



कृषि प्रसार संभाग
DIVISION OF AGRICULTURAL EXTENSION
भा.क.अनु.प.- भा.क.अनु.संस्थान
ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE
नई दिल्ली-110012 NEW DELHI - 110012

निविदा सूचना
TENDER NOTICE

कृषि प्रसार संभाग, भा. कृ. अनु. प.-भारतीय कृषि अनुसंधान संस्थान,, नई दिल्ली -110012 द्वारा विभिन्न हितधारकों के लिए इमर्सिव कृषि शिक्षण के अंतर्गत AR/VR आधारित क्षमता निर्माण मॉड्यूल, ई-कंटेंट एवं संसाधनों के विकास की खरीद हेतु प्रतिष्ठित निर्माता / डीलर / आपूर्तिकर्ता से दो बोली प्रणाली (तकनीकी बोली और वित्तीय बोली) में (जेम पोर्टल के माध्यम से) ऑनलाइन निविदा आमंत्रित की जाती है। (निदेशक आईसीएआर-भारतीय कृषि अनुसंधान संस्थान, नई दिल्ली की ओर से इस संबंध में विस्तृत जानकारी, शर्तें एवं तकनीकी विवरण GeM पोर्टल पर प्रकाशित निविदा दस्तावेज़ में उपलब्ध हैं।

Online Tender through (Through GeM - Government e-Marketplace Portal) are invited from reputed Manufacturer/Dealer/Supplier in Two Bid system (Technical bid & Financial bid) for the **Procurement of Immersive Agricultural Learning: Development of AR/VR-Based Capacity Building Modules, e-Content & Resources for different Stakeholders** by Division of Agricultural Extension, ICAR-IARI, New Delhi -110012 (Details mentioned in tender on behalf of Director ICAR-Indian Agricultural Research Institute, New Delhi.

Details

Pre-mid-meeting Link for clarification for specification the Procurement of Equipment's (Online & Offline) Date & Time : 20.02.2026 & 11.00.00	Offline Venue: Division of Agricultural Extension, ICAR-IARI, New Delhi Online Meeting Link: https://meet.google.com/ywa-oozh-yug
Source of Fund (Institute/Project)	Project code: 12:24 T.G. code : 2624
Estimated Bid Value	Rs. 5,40,99,973.00
EMD	EMD must be 2% of the bid value. (Rs.10,82,000/-)
Performance Security	Performance Security @5% of tender value
Address for Communication	Division of Agricultural Extension, ICAR IARI, New Delhi-110012, Delhi, India
Contact No.	011-25846434
Email Address	head_exten@iari.res.in
Manufacture may be download the tender document from	BID NO: GEM/2026/B/7250860 Start Date: 17-02-2026 4:26 PM End Date: 10-03-2026 5:00 PM https://bidplus.gem.gov.in/published-bids Government e-Market place (GeM) Portal

Instruction to the bidder and terms & conditions of the tender:

1. The rates quoted for the equipment shall be valid for a Minimum period of six months from the date of opening of the bid.
2. The rates quoted by the manufacturer shall be free of cost delivery (FOR) and also Unloading at the Division of Agricultural Extension, ICAR-IARI, New Delhi – 110012. Packing and any damage during the transportation will be borne by the manufacturer /supplier.
3. **Delivery:** The successful bidder shall deliver, install, demonstrate, and make fully operational all AR/VR equipment, peripherals, accessories, and AR/VR software modules within **30 days** from the date of issue of the Purchase Order. It is mandatory that installation and demonstration shall be carried out by the manufacturer/supplier at the designated installation sites, namely the Division of Agricultural Extension, ICAR–IARI, New Delhi – 110012; ICAR–IARI, Jharkhand, Gauria Karma, Barhi, Hazaribagh, Jharkhand; and ICAR–IARI Regional Station, Kalimpong, West Bengal. The delivery shall include safe packing, transportation, unloading, installation, integration of hardware with AR/VR modules, functional testing, and demonstration at no extra cost. The responsibility for the supplied items shall remain with the bidder until successful installation, commissioning, and final acceptance by the competent authority. Any delay beyond the stipulated delivery period of 30 days shall attract penalties as per applicable Government of India/ICAR procurement rules.
4. E-payment will be made to the manufacturer/supplier/firm after satisfactory completion of work, e.g. successful delivery, installation & training at **Division of Agricultural Extension, ICAR-IARI, New Delhi -110012, ICAR-IARI-JHARKHAND, Gauria Karma, Barhi, Hazaribagh, Jharkhand & ICAR-IARI-R.S. Kalimpong, West Bengal.**
5. If taxes, duties or any other charges over and above the rates quoted livable actual Percentage of such taxes/duties/other charges should be clearly indicated in the separate letter and attached with technical bid. Terms and conditions of the company may be attached with a separate letter and attached with technical bid.
6. **EMD must be 2% of the Bid value (Rs. Rs.10,82,000/-) however item wise EMD value is specified in the GeM bid document.**
7. EMD should be in the form of Demand Draft/Pay Order/Fixed Deposit Receipt/Bank Guaranty from the Commercial Bank in favour of the Director, IARI on any Nationalized Bank, without which the tender will not be entertained. The EMD shall be refunded to the unsuccessful bidder after finalization of the tender. In case of a successful bidder, it can be adjusted towards security deposit as per rule.
8. **Performance Security:** The successful firm will have to submit acceptance of contract award order within the period on GeM portal and will have to deposit a performance security 5% of the contract value in the office of Division of Agricultural Extension, IARI, New Delhi. This security deposit is to be furnished in the form of Account Payee Demand Draft/Fixed Deposit Receipt/ Bank Guarantee or Insurance Surety Bond from a Commercial Bank. In the event of non-deposition of the same.
9. **Minimum Annual turnover should not be less than or equal to Rs. 2.17crore (40% of the bid value) per year for the last 3 Financial years (2022–23, 2023–24, 2024–25) and it must be duly certified by Chartered Accountant.**
10. In case any bidder is seeking exemption from Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the Institute.
11. **Warranty Period** for display items three years and other items one year from the date of installation will have to provide for Replacement/repair/service of parts by the manufacturer/supplier.

12. After the supply order is issued, if any part or component is found defective or damaged after delivery at the recipient's location, the manufacturer or supplier will replace or repair it free of cost at the installation site during the warranty period
13. The manufacturer will also provide service after the warranty period for satisfaction on payment basis.
14. In case, any dispute arising out of this contract shall be subject to the jurisdiction of Indian laws & Court at New Delhi. Sole arbitrator is appointed by the Secretary, ICAR, New Delhi. His decision will be final and binding on both parties (Supplier and Purchaser).
15. No interest on security deposit and earnest money deposit shall be paid by the Institute to the bidder.
16. The Director IARI, New Delhi reserves to him/herself the right to accept or reject any or all the tenders either in full or in parts without assigning any reason.
17. Tenders not complying with the above conditions are liable to be rejected.
18. Bidders may please note that Preference will be given to “Make in India” as per order of Ministry of Commerce and Industry, Department of Promotion of Industry and Internal Trade, Govt. of India subject to technical suitability of the product.
19. The bidder must be a legally registered entity in India and shall possess a valid **GST Registration**. Registration under the **Companies Act / LLP Act / Shops & Establishment Act / Factory Act**, or a valid **Shop/Factory License** issued by the competent **State Government or other appropriate Government Authority**, shall be acceptable.
20. Ensure that all duly signed documents as per annexure -VIII is attached along with the technical bids.
21. A Pre-Bid Meeting will be conducted to clarify issues related to the tender. Interested bidders may participate either **online (through video conferencing)** or **offline (in person)** at the designated venue. The date, time, mode, and link/venue details of the Pre-Bid Meeting shall be communicated through the GeM portal / Tender Notice.

अनिवार्य दस्तावेज़ / Mandatory Documents to be uploaded with Technical Bid

1. बोली मूल्य के 2% (रु. 10,82,000/-) के बराबर अर्नेस्ट मनी डिपॉजिट (EMD) की स्कैन की हुई प्रति |
Scanned copy of EMD (2% of the Bid value (Rs. Rs.10,82,000/- Rs. Ten Lakh Eighty Two Thousand) .
2. यदि कोई बोलीदाता ईएमडी/टर्नओवर मानदंड से छूट चाहता है, तो छूट के लिए उसकी पात्रता साबित करने के लिए वैध एमएसएमई/स्टार्ट-अप प्रमाणपत्र संस्थान द्वारा मूल्यांकन के लिए अपलोड किया जाना चाहिए।
In case any bidder is seeking exemption from EMD/Turnover Criteria, Valid MSME/Start-up certificate to prove his eligibility for exemption must be uploaded for evaluation by the Institute.
3. अनुपालन प्रतिज्ञा (Compliance Undertaking) विक्रेता द्वारा अपने लेटरहेड पर, हस्ताक्षर एवं आधिकारिक मुहर सहित प्रस्तुत की जाए –(परिशिष्ट-I)|
Compliance Undertaking to be submitted by the vendor on its letterhead, duly signed and stamped (Annexure-I).
4. अनुभव का प्रमाण- पिछले तीन वर्षों (2022-23, 2023-24, 2024-25) में समान/समान प्रकार के उत्पाद क्षेत्र में केंद्रीय सरकारी कार्यालयों/स्वायत्त निकायों/कॉरपोरेशनों/प्रतिष्ठित सार्वजनिक संगठनों के साथ अनुभव (परिशिष्ट-II)
Proof of Experience – Last three years (2022-23, 2023-24, 2024-25) in same/similar product field with Central Govt. Offices / Autonomous bodies / Corporations / Reputed public organizations. (Annexure-II).
5. नियम एवं शर्तों की स्वीकृति प्रमाण पत्र – बोलीदाता द्वारा हस्ताक्षरित (परिशिष्ट-III)|
Certificate of Acceptance of Terms & Conditions signed by the bidder (Annexure-III).
6. घोषणा/प्रतिज्ञापत्र – ₹100/- गैर-न्यायिक स्टाम्प पेपर पर (नोटरीकृत) कि फर्म किसी भी सरकारी विभाग/पीएसयू/निजी संस्था द्वारा ब्लैकलिस्टेड/डिबार नहीं है (परिशिष्ट-IV)|
Declaration / Undertaking on Non-Judicial Stamp Paper of ₹100/- (Notarized) confirming that the firm is not blacklisted or debarred by any Govt./PSU/Private body (Annexure-IV).
7. पिछले तीन वर्षों (2022-23, 2023-24, 2024-25) के आयकर रिटर्न का प्रमाण/
Proof of Income Tax Return filing for the last 3 years (2022-23, 2023-24, 2024-25).
8. पिछले तीन वित्तीय वर्षों अर्थात् 2022-23, 2023-24 एवं 2024-25 की बैलेंस शीट तथा लाभ) हानि खाता-Profit & Loss Account), जो किसी चार्टर्ड अकाउंटेंट द्वारा विधिवत प्रमाणित हों।(निविदाकर्ता)Bidder) का उपरोक्त प्रत्येक वित्तीय वर्ष में न्यूनतम वार्षिक टर्नओवर ₹2.17 करोड़ बोली मूल्य का)40%) होना अनिवार्य है, जिसकी पुष्टि प्रस्तुत वित्तीय विवरणों से होती हो।
Balance Sheet and Profit & Loss Account for the last three financial years, i.e., 2022-23, 2023-24 and 2024-25, duly certified by a Chartered Accountant. The bidder must have a minimum annual turnover of **Rs. 2.17crore (40% of the bid value)** in each of the said financial years, as evidenced from the submitted financial statements.
9. वारंटी शर्तें- टेंडर अनुसार (परिशिष्ट-V)|Warranty Terms – As per tender (Annexure-V).
10. डिलीवरी शर्तें एवं अवधि – टेंडर अनुसार (परिशिष्ट-VI)| Delivery Terms & Period – As per tender (Annexure-VI).
11. फर्म विवरण (परिशिष्ट-VII)| Firm Details (Annexure-VII).
12. मेक इन इंडिया प्रमाण पत्र Make in India Certificate
13. एनएसआईसी/एम.एस.एम.ई.प्रमाण.पत्र (यदि लागू हो) / NSIC / MSME Certificate (if applicable).
14. पैन एवं जी.एस.टी प्रमाण पत्र / PAN and GST Certificates
15. इस प्रयोजन के लिए संबंधित राज्य के कंपनी/दुकान एवं स्थापना अधिनियम के तहत फर्म का पंजीकरण प्रमाण पत्र। / राज्य सरकार की एजेंसी (दोनों में से कोई एक) द्वारा जारी कारखाना/दुकान लाइसेंस।
Registration Certificate of the firm under Company/Shops & Establishment Act of the respective state for this purpose. /Factory /shop license issued by the state government agency (Either one).

