and	
		i.	Instrumented treadmill All the hardware should have a warranty period of 5 years.	
		j.	All the software updates and customer support (Already existing and new) should be for a period of 5 years.	411-7
2	Elastography and accessories	ac de st	requency Range: 2–15 MHz, with dijustable frequency for different body epths (muscle, tendon, and superficial ructures).	1 Unit
		EI EI	astography Mode: Integrated Shear Wave astography (SWE) and Strain astography for accurate assessment of sue stiffness.	
		c. Im	naging Modes: B-mode, Color Doppler, ulsed Doppler, Power Doppler, and 3D/4D	

			conchilities for comprehensive tissue	
			capabilities for comprehensive tissue evaluation.	
		d.		
		u.	. , .	
			,	
			brightness, contrast, and color settings for	
		_	clear visualization.	
		e.	Probe Types: Linear, Curvilinear, and Micro-	
			convex probes compatible with	
			elastography functionality.	
			Connectivity: Wi-Fi, Bluetooth, or USB for	
			data transfer, enabling integration with	
			external devices and systems.	
3.	Portable	a.	Measurement Method: Capable of	1 unit
	muscle		assessing muscle stiffness via non-invasive	
	stiffness unit		techniques such as shear wave	
	and		elastography, muscle tone testing, or	
	accessories	١.	Myotonometry.	
		b.	Sensors: High-precision force sensors to	
			measure muscle stiffness, with a sensitivity	
			range capable of detecting slight variations	
			in stiffness (e.g., 0.01 N to 100 N).	
		C.	Battery Life: Minimum 6 hours of continuous	
			operation with rechargeable battery (lithium-	
		_1	ion) for field use.	
		a.	Portability: Lightweight and compact design	
			(under 2 kg), allowing easy transport and use	
			in various environments (e.g., sports fields,	
			training facilities).	
		e.	Display & Interface: Handheld unit with a	
			colour touchscreen interface (minimum 5-	
			inch), real-time data visualization, and basic	
4.	Athlete	_	analytics Software Platform: Comprehensive athlete	1 unit
4.		a.	management software that collects, stores,	i unit
	management		•	
	system		and analyzes data from both the ultrasound and muscle stiffness unit.	
		h	Data Syncing: Seamless syncing capabilities	
		υ.	with cloud platforms for real-time data	
			sharing and remote monitoring by coaches,	
			physiotherapists, and medical professionals.	
		C	Analytics & Reporting: Advanced analytics to	
		0.	assess muscle condition, track recovery	
			progress, and predict potential injuries, with	
			customizable reporting formats (PDF, Excel,	
			etc.).	
		d.	Athlete Profiles: Ability to create and manage	
		<u></u>	multiple athlete profiles, including injury	
			history, fitness levels, muscle stiffness	
			history, and recovery schedules.	
	1		, , , , , , , , , , , , , , , , , , ,	

		e. Compatibility: Cross-platform compatibility with smartphones, tablets, and computers (Windows, macOS, Android, iOS).	
5	Hardware Accessories	 i. Desktop Workstation a. OS: Windows 11 Professional 64-bit Processor & Storage:14th Generation Intel Core i9-14900K, Motherboard Compatible with PCIe 5.0 and DDR5 RAM 64 GB up to 128GB, 1 TB NVMe SSD + 2 TB HDD (7200 RPM) or higher. Base clock speed 3.5 GHz to 4.0 GHz Boost Clock: Up to 6.0 GHz, Intel Killer BE Wi-Fi 7 + Bluetooth 5.4 b. Graphics: NVIDIA GeForce RTX 4090 VRAM: 24 GB GDDR6X 64 Cores & 128 Threads, 288 MB Cache, c. Cooling technology: Liquid cooling (Corsair iCUE H150i Elite), Ports: 4xUSB 3.2 Gen 1 and 2xUSB Gen 2, USB-C, audio jack, Display Port outputs HDMI 4K (Dual HDMI ports), Full HD,1080P, DP Ports, Integrated Gigabit Ethernet port, Power Supply Unit (PSU) 850w. d. Speaker: Dolby audio system e. Software: Microsoft Office latest version with lifetime subscription, systems with a 3-year warranty. f. Monitor: 85" + 4k Full HD resolution Monitor with 240HZ refresh rates, 2.0 KVA UPS. g. Accessories: Wireless keyboard and mouse. ii. PRINTER a. A4, A3 Color Laser Multifunction Printer, Perfect for Business, Print, copy, scan, ADF, Duplex, Print speed up to 25 ppm (black) and 25 ppm (color), Dynamic security enabled printer, USB, WiFi, Wireless, Duplex Printing, Scan to email, Scan to PDF, Front USB flash drive port, 	1 Unit

Touchscreen, Terrace cartridge, Automatic document feeder, Print from phone or tablet. iii. WEB CAMERA with mounting device and accessories for conference hall with 80 participants capacity 1 unit a. 4K Resolution with 1/2" Sensor and link captures life-like detail with an excellent dynamic range. b. Al Tracking: With a gimbal design and a powerful AI tracking algorithm, Link's lens should rotate to follow every movement. With automatic zooming and framing, objects at centre stage. c. Versatile Modes: With innovative Al technology and versatile modes such as Whiteboard Mode, Desk View Mode, Overhead Mode and Portrait Mode, Fully compatible with Zoom, Microsoft Teams, Google Meet, and more. d. Dual Noise-Cancelling Microphones: should reduce background noise and amplify speaker voice. iv. PROJECTOR AND ACCESSORIES 1Unit a. Resolution: 4K or more resolution b. Lumen: Min. 10000 or more lumen c. Image size: Min. 200 inches or more at high resolution d. The projector should be capable of remote operational and function in the lab with lowest latency and bright image.

