DOMESTIC TENDER

For the purchase and installation of **fire alarm system** and **PA system** for:

JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS at Indian Institute of Science Bangalore

Document Reference No: RFQ No: IISc/Purchase/ FAS /2025-26/02

Important dates

Published date: 26-06-2025

Last Date of Submission: 17-07-2025

Contact Details:

The Chair, Fire Purchase Committee

Office of Laboratory Safety & Environmental Health (OLSEH),

Room No EG-17-New Chemical Science Building, Indian Institute of Science Bangalore – 560012

Email: Safety.olseh@iisc.ac.in

1 Table of Contents

2	Sho	rt Summary	. 4
	2.1	Important Information	4
	2.2	Important Definitions	5
	2.3	Disclaimer	5
	2.4	Confidentiality	5
3	Tech	nnical Requirements	. 6
	3.1	Introduction	. 6
	3.2	Eligibility	. 6
	3.3	Scope of Work	7
	3.4	Technical specification of the product	7
4	Subi	mission of bid	. 9
	4.1	ENVELOPE No.1	9
	4.2	ENVELOPE No.2	10
5	Ten	der Evaluation	10
6	Tern	ns & Conditions and Other Details	10
	6.1	Cancellation of Bids	10
	6.2	Validity of Bids	11
	6.3	Contacting IISc	11
	6.4	Award and Signing of Contract	11
	6.5	Payment Terms	11
	6.6	Performance Bank Guarantee	11
	6.7	Contract Period	12
	6.8	Agreement	12
7	Can	cellation of Contract	12
	7.1	IISc Rights	12
	7.2	Inspection of Facilities	12
	7.3	Grievance Redressal	13
	7.4	Indemnity	13
	7.5	Governing Laws	13
	7.6	Payment term and condition	13
8	Ann	exure	14
	8.1	Annexure A: Offer Letter (On the Agency's Letter Head)	14
	8.2	Annexure B: Vendor Profile (On the Agency's Letter head)	15

8.3		Annexure C: Financial Bid (On the Agency's Letter Head)	17	
	8.4	Annexure formats	. 18	
9	BOQ		25	
	9.1	FIRE ALARM SYSTEM AND PUBLIC ADDRESS SYSTEM	. 26	
	9.2	Annexure D: Format for Performance Bank Guarantee	. 54	

2 Short Summary

IISc. Bangalore invites Indian OEM, or its authorized Indian distributor / partner are invited to submit their bid in INR only for purchasing and installation of Fire detection and Alarm system with all its accessories for the JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS Building at IISc campus, Bangalore 5600 12.

The bids must be addressed and submitted to:

The Chair, Fire Purchase Committee

Office of Laboratory Safety & Environmental Health (OLSEH),

Room No EG-17-New Chemical Science Building, Indian Institute of Science Bangalore – 560012

Email: - safety.olseh@iisc.ac.in

2.1 Important Information

1	Tender No	IISc/Purchase/ FAS /2025-26/02	
2	Tender Date	26 th June 2025	
3	Item Description	Fire Alarm system and PA system	
4	Tender Type	Two bid system (i) Technical Bid (ii) Commercial Bid	
5	Place of tender submission	Office of Laboratory Safety & Environmental Health (OLSEH), Room No EG-17-New Chemical Science Building, Indian Institute of Science Bangalore – 560012	
6	Last Date & Time for submission of tender	17 th July 2025, 3 PM IST.	
7	For further clarification	Safety Officer Mr. M D Rahman Email: safety.olseh@iisc.ac.in Tel: 080-22933199	

2.2 Important Definitions

The following terms are used in the document interchangeably to mean:

- a. IISc means "Indian Institute of Science".
- b. Recipient, Respondent and Bidder, Vendor, means "Respondent to the RFQ Document".
- c. Tender means RFQ response documents prepared by the Bidder and submitted to IISc.

2.3 Disclaimer

- 1. IISc reserves the right to reject any / all applications without assigning any reason whatsoever.
- 2. The above dates are tentative and subjected to change without any prior notice or intimation
- 3. Bidders should check our website <u>www.iisc.ac.in/tender</u> for any changes / addendums to the above dates and / or any other changes/ update to this RFQ). Bidders are requested to keep themselves updated through our said website from time to time.
- 4. Please note that Financial Bids will be opened for only those service providers who qualify in the Technical bid stage.
- 5. This RFQ is not an agreement and is neither an offer nor invitation by the IISc to the prospective Bidder/s or any other person or entity. The purpose of this RFQ is to provide interested parties with information that may be useful to them in the formulation of their bids pursuant to this RFQ.
- 6. This RFQ may not be appropriate for all persons, and it is not possible for the IISc, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFQ. While all care has been taken to keep the assumptions, assessments, statements, and information contained in this RFQ as relevant, complete, accurate, adequate, and correct, it may not be taken as final.
- 7. The bidder must submit the bid as per the terms and condition of this document. The BOQ is enclosed with this document. The BOQ is prepared based on the drawings of the respective building/floors. Entire system has to be installed as per the above mentioned drawing. During the time of execution of the work, if there is any change/deviation required, the same has to be put up in writing and approval should be obtained from IISc before carrying out the work. However, the drawing will be provided only to the successful bidder once the contract is finalized in all respect.
- 8. Once the job is completed the contractor has to prepare an as built drawing and submit the same to IISc, duly signed and approved by our consultant.

2.4 Confidentiality

This document is meant for the specific use by the Company / persons interested to participate in the current tendering process. This document in its entirety is subject to Copyright Laws. IISc expects the bidders or any person acting on behalf of the bidders to strictly adhere to the instructions given in the document and maintain confidentiality of information. The bidders will be held responsible for any misuse of the information contained in the document and liable to be prosecuted by the IISc. In the event of such a circumstance is brought to the notice of the IISc. By downloading the document, the interested party is subject to confidentiality clauses.

3 Technical Requirements

3.1 Introduction

This Request for Quotation document ('RFQ document' or RFQ)/tender document has been prepared for the purpose of selecting Vendors / Service Providers for purchase and installation of fire detection and alarm system for LIBRARY, CVH GUEST, MAIN GUEST House, MATERIAL ANNEX, SCRAM JET and PHYSICAL SCIENCE DEPARTMENT BUILDING Buildings of IISc . Bangalore.