Annexure VIII

[TECHNICAL BID]

The scan copies of following documents are required to be uploaded with the Technical Bid. Bid will not be considered in absence of these documents:

S. N	Requirements to be checked before submission of the tender	Compiled (Please indicate) Yes after complying with the requirement		Upload scan copy & Indicate Page No.
1.	EMD with Account Payee Demand Draft in favour of Director IARI, Bidder has to upload a scanned copy and send a hardcopy to the AAO Division of Agricultural Extension, ICAR-Indian Agricultural Research Institute, New Delhi -110012. within 5 days of Bid End date / Bid Opening date. EMD must be (2% of the Bid value (Rs. Rs.10,82,000/-))	DD No.		
		Amount		
		Date		
		Bank		
2.	Compliance Undertaking to be submitted by the vendor on its letterhead, duly signed and stamped (Annexure-I)			
3.	Firm should have Proof of Last Three years' experience in the same or similar product field with Central Government offices, autonomous bodies, corporations, or reputed public organizations.ie. 2022-23,2023-24,2024-25 (Experience must be in the related field) Annexure -II			
4.	Certificate to be signed by the bidder acceptance of terms and conditions annexure- III			
5.	Performance Security: The successful firm will have to submit acceptance of contract award order within the period on GeM portal and will have to deposit a performance security 5% of the contract value in the office of Division of Agricultural Extension, IARI, New Delhi. This security deposit is to be furnished in the form of Account Payee Demand Draft/Fixed Deposit Receipt/ Bank Guarantee or Insurance Surety Bond from a Commercial Bank. In the event of non-deposition of the same.			
6.	Declaration undertaking on non-judicial stamp paper Rs. 100/- mentioning that the firm has not been debarred/ blacklisted /by any Government department/ Public Sector Undertaking/ Private Sector/ or any other agency. Annexure-IV			
7.	Proof of Income Tax Return filing for the last 3 years (FY 2022-23, 2023-24, 2024-2025).			
8.	Balance Sheet and Profit & Loss Account for the last three financial years, i.e., 2022-23, 2023-24 and 2024-25, duly certified by a Chartered Accountant. The bidder must have a minimum annual turnover of Rs. 2.17crore (40% of the bid value) in each of the said financial years, as evidenced from the submitted financial statements.			
9.	Warranty terms as per tender accepted. Annexure -V			
10.	Delivery Terms & Period as per tender have been accepted and mentioned in tender. Annexure- VI			
11.	Firm Details: Annexure- VII			
12.	Make in India Certificate			
13.	Registration issued by NSIC/MSME			
14.	GST registration certificate copy and PAN card copy			
15.	Registration under the Companies Act / LLP Act / Shops & Establishment Act / Factory Act , or a valid Shop/Factory License issued by the competent State Government or other appropriate Government Authority .			

* Only those firms will be considered for a financial bid who will qualify in the technical bid. To decide the responsive bid the documents as detailed above are mandatory.

*Mentioning of Page No. is compulsory without which the technical bid will not be accepted.

Signature of bidder with official seal

Project Background

The agricultural sector in India is undergoing rapid transformation with increasing emphasis on climate-resilient practices, agri-entrepreneurship, and digital technology adoption. However, the transfer of knowledge from research systems to farmers, students, and agricultural trainers remains a significant challenge due to diverse agro-ecologies, digital divides, and a lack of engaging learning mechanisms. In this context, immersive technologies such as Augmented Reality (AR) and Virtual Reality (VR) offer a paradigm shift in how agricultural knowledge is created, delivered, and consumed. Globally, immersive learning has emerged as a powerful tool for enhancing skill development and capacity building. VR-based simulations provide experiential, risk-free environments for learners to practice, observe, and interact with real-life farming scenarios. Unlike traditional training methods, immersive technologies create multi-sensory, interactive learning spaces that cater to different learning styles, improve retention, and foster deeper understanding. India's National Education Policy (NEP) 2020 has advocated for the integration of digital learning tools including AR/VR to improve the quality of agricultural and vocational education. Further, ICAR's Vision 2050 emphasizes the use of frontier technologies to strengthen extension services and human resource development (ICAR, 2015). Despite these policy endorsements, there is limited institutional capacity and content availability for immersive agricultural education.

The current proposal aims to bridge this critical gap by developing a comprehensive AR/VR-enabled training and e-learning ecosystem for three major stake holders in Indian agriculture: farmers, students, and teachers. This initiative will be jointly implemented by ICAR-IARI, New Delhi and its regional centers in Jharkhand and Kalimpong, covering ecologically diverse and educationally underserved regions.

For farmers, these modules will cover themes like improved agronomic practices, integrated pest management, post-harvest techniques, climate-smart farming, and government schemes. For students, they will enhance experiential learning in subjects such as crop production, soil science, and agri-technologies. Teacher-focused modules will emphasize digital pedagogy, participatory teaching methods, and content delivery innovations.

Moreover, studies have shown that AR/VR-based agricultural training increases user engagement and improves the application of knowledge in field conditions. Therefore, by leveraging these tools, the project aligns with national and institutional priorities to create a future-ready, digitally empowered agricultural workforce. This pioneering initiative not only supports India's push towards "Digital Agriculture" but also creates a replicable and scalable model for integrating immersive technologies into agricultural extension and education. It promises to make agricultural learning inclusive, interactive, and impactful—addressing the urgent need for personalized, location-specific, and culturally relevant training solutions

1.1. Project Objectives

- (i) **To design, develop, and validate immersive Virtual Reality (VR)-based capacity building modules** catering to the specific learning needs of farmers, students, and agricultural educators.
- (ii) **To pilot, refine, and implement the VR modules and e-content** through structured training and educational interventions across ICAR-IARI campuses in Jharkhand, and Kalimpong.
- (iii) **To evaluate the usability, knowledge gains, and overall impact** of the developed modules in enhancing agricultural competencies, skill acquisition, and pedagogical effectiveness.

Scope of Work

Upgradation of Conference Room on 3 locations

The scope of work includes the upgradation of the existing conference room to a modern, fully functional audio-video conferencing facility. This shall comprise supply, installation, integration, testing, and commissioning of audio-video conferencing systems including displays, cameras, microphones, speakers, control systems, and all associated cabling and accessories. The scope also includes interior enhancement works such as wall paneling, false ceiling, lighting, electrical modifications, and concealment of AV infrastructure, along with the supply and installation of conference room furniture including conference tables and chairs. The upgraded conference room shall be delivered as a turnkey solution, fully operational, aesthetically enhanced, and ready for immediate use.

Development of AR/VR Modules for ICAR-IARI

The project entails the creation and deployment of ten XR modules covering the following areas:

Module No.	Module Title	Description
1	IARI XR Virtual Experience	Establish a world-class, multi-platform XR system on web and mobile devices for virtual exploration of IARI's core divisions/centers.
2	PRA and Rural Appraisal	Simulate realistic virtual village environments for practicing Participatory Rural Appraisal (PRA) techniques (e.g., transect walks, resource mapping, seasonal calendar development).
3	IPM & Pest Identification	Use VR simulations to train users in executing comprehensive Integrated Pest Management (IPM) strategies, including pest scouting and identification.
4	Video Editing & Graphic Design	Conduct a series of VR modules translating professional software suites into an immersive spatial workspace for post-production workflows.
5	Agri-Waste Management	Simulate various scenarios for the sustainable management and conversion of agricultural waste, focusing on valorization, composting, and bioenergy generation.
6	Effective Communication Skill	A VR role-playing and scenario-based module using AI-driven characters to develop effective communication and interpersonal skills for extension workers.
7	Protected Cultivation	Provide detailed, interactive simulations of operating and maintaining protected cultivation structures (e.g., polyhouses), including climate and irrigation control.
8	Fundamental of Data Analytic Techniques	Leverage VR to offer a unique, three-dimensional workspace for visualizing and interacting with abstract datasets for teaching data analytics fundamentals.
9	Post-Harvest Technologies	Simulate key processes for reducing post-harvest losses, including sorting, grading, pre-cooling, and selecting appropriate storage technologies.
10	Teaching and Learning Environments	Develop a robust VR platform for discussions, strategy sessions, and the

Module No.	Module Title	Description
		development of innovative approaches for agricultural education and training.

