

TENDER FOR

Supply, Installation, Testing and Commissioning of Virtual Reality Based Smart Science Lab.

AT

NATIONAL INSTITUTE OF AYURVEDA, JAIPUR

NIT ISSUE DATE	:	29-10-2020
NIT NO.	:	NIA/CS/VRBSSL/(1)18/2020
PRE-BID MEETING	:	05-11-2020 (3.00 pm)
LAST DATE OF SUBMISSION	:	17-11-2020 (2.00 pm)
BID OPENING DATE	:	18-11-2020 (2.00 PM)
TENDER COST	:	1000/-



NATIONAL INSTITUTE OF AYURVEDA

MINISTRY OF AYUSH GOVT. OF INDIA
JORAWAR SINGH GATE AMER ROAD, JAIPUR

Supply, Installation, Testing and Commissioning of Virtual Reality Based Smart Science Lab.

NIA/CS/VRBSSL/(1)18/2020/

National Institute of Ayurveda, Jaipur is an autonomous body under the Ministry of AYUSH, Government of India, invites Online bids in two bid system for tender **Supply, Installation, Testing and Commissioning of Virtual Reality Based Smart Science Lab**. Best offers are invited along with the complete details of specifications, terms & conditions.

S.N.	ITEM DESCRIPTION	QUANTITY	EMD (Rs.)
1.	Supply, Installation, Testing, and Commissioning of Virtual Reality Based Smart Science Lab.	01	19,000/-

INSTRUCTIONS:

1. Bids shall be submitted online at CPPP website: <https://eprocure.gov.in/eprocure/app>
2. The complete bidding process is online. Bidders should be in possession of valid digital Signature Certificate (DSC) of class II or III for online submission of Bids, Prior to bidding DSC need to be registered on the website mentioned above.
3. Tenderer/Contractor/Bidders are advised to follow the instructions provided in the instructions to the contractors/Tenderer/Bidders for the e-submission of the bids online through the Central Public Procurement Portal for e-Procurement at <https://eprocure.gov.in/eprocure/app>
4. Bid documents may be scanned with 100 dpi in black and white option which helps in reducing size of the scanned document.

5. Tender Fee: Tender fee will be Non-refundable amount of one thousand (Rs. 1000/-).

6. Pre Bid Meeting:

Pre Bid meeting with the intending bidders shall be held on 05 November 2020 at 3.00 PM onwards in NIA, Jaipur. All the prospective bidders are requested to send comments/representations on or before pre-bid meeting. Intending bidder will be allowed to seek clarification of specifications, conditions of contract etc. in writing to NIA, Jaipur (e-mail: store-nia-rj@gov.in or nia-rj@nic.in) within 24 hours after the pre bid meeting.

7. EMD Payment:

The Bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of **Rs. 19,000/-(Rupees Nineteen Thousand Only)** by way of demand drafts or Bank Guarantee only. The demand drafts or Bank Guarantee shall be drawn in favour of “**Director, NIA, Jaipur**” Payable at Jaipur. The EMD of the Successful Bidder shall be returned after the successful submission of Bank Guarantee/Security Deposit and for unsuccessful Bidder(s) it would be returned after award of the Contract. **The demand Drafts or Bank Guarantee for EMD must deliver to Director, NIA, Jaipur on or before last date /time of Bid Submission.**

- a) Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fails to observe and comply with stipulation made herein or back out after quoting the rates, the aforesaid amount of earnest money will be forfeited.
- b) The firms who are registered with National Small industries corporation (NSIC) or Small Scale Industries (SSI) are exempted to submit the EMD(Copy of registration must be provided along with Technical Bid) Registration proof and Udyog Aadhar Certificate should be enclosed with Technical Bid.
- c) Bidders are not allowed to submit more than one bid anytime during the tendering process for the same/similar tendered item else all his bids shall be cancelled thereby making him disqualified in addition to the forfeiture of the EMD.