- 1. In response, Indian Institute of science seeks a detailed technical and commercial proposal from the experienced service providers having experience in similar type of activity.
- 2. Initially contract will be awarded to the successful bidder to supply and installation of the fire detection and alarm system.

3.2 Eligibility

- 1. The vendor must have a minimum of three years' experience in commissioning and maintenance of fire detection and alarm systems.
- 2. It's mandatory that Vendor must be Indian OEM or its authorized Indian distributor / partner are invited to submit their bid in INR only.
- 3. In the past three years the vendor should have installed **three** similar systems, (for which the cost of each system should not be less than 30 lakhs) or at least **one single system** for which the cost should not be less than 75 Lakhs in Government/Public sector /Research institutes. Supporting document should be enclosed.
- 4. Minimum yearly turnover of Rs.3 crores over last three financial years, for work of similar nature.
- 5. **Product Certification:** The products of the applicant should have latest UL certification (UL 268-7thedition)
- 6. **Performance Certificate:** The applicant should submit a "Satisfactory Performance Certificate" from two Companies/Entities where the applicant has done installation/maintenance of Fire systems.
- **7. Manufacture authorization:** The certificate of the origin of the country should be enclosed. (The product form China is not acceptable OEM must furnish a supporting letter for the same)
- 8. **Registered Office:** The bidder should have a registered office in Bangalore. If the bidder got a registered main office elsewhere in India, should have a full-fledged registered branch office in Bangalore. The branch office should have a technical team who can promptly attend the calls and rectify the faults. Visit cost will not be reimbursed.
- Trained and Certified Engineers: Bidder shall have at least two certified Engineers permanently placed in Bangalore for the product offered and shall submit the copy of certificates along with the bid.
- 10. **Supply & Installation**: The applicant should be able to supply and install the products for which empanelment is sought by themselves. No subletting of the work is permissible.
- 11. **Past Record:** The applicant should not have been blacklisted by any PSU/PSB/Govt. Organization in the past 3 years or services terminated due to poor performance. A certificate be submitted stating that the company/firm or its owner or any sister concern have not been blacklisted. (Annexure A).
- 12. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to the Class-1 supplier.

- 13. If IISc has issued a dissatisfactory letter / termination of work contract due to dissatisfactory services to the agency the bid of the company will be rejected.
- 14. The product warranty should be 1 years except consumables items.
- 15. The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. A) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. B) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.
- 16. The quotations should be on FOR-IISc Bangalore basis in INR only.
- 17. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support.

3.3 Scope of Work

- FAS System for the buildings in JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS.
- 2. The agency shall supply and install fire detection and alarm system in the building of JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS Building IISc Campus, C V Raman Road Bangalore.
- 3. At present there is NO fire alarm system in the building except the Physical sciences and CULA Labs building. The new system will replace the old system of the physical science and CULA labs building.

3.4 Technical specification of the product:

The technical specification of the product and other accessories are given below.

- 1. The Vendors should only offer and quote Fire Alarm Systems for the following makes. The technical specs must match with the description mentioned in the BOQ. Also, the system should have the facility for seamless integration with the existing system.
 - a. Notifier
- 2. To maintain commonality with existing network and simplify logistics, IISc strongly prefers the Notifier or Bosch or Siemens.
- 3. At present the fire alarm and control panels are not connected to the central control room. In view of this, there is a requirement of providing the auto dial unit, which can dial the predefined telephone number triggered by the detection alarm of the incident in the panel. The minimum requirement is up to four predefined numbers.
- 4. As specified in BOQ an Addressable Fire Alarm Control panel (FACP) with battery backup for 48 hours normal operation and 30 minutes alarm operation. The battery should be a built-in type with the panel and charged from the panel directly. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual color coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10th Edition requirement and FM approved. If the panel programming requires a dongle/key, then the same shall be supplied along with the panel.
- 5. Analogue Addressable Flash scan multi-sensing detector (Acclimate type) having Rotary,

- decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bi-color LEDs for 360 deg viewing and shall blink green every time the detector is addressed and illuminate steady red on alarm. Detector shall comply UL 268, 7thedition requirements.
- 6. Analogue Addressable Flash scan Rate of Rise thermal detector having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with visible bi-color LEDs for 360 deg viewing and shall blink green every time the detector is addressed and illuminate steady red on alarm. Detector shall comply UL 268, 7th edition requirements.
- 7. Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.
- 8. Hooter control Module for all the hooters, plus existing hooter if any , integration to be integrated with new FAS panel
- 9. Addressable Hooter cum strobe unit as per NFPA shall deliver output up to 90 db at1 m from source (adjustable at site or from the panel) and candela setting from 15 to 130 cd from its installed location and 75cd flashing at 1 Hz for visual indication. No external 3rd party power supply shall be permitted. Vendor to include all accessories.
- 10. Addressable Manual Pull Stations of Single action type with an integrally mounted addressable module that monitors and reports contact status.
- 11. Zone Module for removing the Existing Ravel 8 zone panel and converting to the addressable system .
- 12. Power Supply units for the Hooter 24volts 10 amps.
- 13. 2c x 1.5 sq. mm, PVC insulated FRLS copper armored conductor multi core cables.
- 14. Other accessories as per specification given in the BOQ enclosed.

The PA system must only be of the following make – series.

- i. BOSCH Paviro
- ii. Aetis IDA8
- iii. TSG Crypto
- a. Supply, installation ,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , built in 500W ,input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. As per technical specification etc. as required.
- b. Supply, installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required.
- c. Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98Db . Frequency response of 160Hz-20KHz. The speaker should have tapings at 15W/7.5W as per technical specification etc. as required.
- d. Other accessories as per specification given in the BOQ enclosed.

4 Submission of bid

4.1 ENVELOPE No.1

The envelope for Technical Bid, "ENVELOPE No.1" shall be super scribed, "TECHNICAL BID for OFFER LETTER for supply and installation of Fire detection and alarm system at the building of JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS — IISc Bangalore-560012.

Shall contain the following: Information as per the Performa "MANDATORY TECHNICAL REQUIREMENT" along with copies of the required / supporting documents (Self Attested) as per the **Annexure – B**.

4.2 ENVELOPE No.2

The envelope containing Financial Bid, "ENVELOPE No.2" shall be super scribed "FINANCIAL BID for OFFER LETTER for supply and installation of Fire detection and alarm system at JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS

IISc Bangalore-560012.