Development of e-content modules

The selected Agency would be entrusted with the following:

- Curation of e-Content in various video formats
- Curation of e-Content from various global sources including online journals, textbook hubs, other university materials etc.
- Development of assessments and question banks
- Bundling and sequencing of e-Content.
- Capacity building of various stakeholders including faculty, students, and administrators

Following are the resources / provisions that would be made available to the Agency:

- List of all core / compulsory courses. The list would contain identified knowledge capsules, hard spots and assessments required for each lesson. This information would be provided in the following template:

BSMA:	Discipline:		Course No.:		Unit No.:		Lesson No.:		
Learning Outcome / Output of Lesson									
Knowledge Capsule Topic(s)	Type of Instructional Content Required		Hard-Spots		Type of Instructional Content Required		Assessment		Type of Instructional Content Required

- Panel of Subject Matter Experts (SMEs) that would be engaged with review and finalization of e-Content pieces (created or curated).
- Reference material such as website links, literature citations etc. required to create or curate e-Content.
- Tentatively 10-15 hours of e-content is to be developed, this number is tentative and strictly subject to approval.

Stakeholder ecosystem for the Agency for e-content Creation and Curation

In this section, the key stakeholders for the Agency have been identified and defined. The Agency is required to continuously engage with the stakeholder ecosystem for various activities as part of the e- content Creation and Curation processes.

Stakeholder	Role / Engagement with Agency
Division of Agricultural Extension – Steering Committee	- The Division of Agricultural Extension Steering Committee would consist of the Principal Investigator of Division of Agricultural Extension along with Co-

		<p>PIs, and other members from ICAR - IARI offices as deemed necessary.</p> <ul style="list-style-type: none"> - The Steering Committee's direct interaction with the Agency would be limited; however, whenever required, updates would be provided by the Agency to the Committee. - The approvals provided by the Steering Committee to the Agency with respect to e-Content would be final and binding.
	Panel of Subject Matter Experts (SMEs)	<ul style="list-style-type: none"> - Specifically, for the purpose of e-Content Creation and Curation, a panel of SMEs would be constituted. - The SMEs would be from the two selected disciplines and hold the final authority to approve / disapprove any piece of e-content created or curated. - The Agency would engage directly with the SMEs, seeking feedback and approvals whenever required. - The Agency would be required to develop a communication plan based on the availability of the SMEs to ensure timely feedback and approvals on e-Content Creation and Curation.
	Wider Faculty, Students and Administration ecosystem	<ul style="list-style-type: none"> - Once the e-Content Repository is ready, it would be the Agency's responsibility to provide robust Capacity Building to the wider ecosystem of faculty and students. - The capacity building sessions would be focused towards helping faculty and students understand the bundling of content in the repository and they can utilize it fully. - The Capacity Building sessions would need to be activity-based / interactive wherein faculty and students have the option to access the repository in real-time and understand its organization and utilization. - For students, capacity building would be focused on making them adept at utilizing the e-Content Repository to facilitate synchronous and asynchronous learning.

Note:

i. The Agency would be solely responsible and accountable for the provisioning of all equipment (software and hardware) required for e-Content Creation and Curation to its team. Division of Agricultural Extension, ICAR - IARI would not be responsible or accountable to provide for said equipment.

ii. E-Content Creation and Curation activities are inclusive of development, review, finalization, and approval of assessments / question banks (wherever applicable).

iii. Charges for script, detailed shot-by-shot storyboard, travel to shoot location/ facility, boarding and lodging of shooting crew, fees for external models/anchors, shooting, production, editing, titling/sub-titling/text, music, voiceover, background effects, special effects, audio dubbing to either English or Hindi.

Process for e-Content Creation / Curation for the Agency

i. Content Identification

- Agency shall gather project requirements through interactions with relevant Division of Agricultural Extension-ICAR-IARI stakeholders and study the existing courses and content/e-Content already available
- Classify the types of raw content (PPTs, Manuals, hard copy documents, word documents, videos etc.) provided
- Segregate the raw content provided by different stakeholders as per the defined classification
- The Agency shall obtain approval from the Division of Agricultural Extension-ICAR-IARI on the above classification and segregation of raw content received
- The agency shall identify topics on which new e-Content is to be prepared and seek approval from the Division of Agricultural Extension-ICAR-IARI.
- The agency shall submit a Project Plan for delivery of e-Content modules. This plan would include sub-plans for both redesigning of existing learning contents and Curation of new content.

ii. Designing e-Content

- The agency shall be responsible for creating / curating e-Content as per requirements and in line with the defined course curriculum. Agency may be required to undertake following indicative activities during design of e-Content:
 - Development of story line: explain in short both textually and graphically
 - Development of script/storyboard
 - Develop graphics and animation
 - Record, edit and sync the voice over / audio with the video, animation, and text
 - The E-learning Content developed should be of SCROM
 - Enable JAVA Script and Cookies
 - Use authoring tools such as: HTML5/XML etc.
- Since the interactive lessons can be accessed through web, mobile or tab, the content should be responsive and be independent of platforms like operative systems, browsers, and resolutions.

iii. Workflow for e-Content Curation

- An indicative workflow of the process of Creation / Curation is provided below:

Step I: Collection of data – Collection of data in the form of existing content like manuals, PPTs, pamphlets, booklets, training course modules, videos, video lectures etc. from SMEs. This data would also include relevant reference material that would need to be curated from various sources. which are royalty free. In case if the content requires royalty fee or licence fee the same shall be discussed with Division of Agricultural Extension-IARI and if required can be paid as per actuals by IARI on submission of original quote by the agency from the publisher.

Step II: Identification of content for development – After analysis and understanding the requirements the content for design shall be identified. Much of this would be made available to the Agency through the template that would be filled up by SMEs.

Step III: Incorporation of necessary principles and technologies:

- Adult Learning Methodologies
- New e-Content shall be inclusive of Audio, Video, Audio-visual, eBooks, Multimedia, Games, etc.

Step IV: Submission, Review, Feedback and Approval of Content – The agency shall follow the below mentioned steps during the submission process of the e-Content for review, feedback, and approval of the Division of Agricultural Extension-ICAR-IARI.

- (i) Storyboard Submission
- (ii) Review of Storyboard

- (iii) Review of Fixes
- (iv) Storyboard Sign-off
- (v) Alpha Version (First cut of Digitized Version) Submission
- (vi) Review of Alpha Version
- (vii) Review of Fixes
- (viii) Alpha Sign-off
- (ix) Beta Version (with Professional Voiceover) - A maximum of 10% change shall be applicable on the approved story board on submission of the Beta version
- (x) Review of Beta
- (xi) Beta Fixes
- (xii) Beta Sign-off
- (xiii) Submission of Final Version (Gold)
- (xiv) Gold Sign-Off

A similar process would be followed for Curation of content. However, the review and finalization of curated e-Content would be a factor of the following (non-exhaustive):

- (i) Intellectual Property considerations
- (ii) Copyright considerations
- (iii) Citation considerations
- (iv) Academic integrity
- (v) Authentication / Originality / Verification considerations

Step V: Preparation of Online Assessments – The agency shall prepare online assessments post approval of content.

- The assessments shall include adequate measures for assessing students including but not limited to:
 - (i) Case Studies
 - (ii) Quizzes
 - (iii) Multiple Choice Questions
 - (iv) Multiple Response Questions
 - (v) True or False
 - (vi) Fill-in-the-blanks
 - (vii) Question Banks
 - (viii) Essay Type Questions
- Assessment may also include different interactive diagrams and figures and other tools
- Assessments shall be based on varied test structures and shall test the learner's performance using online analytical tools

Step VI: Other activities required to be undertaken for e-Content design and development

- The agency should ensure the finalized e-Content training courses/modules are compatible and uploaded on premises

iv. Content Development Approach

Step I – Prototype/Template Design: Design the functional prototype, branding, skinning i.e., the template of the course. This shall be developed based on inputs like target audience, their skill/education level, nature of topics, other navigation facilities.

- (i) Audio Transcription script
- (ii) Summary
- (iii) Reference

Step II – Development of Design Documents

Based on the inputs provided by subject matter experts (SME), a team of instructional designers shall prepare a table of content / course content identification document and story board/ script/ detailed content design document consisting of the text that shall appear on the screen. The corresponding text for voice over, graphic design instruction shall also be provided. Instructional designers shall interact closely with the SME and obtain the inputs, grasp the concepts, and reproduce them as content, and finally get it reviewed by the SME/ Division of Agricultural Extension-ICAR-IARI. The storyboard shall be checked for technical, typographical, and grammatical errors. Checks shall also be done to ensure that the content matches the requirements specified by the client. Errors found shall be rectified and the final content shall be sent to the ICAR-IARI for approval and sign off.

Step III – Approval of Design Documents

Division of Agricultural Extension-ICAR-IARI shall review the Design Document, and share the reviewed document with Comments, suggestions, if any.

Step IV – Content/ Media/ Assets/ Development and Authoring: Alpha Version

After the necessary corrective actions are implemented, the multimedia team shall put together the approved template and the contents to create the complete version of the e-learning course. Based on the storyboard, graphics and animations shall be included at the appropriate locations. Voice over shall be recorded as necessary, and the graphics and animations created shall be synchronized with the text. This version would be the Alpha Version.

Step V – Beta Version (not more than 10% changes from approved storyboard)

Division of Agricultural Extension-ICAR-IARI would review the Alpha version and share back reviewed content with comments, suggestions, etc. for corrections, if any. Once these corrections are fixed by the agency, the corrected final version shall be submitted to the Division of Agricultural Extension-ICAR-IARI along with relevant approval documents.

