

File No - NIMI/MS/M/15025/AI QBMS/1/2024



NATIONAL INSTRUCTIONAL MEDIA INSTITUTE

Request for Proposal For Onboarding Artificial Intelligent based Question Bank Management System (QBMS) Service Provider

National Instructional Media Institute (NIMI),

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Glossary

Acronym	Abbreviation
AES	Advanced Encryption Standard
AI	Artificial Intelligence
CERT-In	Indian Computer Emergency Response Team
CMMI	Capability Maturity Model Integration
DGT	Directorate General of Training
EMD	Earnst Money Deposit
HTTPS	Hypertext Transfer Protocol Secure
MCQ	Multiple Choice Questions
Meity	Ministry of Electronics and Information Technology
MSME	Micro, Small & Medium Enterprises
NIMI	National Instructional Media Institute
NSQF	National Skills Qualification Framework
PBG	Performance Bank Guarantee
QB	Question Bank
QBMS	Question Bank Management System
QCBS	Quality cum Cost based Selection
RBAC	Role-Based Access Control
RFP	Request for Proposal
SME	Small and Medium-sized Enterprises
SMEs	Subject Matter Experts
SoW	Scope of Work
SP	Service Provider

1. Definition of Terms

- a. **“Bidder”** means any firm offering the solution(s), service(s) and /or materials required in the RFP. The word Bidder when used in the pre award period shall be synonymous with Bidder, and when used after award of the Contract shall mean the Selected Bidder (SB) with whom NIMI signs the agreement for providing their services “.
- b. **“Contract”** is used synonymously with Agreement to be signed with one or more agencies that are selected through this RFP process (including the preceding EOI).
- c. **“Document”** means any embodiment of any text or image however recorded and includes any data, text, images, sound, voice, codes, databases, or any other electronic documents as per Information Technology (IT) Act 2000.
- d. **“Effective Date”** means the date on which this contract is signed
- e. **“Intellectual Property Rights”** means any patent, copyright, trademark, trade name, service marks, brands, proprietary information whether arising before or after the execution of this contract and the right to ownership and registration of these rights.
- f. **“Timelines”** means the project milestones for performance of the Scope of Work and delivery of the Services as described in the RFP.
- g. **“QCBS”** refers to Quality and Cost based selection.
- h. **“Terms of Reference (ToR)”** and **“Scope of Work (SoW)”** used synonymously mean all Goods and Services, and any other deliverable as required to be provided by the selected bidder (SB) under this RFP.
- i. **“Technically Qualified/ Technical Qualification”** is synonymous to bidders who have obtained the minimum Technical Score defined in the RFP and qualified for evaluation of financial bid.

2. About Us

The National Instructional Media Institute (NIMI) was established as the Central Instructional Media Institute (CIMI) in Chennai, India in December 1986 by the Government of India. It operates as an Autonomous Institute under the Ministry of Skill Development & Entrepreneurship (MSDE), Directorate General of Training (DGT), New Delhi. Its establishment was assisted by the German Agency for Technical Cooperation (GTZ) as the executing agency.

NIMI serves as a Nodal Agency responsible for developing instructional materials, e-content, Question Banks, Training media developers and trainers, facilitating translation of books into Hindi and other regional languages Digital learning content/Blended learning, conduct Computer-based exams and acting as a single point of contact for various vocational-led service offerings.

3. Purpose of this RFP

NIMI's approach to developing a Question Bank for ITI skill assessment exemplifies a dedication to consistency and effective evaluation. The initiative employs an objective format, categorizing questions into three levels of complexity to ensure comprehensive skill assessment. These questions are aligned with all curricula learning outcomes, providing a comprehensive measure of understanding. Subject matter experts' involvement enhances questions' relevance to industry needs, while adherence to NIMI norms ensures consistency and quality. The extensive utilization of this initiative in AITT exams and industry assessments underscores its reliability and significance. Overall, NIMI's Question Bank is inclusive, leveraging best practices but needs the technology to meet the diverse needs of the ITI and vocational education ecosystem.

As the demand for assessment and evaluation continues to rise, NIMI finds itself grappling with the limitations of manual processes. With the imperative to expand question banks for more comprehensive, diverse, and qualitative assessments, traditional methods prove insufficient in maintaining quality, preventing redundancy, and staying aligned with evolving educational goals. Recognizing the pressing need for innovation, NIMI is encouraged to explore partnerships with service providers capable of leveraging AI-driven solutions. Such collaborations promise to streamline the creation and management of question banks, while simultaneously enhancing the caliber, diversity, and relevance of educational resources to meet specific learning outcomes. By embracing AI-driven approaches, NIMI can revolutionize examination processes, not only addressing current challenges but also paving the way for a more agile and effective assessment framework tailored to meet the demands of modern education.

- a. **Purpose:** Streamline question generation, curation, and validation processes through the integration of AI capabilities.
- b. **Goal:** Develop a robust and intelligent system that adheres to curriculum objectives, prevents question duplication, and ensures technical correctness.
- c. **Expected Outcomes:** Improved question diversity, accuracy, no duplicity and alignment with learning outcomes.
- d. **Rationale:** Traditional question bank management processes face challenges in maintaining quality, preventing duplication, and aligning with evolving educational objectives.
- e. **Significance:** Utilizing an AI-driven approach will not only simplify the process of creating and managing questions, but it will also enhance the quality, diversity, and alignment of educational materials with 'learning outcomes'. As a result, the system will become a tool for NIMI to ensure that assessment materials are consistently of high quality and relevance.