Rates for supply and installation of Fire detection and alarm system at JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS – IISc Bangalore-560012.

(Annexure – C) given in the Tender Document Excluding GST. Submission of Financial Bid In any format other than the provided format or including any attachment other than the Financial Bid as per the format will not be accepted and the Bid will be rejected.

5 Tender Evaluation

- 1. Bids will be evaluated based on compliance with eligibility, technical specification, other terms, and conditions stipulated in the tender document.
- 2. The bids must be submitted in two parts (under a two-cover bid system).
- 3. Technical Bid (in a single file PDF document format)- As per annexure B
- 4. Financial Bid or Price Bid (As per Annexure-C).
- 5. The technical bids will be evaluated first. Incomplete information submission shall attract disqualification.
- 6. The technical bids of all bidders shall be scrutinized and evaluated by IISc based on eligibility criteria and qualifications as per details provided along-with documents by the bidder in their technical bid. IISc may ask for additional clarification / details / documents / technical presentation etc. For the purpose, any date fixed by IISc, will be final and binding. Decision of IISc, regarding technical evaluation and declaration of technically qualified bidders, will be final and binding.
- 7. Financial Bids (Price Bid) of only those bidders will be opened, who will be declared technically qualified. The decision of IISc, in this regard, will be final and binding.
- 8. The price bids (submitted as per annexure C) of the technically qualified bidders will be evaluated and declared the lowest one is L1.
- 9. Every line item mentioned in all BOQs must be quoted for financial bid evaluation.
- 10. L1 will be decided after calculation of all BOQs.

6 Terms & Conditions and Other Details

6.1 Cancellation of Bids

- 1. IISc reserves the right to reject a tender under any of the following circumstances:
 - a. If this RFQ document is not submitted or submitted without seal & signature of the Vendor in any of the pages.
 - b. If Tender Documents are incomplete and /or not accompanied by all stipulated documents.
 - c. If any of the terms and conditions and mandatory declarations are not accepted.
 - d. If required information with appropriate documents in support of the same is not submitted as per **Annexure (A to D)**.
 - e. Agency should have been in the business of **installation and maintenance of fire detection and alarm system for minimum 3 years**. This period of 3 Years in business should have been completed on the date of application. Proof for previous three years for services provided to any institution preferably PSUs/PSBs and

- should submit report of satisfactory service from them.
- f. Any line item can be increased or decreased according to IISc work requirements.
- g. The IISc reserves the right to accept or reject any Bid in part or in full or to cancel the Bidding process and reject all bids at any time prior to contract award, without incurring any liability to the affected bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the IISc action.

6.2 Validity of Bids:

Bids shall remain valid for a period of 90 Days from the date of opening of the Financial Bid. A bid valid I shorter period may be rejected by the IISc as non-responsive. Validity of all the eligible bids would be required till the successful bidder/s sign contract with IISc.

6.3 Contacting IISc

- 1. No bidder/s shall contact the IISc on any matter relating to its Bid, from the time of opening of RFQ/Tender to the time contract is awarded.
- 2. Any effort by the Bidder/s to influence the IISc in its decision on RFQ/Tender evaluation, comparison or contract award may result in rejection of the Bidder's.

6.4 Award and Signing of Contract

- 1. IISc will communicate to successful bidder/s (through letter in duplicate by email) that its bid has been accepted. The selected bidder/s have to return the duplicate copy to the IISc within 7 working days duly Accepted, Stamped and Signed by the Authorized Signatory in token of acceptance.
- 2. It would be mandatory for L1 Bidder to accept the work awarded by the IISc.
- 3. Successful L1 bidder has to provide unconditional Performance Bank Guarantee of 3% of estimated contract value from any Schedule Commercial Bank excluding Co- operative Bank. The Performance Bank Guarantee will be deposited at IISc for a period of 1 years and 03 month from the date of commencement of contract.
- 4. In case the RFQ is cancelled, IISc reserves the right to take appropriate decision, including calling up of fresh tenders.
- 5. The IISc reserves the right either to invoke the Performance Bank Guarantee or to cancel the purchase order or both if the Bidder/s fail to meet the terms of this Bid or contracts entered in to with them.

6.5 Payment Terms

The terms of payment are as under:

- 1. No advance payment against work order.
- Payment of bills will be made by the IISc after receiving the consolidated quarterly bills with all reports and documents from Service Provider, within 14 working days of submission of such bill.

6.6 Performance Bank Guarantee

- 1. Successful L1 bidder has to provide unconditional Performance Bank Guarantee of 3% of estimated contract value from any Schedule Commercial bank.
- 2. The Performance Bank Guarantee shall be adjusted against any loss, damage, delay expense etc. to the IISc. IISc reserves the right to take appropriate decisions on the adjustment of the Performance Bank Guarantee. In case of failure on the part of the supplier to attend to the defects within a reasonable period, the IISc on its own will get the defects rectified through.

Another vendor at the risk and cost of supplier and repairs rectified through another vendor in such circumstance will not affect the liabilities of the supplier on the warranty for its remaining period nor will it affect the supplier's liabilities on the stipulated Annual Maintenance Contracts.

6.7 Contract Period

The contractor has to complete the contracted work of supply and installation of FAS system within three months or as agreed during the negotiation. The counting of the period will start from the day of issuance of purchase order. In case of any delay without proper reasons, the contractor will be penalized. The penalty clauses will be discussed during the award of contract.

6.8 Agreement

The service provider shall be required to enter into an agreement with IISc, based on terms and conditions mentioned in the tender document.

7 Cancellation of Contract

The IISc reserves the absolute right to cancel the contract with the selected bidder/s at any time during the contract period, by giving a written notice of at least one (01) Months, for any valid reason, including but not limited to the following reasons:

- 1. Delay in execution of orders placed by the IISc.
- 2. Discrepancies / deviations in the agreed process and / of products.
- 3. Violation of terms and conditions stipulated in this Bid / Contract.
- 4. Unsatisfactory performance of the bidder.
- 5. Any other valid reason.