- d) The EMD, in case of unsuccessful Bidders shall be retained by NIA, Jaipur till the finalization of the Tender. No Interest will be payable by NIA, Jaipur on EMD.
- e) EMD is required to protect the purchaser against the risk of Bidders conduct. The EMD will be forfeited if the bidder withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to the notice that the information/ documents furnished in its tender is incorrect or false.
- f) The EMD/PBG shall be forfeited if successful bidder fails to supply the goods/equipment in stipulated time or fails to comply with any of the terms & conditions of the contract or fail to sign the contract.

8. Submission of Tender:

The tender shall be submitted online in two part, viz., Technical Bid and Financial Bid (BOQ). All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

The Bidder shall quote the Technical and Financial Bids as per the format enclosed with tender document. **The Bidders should submit their all relevant documents (Technical bid document and EMD proof etc) before last date and time of bid submission.**

The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.

9. Technical Bid:

All pages of the Tender should be numbered and indexed.

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

The following documents are to be furnished by the contractor/Bidder along with Technical Bid as per the Tender Document:

- a) Signed and scanned copy of appropriate value of valid registration certificate (if any), experience certificate as per the tender notice, PAN, GST registration certificate and Tender Acceptance Letter.
- b) Signed and Scanned Copy of make and model of all systems, sub systems and additional items should be mentioned in the technical bid and complete technical details should be provided in the form of Brochures and write-ups.
- c) The bidders are required to submit user certificate for the relevant equipment on the letter head of the institution (Government/ Private)
- d) Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature must be enclosed with the bid.
- e) **Manufacturer Authorization:** The bidder (if not original equipment manufacturer) must submit Original Equipment Manufacturer authorization certificate that the tenderer is authorized for selling and maintain the equipment quoted for.

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10. Financial Bid:

Price Schedule(s) as per BoQ format filled up with all the details including Make, Model etc. of the goods offered to be uploaded.

While filling up the columns of the Financial Bid, the following aspects should be noted for compliance:

Price should include:

- a) Duties and fees, if any.
- b) Charges towards Packing & Forwarding, Inland Transportation, Insurance, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Financial Bid.
- c) The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Financial Bid.
- d) GST will be payable separately as per applicable rate.

Schedule of price bid in the form of BOQ_XXXX .xls

The below mentioned price bid format is provided as BoQ_XXXX.xls along with this Tender Enquiry Document at <https://eprocure.gov.in/eprocure/app> Bidders are advised to download this BoQ_XXXX.xls as it is and quote their offer/rates in the permitted column and upload the same in the commercial bid. Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tempered /modified in any manner, tender will be completely rejected and tenderer is liable to be banned from doing business with NIA, Jaipur.

11. The authorized signatory of the bidder must digitally sign the bid. Individuals digitally signing the bid or other documents connected with a contract must specify whether he signs as:
 - a) A 'Sole Proprietor' of the firm or constituted attorney of such Sole Proprietor.
 - b) In case of partnership firm he must have authority to quote & to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney.
 - c) Constituted attorney of the firm if it is a company.

12. Turnover:

The Firm/Agency should have an annual total minimum turnover of Rs. 10 lakh during the Last 3 Years (2016-17, 2017- 18, 2018-19) to be eligible for consideration.

13. Validity:

The quoted rates must be valid for a period for 180 days from the date of closing of the tender. The overall offer for the assignment and bidder(s) quoted price shall remain unchanged during the period of validity. If the bidder quoted the validity shorter than the required period, the same will be treated as unresponsive and it may be rejected.

14. The Bidding firm should be continuously engaged (with valid license/ Registration) in the same business at least for last 3 Years the bidding firm should have at least 1 similar contracts with Central Government / State Government / PSU's / Universities/Deemed to be Universities/autonomous bodies **Reputed Medical Institute of Organisation** in last 3 Years.

15. **The bidder firm should not have been blacklisted by any Ministry/Department of Govt. of India/State Government/any PSU's etc. The Performance Security Deposit will be forfeited after awarding the Bid, in case the bidding firms found blacklisted by Central Government/State Government/PSU's/Universities/Deemed to be Universities/Autonomous Bodies at any point of time.**

16. The Director, National Institute of Ayurveda reserve the right to accept or reject any/all tenders without assigning any reason thereof.