Tender No.3404-8 / 2025 Item - VIII 3D Body Scanner and accessor			
S.	Item Name	Specifications	Quantity
No			
1	3D Body Scanner	 a. High-Resolution 3D Scanning Technology: Utilizes advanced laser or structured light scanning to capture detailed 3D body scans with high precision. Provides full-body measurements with millimetre accuracy, allowing for detailed body composition analysis and tracking 	1
		changes over time. b. Comprehensive Body Composition Metrics: i. Measures key body dimensions, including body circumference, posture, lean mass, body fat percentage, and other important health metrics. ii. Offers advanced metrics such as torso shape, body fat distribution, and skeletal alignment for in-depth fitness and health assessment.	
		 c. Fast Scanning Process and Real-Time Feedback: Capable of completing a full-body scan in under 30 seconds, delivering quick results and enabling high-throughput testing. Provides real-time feedback and visual body images, allowing users to see detailed 3D renderings of their body 	
		shape and changes over time. d. User-Friendly Interface and Data Integration: i. Intuitive touch-screen interface or webbased application for easy operation and viewing of results. ii. Seamless integration with fitness platforms, health apps, or wearable devices for continuous tracking of fitness progress and body changes over time. e. Portable and Ergonomically Designed: i. Compact, space-efficient design that can be set up in various locations, including gyms, clinics, and personal health studios. ii. Comfortable scanning environment, allowing users to stand naturally during the scan without the need for specialized clothing or removal of items.	

2 1 Computer a. Laptop Processor: Intel i9-13980HX (up to 5.60 i. Accessories GHz. 36MB Cache, 24 Cores) RAM: 64GB, 2x32GB, DDR5, 4800MHz Storage: 1TB SSD,2TB HDD. ii. Software: Windows 11 Home + Office H&S iii. 2021 Display: 18.0" QHD+ Comfort View Plus iν. NVIDIA G-SYNC + DDS, 100% DCI-P3, FHD IR Camera 165Hz 3ms Graphics: NVIDIA GeForce RTX 4090. ٧. 16GB GDDR6. ٧i. Ports: (1x) RJ-45, (1x) Global headset jack, (1x) Type-A USB 3.2 Gen 1 Port with Power Share, (1x) Type-C USB 3.2 Gen 1 Port, (1x) Power/DC-in Port, (2x) Type-C (Thunderbolt 4.0, USB 4 Gen 2, 15W (3A/5V) Power Delivery and DisplayPort 1.4) Port, (1x) Type-A USB 3.2 Gen 1 Port, (1x) HDMI 2.1 Output Port, (1x) mini-DisplayPort, (1x) SD Card slot 2-5 KVA UPS. vii. b. PRINTER A3/A4 Color Laser Multifunction Printer. i. Perfect for Business, Print, copy, scan, ADF, Duplex, Print speed up to 25 ppm (black) and 25 ppm (color), Dynamic security enabled printer, USB, WiFi, Wireless, Duplex Printing, Scan to email, Scan to PDF, Front USB flash drive port, Touchscreen, Terrace cartridge, Automatic document feeder, Print from phone or tablet. c. iPad Air i. 13 inches (32.78 cm) Liquid Retina Display ii. 8GB RAM, 256GB ROM Apple M2 Chip, Octa Core iii. iν. iPadOS 18 Upto 10 Hours Battery Life ٧. 12 MP Primary Camera, 12 MP Front vi. Camera Landscape Stereo Speakers, Touch ID, vii. Dolby Atmos

Ten	der No.3404-9	/ 2025 Item - IX Pressure Insoles an	d accessories
S.	Item Name	Specifications	Quantity
No			
1	Force or Pressure Insole	Pressure and Force Measurement Range: Pressure measurement: 0-500 kPa with an accuracy of ±2% for	1 set in all sizes
		precise foot pressure analysis. ii. Force measurement: 2.5-5000 N with an accuracy of ±1 N for detailed force distribution. iii. 3 Segment Force Measurement	
		with Accuracy and research grade Industry reliability iv. Ability to measure pressure at multiple points across the insole	
		for comprehensive data collection. 2. Sensor Technology and Resolution: i. Equipped with advanced piezoelectric or capacitive sensors for real-time, high-resolution data capture.	
		ii. High spatial resolution, with up to 1000 measurement points and/or >99.6% of sensor covered area, enabling detailed foot pressure mapping for gait analysis with 6axis IMU.	
		 Data Logging and Wireless Communication: Integrated data logger to store multiple test sessions or configurations. 	
		iv. Wireless communication (Bluetooth or Wi-Fi) for real-time data transfer to a smartphone, tablet, or computer for remote analysis.	
		 4. Comfort and Durability: i. Flexible, lightweight design to ensure comfort during prolonged use without affecting user mobility. ii. Less than 3.4mm thickness with 	
		500h of measurement memory. iii. Waterproof and shock-resistant to ensure reliable performance in various environmental conditions.	