7.1 IISc Rights

Purchase Committee reserves the right to

- 1. Reject any and all responses received in response to the RFQ.
- 2. Waive or change any formalities, irregularities, or inconsistencies in proposal format delivery.
- 3. Amend/modify terms & conditions of RFQ.
- 4. Extend the time for submission of the RFQ.
- 5. Select the most responsive Bidder (in case no Bidder satisfies the eligibility criteria in totality)
- 6. Share the information/ clarifications provided in response to tender by any Bidder, with any other Bidder(s) /others, in any form.
- 7. Re-negotiate the price and terms of the entire contract with the bidder at more favorable terms in case such terms are offered in the industry at that time.
- 8. Cancel the RFQ at any stage, without assigning any reason whatsoever.

7.2 Inspection of Facilities

The applicant should not have any objection to IISc inspecting the site where the similar work is being carried out or already executed by the applicant. IISc may also hold enquiries from past / present clients of the applicant.

7.3 Grievance Redressal

Any vendors have a grievance against a decision or action with regards to the provisions of this RFQ may file a request to the OLSEH, Bangalore at safety.olseh@iisc.ac.in. It may please be noted that the grievance can be filed by only that vendor who has participated in Procurement proceedings in accordance with the provisions of this RFQ.

7.4 Indemnity

The Vendor shall indemnify IISc, and shall always keep indemnified and hold the IISc, its employees, personnel, officers, directors, (hereinafter collectively referred to as "Personnel") harmless from and against any and all losses, liabilities, claims, actions, costs and expenses (including attorneys' fees) relating to, resulting directly or indirectly from or in any way arising out of any claim, suit or proceeding brought against the IISc as a result of:

- 1. IISc authorized / Bonafide use of the Deliverables and /or the Services provided by Vendor under this assignment; and/or
- 2. Negligence or willful misconduct of the Vendor and/or its employees, agents, sub-contractors in performance of the obligations under this assignment; and/or
- 3. claims made by employees or subcontractors or subcontractors' employees, who are deployed by the Vendor, against the IISc; and/or
- 4. claims arising out of employment, non-payment of remuneration and non-provision of statutory benefits by the Vendor to its employees, its agents, contractors and subcontractors, or breach of any terms, representation or false representation or inaccurate statement or assurance or covenant or warranty of the Vendor under this assignment; and/or breach of confidentiality obligations of the Vendor; and/or
- 5. any or all Deliverables or Services infringing any patent, trademarks, copyrights or such other Intellectual Property Rights.
- 6. IISc shall notify the Vendor in writing as soon as practicable when the IISc becomes aware of the claim and Co-operates with the Vendor in the defense and settlement of the claims.
- 7. The Vendor shall have sole control of the defense and all related settlement/ negotiations, and IISc will provide the Vendor with the assistance, information and authority reasonably necessary to perform the above.
- 8. In the event of successful bidder not fulfilling its obligations under this clause within the period specified in the notice issued by the IISc. IISc has the right to recover the amounts due to it under this provision from any amount payable to the vendor under this assignment.
- 9. The indemnities under this clause are in addition to and without prejudice to the indemnities given elsewhere in this RFQ.

7.5 Governing Laws

This RFQ and the subsequent contract shall be governed and construed and enforced in accordance with the laws of India. Both Parties shall agree that in respect of any dispute arising upon, over or in respect of any of the terms of this Agreement, only the courts in Bangalore shall have exclusive jurisdiction to try and adjudicate such disputes to the exclusion of all other courts.

7.6 Payment term and condition

Payment will be made 90% on supply of material and 10% <u>on installation</u> to be paid after successful completion of work.

8 Annexure

8.1 Annexure A: Offer Letter (On the Agency's Letter Head)

Annexure – A

ENVELOPE - 1: OFFER LETTER.

To,

The Chairman, Fire Purchase Committee
Office of Laboratory Safety & Environmental Health (OLSEH),

Room No EG-17-New Chemical Science Building Indian Institute of Science Bangalore - 560012

Dear Sir,

Re: RFQ/tender document for Supply and installation of fire detection and alarm system at the building of JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS — IISc Bangalore-560012.

With reference to the RFQ/Tender document

Having examined the nature and quantum of work relating to the above-mentioned work and having visited and examined the site of the proposed work and having acquired the requisite information relating thereto as affecting the tender invited by you, I / We, the undersigned hereby offer for undertaking Short listing of Service Provider for supplying and installation of fire detection and alarm system at the building of JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS – IISc Bangalore-560012.

- I / We agree to deposit a Performance Bank Guarantee (as per Annexure-D) of 3 % of estimated of contract value (refundable on expiry of the contract), which in the event of not carrying out the contracted services, as per terms and condition of the tender, shall be forfeited.
- 2. I / We certify that the / our Company / firm or owner or any sister concern have not been Blacklisted by any institution of the Central or State Govt. / PSU/PSB in the past three years on any grounds whatsoever.
- 3. We are complying with all the guidelines issued by the Karnataka Fire Services and State Govt. with regards to Provision & Maintenance of Fire Fighting systems and will also ensure such compliance on any new guidelines issued during the currency of the contract period from time to time.
- 4. We have read the general Terms and Conditions of the Work Contract and agree to abide and comply with the same.

Yours faithfully

Name & Signature of the Vendor with Seal Date:

Place:

Enclosures: As above

8.2 Annexure B: Vendor Profile (On the Agency's Letter head)

Annexure – B

ENVELOPE – 1: TECHNICAL BID MANDATORY TECHNICAL REQUIREMENT

S.NO	Description			Informatio	n from the Vendor	Annexure
1.	Name and Address of the Firm				Annexure -1	
2.	Telephone Nos. & Email Id.				Annexure – 1	
3.	Type of Firm: (Sole Proprietorship/Partnership/Ltd. Co./Other)		Copy of Registration certificate		Annexure – 1	
4.	Name of Contact Person with contact number in relation to this RFQ: Company / Firm Registration				Annexure – 1	
	OEM Details			OEM LETTE	R as per eligibility criter	a
5.	Address & Tel. No. of the Branch/Service Centre in Bangalore:			,	Annexure – 1	
6.	GST No. GST copy		Annexure – 1			
7.	PAN No, ESI & PF			PAN Card, ESI and PF copy		Annexure – 1
8.	The Turnover of th	e Firm		Minimum turnover of Rs. 3 crores during Last 3 financial years for a work of similar nature.		
	Year		Turn Over amt. in Lakhs	Audited Balance Sheet (att. Copy)		Annexure – 2
	2022-2023					
	2023-2024 2024-2025					
9.	Name of Banker w	ith ad	dress			Annexure – 3
10.	Details of work carried out for previous clients (attach copy)					
	Year	1	ne of anization	Type of Amount Work		Annexure – 4
	(i)					
	(ii)					
	(iii)					
11.	No. of Authorized	Techn	ical Staff			
	Name of person	(Qualification	Designation Total Experience in the Firm		Annexure – 5