17. Availability of Funds:

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

18. Scope of Work:

The scope of work shall include Supply, Installation, Commissioning and Satisfactory Demonstration. This will also include testing, packing, transportation, scheduling of transportation, transit insurance, delivery at sites, unloading, storage, job site storage, insurance, installation any other services associated with the delivery of the equipment and materials providing warranty of services and operation and maintenance of other related equipment/items required for complete installation. The successful bidder will assume full responsibility of the complete system until final acceptance.

19. Delivery and Installation:

For goods supplied from India.

- a) All the goods ordered shall be delivered and Installed at NIA, JAIPUR within 30 days from the date of issue of supply order. All the aspects of safe delivery, installation and commissioning shall be the exclusive responsibility of the supplier. If the supplier fails to deliver, install and commission the goods on or before the stipulated date, then a penalty at the rate of 0.5% per week or a part thereof of the total order value shall be levied subject to maximum of 10% of the total order value. The successful tenderer will also provide required training for supplied items at NIA, JAIPUR. The goods should be manufactured after adoption of latest technology y. If at any time during the currency of the contract, the supplier encounters conditions hindering timely supply of the goods and performance of services, the supplier shall promptly inform the NIA, JAIPUR for extension of the delivery schedule accordingly.
- b) On receiving the supplier's communication, NIA, JAIPUR shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract. In the case of package supply where the delayed portion of supply materially hampers installation and commissioning of the systems, liquidated damages charges shall be levied as above on the total value of the concerned package of the purchase order. Quantum of liquidated damages assessed and levied by the purchaser shall be final and not challengeable by the supplier.

20. Signing the Contract:

The successful bidder shall be required to execute the Contract Agreement accepting all terms and conditions stipulated herein on a non-judicial stamp paper of Rs. 500/- (Rs. Five Hundred only) along with performance security within fifteen days of the issue of the Letter of notification of a ward. In the event of failure on the part of the successful bidder to sign the Contract within the period stipulated above, the EMD shall be forfeited and the acceptance of BID shall be considered as cancelled.

21. Performance Security :

As a guarantee towards due performance and compliance of the contract work, the successful

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bidder (contractor) will deposit an amount equal to 5% of order value and should be kept valid for a period of 60 days beyond completion of all the contractual obligation, including CMC period towards security deposit by way of demand draft in favour of “**DIRECTOR, NIA JAIPUR**” payable at JAIPUR drawn on any Nationalized Bank/Scheduled Bank and payable at JAIPUR within fifteen days of the issue of the Letter of notification of award along with non-judicial stamp paper of Rs. 500/- (Contract agreement).

22. Incidental Services:

The supplier shall be required to perform the following services: -

- a) Installation & Commissioning, Supervision and Demonstration of the goods.
- b) Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
- c) On Site Training to Doctors/ Technicians/ Staff is to be provided by Supplier for operation and maintenance of the equipment for a period of 30 working days after successful installation of the machine, as per direction of user department.
- d) Supplying required number of operation & maintenance manual for the goods.
- e) To provide non-locked open software and standard interface inter-operability conditions for networked equipment's in hospital management information system, wherever applicable.

23. After Sales Service:

After sales service centre should be available on 24 (hrs.) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 24 hrs to ensure an uptime of minimum 95%, wherever applicable, failing which the necessary penalty measures shall be enforced.

24. Inspections:

- a) NIA, Jaipur shall have the right to inspect and/or to test the goods to confirm their conformity to the NIT Specifications at no extra cost to the Purchaser.
- b) NIA, Jaipur right to inspect, test and, where necessary, reject the Goods after the goods arrival at the final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by NIA,JAIPUR prior to the goods shipment.
- c) The Director, NIA, JAIPUR shall be the final authority to reject full or any part of the supply which is not confirming to the specification and other terms and conditions.
- d) No payment shall be made for rejected items and those must be removed by the Bidders within two weeks of the date of rejection at their own cost and replaced immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the suppliers without any further notice.