4. Bidding Data Sheet

Sl. No	Particular	Details
1	Document No / RFP Mode (Offline / Online)	NIMI/MS/M/15025/AI QBMS/1/2024
2	Name of Work	Request for Proposal for Onboarding Artificial Intelligent based Question Bank Management System (QBMS)
3	Method of selection	The tender will be awarded to the bidder based on the QCBS method (in the ratio of 70:30 of technical and financial bid)
4	Name of the client	National Instructional Media Institute (NIMI)

5	Key Client Personnel	<p>The Executive Director</p> <p>National Instructional Media Institute, Government of India</p> <p>Ministry of Skill Development and Entrepreneurship Post Box No. 3142, CTI Campus, Guindy Industrial Estate, Guindy, Chennai-32</p>
6	Availability of RFP	RFP can be downloaded from www.nimi.gov.in & through Government e Marketplace (GEM) Portal
7	Queries towards the Pre-bid Meeting	<p>All bid related queries should be shared via E-mail on chennai-nimi@nic.in latest by 28.01.2025</p> <p>Subject of pre-bid query emails should be “Pre- bid Queries – AI QBMS Service Provider”</p>
8	Response to pre-bid Queries	<p>Pre-bid Meeting shall be conducted on 31.01.2025 at 2:30 PM at National Instructional Media Institute Ministry of Skill Development and Entrepreneurship Post Box No. 3142, CTI Campus, Guindy Industrial Estate, Guindy, Chennai-32 and via VC (Video Conferencing)</p> <p>NIMI shall respond to pre-bid queries within 2 working days from the Pre-bid Meeting</p>
9	Last Date of Submission of the Proposal	Proposals must be submitted within 30 days from publishing of the RFP i.e 25.02.2025. Any proposal received after submission deadline shall be deemed as disqualified and shall be returned unopened.
10	Validity of Bids	Bid shall be valid for a period of 180 days from the last date of proposal submission
11	Opening of Technical Bid	The Technical Bid shall be opened by NIMI within 1 week from the date of Demo. The same shall be done

		in presence of internal evaluation committee constituted by NIMI.
13	Opening of Financial Bid	The Financial Bid shall be opened within 2 weeks from the opening of the Technical Bid in presence of NIMI committee Members.
14	Letter of Award (LOA)	NIMI shall communicate the final combined score of the bidders within 3 weeks from the day of opening of financial bid. Same shall be followed by subsequent talks between bidders and NIMI. LOA will be awarded as intended by NIMI officials, that is, within 3 weeks from the Opening of Financial Bids.
15	Performance Bank Guarantee (PBGA)	The selected agency(s) shall submit Performance Bank Guarantee amounting to 5% of the contract value in favor of “ NIMI ” and validity should be 2 years from the date of Letter of Award.
16	Earnest Money Deposit (EMD)	All proposals submitted in response to the RFP document must be accompanied by an EMD of INR 2,00,000 (INR Two Lakhs Only) in form of Demand Draft issued in favor of “The Executive Director, National Instructional Media Institute, Payable at Chennai. The validity of the EMD should be 150 days from the date of submission of bid.

5. Important Dates

Sl. No	Particular	Details
1	Availability of RFP	T days
2	Pre-bid Meeting	T + 1 Week (T2)

3	Response to pre-bid Queries	T2 + 2 Days (T3)
4	Last Date of Submission of the Proposal	T + 30 Days (T4)
5	Validity of Bids	T4 + 180 Days (T5)
6	Date of Demo	T4 + 7 Days (T6)
7	Opening of Technical Bid	T6 + 7 Days (T7)
8	Opening of Financial Bid	T7 + 14 Days (T8)
9	Letter of Award (LOA)	T8 + 21 Days
10	Performance Bank Guarantee (PBGA)	5% of the quoted contract value/project cost to be submitted by the L1 bidder within one week from the date of Letter of Award
11	Earnest Money Deposit (EMD)	To be submitted by all the bidders along with the Bid Response Document. Refer Section 12.1 in this document for exemption clauses

6. Eligibility for Participation

The Bidders who have participated in the Expression of Interest that has been floated prior to this Request for Proposal will be eligible to participate and submit their complete and comprehensive bids. All the respondents/bidders who have not participated previously in the EOI process will be strictly not considered to partake in this RFP process. NIMI, in any manner, will not be held responsible for ignoring and non-consideration of the bids from such bidders.

7. Instructions to Bidders

- a. Bidders are strongly advised to thoroughly study all instructions, forms, scope of work, and other information provided in the RFP (Request for Proposal) documents. The submission of bids will be considered as confirmation that the bidder has carefully examined and understood the RFP document and its implications before submitting their bid.
- b. Please ensure that your response to this Request for Proposal is comprehensive and includes all the necessary information requested in the RFP documents. Failure to provide all the required information or submitting a proposal that does not conform to the guidelines outlined in this document will be at the Bidder's own risk and may result in the rejection of their Proposal.
- c. A Pre-bid Meeting will be held on 31.01.2025 before the end date of response to RFP at the premises of NIMI for technical discussion/queries related to the requirement. It will be held online through video conference for which a link will be shared to bidders.
- d. Further clarifications (if any) regarding any aspect of the RFP (if any) will be provided to the Bidders consequently. Only the queries received on or within the date before the Pre- bid meeting will be entertained and answered. All such clarifications, together with all details on which the clarification had been sought will be uploaded on the NIMI Website. Such clarifications shall form part of the RFP document. Bidder can send their queries to chennai-nimi@nic.in.
- e. The Request for Proposal requires the submission of a detailed solution, technical requirements, specifications, and a draft proposal to develop the AI-based Question Bank Management System according to the NIMI requirements.
- f. All interested parties are requested to go through the tentative Scope of Work detailed in the document's next section, i.e., Section 8.
- g. NIMI needs the comprehensive proposal to be submitted in a two-envelop system where the technical and financial proposals are submitted at the

same time in separate sealed envelopes or by emailing to us on chennai-nimi@nic.in along with a telephonic intimation to the concerned official.