	 5. Software Compatibility and Analytics: i. Compatible with user-friendly software for visualization and analysis of pressure and force data (e.g., pressure maps, force-time curves). ii. Provides insights into gait patterns, pressure distribution, balance, and load intensity during walking, running, or standing. 	
2 Computer	a. Laptop	
Accessories	 i. Processor: Intel i9-13980HX (up to 5.60 GHz. 36MB Cache, 24 Cores) RAM: 64GB, 2x32GB, DDR5, 4800MHz ii. Storage: 1TB SSD,2TB HDD. iii. Software: Windows 11 Home + Office H&S 2021 iv. Display: 18.0" QHD+ Comfort View Plus NVIDIA G-SYNC + DDS, 100% DCI-P3, FHD IR Camera 165Hz 3ms v. Graphics: NVIDIA GeForce RTX 4090, 16GB GDDR6, vi. Ports: (1x) RJ-45, (1x) Global headset jack, (1x) Type-A USB 3.2 Gen 1 Port with Power Share, (1x) Type-C USB 3.2 Gen 1 Port, (1x) Power/DC-in Port, (2x) Type-C (Thunderbolt 4.0, USB 4 Gen 2, 15W (3A/5V) Power Delivery and DisplayPort 1.4) Port, (1x) DUAL HDMI 2.1 Output Port, (1x) mini-DisplayPort, (1x) SD Card slot vii. 1.5 KVA UPS. b. PRINTER i. A4 Color Laser Multifunction Printer, Perfect for Business, Print, copy, scan, ADF, Duplex, Print speed up to 25 ppm (black) and 25 ppm (color), Dynamic security enabled printer, USB, WiFi, Wireless, Duplex Printing, Scan to email, Scan to PDF, Front USB flash drive port, Touchscreen, Terrace cartridge, 	1 Unit

Automatic document feeder, Print	
from phone or tablet.	
c. iPad Air	
i. 13 inches (32.78 cm) Liquid	
Retina Display	1
ii. 8GB RAM, 256GB ROM	
iii. Apple M2 Chip, Octa Core	
iv. iPadOS 18	
v. Upto 10 Hours Battery Life	
vi. 12 MP Primary Camera, 12 MP	
Front Camera	
Landscape Stereo Speakers, Touch	
ID, Dolby Atmos	

Tender No.3404-10 / 2025 Item 10: Gas Analyzer (Portable) and accessories					
S. No	Item Name	Sp	pecifications	Quantity	
1	Gas Analyzer System	a.	Advanced Gas Measurement and Accuracy:: i. Measures Oxygen (O ₂) and Carbon Dioxide (CO ₂) concentrations with high precision, O ₂ (0-100%) and CO ₂ (0-10%), accuracy of ±0.1% for reliable metabolic	1	
			analysis. ii. Provides accurate and continuous monitoring of respiratory exchange ratio (RER) during exercise, with a high degree of sensitivity for accurate data collection at different exercise intensities.		
		b.	Real-Time Data Processing and Sampling Rate: i. Continuous real-time analysis with a high sampling rate (up to 200 Hz) to provide immediate feedback on metabolic responses during physical activity.		
			ii. Low response time (<1 second) to ensure accurate tracking of gas exchange during high-intensity and dynamic exercise.		
		C.	Comprehensive Metabolic Testing and VO ₂ Max Assessment:		
			 i. Supports advanced metabolic testing, including VO₂ max, lactate threshold, and other physiological metrics essential for sports performance evaluation. 		
			ii. Capable of measuring both absolute and relative		

		settings, offering athletes and researchers flexibility in testing locations. ii. Comfortable and non-intrusive, designed for extended use during exercise without hindering performance, with ergonomic features for ease of wear during	
		treadmill, cycling, or other exercise protocols.	
2	Computer Accessories	a. Laptop i. Processor: Intel i9-13980HX (up to 5.60 GHz. 36MB Cache, 24 Cores) RAM: 64GB, 2x32GB, DDR5, 4800MHz ii. Storage: 1TB SSD,2TB HDD. iii. Software: Windows 11 Home + Office H&S 2021 iv. Display: 18.0" QHD+ Comfort View Plus NVIDIA G-SYNC +	1