12.	a) Has your company/firm been ever Blacklisted in past 3 years. Give details if Yes		Annexure – 6
	b) If No, a certificate be submitted stating that the company/firm or its		
	owner or any sister concern have not		
	been so blacklisted by any institution		
	of the Central or State Govt, PSU/PSBs		
	in the past three years on any		
	grounds		
	Whatsoever.		
13.	The vendor must have experience in		
	commissioning and maintenance of		
	firefighting system in High Rise		
	Buildings of minimum 05 stories.		Annexure – 7
	(Attach Copy)		
14.	Proof of work executed in last 03 years and satisfactory performance certificates		Annexure – 8
	performance certificates		
15.	Whether any of the family members working with IISc (if Yes, Give Details)	YES/NO	Annexure – 9
16.	Signed copy of Tender document		Annexure-10
17	Product warranty should be 1 year	YES	Annexure-11
	except consumables items.		
18	Whether Section 3 Technical requirement (page no-4 to 6) has fulfilled	Yes/No	Annexure-12

Name & Signature of the Vendor

Date:

Place:

Encl: As above.

8.3 Annexure C: Financial Bid (On the Agency's Letter Head)

ENVELOPE – 2: FINANCIAL BID

To

The Chairman, Fire Purchase Committee
Office of Laboratory Safety & Environmental Health (OLSEH),
Room No EG-17, New Chemical Science Building, Indian Institute of Science Bangalore – 560012

Dear Sir,

Ref RFQ/Tender for Supplying and installation of fire detection and alarm system in the building of JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS IISc Bangalore-560012. We hereby declare that we are abiding by the following terms and condition.

We have gone through the Tender document/RFQ in detail and understood the requirement of the Fire detection and alarm system for JRD TATA LIBRARY, CVH GUEST, MAIN GUEST HOUSE, MATERIAL ANNEX-2, SCRAM JET, PHYSICAL SCIENCE DEPARTMENT (A, B, C &D Wing) AND CULA LABS in IISc campus. Also, we understood the technical specifications and requirements.

- 1. We understood the terms and conditions mentioned in the tender/RFQ document.
- 2. The terms and condition for release of the payment shall be according to the mutually agreed terms and condition during the final negotiation with the selected bidder.

Note: In case of any discrepancy, total cost quoted in words will be considered. Name &

Signature of the Vendor Seal:

Date:

Place:

Format for submission of the Financial Bid: As shown below

8.4 Annexure formats

Annexure 1:

Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Details of the Bidder

Sl. No	Items	Details
1.	Name of the Bidder	
2.	Nature of Bidder (Attach an	
	attested copy of the Certificate of	
	Incorporation/ Partnership Deed)	
3.	Registration No/Trade License	
	(attach attested copy)	
4.	Registered Office Address	
5.	Address for communication	
6.	Contact Person: Name and Designation	
7.	Telephone No	
8.	Email ID	
9.	Website	
10.	PAN No. (attach copy)	
11.	GST No. (attach copy)	
	OEM Contact details	

Signature of the Bidder	
Name	
Designation, Seal	Date:

•		_
Δn	nexure	٦٠
\neg	HEAUIE	J.

Name of Banker with Address

To,

The Chairperson,
Attn: Fire Purchase committee
OLSEH, Indian Institute of Science,
CV Raman Ave. Bangalore – 560012, India.

Ref: Tender No:

Dated:

Dear Sir/Madam,

Below is the Bank details

S.No	Name of Bank	Bank branch details	Account number	IFSC Code

(Signature of the Bidder)
Printed Name
Designation,
Seal
Date:

An	nexure	4:

Declaration regarding details of work carried out

To,

The Chairperson, Attn: Fire Purchase committee OLSEH, Indian Institute of Science,

CV Raman Ave. Bangalore – 560012, India.

Ref: Tender No:

Dated:

Dear Sir/Madam

I have carefully reviewed the Terms & Conditions in the above-referred tender. Following works we have carried out

S.No	Year	Name of	Type of work	Amount
		organization	WOLK	
1				
2				
3				

(Signature of the Bidder)
Printed Name
Designation,
Seal
Date:

۸n	nexu	ıro	ς.
AII	HEXL	11 C	J.

- 1	N I	-		الد. ۸	!	T = = - :	1 CT - EE -
	NHIN	าทer	OT A	Alitha	rizea.	Technica	ı Statts

To,

The Chairperson,
Attn: Fire Purchase committee
OLSEH, Indian Institute of Science,
CV Raman Ave. Bangalore – 560012, India.

Ref: Tender No:

Dated:

Dear Sir/Madam

I have carefully reviewed the Terms & Conditions in the above-referred tender. Following authorized personnel are working in our firm:

S.No	Name of person	Qualification	Designation	Total Experience in frim

(Signature of the Bidder)
Printed Name
Designation,
Seal

Annexure 6:

Declaration regarding track record To,

The Chairperson,

Attn: Fire Purchase committee OLSEH, Indian Institute of Science,

CV Raman Ave. Bangalore – 560012, India.

Ref: Tender No:

Dated:

Dear Sir/Madam,

I have carefully reviewed the Terms & Conditions in the above-referred tender. I hereby declare that my company/ firm is not currently debarred/blacklisted by any Government / Semi-Government organizations/institutions in India or abroad. I further certify that I am a competent officer in my company/firm to make this declaration.

Or

I declare the following

Sl.No	Country in which	Blacklisted/debarred by	Reason	Since when
	the company is	Government / Semi-		and for how
	Debarred	Government/Organization		long
	/blacklisted / case is	S		
	Pending	/Institutions		

(NOTE: In case the company/firm was blacklisted previously, please provide the details regarding the period for which the company/firm was blacklisted and the reason/s for the same).

Yours faithfully (Signature of the Bidder)

Name

Designation,

Seal

Date:

Annexure 7:

Declaration regarding experience

To,

The Chairperson,
Attn: Fire Purchase committee
OLSEH, Indian Institute of Science,
CV Raman Ave. Bangalore – 560012, India.