- h. Any incomplete response to RFP received shall not be considered and will be summarily rejected in the very first instance without any recourse to the bidder and shall not be evaluated. All entries in the response document of RFP should be legible and filled clearly, otherwise the proposal is likely to be rejected.
- i. The proposals shall remain valid till 180 days from the date of submission of bids. In exceptional circumstances, NIMI may ask for extending the period of validity and such a request shall be binding on Bidders.
- j. After the opening of the proposal, the NIMI will examine the technical response basis on the technical evaluation parameters shared in the section 9.1. In case the NIMI decides to seek further information/clarification, the same shall be provided by the bidder.
- k. After evaluation vendors will be required to make a focused demonstration of the solution to the Technical Committee of NIMI. The date of the presentation will be informed to the bidders in advance.
- l. Following the presentations and basis the technical and financial proposals, NIMI will calculate the cumulative score as shared in section 9.
- m. NIMI is not bound to accept the solution of the RFP if any technical discrepancies are found. However, it reserves the right to accept/reject the RFP Response, and the decision of the Authority in this regard shall be final and binding on the Bidder.
- n. At any time prior to the deadline for submission of proposals, NIMI reserves the right to add/modify/delete any portion of this document by issuance of a Corrigendum, which would be published on the NIMI website (www.nimi.gov.in). The Corrigendum shall be binding on all bidders and will form part of the bid documents.
- o. NIMI reserves the right to reject any bid and to annul the bidding process and reject all bids at any time or discontinue this RFP process, without assigning any reason, at any time.

8. Scope of Work

The service provider must prepare a detailed project plan, conduct a thorough study, and analyze requirements for the following scope of work:

8.1 Project Objectives:

Objective: This section outlines the specific objectives of the AI-based Question Bank Management System. These goals are derived from the identified challenges and requirements to ensure the successful implementation of the system.

Details:

1. **Generate New questions for each trade:** The system will produce a standardized set of trade-specific questions, as and when required as per 'test-profile', thereby creating a consistent question bank. This automated process guarantees the creation of a uniform question pool, ensuring the same level of difficulty for each trade-specific assessment.
 - Implement a distribution of questions across three levels (L1, L2, L3): The questions generated will be categorized into three levels of cognition, based on predetermined percentages. This categorization will ensure that the questions are distributed appropriately, under the desired cognitive complexity.

The following levels describe the hierarchy of knowledge acquisition and retention, with each level representing a different stage of cognitive development:

- Level 1 (L1): This level primarily focuses on the acquisition of factual knowledge, with an emphasis on recall memory.
- Level 2 (L2): This stage involves the development of functional understanding, principles, and the ability to apply knowledge to new contexts.
- Level 3 (L3): The final stage of cognitive development involves mastering practical skills, often involving routine and repetition, and acquiring knowledge necessary for performing jobs in real-world scenarios.

However, it's important to note that these divisions are not fixed, and the system should be flexible. There should be a provision for generating questions with different proportions as well, as per the user's requirements. Additionally, if NIMI (National Instructional Media Institute) wants to generate questions of a single level exclusively, the system should accommodate this preference.

2. These objectives collectively address the quantitative and qualitative aspects of question generation, ensuring that the system produces a diverse set of questions that align with the learning outcomes and levels of difficulty specified by the curriculum.
3. The other major objective is to implement a real-time and batch-wise duplicate detection mechanism in the question bank to prevent the recurrence or duplication of questions and avoid redundancy.

8.2 Key Features

Key features are crucial for ensuring the system's effectiveness in generating, curating, and validating questions.

- a) **Curriculum-aligned question generation:** The system will integrate an advanced algorithm specifically designed to generate questions that strictly adhere to the approved “Test Profile by NIMI.” A sample Test Profile is detailed in **Annexure-3**. This algorithm will ensure that all generated questions are aligned with the learning outcomes outlined in the curriculum. The system will have the capability to create a Test Profile directly from the given curriculum. To maintain the relevance and accuracy of the generated questions, output will be reviewed and validated by Subject Matter Experts (SMEs). This review process will ensure that the questions meet the learning objectives and educational standards. Furthermore, the system should be able to generate questions from available data sources, including textbooks where available, and from the internet where textbooks are not available. In all cases, the system must maintain the required difficulty level and strictly adhere to the topics outlined in the Test Profile.
- b) **Manual entry of new questions:** The system will enable the manual addition of questions by NIMI/Competent users approved by NIMI, thus accommodating unique and specialized content beyond the automated

generation process. This feature will enhance the system's flexibility and will cater to the dynamism of the content generation process.