25. Payment Terms:

Payment of the total order value shall be released after the successful installation/commissioning and tanning of the ordered goods against the submission of the inspection report

26. Guarantee / Warrantee Period:

The Tenderers must quote for 5 year comprehensive warranty (including all Spares, Accessories and Labour) from the date of completion for satisfactory installation. The Warranty Charges shall not be quoted separately otherwise the offer shall be summarily rejected.

27. Site Preparation for installation:

The site for installation of the equipment shall be provided by the purchaser as per the

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required specification and environmental conditions before the installation of System.

Site plan and System layout plan including civil/electrical work or other related works shall be prepared by the supplier.

Earthing arrangements for all the equipment shall be completed as per standard practice.

28. The prices quoted by the Bidder and accepted by the committee duly constituted by NIA, Jaipur shall hold good till the completion of the works and no additional claims will be admissible on account of any price variation or fluctuation in market rates.
29. Before the equipment is taken over by the Purchaser/Consignee, the Supplier shall provide manuals of the equipment / systems. This shall include the following:
 - a) System Interface Drawings, Wiring diagrams
 - b) System Interconnection and Block diagrams
 - c) User Operation Manuals
 - d) Equipment Maintenance Manuals
30. The vendor should collect the copy of building layout plan and visit the site, for complete evaluation of the project and feasibility of his material before submitting the bid.
31. Bidder must submit Printed catalogue and technical data sheet to substantiate offer.
32. Bidder shall submit a copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the tender enquiry document.
33. Quality assurance certification like ISO 9000 series should be enclosed wherever applicable.
34. The bidder should be capable to inspect the centralised Virtual Reality Based Smart Science Lab by internationally accredited "Lloyd or equivalent certified Person". Regarding this matter, necessary proof has to be provided alongwith the offer.
35. NIA, Jaipur reserves the right to ask the tenderers for submitting the sample of the item for which rates have been quoted. Technically Qualified Bidders may be asked to submit samples along with their quoted items no. and their firm name without indicating any prices before opening of Financial Bid to NIA, Jaipur for Inspection.
36. The quantity of item given in the tender is tentative, which may be increased or decreased as per the institute's requirement.
37. Conditional bid will be treated as unresponsive and it may be rejected.
38. After due evaluation of the bid(s) Institute will award the contract to the lowest evaluated responsive tenderer.
- 39. Demonstration:**

NIA, Jaipur reserves the right to ask the tenderers for arranging demonstration of their equipment for which rates have been quoted, to the concerned committee, if required.
40. The Institute reserves the right to accept in part or in full or reject any or more tender(s) without assigning any reasons or cancel the tendering process and reject all tender(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).
- 41. Breach of Terms and Conditions:**

In case of breach of any terms and conditions as mentioned above, the Competent Authority, will have the right to cancel the work order/job without assigning any reason

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thereof and nothing will be payable by NIA, Jaipur in that event the security deposit shall also stands forfeited.

42. Insolvency etc.:

In the event of the firm being adjudged insolvent or having a receiver appointed for it by a court or any other order under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions herein specified NIA, Jaipur shall have the power to terminate the contract without any prior notice.

43. Force Majeure:

If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party shall be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such nonperformance or delay in performance, and deliveries have been so resumed or not shall be final and conclusive.

Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may, at least option to terminate the contract.

44. Applicable Law:

The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings/processing.

Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Jaipur, Rajasthan, India only.

The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Jaipur. The decision of the Arbitrator shall be final and binding on both the parties.

Force Majeure: Any delay due to Force Majeure will not be attributable to the supplier.