Ref: Tender No:

Dated:

Dear Sir/Madam

I have carefully reviewed the Terms & Conditions in the above-referred tender. I hereby declare that my company/firm has years of experience in supplying and installing the Fire alarm and PA system.

(Signature of the Bidder)
Printed Name
Designation,
Seal
Date:

۸	n	n	6	vi		r	Δ	Q	
н	11	11	\vdash	ΧI	1	П	_	\sim	

Declaration regarding work executed

To,

The Chairperson,

Attn: Fire Purchase committee OLSEH, Indian Institute of Science,

CV Raman Ave. Bangalore – 560012, India.

Ref: Tender No:

Dated:

Dear Sir/Madam

I have carefully reviewed the Terms & Conditions in the above-referred tender. I hereby declare that my company/firm has installed Fire alarm and PA system in following organizations

S.No	Name of firm	Type of work	Year of	Project/work
		executed	execution	status

(Signature of the Bidder)
Printed Name
Designation,
Seal
Date:

9.1 FIRE ALARM SYSTEM INCLUDING PA SYSTEM: Financial bid to be submitted based on the BOQ given below.

LIBRARY IISC BANGALORE-560012.

A. SUPPLY AND INSTALLATION OF FAS AND PASYSTEM FOR LIBRARY

SI No	Item Description	Make & Model	Qty	Unit
1	Addressable 4 Loop Fire Alarm Control panel (FACP) with battery back up for 48 hours normal operation and 30 minutes alarm operation. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual colour coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10 th Edition requirement and FM approved. If the panel programming requires a dongle/key then the same shall be supplied along with the panel.	Notifier or Bosch or Siemens	1	Nos
2	Analogue Addressable Flash scan multi-sensing, low-profile detector(Acclimate type) having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bi-colour LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm. Detector shall comply UL 268, 7 th edition requirements	Notifier or Bosch or Siemens	411	Nos
3	Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.	Notifier or Bosch or Siemens	21	Nos
4	Addressable Hooter cum strobe unit as per NFPA, No external 3 rd party power supply shall be permitted. Vendor to include all accessories.	Notifier or Bosch or Siemens	20	Nos
5	Addressable Manual Pull Stations or Manual Call Point (MCP) of action type with an integrally mounted addressable module that monitors and reports contact status.	Notifier or Bosch or Siemens	20	Nos
6	Analogue Addressable Control module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	6	Nos
7	Addressable power supply unit with battery backup for hooters with suitable MS enclosure	Notifier or Bosch or Siemens	1	Nos
В	CABLE & ACCESSORIES			

8	2c x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/ Polycab	6250	Mtr
9	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	Reputed	478	Nos
10	Glands for the Detector Back Box	Reputed	956	Nos
11	Telephone Dialler to integrate with FAS panel with Required cables	Reputed	1	Nos
12	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot
Α	PA System			
1	Supply, installation ,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , built in 500W ,input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. As per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's
2	Supply, installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, in case of CPU failure as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's
3	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98Db . Frequency response of 160Hz-20KHz. The speaker hould have tapping's at 15W/7.5W as per technical specification etc. as required.	Bosch/TSG/Ateis	117	No's
4	500W Amplifier	TSG	4	Nos
5	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	2965	Mtrs
6	Supply and Installation of 24U Rack for Keeping controller and Amplifier setup	Reputed	1	No's
7	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot
	TOTAL			

B. SUPPLY AND INSTALLATION OF FAS AND PASYSTEM CVH GUEST IISC BANGALORE-560012.

SI No	Item Description	Make & Model	Qty	Unit
Α	FIRE ALARM SYSTEM			
1	Addressable 4 Loop Fire Alarm Control panel (FACP) with battery back up for 48 hours normal operation and 30 minutes alarm operation. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual color coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10 th Edition requirement and FM approved. If the panel programming requires a dongle/key then the same shall be supplied along with the panel.	Notifier or Bosch or Siemens	1	Nos
2	Analogue Addressable Flash scan multi-sensing, low-profile detector(Acclimate type) having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bi-color LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm. Detector shall comply UL 268, 7 th edition requirements	Notifier or Bosch or Siemens	250	Nos
3	Analogue Addressable Heat Detector, White, low-profile intelligent rate-of- rise thermal sensor, Flash Scan Detector shall comply UL 268, 7 th edition requirements	Notifier or Bosch or Siemens	3	Nos
4	LPG Gas Leak detector	Notifier or Bosch or Siemens	2	Nos
5	Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.	Notifier or Bosch or Siemens	6	Nos
6	Addressable Hooter cum strobe unit as per NFPA, No external 3 rd party power supply shall be permitted. Vendor to include all accessories.	Notifier or Bosch or Siemens	37	Nos
7	Addressable Manual Pull Stations or Manual Call Point (MCP) of Single action type with an integrally mounted addressable module that monitors and reports contact status.	Notifier or Bosch or Siemens	37	Nos
8	Analogue Addressable Control module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	14	Nos
9	Analogue Addressable Monitor module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	2	Nos

10	Addressable power supply unit with battery backup for hooters with suitable MS enclosure	Notifier or Bosch or Siemens	2	Nos
В	CABLE & ACCESSORIES			
11	2c x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	6500	Mtr
12	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	Reputed	349	Nos
13	Glands for the Detector Back Box	Reputed	698	Nos
14	Telephone Dialler to integrate with FAS panel with Required cables	Reputed	1	Nos
15	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot
Α	PA System			
1	Supply, installation ,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. As per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's
2	Supply, installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, in case of CPU failure as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's
3	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98Db . Frequency response of 160Hz-20KHz. The speaker 28hould have tapping's at 15W/7.5W as per technical specification etc. as required.	Bosch/TSG/Ateis	93	No's
4	500W Amplifier	Bosch/TSG/Ateis	3	Nos
5	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	2596	Mtrs
6	Supply and Installation of 24U Rack for Keeping controller and Amplifier setup	Reputed	1	No's
7	Installation Supervision Programming Testing & Commissioning charges		1	Lot
	TOTAL			