- c) **Image-based Question:** The new system should incorporate advanced features for image- based question generation, ensuring high-resolution quality, adherence to NIMI format, and innovative utilization of color-coded elements. To enhance understanding, the system should incorporate a technique of highlighting by colouring the relevant part within line diagrams. This method can effectively clarify specific components, making questions clearer and assisting students in fully comprehending what is being asked, with accuracy.
- d) **Real-time duplicate detection mechanism:** It is recommended that a mechanism be implemented to detect and prevent the recurrence or duplication of questions/ or similar questions in real-time. To achieve this, a real-time duplication detection mechanism should be put in place. This mechanism should be operational whenever authorized users add new questions to the question bank. It should automatically highlight if a question is already present in the bank. Additionally, the system should detect and flag any repetition of options within the same question to ensure that each question maintains its uniqueness and clarity. The system should be designed in a way that ensures no repeated questions or similar options within the same questions are added to the question bank. Such an approach will avoid redundancy and promote efficient use of resources.
- e) **Batch-wise duplicate detection mechanism:** The mechanism in place must be designed to accurately identify and prevent the recurrence or duplication of questions, near similar questions, or repetition of options within the same question from the existing question bank when entered into the system/platform. This process will be instrumental in ensuring the validity and reliability of the system's decisions regarding the uniqueness of questions and options, which will then be subject to human validation.
- f) **AI-driven technical correctness validation:** The questions generated by the system will undergo a thorough AI-driven analysis to ensure that they are technically accurate, precise, and comply with established standards. The system should utilize a technical dictionary provided by NIMI to ensure that technical terms are not flagged as incorrect. After that, authorized users or

subject matter experts (SMEs) will have the option to identify any errors and make necessary edits to verify the alignment of the questions with the subject matter. By combining both AI and human review processes, we can ensure that the questions generated by the system are highly reliable.

- g) Error-free content verification:** The deployment of comprehensive AI-based checks will be essential to ensure the accuracy of formulated questions within a specified context. These checks will aim to convey the intended meaning unambiguously and eliminate/ suggest basic errors such as spelling and grammar. Additionally, a verification option by a subject matter expert will be available to verify the extent to which the questions convey the intended meaning, thereby minimizing the possibility of confusion or misinterpretation.
- h) Evidence-based validity analytics:** The platform will include a feature that will provide proper referencing for questions sourced from books, concerning the text, page number, and figure number. This will ensure the validity and authenticity of the source, thereby minimizing or eliminating any potential discrepancies in the future. Moreover, subject matter experts can utilize this feature to cross-check questions generated by the AI system for verification purposes. This evidence-based validity approach will guarantee that the generated questions are grounded in reliable references and that the levels assigned to the question are based on the standards of the subject matter.
- i) Blind vetting support by SMEs:** The platform will need to have a provision for NIMI to conduct blind vetting. To achieve this, we will require an integrated feature allowing NIMI to submit questions to randomly selected SMEs registered with NIMI. The SMEs will evaluate the questions based on their correctness, clarity, relevance, and authenticity. Each vetting expert (SMEs) will provide their remarks on these criteria. Our acceptance of a question will depend on it meeting the minimum criteria set by the SMEs.
- j) Number of trades & Number of Questions:** The AI-based system should have the capability to generate the required number of questions for over 145 trades, as NIMI is currently developing question banks for these trades. The system should be able to adapt and generate questions based on the directives of the competent authority. It should also utilize input from

existing questions within the system to enhance its training and question-generation capabilities. This approach ensures that the system continuously learns and evolves, ultimately enabling it to produce high-quality questions that align with the standards and as per the requirements of learning outcomes based on the test profile.

- k) Creation of tests for assessments:** The assessment system should include a randomization or shuffling feature for questions, ensuring that each test is unique by presenting questions in a different order. Additionally, the platform should allow for a specific number of questions to be included in each assessment. The system should provide user-friendly tools or functionalities that enable NIMI to create customized tests based on specific assessment requirements. This could involve selecting questions from the question bank based on criteria such as topic, difficulty level, or other preferences. It's crucial that the shuffling feature is implemented in a way that ensures no two questions from the same topic appear in a single question paper, enhancing the diversity and fairness of assessments.
- l) Adaptable to Future Revisions:** A question bank management system should be designed to seamlessly adapt to evolving vocational educational standards and requirements. It needs to allow for easy modification of the criteria used to develop questions, ensuring that any changes in question generation criteria can be incorporated to ensure that the question bank remains aligned with the latest learning outcomes of the particular trade. The system should have the capability to generate new questions based on updates or changes in the syllabus. It should be able to identify questions that have become outdated or redundant due to changes in standards or curricula. The system should then suggest the removal of these questions, subject to verification by Subject Matter Experts (SMEs), and recommend appropriate updates.
- m) Supported Document Types:** The AI-powered Question Bank Management System should be capable of generating various document formats, including PDF and Excel files. Regarding PDF files, the system should be capable of producing native or digital-born output content. This capability ensures seamless compatibility with PDF files.

- n) Document Formatting:** The system should be able to create documents with varying formats, including those featuring single or multiple columns. Sample documents will be provided to illustrate different arrangements of content, aiding in system adaptation and optimization for diverse document layouts.
- o) Image-Text Integration:** The system should be capable of generating questions based on both images and text within them. This should enable comprehensive analysis and question generation, ensuring that textual information embedded within images is effectively utilized. Also, the system will need to support questions with accompanying images. This feature enhances the richness and variety of question types, allowing for more engaging assessments that incorporate visual elements.
- p) Scope for Future Courses:** The system should be designed to accommodate future courses and adapt to evolving educational needs. This flexibility will ensure scalability and adaptability, enabling the system to grow and evolve alongside any curriculum expansions.
- q) User Authentication and Authorization:** To ensure safety and security of sensitive information, it is essential to implement strong user authentication mechanisms. These mechanisms could be username/password combinations and 2 factor/multi-factor authentication. They can help verify the identity of users before granting access to the system. Furthermore, it is recommended to use role-based access control (RBAC) to assign specific permissions and privileges to users based on their roles and responsibilities. This would help in maintaining the confidentiality and integrity of the data by ensuring that only authorized personnel have access to it.
- r) Performance Analysis:** The proposed system will include a comprehensive performance analysis module that provides detailed insights into question usage and effectiveness, helping to inform instructional strategies. The system will analyze student performance metrics such as module-wise, topic-wise, and question-wise regional attempt rates and success rates using data provided in the NIMI template for statistical analysis. This analysis will reveal regional performance variations, enabling targeted educational improvements. Additionally, the system will generate reports formatted

