



# भारतीय समुद्री विश्वविद्यालय INDIAN MARITIME UNIVERSITY

(Central University, Govt. of India)

HEADQUARTERS



**Indian Maritime University**

**(A Central University, Govt. of India)**

**East Coast Road, Semmencherry,  
Sholinganallur (P.O), Chennai 600 119.**

**Tel: (044) 2453 9020, Fax: 2453 0342**

आजादी का अमृत महोत्सव



Ref No. IMU-HQ/R/71/93-E/2023-PUR

01.09.2023

## **NOTICE INVITING EXPRESSION OF INTEREST (EoI)**

**FOR**

### **Automated Question Paper (QP) Generation and Block chain based examination result and certificate verification System**

Indian Maritime University (IMU) invites Expression of Interest (EoI) for Automated Question Paper (QP) Generation and Block chain based examination result and certificate verification System for conducting Examinations by Indian Maritime University. All the interested and eligible software companies / firms meeting the eligibility criteria can submit their proposals to the Registrar, Indian Maritime University-Headquarters, East Coast Road, Semmancherry, Chennai-600119 on or **before 25.09.2023**.

The EoI Document can be downloaded from the University website [www.imu.edu.in](http://www.imu.edu.in) or from <https://eprocure.gov.in/eprocure/app> or from <https://gem.gov.in> from 04.09.2023 onwards. The last date for receiving EoI is **02:00 PM on 25.09.2023**.

  
**Deputy Registrar (Purchase)**

**Expression of Interest (EoI) For  
Automated Question Paper (QP)  
Generation and Block chain  
based examination result and  
certificate verification System in  
Indian Maritime University,  
Chennai.**

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**INDIAN MARITIME UNIVERSITY, CHENNAI**  
**INVITATION FOR EXPRESSION OF INTEREST**

1. The Indian Maritime University (IMU) was established in 2008 by an act of the Parliament. It is a Central University under the Union Ministry of Port, Shipping & Waterways with All India jurisdiction, Headquarters at Chennai, and having Campuses at Chennai, Cochin, Mumbai, Kolkata and Visakhapatnam and 18 Affiliated Institutes all over the country. The University offers the following Diploma, UG, PG and Research programmes:

(a) **UG Programmes:**

- (i) B. Tech (Marine Engineering)
- (ii) B. Tech (Naval Architecture & Ocean Engineering)
- (iii) B. Tech (Naval Architecture & Ship Building)
- (iv) B. Sc (Nautical Science)
- (v) BBA (Logistics, Retailing and e-Commerce)
- (vi) BBA (Maritime Logistics)
- (vii) Diploma in Nautical Science (DNS) leading to B.Sc. (Applied Nautical Science)

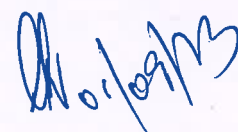
(b) **PG Programmes:**

- (i) M.Tech (Naval Architecture and Ocean Engineering)
- (ii) M.Tech (Dredging and Harbour Engineering)
- (iii) MBA (Port and Shipping Management)
- (iv) MBA (International Transportation and Logistics Management)
- (v) M.Tech (Marine Technology)
- (vi) Postgraduate Diploma in Marine Engineering

(c) **Research Programmes**

- 1. M.S / Ph.D (by Research)

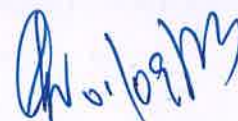
2. Indian Maritime University, Chennai invites non-binding expression of interest (EoI) from the registered companies/firms in India for Automated Question Paper (QP) Generation and Blockchain based examination result and certificate verification System. The purpose of this EoI is to invite interested parties having the expertise in the said niche to participate and present in detail the modus operandi.



3. The parties are advised to study the EoI document carefully before submitting their response.
4. In exceptional circumstances and at its own discretion, Indian Maritime University may extend the deadline for submission of proposals by issuing a corrigendum which will be made available on the university website.
5. The parties are requested to submit any queries in writing by email. The queries shall be addressed to Deputy Registrar (Academics) at the email id: [dracademics@imu.ac.in](mailto:dracademics@imu.ac.in) with a copy to [dr.purchase@imu.ac.in](mailto:dr.purchase@imu.ac.in).
6. Indian Maritime University (IMU) reserves right to cancel this call for EoI and/or invite afresh with or without amendments, without any liability or any obligation and without assigning any reason.
7. Parties are advised to visit University website regularly for any update, Corrigendum, etc. on this EoI.
8. The parties shall bear all the costs associated with the preparation and submission of its response, including but not limited to preparation expenses associated with any demonstrations or presentations given to the Indian Maritime University, site visits, investigations, studies, or any other costs incurred in connection with or relating to its response. All such costs and expenses will remain with the parties and IMU shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by the parties in preparation or submission of the response, regardless of the conduct or outcome of the process.
9. Sealed envelope, containing EOI along with the copies of supporting documents shall be submitted to the address given below mentioning "EOI Automated Question Paper (QP) Generation and Blockchain based examination result and certificate verification System in Indian Maritime University, Chennai" on the top cover:

To,

The Registrar  
Indian Maritime University,  
East Coast Road, Semmancherry,  
Chennai-600119.