Step VI – Gold version

Gold version would contain following multimedia elements:

- (i) Approved/ Final Table of Content
- (ii) Approved/ Final Design Document (Script, Story Board, Detailed Design Document)
- (iii) Alpha Version
- (iv) Beta Version
- (v) Pen drive Version
- (vi) Raw contents (images, PDF, DOC, PPT, other files collected from Division of Agricultural Extension-ICAR-IARI)
- (vii) User Manuals, Test Documents, Graphic Charter
- (viii) Quality Assurance Document

Note: The ICAR-IARI, Division of Agricultural Extension (or its nominated party) reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical Evaluation proposals and the requisite support must be provided by the Bidder:-

Sl. No.	Parameter	Maximum Marks	Supporting Documents
1.	Bidders Experience	50	
1.1	<p>The bidder should have executed projects with a cumulative value of INR 1 Crore for the supply and installation of smart video conferencing equipment for board/meeting rooms/smart classrooms or auditoriums. The project should have been executed in the last 3 years i.e. between 01.01.2022 to 31.12.2025 with a Central/State Government institution or a Public Sector Unit (PSU)/ Private Sector.</p> <p>The bidder can submit a maximum of 10 work orders against the criteria.</p>	20	<ul style="list-style-type: none"> • Work Order or certificate from Company Secretary/ CA in case the work order is confidential & • Certificate of completion from client. In case of ongoing projects CA certificate clearly stating that 80% of the order value has been paid
	In case at least 3 of the work orders submitted by the bidder is with a government academic agricultural institution additional 5 marks shall be awarded to the bidder	05	
1.2	<p>The bidder should have executed projects with a cumulative value of INR 2 Crore for the development of immersive learning content using AR/VR technology or e-Content. The project should have been executed in the last 3 years i.e. between 01.01.2022 to 31.12.2025 with a Central/State Government institution or a Public Sector Unit (PSU)/Private Sector.</p> <p>The bidder can submit a maximum of 10 work orders against the criteria.</p>	20	<ul style="list-style-type: none"> • Work Order or certificate from Company Secretary/ CA in case the work order is confidential & • Certificate of completion from client. In case of ongoing projects CA certificate clearly stating that 80% of the order value has been paid
	In case at least 3 of the work orders submitted by the bidder is with a government academic agricultural institution additional 5 marks shall be awarded to the bidder.	05	
2	Sample & Demonstration	40	
2.1	<p>The bidder needs to submit an AR/VR video providing a tour of an academic institution facility such as a lab or a center of excellence. The module should have interactive features and should enable the user to explore the facility interactively. The video needs to be shared through a shared drive link and should be protected by password. The interactivity should work with or without a VR headset and sensors and should be compatible with being played on an HTML based browser. The committee shall evaluate the sample shared on the above-mentioned parameters.</p> <p>a. The relevance of the video to the subject should be from the domain of agriculture – 10 Marks</p> <p>b. The smoothness of screen transitions – 10 Marks</p>		Sample Video should be submitted to the department before the bid due date and time. The bidder should upload the video on a shared link and provide the link in technical proposal. The bidder also needs to submit a pen drive with the copy of the video before the bid submission to Division of Agricultural Extension

Sl. No.	Parameter	Maximum Marks	Supporting Documents
	c. Quality of a clarity of the video – 5 Marks d. Quality of the voice – 5 Marks e. Accuracy of the explanation and concepts – 10 Marks		
3	Bidders Experience with Indian Languages	10	
3.1	The bidder should have experience in development of e-learning content in different Indian languages.		The bidder needs to submit the copy of work order along with the scope of work clearly mentioning the language for development of the e-learning content. The bidder also needs submit client completion certificate or CA certificate clearly mentioning the work has been successfully completed and delivered.
Total Marks		100	

Note : The bidder shall be considered financial evaluation only if they secure 70 Marks in the technical evaluation criteria.

**ICAR-IARI, Division of Agricultural Extension,
New Delhi-110012**

Bill of Quantity

The selected vendor shall help in the development of the e-content and AR/VR modules but shall also help upgrade the existing infrastructure on a turnkey basis. The major deliverables as envisaged under the project is as mentioned below along with their bill of quantities.

A. Upgrading the infrastructure of Seminar Hall at Division of Agriculture Extension at ICAR-IARI.

S.No.	Particulars	Quantity
	Display	
1	Interactive Monitor for the Chairman	1
2	Windows PC	1
	Audio	
3	Flush mount Chairman Unit Microphone	1
4	Flush Mount Delegate Unit Microphone	47
5	Gooseneck microphone	48
6	Digital Dante Based Conference System	1
7	Power Supply Extension Box	1
8	Wireless Collar and Handheld Microphone	01 Set
9	Digital Signal Processor	1
	Miscellaneous	
10	Cable Cubby	7
11	Matrix Switcher 8 In 8 Out	1
12	Rack 12U	1
	Interior Work	
13	Light 36-Watt LED, 2feet x 2feet Backlit	4
	Panel Cool White Light(6500K)	
14	Table for Stage 15ft x 2.5ft x 2.5ft	1
15	Conference Table 40ft x 6ft, Height 2.5ft	1
16	Chairman Chair	1
17	Delegate Chair	47
18	Chair for Audience	144
19	Carpet	3200 sqft
20	Cables, Connectors, Installation & Training	01 Lot
	Total	

B. Upgradation of Next Gen Agricultural Extension Learning and Analytics Hub (NAEL Hub), Division of Agricultural Extension, ICAR-IARI, New Delhi.

S. No.	Particulars	Quantity
	Display	
1	Interactive Monitor for the chair	1
	Audio	
2	Flush mount Chair Unit Microphone	1
3	Flush Mount Delegate Unit Microphone	12
4	Gooseneck microphone	13
5	Digital Dante Based Conference System	1
6	Wireless Collar and Handheld Microphone	01 Set
7	Digital Signal Processor	1
8	Workstation I9	3
9	Fall Ceiling Fan	20
10	Exhaust Filter	1
11	Wall Mount Split AC	3
12	Water Treatment System	2
	Miscellaneous	
13	Cable Cubby	3
14	Matrix Switcher 4 In 4 Out	1
15	Rack 17U	1
16	Cables, Connectors, Installation & Training	01 Lot

C. Upgradation of conference room at ICAR-IARI-JHARKHAND, Gauria Karma, Barhi, Hazaribagh, Jharkhand.

S. No.	Particulars	Quantity
	Display	
1	Interactive Flat Panel- 86" IFP with Wall Mount	1
2	Commercial Display Size 65"	2
3	Interactive Monitor for the Chair	1
	Camera	
4	PTZ Camera 20X Optical Zoom	1
	Audio	
5	Flush mount Chair Unit Microphone	1
6	Flush mount Delegate Unit Microphone	10
7	Gooseneck microphone	11
8	Digital Dante Based Conference System	1

9	Wireless Collar and Handheld Microphone	01Set
10	Digital Signal Processor	1
11	Ceiling Speaker	4
12	Amplifier 150 watt	1
	Miscellaneous	
13	Cable Cubby	3
14	Matrix Switcher 4 In 4 Out	1
15	Rack 17U	1
	Interior Work	
16	Wall Panel PVC wall panelling Thickness of 8mm	600 sqft
17	Fall Ceiling White 2 X 2 Grid False Ceiling	192sqft
18	Light 36-Watt LED, 2 feet x 2 feet Backlit Panel	8
19	ConferenceTable10ftx4ft	1
20	Chairman Chair	1
21	Delegate Chair	10
22	Cables, Connectors, Installation & Training	01Lot

D. Upgradation of conference room at ICAR-IARI-R.S. Kalimpong, West Bengal

S. No.	Particulars	Quantity
	Display	
1	Interactive Flat Panel- 86" IFP with Wall Mount	1
2	CommercialDisplaySize65"	2
3	Interactive Monitor for the Chair	1
	Camera	
4	PTZ Camera 20X Optical Zoom	1
	Audio	
5	Flush mount Chair Unit Microphone	1
6	Flush mount Delegate Unit Microphone	20
7	Gooseneck microphone	21
8	Digital Dante Based Conference System	1
9	Wireless Collar and Handheld Microphone	01Set
10	Digital Signal Processor	1
11	Ceiling Speaker	6
12	Amplifier 150 watt	1
	Miscellaneous	

13	Cable Cubby	3
14	Matrix Switcher 4 In 4 Out	1
15	Rack 17U	1
Interior Work		
16	Wall Panel PVC wall panelling Thickness of 8mm	1100 sqft
17	Fall Ceiling White 2 X 2 Grid FalseCeiling	700 sqft
18	Light 36-Watt LED, 2 feet x 2 feet Backlit Panel	8
19	ConferenceTable10ftx4ft	1
20	Chairman Chair	1
21	Delegate Chair	20
22	Cables, Connectors, Installation & Training	01Lot

E. Solar Lanterns to be distributed to trainee farmers at ICAR-IARI, New Delhi

S. No.	Particulars	Quantity
1	LED Solar Lanterns	100

F. e-Content modules to be developed for training and then converted to different Indian languages

S. No.	Particulars	Quantity
1	Development of e-content modules of duration of 25 to 45 minutes including the cost of curation and creation in Hindi and English	16

G. Development of AR/VR modules for ICAR-IARI

S. No.	Particulars	Quantity
1	Campus Walk through in 360 degrees using VR Headset/Interactive Flat Pannel 360-degree photos/videos. Story boarding, shooting, stitching, and basic editing for complete end- to-end Campus Walkthrough.	1
2	Development of VR modules in 3D on different subjects	09
3	Virtual reality headsets at the three ICAR-IARI locations	30

Technical Specification

Interactive Monitor for Chairman		
S. No.	Category	Specification
1.	Display Size	22" or above
2.	Viewable Area	21.5" or above
3.	Panel Type	IPS Technology
4.	Resolution	1920 x 1080 (FHD) or above
5.	Static Contrast Ratio	1,000:1 (typ) or above
6.	Dynamic Contrast Ratio	50M:1 or above
7.	Light Source	LED
8.	Brightness	200 cd/m ² (typ) or higher
9.	Colors	16.7M
10.	Color Space Support	8-bit (6-bit + Hi-FRC)
11.	Aspect Ratio	16:9
12.	Response Time (GTG)	5ms (typical)
13.	Response Time (GTG w/OD)	5ms or better
14.	Viewing Angles	178° H / 178° V
15.	Backlight Life	30,000 hours or above
16.	Curvature	Flat
17.	Refresh Rate	60 Hz
18.	Low Blue Light	Software solution
19.	Flicker-Free	Yes
20.	Colour Gamut	NTSC: 77% (typ), sRGB: 108% (typ)
21.	Pixel Pitch	0.248mm (H) x 0.248mm (V) or above
22.	Touch Screen	Capacitive or better, 10-point multi-touch
23.	Cover Glass Thickness	0.7 mm or more
24.	Ports / Connectivity	VGA x1, USB 3.2 Type-A x 1 or more, USB 3.2 Type-B x1, 3.5mm Audio In x1, HDMI 1.4 x1, DisplayPort x1

PC		
S. No.	Category	Specification
1.	Processor	Intel Core i7
2.	RAM	16 GB
3.	Storage	1 TB SSD
4.	Operating System	Windows 10 / Windows 11