according to the NIMI template, allowing NIMI to conduct its own detailed analysis to identify trends and areas for improvement in the curriculum.

- s) **Data Encryption:** Utilizing encryption techniques to secure data both at rest and in transit. This includes encrypting sensitive information stored in databases or files using encryption algorithms like AES (Advanced Encryption Standard) and ensuring secure communication channels through protocols like HTTPS (Hypertext Transfer Protocol Secure).
- t) **Audit Trails and Logging:** Implementing audit trails and logging mechanisms to track user activities within the system. This includes recording user logins, data modifications trails, and access attempts, which can be useful for compliance auditing, and detecting unauthorized or suspicious activities.
- u) **Data Backup and Disaster Recovery:** Establishing regular data backup procedures to create copies of the system's data and storing them securely in off-site locations. Additionally, implementing disaster recovery plans to ensure the system can be quickly restored in the event of data loss, corruption, or other catastrophic events.

9. General Information

- a) **Platform Usage and Integration:** - The AI-QBMS platform is strictly designed for the management of question banks. There is no intention to conduct tests or integrate the AI-QBMS platform with any test-conducting platform for assessment purposes. However, the platform should have the capability to generate questions in the NIMI-required format, which can be shared with exam agencies via API integration.
- b) **Provision of Training Data:** - NIMI shall be solely responsible for providing the necessary training data, including books and existing question banks, required for the development and modelling of the AI-based QBMS. NIMI will also provide the curriculum, inclusive of learning outcomes, cognitive level difficulty guidelines, and relevant action verbs.
- c) **Data Storage and Processing:** - Data storage will be maintained on in-house servers to ensure data security and adherence to organizational policies. Data processing may be hosted on MeitY (Ministry of Electronics and Information Technology) approved cloud

servers. The selected cloud server must comply with CERT-In (Indian Computer Emergency Response Team) standards to ensure data safety and compliance with regulatory requirements.

- d) **Question Quality and Relevance Assessment:** - The following mechanisms will be used to assess the relevancy and quality of questions generated by the AI-QBMS platform:
- Alignment with specified Learning Outcomes
 - Compliance with the Test Profile
 - Technical Accuracy
 - When generating questions from approved books, the system must ensure proper referencing of the relevant topics. If the question is sourced from the internet, the specific topic from the test profile should be mentioned to maintain transparency and accuracy.
 - Evaluation of Cognitive Complexity as per Bloom's Taxonomy (Levels 1, 2, and 3, as outlined for National Skills Qualifications Framework guidelines for the relevant levels.)
 - Ensuring clarity, precision, and proper use of language, grammar, and context.
- e) **Question Format:** - The AI-QBMS platform shall generate multiple-choice questions (MCQs) with a single correct option among four choices. Additionally, the platform should be designed with the flexibility to accommodate changes and adjustments based on future requirements.
- f) **Platform Usage Frequency:** - The AI-QBMS platform will be used on a real-time basis, as and when required, depending on project demands.
- g) **Vendor Eligibility and Compliance:** - Start-ups seeking to participate in the project must adhere to the prescribed quality and technical specifications. In the event of a need for relaxation of certain requirements, Start-ups are required to submit a relaxation conditions document in accordance with GFR (General Financial Rules) regulations.

10. Evaluation of Bids

All the bids/response documents will be evaluated on a QCBS evaluation technique. The technique is detailed below

Total Evaluation Marks = 100

Weight assigned to technical proposal = 70%

Weight assigned to financial proposal = 30%

Final Score Calculation = 0.7 (Marks Obtained in Technical Evaluation) + 0.3 (Marks Obtained in Cost calculation)

10.1 Technical Evaluation Parameters

The technical evaluation will be carried out for a total of 100 marks and the weighted average will be calculated accordingly.

Sl. No	Evaluation Parameter	Max Marks	Applicability
Bidder Capability (30 Marks)			
1	The agency should have been in the AI based platform Development and execution of solution/ similar projects as mentioned in RFP for the last 2 continuous years. < 2 Clients = 1 Mark 2 Clients = 2 Marks 3-4 Clients = 5 Marks > 5 Clients = 10 Marks	10	

Sl. No	Evaluation Parameter	Max Marks	Applicability
2	<p>The Service Provider must have developed an AI-based solution that is fully integrated with other organizations. Completion Certificates should be provided for successfully completed projects relating to the scope of work detailed in the RFP and in-progress certificates for ongoing engagement(s).</p> <p>< 2 projects with completion certificate from the client = 1 Mark</p> <p>2 project with completion certificates from the clients = 2 Marks</p> <p>3-4 project with completion certificates from the clients = 5 Marks</p> <p>> 5 project with completion certificates from the client s= 10 Marks</p>	10	
3	<p>The Annual turnover of the bidder as per Annexure-2 during each of the last three financial years (2021-22, 2022-23, and 2023-24).</p> <p>> 2 Cr = 1 Mark</p> <p>2-5 Cr = 2 Marks</p> <p>> 5 Cr = 5 Marks</p> <p>Note : Relaxation for the start-ups will be given as per the current Government Guidelines.</p>	5	
4	<p>The CMM Level for the Software and services of the bidder.Below than CMM Level 3 = 2 MarksCMM Level 3 = 4 MarksMore than CMM Level 3 = 5 Marks</p>	5	
Technical Capability (70 Marks)			