10. Further details are given below in the table:

Name of work	Expression of Interest (EoI) for Automated Question Paper (QP) Generation & Blockchain based examination result and certificate verification System in Indian Maritime University, Chennai
Product Category	ERP Services
Place of delivery	Indian Maritime University, Chennai
<b>EoI Publishing Date</b>	<b>01.09.2023</b>
<b>EoI Submission End Date</b>	<b>25.09.2023</b>
<b>Pre-Bid Meeting</b>	<b>12.09.2023 at 1100 hrs through Video Conference. (Video Conference link will be shared to the bidders registered through google form available on IMU's Website) The link is as follows:- <a href="https://docs.google.com/forms/d/1xAWye9lgZdprvsWeCbCGJPZA4keFwQuZ76vTn2OE6Ug/edit">https://docs.google.com/forms/d/1xAWye9lgZdprvsWeCbCGJPZA4keFwQuZ76vTn2OE6Ug/edit</a></b>
Contact Person	Deputy Registrar (Academics) Contact No: 044-24539040 <a href="mailto:dracademics@imu.ac.in">dracademics@imu.ac.in</a>

11. The University reserves the right to accept or reject any or all the EoI's at any stage of the process or any of the terms of this document (partially or completely) without assigning any reason, no correspondence in this regard shall be entertained.
12. The firms/ organizations will be short listed based on the evaluation of their presentations by the Committee, constituted by the competent authority of the university. **The date of presentation will be tentatively on 03.10.2023 or 04.10.2023 at 1100hrs (confirmation mail will be send to the qualified bidders as per para-16)** and other information's (if any) shall be intimated through the University website.

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13. Request for Proposal (RFP) for submission of Technical & Financial Bid shall only be issued to those firms/organizations who shall be declared qualified and shortlisted after presentation and its subsequent evaluation of their EoI.
14. The objective of automation is to develop a project with secured technology without affecting the sanctity of the whole examination process of the University in terms of software for Automated Question Paper Generation with specified parameters and blockchain based secure examination result and certificate verification system. The detailed User requirements and Technical requirements are placed as **Appendix-1** to this EOI.
15. For more details about the Indian Maritime University (IMU), Chennai refer to <https://www.imu.edu.in>
16. **Eligibility Criteria:** The process of EoI is open to all the prospective bidders who are satisfying the following criteria upon furnishing the documentary evidence supporting the information provided by them as mentioned against each criteria.

S. No.	Criteria	Details	Supporting document
16.1	Incorporation	<ul style="list-style-type: none"> <li>The party should be registered as a company in India as per Companies Act 1956/2013.</li> <li>Should have operation for a period of at least 05 years as on last date of submission EOI.</li> </ul>	Copy of Registration Certificate as <b>Annexure A</b>
16.2	Past relevant experience	The party should have successfully completed/implemented the similar ERP solutions for the examination system of <ol style="list-style-type: none"> <li>State Universities</li> <li>Central universities/IITs</li> </ol> or <ol style="list-style-type: none"> <li>Higher Educational Institutions.</li> </ol>	Work Order and Project Completion certificate to be submitted for <ol style="list-style-type: none"> <li>State universities as <b>Annexure B (1)</b></li> <li>Central universities/IITs/HEIs as <b>Annexure B (2)</b></li> </ol>
16.3	Fit and Proper	The party should not be a blacklisted company/ firm in any govt. department/ Banks /PSUs/other institution in India due to unsatisfactory performance, breach of	Letter of undertaking to this effect on company's letter head signed by company's authorised signatory as <b>Annexure C</b>

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		general or specific instructions, corrupt or fraudulent or any other unethical business practices.	
16.4	Team size	Party should have adequate manpower with experience in the technical skills on roll since last 05 years of engagement in providing ERP solutions	Supporting document/undertaking by the HRD to be submitted as <b>Annexure D</b>
16.5	Annual turnover	2 Crore	Single page signed by CA & company's authorised signatory as <b>Annexure E</b>

17. **EoI Evaluation Process:** All responses including the proposed solution(s) received by the university as EoI submitted by various firms/organizations shall be evaluated by an Evaluation Committee duly constituted by the competent authority of the university, on the basis of eligibility and evaluation criteria mentioned in this document. The respondents will give detailed presentation of the solution before the Committee as per the schedule published by the university on its website. Only the eligible EoI submitting firms/Organizations will be informed about their selection and RFP will be issued to them.