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Technical Bid

1.	Name of Tendering Company/Firm/Agency	:	
2.	Name of Owner/Partners/Directors	:	
3	Full Particulars of the Head Office	:	
	• Address	:	
	• Telephone No.	:	
	• Fax No.	:	
	• E-mail address	:	
4	Full Particulars of the Bankers of the Company/Firm/Agency, with full Address/Tel. No.	:	
	• Name of the Bank	:	
	• Address of the Bank	:	
	• Telephone No.	:	
	• Fax No.	:	
	• E-mail address	:	
5	Registration Details:	:	
	• Copy of Firm/Agency's Registration No.	:	
	• PAN/GIR NO.	:	
	• GST Registration No	:	
	• Aadhar No. of Owner/Partners/Directors	:	
6	Details of Earnest Money Deposit	:	
	• Amounts (Rs.)	:	
	• DD/PO No. and Date	:	
	• Drawn on Bank	:	
	• Valid upto	:	
7	Details of Tender Fee	:	
	• Amount	:	
	• DD/PO No.	:	
	• Drawn on Bank	:	
	• Valid upto	:	
8	Annual Turnover of the Company/Firm/Agency for the last 3 years (With Proof duly certified by Chartered Accountant/Auditor) Last 03 Years balance sheet and copies of Income tax returns for 3 Years as stated in Terms & Conditions	:	
	2016-2017	:	
	2017-2018	:	
	2018-2019	:	
9	The Firm who are registered with National small Industries Corporation (NSIC)/ or Small Scale Industry / or MSME are exempted to submit the Tender fee or EMD (copy of Valid MSME registration Certificate must be provide along with Udhyog Addhar)	:	
10	Similar supplies in last 3 Years (with Proof)	:	

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	Experience in the field for the minimum 2 years		Similar 1 Government Running Contract with central government/State Government/PSU/University/Deemed to be university/Autonomous bodies in last 3 years	
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**Certificate
(To be submitted with the Technical Bid)**

The Annual Turnover of M/s. _____ for the last 3 Years are given below and it is certified that the Statement is true and correct:

S.N.	Year	Turnover Rs. In Lacks
1	2016-2017	
2	2017-2018	
3	2018-2019	
	Total	Rs _____ Lacks

Average Turnover per Annum: Rs. _____ Lakhs.

Signature of Chartered Accountant/Auditor with Seal

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MANUFACTURER'S/PRINCIPAL'S AUTHORIZATION FORM

TO,
Director
National Institute of Ayurveda
Jaipur
Sir,
Tender:.....

We ----- who are established and reputable manufacturer of
having factories at.....and....., hereby
authorize Messrs. ----- (name and address of agent(s) to bid, negotiate
and conclude the contract with you against Tender.

No ----- for the above goods manufactured by us. No company or firm or individual
Other than Messrs -----are authorized to bid, negotiate and conclude the contract in
regards to this business against this specific tender.

We hereby extend our full guarantee and warranty as per the conditions of tender for the goods offered
for supply against this tender by the above firm.

The authorization is valid upto..... -

Yours faithfully,

For and on behalf of messrs.-----
(Name of manufacturers) principal

Specification

1. Human Body

- Module should include outside and inside view of the human body (Male and Female).
- It should include circulatory system with blood circulation around the body via the heart, arteries and veins. Delivering oxygen and nutrients to organs and cells and carrying their waste products away
- It should include digestive system to showcase absorption of nutrients and removal of waste products via gastrointestinal tract including mouth, oesophagus, stomach, intestine, rectum and anal canal
- It should include muscular system to showcase body to move using muscles. Individual muscle action their contraction and relaxation should be visible
- It should include renal system to showcase kidneys filtering blood to produce urine and excretion of waste products.
- It should include respiratory system to showcase air into and out of the lungs to absorb oxygen and remove carbon dioxide up to alveolar level
- It should include skeletal system to showcase bones and joints maintaining structure of the body and its organs.
- Module should have labeling of various visible parts with detailed textual description for easy learning.
- There should be provisions to further alteration or development of the existing modules as per requirements and technical advice of the experts.

2. Cardiovascular system

- Module should showcase inside and outside view of the human working cardiovascular system with fine details including labeling of various visible parts with detailed textual description to learn.
- There should be provisions to further alteration or development of the existing modules as per requirements and technical advice of the experts.

3. Respiratory System

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- Module should showcase inside and outside view of the human respiratory system in detail including labeling of various visible parts with detailed textual description to learn.
- There should be provisions to further alteration or development of the existing modules as per requirements and technical advice of the experts.

HARDWARE AND SOFTWARE REQUIREMENTS

1. Virtual Reality (VR) Desktop (With latest available configuration and all other required accessories).
2. Virtual Reality (VR) Desktop based Virtual Reality (VR) Equipment (With latest available technology for virtual reality modules).