C. SUPPLY AND INSTALLATION OF FAS AND PASYSTEM AT MAIN GUEST HOUSE- IISC BANGALORE-560012.

SI No	Item Description	Make & Model	Qty	Unit
Α	FIRE ALARM SYSTEM			
1	Addressable Single Loop Fire Alarm Control panel (FACP) with battery back up for 48 hours normal operation and 30 minutes alarm operation. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual colour coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10 th Edition requirement and FM approved. If the panel programming requires a dongle/key then the same shall be supplied along with the panel.	Notifier or Bosch or Siemens	1	Nos
2	Analogue Addressable Flash scan multi-sensing, low-profile detector(Acclimate type) having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bi-colour LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm. Detector shall comply UL 268, 7th edition requirements	Notifier or Bosch or Siemens	70	Nos
3	Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.	Notifier or Bosch or Siemens	4	Nos
4	Addressable Hooter cum strobe unit as per NFPA, No external 3 rd party power supply shall be permitted. Vendor to include all accessories.	Notifier or Bosch or Siemens	16	Nos
5	Addressable Manual Pull Stations or Manual Call Point (MCP) of Single action type with an integrally mounted addressable module that monitors and reports contact status.	Notifier or Bosch or Siemens	16	Nos
6	Analogue Addressable Control module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	5	Nos
7	Addressable power supply unit with battery backup for hooters with suitable MS enclosure	Notifier or Bosch or Siemens	1	Nos
В	CABLE & ACCESSORIES			
8	2c x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	3650	Mtr

9	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	Reputed	111	Nos
10	Glands for the Detector Back Box	Reputed	222	Nos
11	Telephone Dialler to integrate with FAS panel with Required cables	Reputed	1	Nos
12	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot
Α	PA System			
1	Supply,installation,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone, input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files,volume adjustment with digital volume control. As per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's
2	Supply,installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility,LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's
3	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98Db . Frequency response of 160Hz-20KHz. The speaker 30hould have tappings at 15W/7.5W as per technical specification etc. as required.	Bosch/TSG/Ateis	46	No's
4	500W Amplifier	Bosch/TSG/Ateis	2	Nos
5	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	1850	Mtrs
6	Supply and Installation of 12U Rack for Keeping controller and Amplifier setup	Reputed	1	No's
7	Installation Supervision Programming Testing & Commissioning charges		1	Lot
	TOTAL			

D. SUPPLY AND INSTALLATION OF FAS AND PASYSTEM AT DEPARTMENT OF MATERIAL ANNEX 2- IISC BANGALORE-560012.

SI No	Item Description	Make & Model	Qty	Unit
1	Microprocessor based UL listed 8 Zone conventional fire alarm control panel, the system has 16 X 2 LCD character, 8 zones detection circuit,3 common potential free contacts &2 common NAC sounder output, inbuilt Rs-485 for repeater connectivity, wall/ceiling mounted, Switch mode power supply- SMPS & Battery polarity & Deep discharge protection with Battery backup	Ravel /Cease Fire/Edward	1	Nos
2	Conventional UL Approved Multi sensor Detector, Dual LED's for 360° visibility, Advanced detection and communication protocol, Regular 100mm base, Operating Voltage 9 $^{\sim}$ 33V DC, Start-Up Current 120 Ma, Smoke Sensitivity (1.9 \pm 0.76) % / ft, Thermal Rating 59 °C (138 °F), Rate of Raise of Temp 11.1°C / min (20°F/min)	Ravel /Cease Fire/Edward	8	Nos
3	Conventional UL Approved Heat Detector, is a fixed cum rate of rise heat detector using a thermistor. These detectors will raise an alarm when the detector O reaches 59 C(Fixed) or when the change in temperature exceeds O the rate of rise of 11 C / min	Ravel /Cease Fire/Edward	2	Nos
4	Hooter cum Strobe, Sound Level 88 db +/- 5Db @ 30cm, Tone Type 1. Ambulance 2. Police car 3. Fire Engine, Operating Temperature - 10 to 500C,	Ravel /Cease Fire/Edward	4	Nos
5	Conventional Manual Call Point, Alarm status is indicated By Red colour LED, Operates on 24 VDC, 1 No's of CO & NC Output (Optional), IP-50 IP Rating, Operating Current 30Ma	Ravel /Cease Fire/Edward	4	Nos
6	UL Listed Control Module to integrate with Conventional Audible devices like Sounder, Sounder cum strobe, strobe, bell etc., Also having supervisory features for NAC circuit as well as the power supply input. Capable to connect multiple notification devices in single module having RED coloured LED for status indications with 8 digit Dip switch for address settings.	Ravel /Cease Fire/Edward	1	Nos
7	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	250	Mtrs
8	Installation Supervision Programming Testing & Commissioning charges		1	Lot
	TOTAL			

E. SUPPLY AND INSTALLATION OF FAS AND PASYSTEM AT DEPARTMENT OF AEROSPACE SCRAM JET FACILITY - IISC BANGALORE-560012.

		Make & Model	Qty	Unit
1	Microprocessor based UL listed 8 Zone conventional fire alarm control panel, the system has 16 X 2 LCD character, 8 zones detection circuit,3 common potential free contacts &2 common NAC sounder output, inbuilt Rs-485 for repeater connectivity, wall/ceiling mounted, Switch mode power supply- SMPS & Battery polarity & Deep discharge protection with Battery backup	Ravel /Cease Fire/Edward	1	Nos
2	Conventional UL Approved Multi sensor Detector, Dual LED's for 360° visibility, Advanced detection and communication protocol, Regular 100mm base, Operating Voltage 9 $^{\sim}$ 33V DC, Start-Up Current 120 Ma, Smoke Sensitivity (1.9 \pm 0.76) % / ft, Thermal Rating 59 °C (138 °F), Rate of Raise of Temp 11.1°C / min (20°F/min)	Ravel /Cease Fire/Edward	4	Nos
3	Conventional UL Approved Heat Detector, is a fixed cum rate of rise heat detector using a thermistor. These detectors will raise an alarm when the detector O reaches 59 C(Fixed) or when the change in temperature exceeds O the rate of rise of 11 C / min	Ravel /Cease Fire/Edward	17	Nos
4	Hooter cum Strobe, Sound Level 88 db +/- 5Db @ 30cm, Tone Type 1. Ambulance 2. Police car 3. Fire Engine, Operating Temperature - 10 to 500C,	Ravel /Cease Fire/Edward	7	Nos
5	Conventional Manual Call Point, Alarm status is indicated By Red colour LED, Operates on 24 VDC, 1 No's of CO & NC Output (Optional), IP-50 IP Rating, Operating Current 30Ma	Ravel /Cease Fire/Edward	7	Nos
6	UL Listed Control Module to integrate with Conventional Audible devices like Sounder, Sounder cum strobe, strobe, bell etc., Also having supervisory features for NAC circuit as well as the power supply input. Capable to connect multiple notification devices in single module having RED coloured LED for status indications with 8 digit Dip switch for address settings.	Ravel /Cease Fire/Edward	2	Nos
7	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	1950	Mtrs
8	Installation Supervision Programming Testing & Commissioning charges		1	Lot
	TOTAL			

F. SUPPLY AND INSTALLATION OF FAS AND PASYSTEM AT DEPARTMENT OF PHYISCAL SCIENCE (A, B, C & D Wings) - IISC BANGALORE-560012.