18. **Criteria for Technical Evaluation:**

S. No.	Description	Max Marks
1	Number of projects carried out based on Block chain technology in the last 3 year ( <b>2 Marks per project</b> )	<b>8</b>
2	Number of similar projects carried out for State / Central / Govt agencies ( <b>2 Marks per project</b> )	<b>8</b>
3	Number of Universities/Institutions making use of the ERP Solutions of the agency ( <b>2 Marks per University/Institution</b> )	<b>8</b>
4	Number of modules in Universities/Institutions based on Blockchain Technology ( <b>2 Marks per modules</b> )	<b>8</b>
5	Number of projects with project cost 10 Lakhs & above ( <b>2 Marks per project</b> )	<b>8</b>
6	<b>Certifications</b>	<b>10</b>
	(i) <b>ISO/IEC Certificate for Software Standards</b> (2 Marks per certificate)	<b>5</b>
	<b>CMMi level Certification of the EoI submitting firms/Organizations</b>	
	Level 5	<b>5</b>
	Level 3 or above	<b>3</b>

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7	<b>Presentation to IMU about the project</b>	<b>10</b>
<b>Total Marks</b>		<b>60</b>

19. **Criteria for shortlisting the vendors for bid submission:** Only those bidders who would be found eligible as per eligibility and evaluation criteria i.e. EoI submitting firms/Organizations with overall Technical Score of **70%** and above (with minimum 50 % in each of the seven categories given in the above Table **Criteria for Technical Evaluation**) will be qualified to participate further in the tender process. The University will send the email communication to the shortlisted bidders only at their registered email id and invite the limited tender bids through eProcurement system /GeM Bid. All other disqualified bidders of EOI cannot participate in tendering process.
20. **Criteria for shortlisting the vendors in GeM portal.** The evaluation criteria will be as per Para 19 above for bidders participating in GeM portal through GeM Services Bid and only Technical Bid will be opened for evaluation and shortlisting of bidders. Financial Bid will not be evaluated for the Custom Bid. The Qualified Bidders may participate in the tendering process on creation of Category by GeM through single packet submission which will be notified to the qualified bidders through mail as per the discretion of IMU. All other disqualified bidders through GeM cannot participate in GeM tendering process.

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## **Appendix -1**

(Refers to para 14 of EOI)

### **AUTOMATED QUESTION PAPER GENERATION, VALUATION, RESULT DECLARATION AND RELEASING OF MARK STATEMENT, PASS CERTIFICATE AND PROVISIONAL/DEGREE CERTIFICATE IN THE BLOCK CHAIN TECHNOLOGY**

#### **I. User Requirements:**

1. Provision of importing the date of admitted students into the software.
2. Auto assigning of Register number based on their course and admitted year.
3. Collection of Programme Fee, Exam Fee and other fees online.
4. Separate portal for all the students & parents to view attendance; apply for examinations, payment of fees, etc.
5. Faculty login must have the facility to enter lesson plan details, unit wise questions with difficulty level, priorities and its answer key.
6. Question paper must be generated automatically based on the algorithm specified by the administrator.
7. The selected question paper must be encrypted and forwarded to the exam centers in a secured manner.
8. Answer scripts must be digitized for valuation.
9. Automatic / manual allocation of answer scripts to the evaluators.
10. Examination results must be processed and published.
11. All the marks sheets, certificates must be generated and provision should be made to upload in Digilocker.
12. Separate Login for Exam, Academic, Finance Section, Campuses and Affiliated Institutes to view respective information.

#### **II. Technical Requirements:**

1. Open Source License software is recommended for the development of the software. If any licensed Software / API, etc. are to be used, it must be licensed to Indian Maritime University.

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2. Software must be developed using Block Chain Technology.
3. All the developed code, database, documentation, etc. related to the software are the property of IMU. IMU will have the rights to add / modify the code according to its need.
4. Detailed cloud server specifications must be provided for handling approximately 7000 concurrent users (students, faculty and staff).
5. Periodical backup of database / software should be automated and stored in a remote location.
6. Email and SMS Gateway should be integrated.
7. All the sensitive information must be encrypted before storing in the database.
8. Strong password policy must be adopted. No commonly used passwords should be allowed. Users must be prompted every 90 days to change their password.
9. One Super Administrator account must be created with options to view all the Logs, Transactions and security history.
10. Super user must have the provision to assign / remove menu level access to all users.
11. Detailed User Manual, Process Flow and other documentations must be submitted upon completion of the project.

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