- DDS, 100% DCI-P3, FHD IR Camera 165Hz 3ms
- v. Graphics: NVIDIA GeForce RTX 4090, 16GB GDDR6,
- Ports: (1x) RJ-45, (1x) Global vi. headset jack, (1x) Type-A USB 3.2 Gen 1 Port with Power Share, (1x) Type-C USB 3.2 Gen 1 Port, (1x) Power/DC-in Port, (2x) Type-C (Thunderbolt 4.0, USB 4 Gen 2, 15W (3A/5V) Power Delivery and DisplayPort 1.4) Port, (1x) Type-A USB 3.2 Gen 1 Port, (1x) HDMI 2.1 Output Port, (1x)mini-DisplayPort, (1x) SD Card slot
- vii. 2-5 KVA UPS.

b. PRINTER

i. A4 Color Laser Multifunction Printer. Perfect for Business. scan, ADF, Print, copy, Duplex, Print speed up to 25 ppm (black) and 25 ppm (color), Dynamic security enabled printer, USB, WiFi, Wireless, Duplex Printing, Scan to email, Scan to PDF, Front USB flash drive port, Touchscreen, Terrace cartridge, Automatic document feeder, Print from phone or tablet.

c. iPad Air

- i. 13 inches (32.78 cm) Liquid Retina Display
- ii. 8GB RAM, 256GB ROM
- iii. Apple M2 Chip, Octa Core
- iv. iPadOS 18
- v. Upto 10 Hours Battery Life
- vi. 12 MP Primary Camera, 12 MP Front Camera
- vii. Landscape Stereo Speakers, Touch ID, Dolby Atmos

Ten	der No.3404-1	11 / 2025 Item - XI 3D Foot Scanner and accessories	
S.	Item Name	Specifications	Quantity
No			
1	3D Foot		2
	Scanner	a. Type: Laser	
		b. Colour camera with class 1 laser: minimum of 8 cameras	
		c. Capable of scanning foot even in	
		daylight without closing the	
		scanner for capturing the 3D	
		image and measurement.	
		d. Landmark points placement and recognition	
		e. Heated glass to absorb moisture from sweat.	
		This feature is required to helps alleviate	
		condensation build up on glass ensuring clearer	
		scans.	
		f. Capable of capturing foot size	
		minimum of = Length 400mm, Width	
		= 195 mm and Height = 150 mm.	
		g. Planter surface 2D imaging capability h. 3D Foot envelope (E data) captured by Foot	
		scanner with size estimation	
		i. Data export of foot in VRML, OBJ, STL, CSV	
		and ASCII formats	
		j. Accuracy: +/- 0.5 mm	
		k. Scanning time less than: 20mm/sec.	
		I. Ability to read and detect	
		specific points on the foot and provide all	
		and provide all measurements and	
		required details specific to	
		the point.	
		m. Capable of scanning the foot of the	
		person having the maximum weight of	
		upto 150 kg	
		n. Weight of the scanning machine maximum: 30	
		kg	
		o. Software capable of	
		converting foot scan data into an equivalent foot	
		an equivalent foot dimensional parameters data.	
		p. Capable of sending 3D Foot envelope (E data)	
		captured data (.STL format)	
		q. Connection type USB 3.0	
		r. Along with Carry Case for Foot scanner and	
		Calibration kit.	
		s. Calibration kit & self-calibration certificate	

			1
		t. Power supply: Single phase 200 - 240 V & AC 50-60 Hz	
		u. With International (CE) compliance certificate	
		v. Compatible with Windows 11 Professional 64 bit	
		OS	
2	Computer	a. Laptop 1	
	Accessories	i. Processor: Intel i9-13980HX (up to 5.60 GHz. 36MB Cache, 24 Cores) RAM: 64GB, 2x32GB, DDR5, 4800MHz	
		ii. Storage: 1TB SSD,2TB HDD. iii. Software: Windows 11 Home + Office H&S 2021	
		iv. Display: 18.0" QHD+ Comfort View Plus NVIDIA G-SYNC + DDS, 100% DCI-P3, FHD	
		IR Camera 165Hz 3ms	
		v. Graphics: NVIDIA GeForce RTX 4090, 16GB GDDR6,	
		vi. Ports: (1x) RJ-45, (1x) Global headset jack, (1x)	
		Type-A USB 3.2 Gen 1 Port with Power Share,	
		(1x) Type-C USB 3.2 Gen 1 Port, (1x)	
		Power/DC-in Port, (2x) Type-C (Thunderbolt	
		4.0, USB 4 Gen 2, 15W (3A/5V) Power Delivery and DisplayPort 1.4) Port, (1x) Type-A USB 3.2	
		Gen 1 Port, (1x) DUAL HDMI 2.1 Output Port,	
		(1x) mini-DisplayPort, (1x) SD Card slot	
		vii. 2-5 KVA UPS.	
		b. PRINTER	
		i. A3/A4 Color Laser Multifunction Printer, Perfect	
		for Business, Print, copy, scan, ADF, Duplex,	
		Print speed up to 25 ppm (black) and 25 ppm	
		(color), Dynamic security enabled printer, USB,	
		WiFi, Wireless, Duplex Printing, Scan to email,	
		Scan to PDF, Front USB flash drive port,	
		Touchscreen, Terrace cartridge, Automatic	
		document feeder, Print from phone or tablet.	
		c. iPad Air	
		i. 13 inches (32.78 cm) Liquid Retina Display	
		ii. 8GB RAM, 256GB ROM	
		iii. Apple M2 Chip, Octa Core	
		iv. iPadOS 18	
		v. Upto 10 Hours Battery Life	
		vi. 12 MP Primary Camera, 12 MP Front Camera	
		vii. Landscape Stereo Speakers, Touch ID, Dolby	
		Atmos	
		d. Android TV (85 inches or more) with DUAL HDMI	
		port with movable stand with wheel base.	