Chairman Unit Microphone		
S. No.	Category	Specification
1.	Design	Flush-mount unit with discreet recessed enclosure for seamless integration
2.	Body Material	High-quality Copper Zinc alloy (die-cast)
3.	Microphone Type	Detachable Screw-Type Gooseneck Microphone
4.	Button Features	Backlit Speak & Override button
5.	Polar Pattern	Cardioid Condenser
6.	Frequency Response	50 Hz – 20 KHz
7.	Sensitivity	-20 dBV (±3 dB) or better
8.	Maximum Input SPL	110 dB (THD < 5%, f = 1 KHz)
9.	Signal-to-Noise Ratio (SNR)	> 100 dBA (THD < 1%, f = 1 KHz)
10.	Distortion	< 0.1%
11.	Power Supply	15V - 24V DC (from controller)
12.	Power Consumption	0.72 W
13.	Interface / Connectivity	RJ45 Network Input
14.	Key Features	Durable design, clear audio capture, noise reduction, high performance, seamless integration

Delegate Unit Microphone		
S. No.	Category	Specification
1.	Design	Discreet recessed flush-mount design for seamless integration
2.	Body Material	High-quality Copper Zinc alloy (die-cast)
3.	Microphone Type	Detachable Screw-Type Gooseneck Microphone
4.	Button Features	Backlit Speak button
5.	Polar Pattern	Cardioid Condenser
6.	Frequency Response	50 Hz – 20 KHz
7.	Sensitivity	-20 dBV (± 3 dB) or better
8.	Maximum Input SPL	110 dB (THD < 5%, f = 1 KHz)
9.	Signal-to-Noise Ratio (SNR)	> 100 dBA (THD < 1%, f = 1 KHz)
10.	Distortion	< 0.1%
11.	Power Supply	15 V- 24V DC (from controller)
12.	Power Consumption	0.72 W
13.	Interface / Connectivity	RJ45 Network Input
14.	Key Features	High durability, clear audio capture, low noise, discreet appearance

Gooseneck Microphone		
S. No.	Category	Specification
1.	Microphone Type	Screw-type detachable gooseneck microphone
2.	Gooseneck Length	12 inches or Higher
3.	Design	Dual-flex design for precise aiming
4.	Body Material	Superior brass body
5.	Finish	matte finish
6.	Capsule Type	Cardioid condenser
7.	Polar Pattern	Cardioid
8.	Frequency Response	100 Hz – 15 KHz
9.	Sensitivity	-47 dB / 1 kHz at 1 Pa or better
10.	Maximum SPL	105 dB SPL / 1 kHz at 1% THD
11.	Impedance	680 Ω
12.	Signal-to-Noise Ratio (SNR)	> 52 dB / 1 kHz at 1 Pa
13.	Power Requirement	3V-5V DC
14.	Output Connector	Female 3-pin XLR
15.	Key Features	Smooth wide frequency response, superior off-axis rejection, natural audio reproduction

Controller		
S. No.	Category	Specification
1.	System Type	Digital Dante Based Conference System
2.	Controller Features	Supports 4 conference modes: FIFO Mode, Request Mode, Automatic Mode, Voice Activation Mode
3.	Microphone Control	Can select the number of speakers and activate 2/3/4 microphones simultaneously
4.	Camera Support	Supports camera tracking via RS-232 & RS-422 communication protocols or better
5.	Camera Connectivity	Can connect and control up to 4 cameras
6.	Control Protocol Compatibility	VISCA, Pelco D, Pelco P or better

Extension Box		
S. No.	Category	Specification
1.	Application	Power supply extension box for conferencing units
2.	Power Repeater Capacity	Supports up to every 30 discussion units

3.	Functionality	Enhances system stability
4.	Built-in Power Module	72W / 24V or higher
5.	Connectors	2 × RJ-45 connectors
6.	Cooling System	Built-in fan for efficient heat dissipation
7.	Status Indication	LED indicator for extension box status

Wireless Collar and Handheld Microphone

S. No.	Category	Specification
1.	System Type	High-quality UHF band dual wireless microphone system
2.	Channels	80 selectable UHF channels
3.	Display	Backlit display for frequency identification
4.	Microphone Usage	Two microphones can be used simultaneously
5.	Setup Method	Easy system setup via Infrared (IR)
6.	Receiver Type	Dual Channel, Non-Diversity
7.	Frequency Response	40 Hz – 16 kHz
8.	Polar Pattern (Collar & Handheld)	Cardioid
9.	Outputs	Individual Channel Output: XLR; Mixed Output: ¼" Jack
10.	Controls	Individual channel output level control + mixed output
11.	Key Features	Stable UHF transmission, easy pairing, versatile dual mic operation
12.	System Type	High-quality UHF band dual wireless microphone system

Digital Signal Processor

S. No.	Category	Specification
1.	Mic/Line Inputs	Minimum 4 AEC-enabled Mic/Line inputs (or better)
2.	Line Outputs	Minimum 4 Line outputs (or better)
3.	Input Channel Processing	Pre-amplifier, Signal Generator, Expander, Compressor, 10-band Parametric EQ (or better)
4.	Output Channel Processing	31-band Graphic Equalizer, Delay, Crossover, Limiter (or better)
5.	Audio Enhancement Features	Automatic Mixing Console, Ducker, Feedback Elimination, Noise Elimination, Echo Elimination (or better)
6.	USB Interface	Built-in Bi-directional USB for software-based VC and digital audio playback
7.	Camera Tracking Module	Built-in camera tracking module
8.	GPIO	Minimum 4-port freely configurable GPIO (or better)
9.	Dynamic Range	Analog/Digital dynamic range ≥ 114 dB
10.	Sampling Rate	48 kHz (or better)
11.	Frequency Response	20 Hz – 20 kHz (or better)
12.	Phantom Power	Per-channel phantom power module (or better)
13.	Configuration	Fully software-configurable

Cable Cubby

S. No.	Category	Specification
1.	HDMI Port	1 × HDMI
2.	LAN Port	1 × LAN
3.	Power Ports	2 × Power Sockets
4.	USB Socket	1 × USB Port

Matrix Switcher

S. No.	Category	Specification
1.	HDMI Inputs	8 × HDMI Inputs
2.	HDMI Outputs	8 × HDMI Outputs
3.	HDMI Specification	HDMI 2.0a
4.	Bandwidth	18 Gbps (600 MHz)

5.	Video Resolution Support	• 3840×2160 @ 60Hz (4:4:4, 8-bit) • 4096×2160 @ 60Hz (4:4:4, 8-bit) • 16-bit Deep Color up to 1080p @ 60Hz
6.	Audio Formats Supported	Digital and Analog
7.	Front Panel Controls	Intuitive front panel with LCD display
8.	Control Interfaces	RS-232, Telnet, WebGUI, IR Remote
9.	Key Features	4K UHD support, flexible AV routing, multiple control options

Interactive Flat Panel		
S. No.	Category	Specification
1.	Screen Size	86" or higher
2.	Panel Type	TFT LCD Module with DLED Backlight, VA
3.	Aspect Ratio	16:9
4.	Resolution	UHD 3840 x 2160 or higher
5.	Colors	1.07B colors
6.	Brightness	400 nits or higher
7.	Contrast Ratio	5000:1 or higher
8.	Response Time	8ms or better
9.	Viewing Angles	H = 178°, V = 178° (typical)
10.	Backlight Life	50,000 hours minimum
11.	Surface Treatment	Hardness: 7H Anti-glare coating or higher
12.	Orientation	Landscape
13.	Processor	Quad Core ARM Cortex A55*4 or higher
14.	RAM	8GB DDR4 or higher
15.	Storage	128 GB or higher
16.	Touch Technology	UFT (Ultra Fine Touch) Technology
17.	Touch Points	40 points or higher
18.	INPUT Ports	HDMI 2.0 x 2 or more, Audio x1
19.	OUTPUT Ports	HDMI 2.0 x1, Audio x1
20.	LAN Ports	RJ45 x 1 or more
21.	USB Ports	Type A: USB 2.0 x1, USB 3.0 x1 or more; Type B x1 or more;
22.	Speakers	16W x2 or higher
23.	Embedded OS	Android 13 or higher
24.	OEM Requirement	Software and hardware should come from the same OEM for both Windows and Android systems
25.	Special Features	Simple LAN sharing (10/100M for Android & Slot-in PC), Light Sensor: Yes, Remote Controller (AAA battery included), Power Cord, Touch Pen x2
26.	Wireless Content Sharing	Supports mirroring from Laptop/Desktop (Mac, Windows) & Mobile devices (iOS, Android)
27.	Video Conference	USB based PTZ cameras support, Software-based Video Conferencing
28.	Built-in PC Slot	Slot available for built-in PC
29.	Dual Writing	Auto-detects pen thickness and adjusts writing width; 4-way split
30.	Software Platforms	Windows, Android, Web
31.	Video Recording	Live webcast to YouTube & Facebook; Android: 4K resolution recording
32.	Canvas Area	Infinite pages, infinitely scrollable
33.	AI Pen	Auto-detects shapes, provides real-time Google results
34.	File Compatibility	Images: .bmp, .png, .jpg, .jpeg, .gif, .ico, .tif, .tiff Audio: .mp3, .aac, .wma, .wav, .m4a Documents: .pptx, .pdf, .docx, .one, .txt, .url Video: .3gp, .asf, .avi, .m4v, .mkv, .mov, .mp4,
35.	Embedded Browser	Chrome
36.	Drag & Drop on Canvas	Direct images from Google search, Drag & Drop YouTube videos
37.	Split Screen	Multiple ways to access different documents
38.	OPS PC Specs	Intel i5, 8GB RAM, 512 GB SSD, Windows 10/11

Commercial Display		
S. No	Category	Specification
1.	Display Type	Commercial Display
2.	Size	65"
3.	Backlight Type	D-LED or better
4.	Resolution	3840 x 2160 pixels (4K UHD)
5.	Brightness	400 cd/m ² or higher
6.	Contrast Ratio	1200:1 or higher
7.	Response Time	8ms or better
8.	Viewing Angle	178° (H) / 178° (V)
9.	RAM	2GB
10.	ROM / Storage	16GB
11.	Operating System	Android 8
12.	Speakers	Yes