Sl. No	Evaluation Parameter	Max Marks	Applicability
Every bidder will be given a time slot of 30 minutes to demonstrate a prototype to the evaluation committee. Following components need to be considered while making the Demonstration to the evaluation committee along with an explanation wherever sought			
Demo			
5	The focus is on ensuring the system's effectiveness in creating diverse, accurate, and relevant questions basis curriculum of bidder's choice. The curriculum is available on DGT Website - https://dgt.gov.in/cts-details . Technical Solution Capabilities: This includes the system's ability to generate -		Bidder needs to give a Live Demonstration mentioning the components and needs to provide all the detailed description in the Technical Bid Response. Copy of the Technical Presentation must be submitted by the bidder during the bid submission.
	1. Curriculum-aligned questions	4	
	2. Detect duplicates	4	
	3. Support image-based question generation	4	
	4. Allow manual entry of questions	3	
	5. Test profile generation basis the curriculum of choice (Sample test profile is shared in the Annexure-3)	10	
6	Performance Analysis and Adaptability: Assessment of the system's ability to provide insights into question usage and its adaptability to future revisions and courses. This ensures the system remains relevant and effective over time. <i>Note: See Annexure-4 for more details</i>	20	
Explanation by the bidder			
7	Security and Data Management: Evaluation of the system's mechanisms for user authentication, data encryption, and secure data storage and processing. This ensures the protection of sensitive information and compliance with security standards.	10	

Sl. No	Evaluation Parameter	Max Marks	Applicability
8	Integration and Usability: Evaluation of the system's capability to integrate with external exam agencies via API and the provision of user training and support. This ensures seamless operation and user satisfaction.	15	
Total Marks		100	

10.2 Financial Evaluation

The lowest-priced financial proposal is awarded the full weighted score. Using the above weights, that would be 30%. The weighted scores of the other financial proposals are calculated as a fraction of the highest scoring proposal. So, if the lowest priced proposal is INR X, the weighted scores for another submission, for which the proposed price was INR A, would calculate as (INR A/ INR X), multiplied by weight assigned financial proposals (30%). Hence, their final weighted scores will always be less than that of the lowest-priced financial proposal.

11. The RFP Process

11.1 Release of RFP

The RFP will be published both on the NIMI official website www.nimi.gov.in and on GeM Portal as well. The GeM bidding document subject and the Document number will be provided to the bidders upon request by a mailer to chennai-nimi@nic.in.

11.2 Pre-Bid Meeting

- a) NIMI will conduct a pre-proposal/pre-bid meeting with potential bidders at NIMI Chennai. The Bidders will have to ensure that their queries for the Pre-proposal meeting should reach to the NIMI by email on or before **28.01.2025** at chennai-nimi@nic.in.

- b) Please note that any queries regarding payment terms and mode of selection will not be addressed at this stage. We kindly request that all queries raised be limited to the RFP and Scope of Work. All necessary clarifications on other matters will be provided during the RFP stage.
- c) The ideal method for submitting written inquiries to the designated contact is via email. Telephone communications will not be entertained. The queries by the applicants will be provided in the following format:

S No	Page	Section	Sub Section	Details	Clause of the RFP on which Clarification required	Clarification Required

11.3 Responses to Pre-Proposal Queries and Issue of Corrigendum

- a) The Nodal Officer appointed by the NIMI will make every effort to promptly respond to all inquiries.
- b) Prior to the last date for receipt of Request for Proposal (RFP), NIMI reserves the right to modify the RFP Document by issuing a corrigendum. This modification may happen at NIMI's own initiative or in response to a clarification requested by a prospective bidder.
- c) The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on the NIMI website <https://nimi.gov.in/>.

- d) Any such corrigendum shall be deemed to have been incorporated into this RFP.
- e) To provide prospective bidders with reasonable time to take the corrigendum into account or for any other reason, NIMI may extend the last date for the receipt of RFP proposals at its discretion.
- f) This RFP does not constitute an offer by NIMI. The bidder's participation in this process may result in finalizing the bidder inline with the scope of work, technical and cost evaluation criteria as shared in this document.
 - g) The response to the RFP should be titled as – “Response to Request for Proposal for Onboarding Artificial Intelligent based Question Bank Management System (QBMS)”
- h) The proposal submitted by the service provider/ bidder in response to the Request for Proposal (RFP) should be a complete document. It must be page numbered, include a list of contents with corresponding page numbers, and should be signed by the Authorized Representative of the bidder.
- i) Proposals must be received by post at the address specified below latest by: 25.02.2025

The Executive Director,

National Instructional Media Institute (NIMI), CTI

Campus Guindy, Chennai, Tamil Nadu - 600032

Or

By e-mail on chennai-nimi@nic.in

- j) NIMI reserves the right to modify and amend any of the above-stipulated conditions/criteria depending upon project priorities vis-à-vis urgent commitments.
- k) NIMI will perform a detailed analysis of the technical and financial proposals submitted by the vendors and publish a ranking ranging from 1-6 with a clear score each bidder has obtained.