	Tender No.3404-12 / 2025 Item – XII Cardio and Rehab Station and accessories			
S. No	Item Name	Specifications	Quantity	
1	Anthropometric Set	 a. Should have a large bone anthropometer of measurement up to 60 cm b. Should have a Small bone anthropometer of up to 18 cm c. The set should contain a Rigid segmometer measuring up to 60 cm d. Should have a Skinfold calliper of measurement up to 60 mm e. Anthropometric tape should measure up to 2 m f. The kit should have a head square for height & arm span measurement g. The kit should contain a transport case to safely store and carry all the anthropometric devices. 	1	
2	Sit and Reach Box	 a. Equipment should have an assessment sheet attached for evaluation. b. It should be used to perform sit and reach flexibility tests. c. Should be made of sturdy powder-coated metal with a built-in foot plate and a maximum stretch indicator. d. Should have an easy-to-read scale that provides both centimetre and inch measurements along with a built-in footplate. e. Equipment must have a maximum reach indicator. 	1	
3	Digital Grip Dynamometer	 a. Equipment should work with Android 5.0 and IOS 10.0+ or above. b. The acquisition frequency should be a minimum of 2000Hz or more. c. The equipment should weigh a minimum of 170 grams. d. Must have a wireless range of up to 40 meters or more. e. Equipment should be able to take the force up to 90 kgs or above. f. Should consist of battery backing up to 12 hours or more. g. Data reading accuracy should be of minimum 0.2% 	1	
4	Body Composition Analyzer	a. Weight Measurement Range: At least 10-250 kg. b. Height Measurement Range: At least 100-210 cm.	1	

		 c. The product should have multiple frequency ranges up to 250 kHz. d. Measurement Time: Under 1 minute. e. Input Options: Touchpad and Keypad. f. Measurement Current should be approx. 180 μA ± 15 g. Display: LCD. h. The product must have the following analysis types: Complete Body Composition Analysis, Complete Skeletal Muscle/ Fat Analysis, Overall Evaluation- Body Type, Biological Age, Basal Metabolic Rate, Calories • Needed per Day, Body Cell Mass, Total Score, Body Balance Assessment Weight Control Targets-Recommended Weight, Weight Control Value, Muscle Control Value, Fat Control Value Extracellular Water Ratio, Body Fat Mass/ Muscle Mass by Body Parts Impedance and others 	
5	Broad Jump Mat	 a. The mat should have markings for the following tests: i. Star Excursion Balance Test (SEBT) ii. Y-Balance test (YBT) iii. Weight Bearing Lunge Test (WBLT) iv. Hop + Jump tests v. Squats tests vi. Lunge tests vii. Closed Kinetic Chain Upper Extremity Test (CKCUET) viii. Upper Quarter Y-Balance Test (UQYBT) ix. Star Excursion Sitting Test (SEST) x. Standing Long Lump xi. and other Functional Performance Tests 	2
6	Swiss Balls (set)	a. Should have a surface with anti-slip treatment, with the fitness printing pattern b. The ball should be Anti Burst & Slip resistant c. The diameter of the ball should be 75cm.	1
7	Rowing Ergometer	 a. The monitor should provide distance, speed, pace, calories, and watts for each workout. b. Performance monitors should provide data feedback. c. The monitor should be able to run on batteries with an optional AC adapter. d. Belt-based drive system. e. Maximum User Weight: 400 lbs or more. f. The product should have EN-957 or ASTM certification for stationary fitness equipment. 	2

8	Power, Cadence & Balance Testing Bike	b. M b. M c. M c. S d. M c. S f. M i. S j. M i. C j. K	times/sec) of at least 35 parameters. g. Machine Weight: At least 45 kg h. No of Gears: At least 20 i. Must have Bluetooth, Ant+, FTMS connectivity, and more.	
9	Blood Lactate Analyser	a. T la b. T d. s d. S d. S e. E f. u g. S	The product should be fast and reliable actate measurement. The product should offer fast and accurate measurement of lactate levels in the blood in a minimum of 15 seconds from blood detection, providing real-time monitoring during rehabilitation. Should require only 0.3µL of blood should be a portable Lactate meter and an easy-to-use device. Equipment should have a minimum of 300 memory test capacity. Large LCD should be given for convenient use Should have automatic strip ejection to avoid contamination.	1
10	21 in 1 electrotherapy unit	b. S s c. M	Equipment must have two-channel electrotherapy which includes a minimum of 21 different currents. Should include alternating and simultaneous stimulation along with low, medium frequency and diagnostic currents. Must have Hufschmidt, Jantsch or both protocols for the treatment.	1