PTZ Camera		
S. No.	Category	Specification
1.	Camera Type	PTZ Camera (USB based)
2.	USB Support	Yes, USB 3.0 x1
3.	Zoom	Minimum 20X Optical Zoom
4.	Iris	f=5.57~110mm; F1.6 ~ F3.5
5.	Viewing Angle	3.3° (tele) – 54.7° (wide)
6.	Sensor	1/2.8 inch or better CMOS sensor
7.	Pixels	2.07 Mega Pixel
8.	Video Formats (SDI)	1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94; 720P/50/30/25/59.94/29.97
9.	Minimum Illumination	0.5 Lux
10.	DNR	2D & 3D DNR
11.	White Balance	Auto / Manual / One Push (3000K to 7000K)
12.	Electronic Shutter	Auto / Manual
13.	Focus	Auto / Manual / One Push
14.	BLC	On / Off
15.	WDR	Off / Dynamic level adjustment
16.	Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve
17.	SNR	>55 dB
18.	Interfaces	USB 3.0 x1, DVI/HDMI x1, LAN x1, RS232 x1
19.	Video Compression Format	H.265 / H.264
20.	Control Protocol	VISCA / PELCO-D / Pelco-P
21.	Baud Rate	11520 / 9600 / 4800 / 2400
22.	LAN Port	Yes
23.	Network Protocol	RTSP / RTMP / ONVIF / GB/T28181
24.	Pan Rotation	+170°
25.	Tilt Rotation	-30° to +90°
26.	Pan Control Speed	0.1 ~ 100°/second
27.	Tilt Control Speed	0.1 ~ 45°/second
28.	Preset Speed	Pan: 100°/second, Tilt: 45°/second
29.	Preset Number	255

Ceiling Speaker		
S. No.	Category	Specification
1.	Speaker Type	Two-way Coaxial Ceiling Speaker
2.	Elements	5" Woofer + 0.5" Tweeter
3.	Power Taps (100V line)	20W / 10W / 5W / 2.5W
4.	Power Taps (70V line)	20W / 10W / 5W / 2.5W / 1.25W
5.	Power Taps (Low Impedance)	20W at 8 ohms
6.	Frequency Response	100 Hz – 20 kHz
7.	Sensitivity (1W/1m)	88 dB or better
8.	Maximum SPL	101 dB or better

Amplifier		
S. No.	Category	Specification
1.	Amplifier Type	150-Watt Amplifier
2.	Power Supply (AC)	110-240V, 50/60 Hz
3.	Inputs	2 x Mic or more
4.	Speaker Output	4Ω / 8Ω & 70V / 100V
5.	Frequency Response	70 Hz – 15 kHz ±3dB
6.	Signal-to-Noise Ratio	≥70 dB

Matrix Switcher		
S. No.	Category	Specification
1.	Device Type	HDMI Matrix Switcher
2.	HDMI Inputs	4 HDMI inputs (HDMI 2.0a, 18 Gbps / 600 MHz)
3.	HDMI Outputs	4 HDMI outputs
4.	Resolution Support	Up to 4K UHD: 3840×2160@60Hz (4:4:4, 8-bit), 4096×2160@60Hz (4:4:4, 8-bit)
5.	Color Depth	16-bit Deep Color up to 1080p@60Hz
7.	Audio Support	Digital and Analog formats
8.	Control Options	Front panel controls with LCD, RS-232, Telnet, WebGUI, IR Remote Control
9.	HDMI Specification	HDMI 2.0a, 18 Gbps (600 MHz)

Rack 12U		
S. No.	Category	Specification
1.	Size	12U
2.	Additional Feature	With trolley

Led Light		
S. No.	Category	Specification
1.	Power	36 Watt
2.	Size	2 ft × 2 ft Backlit Panel
3.	Color Temperature	Cool White (6500K)

Table for Stage		
S. No.	Category	Specification
1.	Dimensions	15 ft × 2.5 ft × 2.5 ft
2.	Material	25 mm plywood with mica finish

Conference Table		
S. No.	Category	Specification
1.	Dimensions	40 ft × 6 ft × 2.5 ft (Height)
2.	Material	25 mm plywood with mica finish

Chair for Chairman		
S. No.	Category	Specification
1.	Type	High Back Revolving Chair
2.	Features	Armrest, Height Adjustable, Leather Finish

Chair for Delegates		
S. No.	Category	Specification
1.	Type	Mid Back Revolving Chair
2.	Features	Armrest, Height Adjustable, Leather Finish

Chair for Audience		
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S. No.	Category	Specification
1.	Features	With foldable desk
2.	Material	Fabric & Metal

Carpet		
S. No.	Category	Specification
1.	Product	Carpet
2.	Area	3200 sq. ft

Workstation		
S. No.	Category	Specification
1.	Processor	Intel i9-14900
2.	RAM	16 GB DDR5 5600 MHz
3.	Storage	1 TB SSD
4.	Graphics	8 GB GPU
5.	Optical Drive	DVD
6.	Operating System	Windows 11
7.	Display	22-inch

Dust Capacity Vacuum Cleaner		
S. No.	Category	Specification
1.	Dust Capacity	≥ 1.5 L
2.	Exhaust Filter	Allergy H13
3.	Motor Filter	Washable
4.	Filtration Level	HEPA13
5.	Wheel Type	Rubber
6.	Carrying Handle	Top & Front
7.	Tube Type	Metal 2-piece telescopic

Inverter AC		
S. No.	Category	Specification
1.	Capacity	2 Ton
2.	Star Rating	5 Star
3.	ISEER Value	5.0 – 5.5
4.	Type	Variable Speed Wall Mount Split AC

Ozean RO Water Treatment System		
S. No.	Category	Specification
1.	Version	V3
2.	Standard	IS 16240 compliant
3.	Mounting	Countertop / Wall Mount
4.	Material	ABS / PP Food Grade
5.	Capacity	≥ 12 Liters

Rack 17U		
S. No.	Category	Specification
1.	Size	17U
2.	Additional Feature	With trolley

Wall Panelling		
S. No.	Category	Specification
1.	Material	PVC
2.	Thickness	8 mm
3.	Features	Moderate soundproofing, Waterproof, Heat Resistant, Wooden color texture

4.	Fixing Method	Hot-dip galvanised screws or pasting material
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Conference Table		
S. No.	Category	Specification
1.	Dimensions	10 ft × 4 ft × 2.5 ft (Height)
2.	Material	25 mm plywood with mica finish

False Ceiling		
S. No.	Category	Specification
1.	Type	White 2 × 2 Grid
2.	Thickness	8 mm

Conference Table		
S. No.	Category	Specification
1.	Dimensions	15 ft × 4 ft × 2.5 ft (Height)
2.	Material	25 mm plywood with mica finish

False Ceiling Fan		
S. No.	Specification	Description
1.	Fan Size (Sweep)	1200 mm (48 inch) – most common
2.	Power Consumption	50W – 75W (standard), 28W – 40W (BLDC)
3.	Air Delivery	210 – 240 m³/min
4.	RPM (Speed)	300 – 380 RPM
5.	Mounting Type	Downrod mounting (false ceiling cut-out required)
6.	Downrod Length	6–12 inches (depends on ceiling height)
7.	Operating Voltage	220–240V AC
8.	Frequency	50 Hz
9.	No. of Blades	3 (standard), 4 (optional)
10.	Material	Aluminium / ABS blades
11.	Weight	~3–4 kg
12.	Control Type	Regulator / Remote (BLDC)
13.	Cut-out Requirement	Typically, 6–8-inch round opening in ceiling
14.	Safety Requirement	Fan must be mounted on RCC slab, not on gypsum frame

AR/VR Module Requirements

All modules must adhere to the following technical standards:

- **Platform Compatibility:** Must be compatible with specified VR headsets, mobile (Android/iOS), and web browsers.
- **Immersive Design:** Use photorealistic 3D models and environments.
- **Interactivity:** High level of user interaction, providing immediate, context-sensitive feedback.
- **Assessment:** Include integrated assessment tools to track user progress and performance.

B. Hardware and Infrastructure Supply

The bidder must supply the following hardware as part of the total solution:

Item	Minimum Specification	Quantity
VR Headset (Standalone)	6DOF tracking(Eye, Facial & Body tracking), minimum 1832x1920 pixels per eye or Higher, 90Hz to 120 Hz refresh rate, Field of view 110 or Higher degrees horizontal and 96 degrees vertical, Storage 512 GB, RAM 6 GB, Wire & Wireless, Dual Micro LED/LCD Display, Preferred Pencake Lenses 3 rd Generation or More	30 Units

1. IARI XR Virtual Experience

To establish a world-class, multi-platform Extended Reality (XR) system on web and mobile devices, allowing national and international visitors, students, scientists, and policymakers to virtually explore and understand the breadth of research, education, and extension activities undertaken by the 22 core divisions/centers of the IARI campus.

2. PRA and Rural Appraisal

This VR module will simulate realistic virtual village environments for conducting **Participatory Rural Appraisal (PRA)**. Users will be immersed in a 3D setting to practice techniques like transect walks, resource mapping, and seasonal calendar development. The module provides hands-on, contextual training in collecting and analyzing essential community data for effective rural development planning.

3. IPM & Pest Identification

The module will use VR simulations to train users in executing comprehensive **Integrated Pest Management (IPM)** strategies. Users will navigate a virtual farm to practice pest scouting, accurate pest and disease identification using 3D models, and the selection and application of appropriate biological or chemical controls, all within a safe, controlled environment.

4. Video Editing & Graphic Design

This topic involves conducting a series of VR modules that translates professional **video editing and graphic design software suites** into an immersive spatial workspace. The module will feature interactive 3D tutorials and practice scenarios focused on mastering visual communication principles and post-production workflows for agricultural educational content.

5. Agri-Waste Management

This immersive VR training will simulate various scenarios for the **sustainable management and conversion of agricultural waste**. Users will learn and practice techniques for valorization, composting, bioenergy generation, and reducing environmental impact, focusing on optimal process controls and adherence to regulatory standards in a virtual facility.

6. Effective Communication Skill

A VR role-playing and scenario-based module designed to develop **effective communication and interpersonal skills** critical for extension workers and team leaders. It will use AI-driven characters to facilitate realistic practice in conducting stakeholder meetings, delivering technical presentations, and managing team dynamics, offering immediate feedback on user performance.

7. Protected Cultivation

This VR module will provide detailed, interactive simulations of operating and maintaining **protected cultivation structures (e.g., polyhouses)**. Users will gain hands-on experience adjusting climate control systems (temperature, humidity), managing complex irrigation systems, preparing nutrient solutions, and performing critical maintenance within a fully immersive 3D greenhouse.