11.4 Submission of Bids

- a) In case of the bids to be submitted through a post or physical copy, the bids submitted by the vendors should contain 2 envelopes – one envelope containing the technical bid and other the financial bid. In case of mailing the bids to the official mail of NIMI - chennai-nimi@nic.in, make sure that the proposal is named as 1. The Technical Response to AI QBMS RFP – “Name of the Bidder” & 2. Financial for AI QBMS – “Name of the Bidder” as two separate attachments in the same mail.
- b) In both the cases as mentioned above, the bids should be preceded by a cover letter as shared in the **Annexure-1**
- c) The CMM certificate of the concerned bidder needs to be shared with the technical bid.
- d) In case of CMM exemption, a clear undertaking needs to be submitted mentioning the relevant government clauses that are applicable to claim the exemption on the respective bidder’s letter head
- e) EMD as mentioned in the Section 4 of this RFP needs to be provided along with the submission of bids.

11.5 Evaluation of Bids

- a) All the bids that are sent to NIMI within the specific timeline as mentioned in the Section 5 of this RFP will be considered. Late submission of bids due to any unforeseen circumstances will not be entertained and such bids shall not be considered for evaluation unless there is an official corrigendum released from NIMI. The timelines in the following corrigendum will have to be adhered by the bidder in such cases.
- b) The bids evaluated will be given a ranking (L1, L2,.....L6) based on the parameters in Section 10 of this RFP document. L1 will be the bidder with the highest marks and then L2 and so on and so forth.

11.6 Award of Contract/Letter of Award

- a) The award of contract/letter of award will be issued to L1 vendor.
- b) In case where the L1 vendor is no more interested to go ahead with the service provision, the same needs to be addressed to the Executive Director in Writing and the same should be mailed to - chennai-nimi@nic.in

nimi@nic.in. In such cases, the LOA will be awarded to L2 bidder and so on and so forth

12. General Terms and Conditions

12.1 Earnst Money Deposit

- a) All the bidders are required to submit EMD in the form in the form of a Demand Draft/Bank Guarantee issued by any Scheduled bank in favour of “National Instructional Media Institute”, payable at Chennai, valid for a period of 150 days from the last date of the bid submission of the RFP
- b) In the event of any extensions in the overall process, bidders shall re-submit the Demand Draft/Bank Guarantees for further 150 days, as the case may be.
- c) The EMD of the unsuccessful bidders will be returned within 4 weeks from the announcement of bid winner.
- d) The EMD of the successful bidder will be adjusted against performance security/Performance Bank Guarantee or will be returned upon
- e) The EMD amount is interest free and will be refundable to the bidders, without any interest accrued thereon
- f) Start-ups are exempted from payment of EMD
 - 1. NSIC certificate/ Udyog Aadhar Memorandum/Udyam Registration Certificate should cover the items tendered to get EMD exemptions. Certificate/ Memorandum should be valid as on due date / extended due date for Bid submission
 - 2. Start-up company should enclose the valid Certificate of Recognition issued by Department for Promotion of Industry and Internal Trade (DPIIT), (erstwhile Department of Industrial Policy and Promotion), Ministry of Commerce & Industry, Govt. of India with the technical bid.
 - 3. Start-ups which are not under the category of MSE shall not be eligible for exemption of tender fee
 - 4. Bidder who solely on its own, fulfils each eligibility criteria condition as per the RFP terms and conditions and who are having MSE or Start-up company status, can claim exemption for EMD/ tender fee

5. If all these conditions are not fulfilled or supporting documents are not submitted with the technical Bid, then all those Bids without EMD will be summarily rejected and no queries will be entertained
- g) The EMD/ Bid Security may be forfeited in the following conditions:
 1. If a bidder withdraws its bid during the period of validity of the bid.
 2. In case of a bidder being successful in the commercial bidding process if the bidder fails to sign the contract in accordance with terms and conditions as detailed under this RFP.
 3. If the successful Bidder fails to accept Purchase Order and/or sign the Contract or furnish Bank Guarantee, within the specified time.

12.2 Performance Bank Guarantee

- a) The L1 bidder upon the issue of the Letter of Award should submit a Performance Bank Guarantee which is 5% of the quoted contract value/project cost.
- b) The Performance Bank Guarantee should be valid for a period of 2 years from the date of Award of Contract/Letter of Award

12.3 Termination and Exit Transition

12.3.1 Termination Rights

a. **Termination for Convenience:**

Either Party may terminate this Award of Contract/Work Order for any reason by providing no less than 120 days prior written notice to the other Party.

b. **Termination for Cause:**

In the event either Party materially breaches any term of this Agreement, the non-breaching Party may terminate the Agreement by providing written notice of such breach. If the breach is not cured within 30 days of the notice, termination will be effective immediately upon expiration of the cure period.