		 d. Should consist of a manual release key for emergency shut-off or intentional exercises. e. Must have a warning indicator in case of intensity exceeding. f. Must have a clean and superfast user interface. g. Equipment should come with a 7" touch screen for easy user guidance. 	
11	Shockwave Unit	 a. The product should have a maximum energy density of 0.72 mJ/mm2 or more b. Frequency range should be at least 1–22 Hz c. The product should be able to provide at least 2.000.000 guaranteed impulses d. Max. pressure should be 6.9 bar / 5 bar working pressure or more. e. Min. pressure should be 0.4 bar – adjustable in increments of 0.2 bar or less. f. The equipment should have pressure modulation and frequency modulation g. The equipment should be operated in both continual and dynamic modules. h. Operation via high-resolution 12.1" colour touchscreen i. The product should be able to provide a patient database of up to 1,000,000 or more. 	1
12	Treatment Couches	 a. Minimum height: 50-55 cm b. User weight: Upto 200 kg c. Should provide precise traction, flexion and drops. d. The head section should be adjustable in height & width. e. Frame Material: Mild Steal. f. Should provide four manual drops: Cervical, Thoracic, Lumbar and Pelvic g. Should have a double layer of foam of at least 10cm/ 3.9" cushion. 	1
13	Ultrasound	 a. Must include continuous and pulsed modes of treatments for gentle microscopic vibration for better pain relief and musculoskeletal rehabilitation. b. The display should be digital and large enough for easy viewing. c. The touch buttons should be light-illuminated for easy use d. The time, duty cycle and frequency should be selectable and should have a minimum of 4 preset program 	1

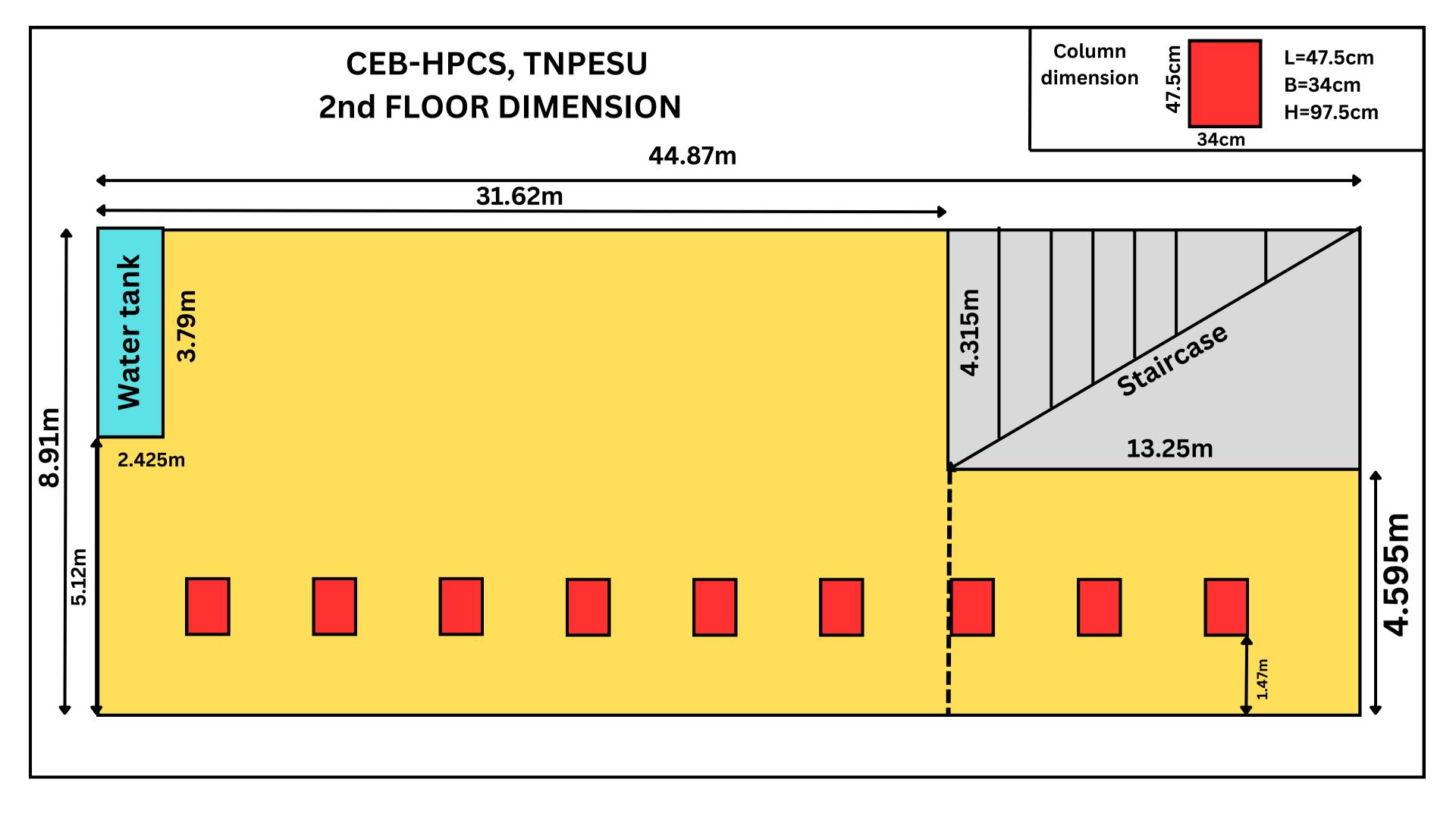
		e. Must include 1 MHz and 3 MHz compatible Ultrasound Applicator along with a side stand.	
14 12 in 1 combo therapy		 a. Must have a minimum of 4 channel electrotherapy modalities in a single unit. b. Must include the following modes of electrotherapy modalities: Interferential current, Russian Current, TENS, Galvanic Current, or more. c. Should have an SD Curve for interdependence between stimulus strength 	1
		 and the time required to activate the muscles. d. Should have a full-coloured, 8" sharp and vivid LCD touchscreen display for easy operation. e. Should be able to save different treatment 	
		parameters for different patients. f. Must be able to treat and monitor multiple patients at the same time.	
15	2 in 1 analgesic unit	 a. Must include Transcutaneous electrical nerve stimulation along with electrical muscle stimulation modality b. Must be able to treat a minimum 4 body areas or a minimum of 2 individual patients simultaneously c. Should have at least 7 or more preset programs enabling treatment of different pains d. Should have a single mode for custom parameters and custom treatment e. Must have the flexibility for designing custom protocols as per requirements 	1
16	Self-spotting half-rack	 a. Must have adjustable brake handles that slide in and out for customizable grip width. b. Must have a bar-guided system that allows for 360-degree bar movement, just like a traditional floating bar. c. Must have a self-spotting mechanism that will always provide full control of the bar along with better safety d. The bar should be counterbalanced for up to 13.60 kg. e. Adjustable safety spotters must be included for an added measure of safety. 	1
17	Power rack with quad lock braking system	 a. Equipment should consist of adjustable handles that slide in and out for different grip widths. b. It should have a self-spotting mechanism for concentric and eccentric movement. 	1