8. Fundamental of data analytic Techniques

The module will leverage VR to offer a unique, **three-dimensional workspace for visualizing and interacting with abstract datasets**. Trainees will learn the **fundamentals of data analytics**, including data cleaning, statistical analysis, and interpretation, transforming complex mathematical concepts into tangible, explorable 3D data models for clearer comprehension.

9. Post-Harvest Technologies

This VR training will simulate key processes for **reducing post-harvest losses and maintaining product quality**. Users will practice techniques such as sorting, grading, pre-cooling, and selecting appropriate storage technologies (CA/MA), with a focus on implementing industry best practices and food safety protocols in a virtual processing facility.

10. Teaching and Learning Environments

The focus is on developing a robust VR platform that brings together leading experts, educators, industry professionals, and policymakers to discuss, strategize, and develop innovative approaches for agricultural education and training. These workshops aim to address the evolving needs of the Indian agriculture sector, foster skill development, and promote sustainable practices.

E-Content Development for different Stakeholders

Following are the names of the topics for which content shall be developed. Division of Agricultural Extension-ICAR-IARI reserves the right to change, modify, add, or delete the topic names during the course of development.

Sr. No.	Students	Farmers	Instructor
1	Diffusion and Adoption of Innovations	Climate-Smart Agriculture	Digital Content Development for Agricultural Training
2	Entrepreneurship in Agriculture	Post-Harvest Management & Storage	Monitoring and Evaluation
3	Communication Models & Effective Communication techniques	Integrated Pest and Disease Management (IPDM)	Designing Farmer-Centric Training Modules
4	Designing Training Modules	Agri-Waste Management (Pusa Decomposer)	Knowledge Co-Creation
5	Extension Programme Planning & Implementation	Value Addition of fruits & Vegetable	Experiential Learning
6	Extension Approaches & Linkage Mechanisms		

Compliance Report

M/s
.....

agree to supply the equipment with the following specifications.

To
The Director
ICAR – Indian Agricultural Research Institute
New Delhi – 110012

Name of the Service Provider:

Name of the Bidder:

Sir,

Due Date:

1. This is to certify that I/We, before signing this bid, have read and fully understood all the terms and conditions and instructions contained in the tender document and hereby undertake to abide by the same.

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर
Signature of bidder with office seal

(To be furnished on company letterhead)

पिछले 3 वर्षों का कार्य विवरण

Performance Statement of last three financial years i.e. 2022- 23, 2023-24 and 2024-25

S.N	Name of firm of the items	Name of the office by whom order was placed	Order No. & date (Please enclose copy of supply orders)	Price of supply order	Delivered in time or not	If not please specify the reason	Attach satisfactory working report from each office (Yes/No)

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर

Signature of bidder with office seal

नियम एवं शर्तों की स्वीकृति प्रमाणपत्र बोलीदाता द्वारा हस्ताक्षरित होना चाहिए
CERTIFICATE TO BE SIGNED BY THE BIDDER ACCEPTANCE OF TERMS AND CONDITIONS

(To be furnished on company letterhead)

यह प्रमाणित किया जाता है कि मैसर्स _____ घोषणा करते हैं कि हम सभी अनुबंध नियमों और निविदा के अतिरिक्त नियमों और शर्तों से सहमत हैं बोली संख्या: _____ बोली दस्तावेज के अनुसार। हमने सभी दस्तावेजों को पढ़ और समझ लिया है और निविदा पूछताछ और इसकी अनुसूची में निहित सभी निर्देशों का पालन करने के लिए सहमत हैं। इस निविदा की अनुसूची के सभी पृष्ठ _____ से पृष्ठ _____ तक, ठीक से भरे गए हैं और हस्ताक्षर किए गए हैं।

It is hereby certified that we, M/s. _____, declare that we agree with all the contract terms and additional terms and conditions of tender number Ref: Bid Number: _____ as per the bid document. We have read and understood all the documents and agree to comply with all instructions contained in the tender enquiry and its schedule. All pages of the schedule of this tender, from page _____ to page _____ have been properly filled and signed.

NAME IN BLOCK LETTERS	
NAME OF FIRM	
FULL ADDRESS OF FIRM	
TELEPHONE NO	
MOBILE NO.	
EMAIL ID:	

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर
Signature of bidder with office seal

नियम एवं शर्तों की स्वीकृति प्रमाण पत्र बोली दाता द्वारा हस्ताक्षरित होना चाहिए
CERTIFICATE TO BE SIGNED BY THE BIDDER ACCEPTANCE OF TERMS AND CONDITIONS

(To be furnished on company letterhead)

It is hereby certified that we, M/s. _____, declare that we agree with all the contract terms and additional terms and conditions of tender number Ref: Bid Number: _____ as per the bid document. We have read and understood all the documents and agree to comply with all instructions contained in the tender enquiry and its schedule. All pages of the schedule of this tender, from page _____ to page _____ have been properly filled and signed.

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर
Signature of bidder with office seal

गैर-प्रतिबंधित करने के संबंध में घोषणा पत्र

**DECLARATION UNDERTAKING REGARDING
BLACKLISTING /NON – DEBARMENT**

(To be furnished on on non-judicial stamp paper Rs. 100/-)

We hereby confirm and declare that we, M/s _____

_____ Is not

blacklisted/ Deregistered/

Debarred, by any Government department/ Public Sector Undertaking/ Private Sector/
or any other agency.

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर

Signature of bidder with office seal

GUARANTEE / WARRANTY UNDERTAKING
(To be furnished on company letterhead)

हम, मैसर्स _____, द्वारा यह पुष्टि और प्रस्तुत

करते हैं कि उद्धृत उपकरण को अंतिम स्वीकृति की तारीख से या उपभोक्ता स्थान पर मशीन की स्थापना, कमीशनिंग और

परीक्षण के पूरा होने के बाद _____ वर्षों की ऑनसाइट गारंटी/वारंटी अवधि प्राप्त होगी।

हम बिक्री के बाद समर्थन (आफ्टर-सेल्स सपोर्ट) प्रदान करेंगे और गारंटी/वारंटी अवधि के दौरान किसी भी दोष की शीघ्र सेवा

और मरम्मत सुनिश्चित करेंगे, जैसा कि निविदा समझौते के अनुसार।

We, M/s _____, hereby confirm and submit that the quoted equipment shall have an onsite guarantee/warranty period of _____ years from the date of final acceptance of goods or after the completion of installation, commissioning, and testing of the machine at the consignee's location.

After-sales support. During the guarantee/warranty period, we will ensure that qualified technical service personnel/engineers are designated and deployed to address service requests in a timely manner. We will also ensure prompt servicing and rectification of any defects, as per the mentioned in the relevant clause of the bid.

Place: _____

Date: _____

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर
Signature of bidder with office seal

डिलीवरी शर्तों और आपूर्ति अवधि की स्वीकृति के लिए घोषणा पत्र
"Undertaking for Acceptance of Delivery Terms and Supply Period"
(To be furnished on company letterhead)

हम, मैसर्स _____, टेंडर में निर्दिष्ट डिलीवरी की शर्तों और अवधि को स्वीकार करने की पुष्टि करते हैं। टेंडर दस्तावेज़ में उल्लिखित उत्पाद निर्दिष्ट आपूर्ति अवधि के भीतर और टेंडर के निर्देशों एवं नियमों और शर्तों के अनुसार वितरित किए जाएंगे।

स्थान: _____

तारीख: _____

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर
Signature of bidder with office seal

We, M/s _____ confirm our acceptance of the delivery conditions and period specified in the tender. The products mentioned in the tender document will be delivered within the stipulated supply period and in accordance with the instructions and terms and conditions of the tender.

Place

Date:

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर
Signature of bidder with office seal

फर्म का विवरण Firm Details

(To be furnished on company letterhead)

Name of the Firm-----

Registered/Postal Address-----

1.	Permanent Account Number (PAN)	
2.	GST, Registration No.	
3.	Bank Name	
4.	Branch Address	
5.	Account Number	
6.	Type of account (current/saving)	
7.	MICR No.	
8.	RTGS/NEFT code	

आधिकारिक मुहर के साथ बोली लगाने वाले के हस्ताक्षर
Signature of bidder with official sea

बिड दस्तावेज़ / Bid Document

बिड विवरण / Bid Details	
बिड बंद होने की तारीख/समय / Bid End Date/Time	10-03-2026 17:00:00
बिड खुलने की तारीख/समय / Bid Opening Date/Time	10-03-2026 17:30:00
बिड पेशकश वैधता (बंद होने की तारीख से) / Bid Offer Validity (From End Date)	180 (Days)
मंत्रालय/राज्य का नाम / Ministry/State Name	Ministry Of Agriculture And Farmers Welfare
विभाग का नाम / Department Name	Department Of Agricultural Research And Education (dare)
संगठन का नाम / Organisation Name	Indian Council Of Agricultural Research (icar)
कार्यालय का नाम / Office Name	Indian Agricultural Research Institute, New Delhi
कुल मात्रा / Total Quantity	1
वस्तु श्रेणी / Item Category	Development of AR/VR-Based Capacity Building Modules, e-Content & Resources for different Stakeholde
GeMARPTS में खोजी गई स्ट्रिंग्स / Searched Strings used in GeMARPTS	Immersive Agricultural Learning Development of AR/VR-Based Capacity Building Modules, e-Content & Resources for different Stakeholders
GeMARPTS में खोजा गया परिणाम / Searched Result generated in GeMARPTS	Category not available on GeM for the text string uploaded by the buyer
अधिसूचना के लिए चयनित प्रासंगिक श्रेणियाँ / Relevant Categories selected for notification	<ul style="list-style-type: none"> Virtual Reality Headset
बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का) / Minimum Average Annual Turnover of the bidder (For 3 Years)	217 Lakh (s)
मूल उपकरण निर्माता का औसत टर्नओवर (गत 3 वर्षों का) / OEM Average Turnover (Last 3 Years)	200 Lakh (s)
उन्हीं/समान सेवा के लिए अपेक्षित विगत अनुभव के वर्ष / Years of Past Experience Required for same/similar service	3 Year (s)
टर्नओवर के लिए एमएसई को छूट प्राप्त है / MSE Relaxation for Turnover	Yes Complete
टर्नओवर के लिए स्टार्टअप को छूट प्राप्त है / Startup Relaxation for Turnover	Yes Complete