12.3.2 Obligations Upon Termination

a. **Exit Transition Plan:**

Within 15 days of receiving notice of termination, the Vendor shall deliver a comprehensive transition plan that includes:

- A detailed schedule and methodology for the orderly transfer of all services.
- A list of all deliverables including documentation, system configurations, source code, and any proprietary AI algorithms or data used in the question bank management system.
- Identification of key personnel and contact information to facilitate the transition.

b. **Data Migration and Return:**

The Vendor shall, at no additional cost to the Customer:

- Return all Customer Data in a structured, commonly used, and machine-readable format as desired by NIMI
- Assist in the migration of data to a new service provider or the Customer's internal systems, that is, carry out the migration of the data, content and any other assets to the new environment created by NIMI or any other Agency (on behalf of NIMI) on alternate service provider's offerings to enable successful deployment and running of the NIMI's solution on the new infrastructure
- Shall not delete any data at the end of the agreement (for a maximum of 45 days beyond the expiry of the Agreement) without the approval of NIMI
- Upon Customer's written instruction, securely delete all Customer Data from its systems, ensuring compliance with all applicable data protection and privacy laws issued by government from time to time
- Make sure that the transition of the services rendered will be as per the laid guidelines including the necessary handovers, data migration to the target service provider in the said format or to the service renderer and any other services that the renderer has been availing through the course of time.

c. Key Activities to be carried out by bidder/service provider for knowledge transfer

- Prepare documents to explain design and characteristics.
- Carry out joint operations of key activities or services.
- Briefing sessions on process and process Documentation.
- Sharing the logs, etc.
- Briefing sessions on the managed services, the way these are integrated and necessary briefing sessions wherever deemed necessary.
- Transfer know-how relating to operation and maintenance of the software and other related services.
- Provide/Handover the architecture based on which development is carried to ensure the smooth transition and future development, if any.

d. Post-Termination Support:

For a period of 30 days following the termination effective date, the Vendor shall provide reasonable assistance and support to ensure a seamless transition of services. This may include access to system experts, ongoing maintenance of the system, and troubleshooting support as necessary.

12.3.3 Financial and Other Considerations

a. Final Payment:

The Customer shall be responsible for payment for all services rendered up to the effective date of termination, provided successful transition of necessary data and other information and satisfaction with regards to the stages of work completion . Any advance payments or deposits shall be adjusted against any transition support fees or refunded as agreed upon in writing.

b. Liabilities and Indemnification:

Termination shall not affect any accrued rights or liabilities of either Party. The Vendor agrees to indemnify and hold the Customer harmless

for any claims, losses, or damages arising from the Vendor's failure to meet its post-termination obligations.

12.3.4 Confidentiality and Intellectual Property

a. Confidentiality:

All confidentiality obligations under this Agreement shall survive termination. The Vendor shall continue to protect all confidential and proprietary information received from the Customer during the term of this Agreement.

b. Intellectual Property:

The termination of this Agreement shall not transfer any intellectual property rights unless expressly stated. The Customer shall retain ownership of all Customer Data, and any customizations made during the term of the Agreement.

12.3.5 Dispute Resolution

Any disputes arising from or relating to the exit transition process shall be resolved in accordance with applicable government/GeM guidelines

12.3.6 Miscellaneous

a. No Waiver:

Failure to enforce any provision of this Exit Clause shall not constitute a waiver of the right to later enforce the same or any other provision.

b. Survival:

All obligations and rights under this Exit Clause that by their nature are intended to survive termination shall continue in full force and effect following termination.

12.4 Service Level Agreement

A Service Level Agreement will have to be signed by the L1 bidder and necessary information will be provided to the concerned during the issue of LOA/Work Order

13. Annexures

13.1 Annexure - 1 (Cover letter)

Cover Letter

(To be given on Company Letter Head) Date:

To

Sub: Request for Proposal For Onboarding Artificial Intelligent based Question Bank Management System (QBMS)
Service Provider

Name of the work:

Dear Sir,

1. I/ We have downloaded/obtained the RFP document(s) for the above mentioned "RFP" from the web site(s) namely

as per your advertisement, given in the above-mentioned website i.e. <https://nimi.gov.in/>.

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. __to__ (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I/we shall abide hereby by the terms/conditions/clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the conditions of above mentioned RFP document(s)/ corrigendum(s) in its totality/entirety.
5. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking/Any private institute.
6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully, (Signature of the Service provider, with Official Seal)

13.2 Annexure - 2 (Financial Capability)

[On the letterhead of the Bidder]

Annual turnover details of the Bidder from [insert relevant details]

#	Financial Year	Turnover in Indian Rupees	Document Page No.
A	2021-22		
B	2022-23		
C	2023-24		

*The Audited Balance sheet and profit & Loss account statement of the Bidder for each of the above- mentioned financial years shall be submitted as supporting evidence.

1. Please affix the signature of the authorized signatory of the Bidder with name, designation, seal and date here.
2. Please affix the signature of the authorized signatory of the statutory auditor of the Bidder with name, designation, seal and date here.

Authorized Signatory

(Signature in full): _____

Authorized Signature of Statutory Auditor: _____

Name and title of Signatory: _____

Stamp of the Company: _____

Stamp of the firm _____

13.3 Annexure - 3 (Test Profile)

A sample test profile is shared in the Google Drive Link Below –

<https://drive.google.com/drive/folders/1LoMzUUZBNqm0n7HN4RG9q-HXlCvPgExT?usp=sharing>

13.4 Annexure - 4 (Adaptability)

The content to this annexure is detailed in the below explanation.

Consider that the current set of Questions in the existing Question Bank are being created pertaining to the curriculum that is revised till the year 2022.

Say a new curriculum revision happens in the future that is 2025 or 2026. The bidder would be required to give a demonstration on how the system that will be deployed or the solution that will be provided will be able to adapt to the changes in the Curriculum. The bidders are required to consider all the cases such as change in the question pattern, detection of duplicate questions, revamping the questions as per the levels etc.

The bidder will be expected to show a demonstration and explain how the system will be able to provide insights into question usage and its adaptability to future revisions and courses.