		 c. The bar in the machine should be counterbalanced for standard Olympic weight. d. Brake handles for racking and unracking the bar. e. The bar should have a 360° plane of motion. f. The frame should be made of at least 7" heavy-duty pipe. g. The bar should be counterbalanced for up to 13.60 kg. h. The equipment should be equipped with a multi grip pull up bar. 	
18	Composite Press	 a. Equipment should have concurrent upper and lower body pressing motions. b. It should have spring-assisted, adjustable knee pads. c. Equipment Weight must be 250 kg or more. d. The product should have EN-957 or ASTM 	1
19	Lateral Trainer	 certification for stationary fitness equipment. a. The product should have an adjustable lateral 3D motion. b. Should have an adjustable side to side & stepping motion c. Must contain Lateral width with a minimum of 10 adjustments. d. Should be able to take up to 180 kg or more of max user weight. e. Should consist of a minimum of 30 levels of resistance with up to 14 programs or more. 	1
20	Spin Bike with Console	 a. Equipment must have magnetic resistance and a built-in generator that powers the console. b. It should have a dual Adjustable Universal Seat that should adjust vertically & horizontally. c. Should have a steel frame and aluminium Flywheel with a Q-Factor of a minimum of 6.46" (164.2 mm) d. Should have a minimum of 20 resistance levels e. Product should weigh up to 50 kg or more. 	1
21	Vertical Knee Raise/Dip Stand	 a. Product should weigh 55 kg or more b. The product should have contoured elbow pads and back pads angled at a minimum of 15 degrees for support and proper anatomical alignment. c. Product should have EN-957 or ASTM certification for stationary fitness equipment. 	1

22	Counter Weighted Bar Smith Machine	b. c. d.	 a. Product should have a minimum of 8 weight horns for ample plate storage and adjustable bar hooks along with guide rods b. Product should weigh up to 275 kg or more. c. Max Exercise Weight should be 200 kg or more. d. Max Weight Storage should be 800 kg or more. e. Equipment should have a welded steel frame 			
23	Multi- Press Upper Body	a. b. c. d.	The product should have at least 3 positions back pad with lumbar support wings & integrated head pad. Must consist of minimum of 6 position press arms & up to 8 position seat adjustments to accommodate a wide range of users. Multi-position hand grips should be present The weight stack should be a minimum of 115 kg or more. The machine should weigh at least 295 kg or more. The product should have EN-957 or ASTM	1		
24	Seated Extension/Leg Curl	b. c. d.	certification for stationary fitness equipment. Equipment should have a multi-position contoured back pad with lumbar support wings & integrated head pad Must have at least three starting positions for both Leg Extension & Leg Curl exercises Equipment should have a minimum 4-position ankle pad Must have a minimum weight Stack of 115 kg or more. It should have EN-957 or ASTM certification for stationary fitness equipment.	1		
25	Recumbent Cycle	b. c. d.	Equipment should have an adjustable seat back & oversized pedals for quick strap adjustment. Must have a tri-colour LED and a Headphone jack with built-in volume control. Should have a USB port and cardio advisor display. It Should consist of a minimum of 40 Resistance Levels and support wireless heart rate monitoring Should be able to give Read Outs of Heart rate, Cardio Zone, Weight Loss Zone, Active Zone, Calories, Level, Time, Distance, RPM, METs, Speed, Watts The maximum user Weight should be up to 180 kg or more.	1		