बिड विवरण/Bid Details	
विक्रेता से मांगे गए दस्तावेज़/Document required from seller	Experience Criteria,Past Performance,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate,OEM Annual Turnover,Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
क्या आप निविदाकारों द्वारा अपलोड किए गए दस्तावेजों को निविदा में भाग लेने वाले सभी निविदाकारों को दिखाना चाहते हैं? संदर्भ मेनू है/Do you want to show documents uploaded by bidders to all bidders participated in bid?	No
बिड लगाने की समय सीमा स्वतः नहीं बढ़ाने के लिए आवश्यक बिड की संख्या। / Minimum number of bids required to disable automatic bid extension	1
दिनों की संख्या, जिनके लिए बिड लगाने की समय-सीमा बढ़ाई जाएगी। / Number of days for which Bid would be auto-extended	3
ऑटो एक्सटेंशन अधिकतम कितनी बार किया जाना है। / Number of Auto Extension count	1
विगत प्रदर्शन /Past Performance	40 %
बिड से रिवर्स नीलामी सक्रिय किया/Bid to RA enabled	Yes
रिवर्स नीलामी योग्यता नियम/RA Qualification Rule	50% Lowest Priced Technically Qualified Bidders
लागू आरसीएम/RCM Applicable	Yes
बिड का प्रकार/Type of Bid	Two Packet Bid
तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय /Time allowed for Technical Clarifications during technical evaluation	2 Days
निरीक्षण आवश्यक (सूचीबद्ध निरीक्षण प्राधिकरण /जेम के साथ पूर्व पंजीकृत एजेंसियों द्वारा)/Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
मूल्यांकन पद्धति/Evaluation Method	Total value wise evaluation
मध्यस्थता खंड/Arbitration Clause	No
सुलह खंड/Mediation Clause	No

ईएमडी विवरण/EMD Detail

एडवाइजरी बैंक/Advisory Bank	State Bank of India
ईएमडी राशि/EMD Amount	1082000

ईपीबीजी विवरण /ePBG Detail

एडवाइजरी बैंक/Advisory Bank	State Bank of India
ईपीबीजी प्रतिशत (%) /ePBG Percentage(%)	5.00
ईपीबीजी की आवश्यक अवधि (माह) /Duration of ePBG required (Months).	15

(a). जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित कैटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज प्रस्तुत करने हैं। एमएसई कैटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।/EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.

(b). ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए। / EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

लाभार्थी /Beneficiary :

Assistant

Indian Agricultural Research Institute, New Delhi, Department of Agricultural Research and Education (DARE),
Indian Council of Agricultural Research (ICAR), Ministry of Agriculture and Farmers Welfare
(Yogesh Kumar)

बोली विभाजन लागू नहीं किया गया/ Bid splitting not applied.

एमआईआई खरीद वरीयता / MII Purchase Preference

एमआईआई खरीद वरीयता / MII Purchase Preference	Yes
मेक इन इंडिया विक्रेताओं को खरीद में प्राथमिकता, यदि उनका मूल्य $L1+X\%$ तक की सीमा में है / Purchase Preference to MII sellers available upto price within $L1+X\%$	20
मेक इन इंडिया खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MII purchase preference	50
सार्वजनिक खरीद (मेक-इन-इंडिया को प्राथमिकता) आदेश 2017 के अनुसार केवल क्लास 1/क्लास 2 के स्थानीय आपूर्तिकर्ताओं को ही भागीदारी की अनुमति है दिनांक 16.09.2020 (समय-समय पर संशोधित एवं लागू) / Allow participation only from Class 1/Class 2 local suppliers as per the Public procurement(Preference to Make-in-india) order 2017 date 16.09.2020(as amended and applicable time to time)	Yes, in compliance with the MII ORDER : DPIIT Order(as amended and applicable time to time)

एमएसई खरीद वरीयता/MSE Purchase Preference

एमएसई खरीद वरीयता/MSE Purchase Preference	Yes
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माताओं को खरीद में प्राथमिकता, यदि उनका मूल्य $L1+X\%$ तक की सीमा में हो / Purchase Preference to MSE OEMs available upto price within $L1+X\%$	15
सूक्ष्म और लघु उद्यम को खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MSE purchase preference	25

1. If the bidder is a Micro or Small Enterprise (MSE) as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Bidder Turnover" as defined above subject to meeting of quality and technical specifications. If the bidder itself is MSE OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover, shall upload the supporting documents to prove his eligibility for Relaxation.
2. If the bidder is a DPIIT registered Startup, the bidder shall be relaxed from the the eligibility criteria of "Bidder Turnover" as defined above subject to their meeting of quality and technical specifications. If the bidder is DPIIT Registered OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover shall upload the supporting documents to prove his eligibility for Relaxation.
3. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
4. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM of the product offered in the bid {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts and delivery acceptance certificates like CRAC to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
5. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
6. Preference to Make In India products (For bids < 200 Crore): Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.
[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.
7. Purchase preference will be given to MSEs having valid Udyam Registration and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small

Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service and Buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the OM No. F.1/4/2021-PPD dated 18.05.2023 [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

8. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 40% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

जीएसटी की धारा 9(3)/Section 9(3) Of GST

Where ever RCM is applicable, sellers (Regular GST registered seller who opted out of FCM , unregistered seller, seller registered under composition scheme)will be forced to put Zero GST and GST cess in their bids. Buyer will have liability of paying the GST and GST cess to the government on the specified rate mentioned by them in this Bid.

9. Reverse Auction would be conducted amongst first 50% of the technically qualified bidders arranged in the order of prices from lowest to highest. Number of sellers eligible for participating in RA would be rounded off to next higher integer value if number of technically qualified bidders is odd (e.g. if 7 bids are technically qualified, then RA will be conducted amongst L-1 to L-4). In case number of technically qualified bidders are 2 or 3, RA will be between all without any elimination. If Buyer has chosen to split the bid amongst N sellers, then minimum N sellers would be taken to RA round. In case Primary products of only one OEM are left in contention for participation in RA based on lowest 50% bidders qualifying for RA, the number of sellers qualifying for RA would be increased to get at least products of one more OEM (directly participated or through its reseller) if available. Further, if bid(s) of any seller(s) eligible for MSE preference is / are coming within price band of 15% of Non MSE L-1 or if bid of any seller(s) eligible for Make in India preference is / are coming within price band of 20% of non MII L-1, then such MSE / Make in India seller shall also be allowed to participate in the RA process.

जीएसटी की धारा 9(3) / Section 9(3) Of GST

Where ever RCM is applicable, sellers (Regular GST registered seller who opted out of FCM , unregistered seller, seller registered under composition scheme)will be forced to put Zero GST and GST cess in their bids. Buyer will have liability of paying the GST and GST cess to the government on the specified rate mentioned by them in this Bid.

If the buyer has mentioned MSE purchase preference in ATC then service provider is required to upload necessary documents for MSE purchase preference for verification by the buyer during evaluation.

एक्सेल में अपलोड किए जाने की आवश्यकता /Excel Upload Required :

Price Bid - [1771322513.xlsx](#)

Pre Bid Detail(s)

मूल्य भिन्नता खंड दस्तावेज़/Pre-Bid Date and Time	प्री-बिड स्थान/Pre-Bid Venue

20-02-2026 11:00:00	Offline Venue: Division of Agricultural Extension, ICAR-IARI, New Delhi Online Meeting Link: https://meet.google.com/ywa-oozh-yug
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Development Of AR/VR-Based Capacity Building Modules, E-Content & Resources For Different Stakeholders (1 Lot)

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

क्रेता विशिष्टि दस्तावेज़ /Buyer Specification Document	Download
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इनपुट कर क्रेडिट(आईटीसी) तथा रिवर्स प्रभार (आरसीएम)/Input Tax Credit(ITC) and Reverse Charge(RCM) Details

जीएसटी पर इनपुट कर क्रेडिट /ITC on GST	जीएसटी उपकर कर क्रेडिट /ITC on GST Cess	लागू आरसीएम/R CM Applicable	रिवर्स प्रभार के अनुसार जीएसटी/GST as per RCM	रिवर्स प्रभार के अनुसार जीएसटी उपकर 1 /GST Cess 1 as per RCM	GST Cess 2 as per RCM	वैकल्पिक रिवर्स प्रभार /Optional RCM
NA	NA	Yes	18%	NA	NA	No

परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Anita Sharma	110012,IARI Pusa Campus IARI New Delhi 110012	1	15

क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें/Buyer Added Bid Specific Terms and Conditions

1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity up to 25% of the contracted quantity during the currency of the contract at the contracted rates. The delivery period of quantity shall commence from the last date of original delivery order and in cases where option clause is exercised during the extended delivery period the additional time shall commence from the last date of extended delivery period. The additional delivery time shall be $(\text{Increased quantity} \div \text{Original quantity}) \times \text{Original delivery period (in days)}$, subject to minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the original delivery period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising the option clause. Bidders must comply with these terms.

अस्वीकरण/Disclaimer

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for [attached categories](#), trials are allowed as per approved procurement policy of the buyer nodal Ministries)
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.
15. Buyer added ATC Clauses which are in contravention of clauses defined by buyer in system generated bid template as indicated above in the Bid Details section, EMD Detail, ePBG Detail and MII and MSE Purchase Preference sections of the bid, unless otherwise allowed by GeM GTC.
16. In a category based bid, adding additional items, through buyer added additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added through bunching category based items or by bunching custom catalogs or bunching a BoQ with the main category based item, the same must not be done through ATC or Scope of Work.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

All GeM Sellers/Service Providers shall ensure full compliance with all applicable labour laws, including the provisions, rules, schemes and guidelines under the four Labour Codes i.e. the Code on Wages, 2019; the Industrial Relations Code, 2020; the Occupational Safety, Health and Working Conditions Code, 2020; and the Code on Social Security, 2020 as and when notified and brought into force by the Government of India.

For all provisions of the Labour Codes that are pending operationalisation through rules, schemes or notifications, the corresponding provisions of the pre-existing labour enactments (such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972, etc. and relevant State Rules) shall continue to remain applicable.

The Seller/ Service Providers shall, therefore, be responsible for ensuring compliance under:

- **All notified and enforceable provisions of the new Labour Codes as mentioned hereinabove; and**
- **All operative provisions of the erstwhile Labour Laws until their complete substitution.**

All obligations relating to wages, social security, safety, working conditions, industrial relations etc. and any other statutory requirements shall be strictly met by the Seller/ Service Provider. Any non-compliance shall constitute a breach of the contract and shall entitle the Buyer to take appropriate action in accordance with the contract and applicable law.

[यह बिड सामान्य शर्तों के अंतर्गत भी शासित है /This Bid is also governed by the General Terms and Conditions](#)

जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।/In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

---धन्यवाद/Thank You---