Modules for Desktop based VR equipment (For Human Body, Cardiovascular System and Respiratory System) with provision to further development as per required by the institute.

Other Terms and Conditions

- Interested companies may present the detailed description of the proposal as per our requirements.
- Along with detailed proposal specifications of Virtual Reality (VR) Desktop and Desktop based Virtual Reality (VR) Equipment will be mandatory for the comparison with other proposal received.
- There will be a technical evaluation committee which will study all the proposal and shortlist the proposals which will be found suitable for technical bid.
- Demonstration of the modules before technical committee will be mandatory to qualify for the financial bid.
- Preference will be given to the companies those who have already developed modules and had served the Government sector previously.
- Bidder should have adequate experience in developing Virtual Reality Programme in field of medical education for which supporting documents needed to be enclosed with proposal
- Bidder has to submit audited financial statements of the last three financial years i.e. FY 16-17, FY 17-18 and FY 18-19.

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- Prior Experience – Bidder should have executed or executing at least two similar projects in the last 5 years period prior to the bid submission date. Preference will be given to those bidder who had worked for government sector earlier.
- In case of Completed project – copy of work order + Completion Certificates from client + Project Citation should be enclosed with proposal.
- Vendor has to demonstrate/share/present their relevant past work showing their team strength/capability/capacity. It will be criteria for technical evaluation for the TEC (Technical Evaluation Committee) prior to opening the Financial Bid of the vendors submitting the bids.
- Financial bid of those bidders whose Techno-commercial bid is accepted by the TEC will be opened and comparative statement will be prepared. The best acceptable bid will be decide upon the lowest price quoted by the particular bidder.
- Vendor has to submit the credit worthiness/bank guarantee issued by a bank/ a certified registered CA at least double to the cost of the project.
- Director, NIA reserves the right to withdraw/modify the requirement at any stage without any need to clarify as the case may be.

Remark

As per standard SOP other requirements may be included if any not covered above and deemed necessary as the case may be

Proposal for setting up Virtual Reality Based Learning Lab in National Institute of Ayurveda, Jaipur

In the last decade, the rapid innovation in the technological world has had a major impact on the human-computer interaction (HCI). The education sector has also realized its significance and has made various attempts to use it to their advantage. Various technologies have been introduced to enhance the learning, engagement of the student, and their assessments, aiming to enrich the quality of education. The motivation of students to effectively learn plays and effective role is one of such key priorities for educational systems.

Virtual Reality (VR) technologies have transformed the landscape of HCI in recent year by offering

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new and unique viewpoints on the core goals of training and education in medical field. VR creates a sense of immediacy and control through its immersive display which puts the user into a simulated environment that looks and feels to a certain extent like the real world. This immersion, in turn, engages the user by attaining their attention to the fullest resulting in better learning outcomes.

In medical studies, both theoretical and practical expertise are having vital role. Repetition of practical can improve young doctor's professional competency. Immersive technologies were found best for medical students in both learning motivation and learning competency. Medical Students and education may introduce VR and new learning methodology for curriculum learning.

Some of the **Key** features of Virtual Reality Labs have been listed below:-

1. It uses state of the art technology (VR) for interactive and immersive exploration of concept that the students learn via Textbooks.
2. It enables the student to visualize, explore and interact with the concept/model being taught.
3. The models and its corresponding parts may also be explored.
4. The VR based visualization enables the students to have a 360 degree view of the concept/model.
5. The details of each of the components in the model, facilitates learning while visualizing the model in totality.

Keeping in view above background it is proposed to develop virtual reality lab in our Institute in a phased manner. To start with it is proposed to establish virtual reality modules for the following systems

1. Human body module to showcase the outside and inside view of the male and female human body which shall include various systems namely – Circulatory system, digestive system, muscular system, urinary system, respiratory system, skeletal system.
2. Cardiovascular system module which especially deals with details of heart to showcase outside and inside view.
3. Respiratory system module which especially deals with details of lungs to showcase outside and inside view.

Nervous system module which especially deals with details of lungs to showcase outside and inside view.