		g. The Unit Weight of the equipment should be	
		at least 75 kg or more.	
26	Tibialis Dorsi Flexion	a. The structure should have a minimum of sturdy 11 gauge steel frame to ensure maximum structural integrity	1
		b. Each frame should have an electrostatic powder coat finish to ensure maximum adhesion & durability.	
		c. Should use ball bearings at the appropriate location.	
		d. Should have minimum 2 Hard chrome weight plate sleeves	
		a. The product should weigh 25 kg or more.	
27	Athletic Rig	a. 16-pillar structure complete with power racks and weight training add-ons.	1
		b. Adjustable Jammer Arms x 4.	
		c. Muscle Up Bars.	
		d. Wall Ball Stations x 4.	
		e. Weight plate storage.	
		f. Kettle Bell Tray.	
		g. Wall Ball Holder.	
		h. Battle Rope Attachment x 2. i. Band Peg Attachment x 4.	
		j. Dip Bar Attachment x 2.	
		k. Land Mine Attachment x 2.	
		I. Monkey Bar.	
		m. Cable Tower with at least 130 kg weight, 2:1	
		ratio, with swivel handles.	
		n. At least 40 options of adjustments per pillar	
		(holes) laser cut with numbering.	
28	Ice Bath with Accessories	a. Should have an automatic Water temperature Control of 3 to 40 degrees Celsius with a	1
	Accessories	floating thermometer	
		b. UVC Purification	
		c. Megacube ice trays (20 packs)	
		d. Strong and durable build	
		e. For Individuals up to 6'5"	
		f. Particle Filter	
		g. Energy efficient	
29	Free Weight	a. The product thickness should be 25 mm or	1
	Flooring	more. b. The dimension of the tile should be 490mm x	
		490mm or more.	
		c. The tile should be made up of Styrene-	
		Butadiene Rubber.	
30	Sports Flooring	a. The dimension of each tile should be 3.25 ft x 3.25 ft.	1
L	l .	/ · · · · · · · · · · · · · · · · · · ·	

			flooring should facilitate the athletes to rm sled training and other functional ng.
31	Desktop Workstation and accessories	a. OS: Proce Core with 128G RPM 4.0 G Killer b. Grap VRAI Threa c. Cooli iCUE and Displ HD,1 Ether 850w d. Spea e. Softw lifetin warra f. Monit UPS	Windows 11 Professional 64-bit essor & Storage:14th Generation Intel i9-14900K, Motherboard Compatible PCIe 5.0 and DDR5 RAM 64 GB up to B, 1 TB NVMe SSD + 2 TB HDD (7200) or higher. Base clock speed 3.5 GHz to GHz Boost Clock: Up to 6.0 GHz, Intel BE Wi-Fi 7 + Bluetooth 5.4 hics: NVIDIA GeForce RTX 4090 M: 24 GB GDDR6X 64 Cores & 128 ads, 288 MB Cache, ng technology: Liquid cooling (Corsair H150i Elite), Ports: 4xUSB 3.2 Gen 1 2xUSB Gen 2, USB-C, audio jack, ay Port outputs HDMI 4K, Full 080P, DP Ports, Integrated Gigabit and port, Power Supply Unit (PSU) is ker: Dolby audio system ware: Microsoft Office latest version with the subscription, systems with a 3-year
31	technical bid) a	lue print of	he cardio and rehab area and submit (along with the proposed flooring zone with amenities suiting cardio and rehab zone



APPENDIX - E

BoQ Tamil Nadu Physical Education and Sports University, Melakkottaiyur, Chennai, Tamil Nadu - 600127 (High Performance Centre for Sports - Tender 2025) NAME OF THE COMPANY **Tender No and Item No** 2 3 5 8 9 6 10 11 12 13 14 **Basic Rate** Cess on Basic Custom Duty in (Percentage) % Item Description Currency in INR Other Currency Basic Custom Duty in in the selected currency Percentage) % **FOTAL TAXES** (One Qty) in **CAMC Cost Extended Price** Terms of Delivery figures to be % TOTAL for 3 years Quantity [Qty. x (Basic Rate å Units ₽. entered by **AMOUNT** in the after the + Basic Customs GST S. the Bidder in selected extended **Duty + Cess on** the currency warranty BCD)] respective period currency **FOR FOR FOR FOR FOR FOR** FOR Total in Figures Quoted Rate in Words

Note:

- 1. The bidders can add the necessary rows if needed
- 2. The L1 will be decided based on column No. 12
- 3. The SI. No 14 (Comprehensive Annual Maintenance contract) will also be considered in finalizing the bid.