SI No	Item Description	Make & Model	Qty	Unit
1	Addressable 4 Loop Fire Alarm Control panel (FACP) with battery back up for 48 hours normal operation and 30 minutes alarm operation. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual colour coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10 th Edition requirement and FM approved. If the panel programming requires a dongle/key then the same shall be supplied along with the panel.	Notifier or Bosch or Siemens	1	Nos
2	Analogue Addressable Flash scan multi-sensing, low-profile detector(Acclimate type) having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bicolour LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm. Detector shall comply UL 268, 7 th edition requirements	Notifier or Bosch or Siemens	320	Nos
3	XCD Gas Detector, 4 to 20 Ma output, UL/c-UL/INMETRO, 2 x ¾" NPT entries, painted 316SS, includes catalytic sensor cartridge 0 to 100%LEL, user selectable FSD between 20% and 100%LEL (10%LEL resolution), includes nylon weather protection and considered necessary addressable module	Notifier or Bosch or Siemens	2	Nos
4	Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.	Notifier or Bosch or Siemens	17	Nos
5	Addressable Hooter cum strobe unit as per NFPA, No external 3 rd party power supply shall be permitted. Vendor to include all accessories.	Notifier or Bosch or Siemens	52	Nos
6	Addressable Manual Pull Stations or Manual Call Point (MCP) of action type with an integrally mounted addressable module that monitors and reports contact status.	Notifier or Bosch or Siemens	52	Nos
7	Analogue Addressable Control module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	18	Nos
8	Analogue Addressable Control relay module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	2	Nos

8	Addressable power supply unit with battery backup for hooters with suitable MS enclosure	Notifier or Bosch or Siemens	4	Nos
В	CABLE & ACCESSORIES			
9	2c x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	8600	Mtr
10	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	Reputed	110	Nos
11	Glands for the Detector Back Box	Reputed	320	Nos
12	Telephone Dialler to integrate with FAS panel with Required cables	Reputed	1	Nos
13	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot
Α	PA System			
1	Supply, installation ,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , built in 500W ,input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. As per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's
2	Supply, installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, in case of CPU failure as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's
3	Supply, Installation, Testing & Commissioning of 6Watts Ceiling Mount speaker with max SPL1M/1W 98Db . Frequency response of 160Hz-20KHz. The speaker 34should have tapping's at 6/3W as per technical specification with necessary back box	Bosch/TSG/Ateis	151	No's
4	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98Db . Frequency response of 160Hz-20KHz. The speaker 34should have tapping's at 15W/7.5W as per technical specification etc. as required.	Bosch/TSG/Ateis	110	No's
5	500W Amplifier	Bosch/TSG/Ateis	6	Nos
6	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	2965	Mtrs
7	Supply and Installation of 24U Rack for Keeping controller and Amplifier setup	Reputed	1	No's
8	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot
	TOTAL			

G. SUPPLY AND INSTALLATION OF FAS AND PASYSTEM AT CULA LABS - IISC BANGALORE-560012.

SI No	Item Description	Mke & Model	Qty	Unit
Α	CONVENTIONAL FIRE ALARM SYSTEM			
1	Microprocessor based UL listed 8 Zone conventional fire alarm control panel, the system has 16 X 2 LCDcharacter, 8 zones detection circuit,3 common potential free contacts &2 common NAC sounder output, inbuilt Rs-485 for repeater connectivity,bwall/ceiling mounted, Switch mode power supply-SMPS & Battery polarity & Deep discharge protection with Battery backup	Ravel /Cease Fire/Edward	1	Nos
2	Conventional UL Approved Multi sensor Detector, Dual LED's for 360° visibility, Advanced detection and communication protocol, Regular 100mm base, Operating Voltage 9 $^{\sim}$ 33V DC, Start-Up Current 120 Ma, Smoke Sensitivity (1.9 \pm 0.76) % / ft, Thermal Rating 59 °C (138 °F), Rate of Raise of Temp 11.1°C / min (20°F/min)	Ravel /Cease Fire/Edward	29	Nos
3	Hooter cum Strobe, Sound Level 88 db +/- 5dB @ 30cm, Tone Type 1. Ambulance 2. Police car 3. Fire Engine, Operating Temperature - 10 to 50OC,	Ravel /Cease Fire/Edward	5	Nos
4	Conventional Manual Call Point, Alarm status is indicated By Red colour LED, Operates on 24 VDC, 1 No's of CO & NC Output (Optional), IP-50 IP Rating, Operating Current 30mA	Ravel /Cease Fire/Edward	3	Nos
В	CABLE & ACCESSORIES			
1	$2c \times 1.5 \text{ sq. mm}$, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	1250	Mtr
2	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	T Reputed 1		Nos
3	Glands	Reputed	50	Nos
4	2 Inch FRLS Casing and capping Jointing accessories	Reputed	1	Lot
5	2 Inch FRLS Casing and capping	Reputed	100	Mtr
6	50X50 truffe for cabling	Reputed	100	Mtr
7	Telephone Dialer to integrate with FAS panel with Required cables	Reputed	1	Nos
С	SERVICE - FAS			
1	Supervision, programming, Drawing charges, Testing & Commissioning and Ladder(18 to 18 feet) charges		1	Lot
D	PA System			
1	Supply,installation ,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , built in 500W ,input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files,volume adjustment with digital volume control. as per technical specification etc. as required.	TSG CRP-500Z12	1	No's
2	Supply,installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility,LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required.	TSG CRP-CS12	1	No's

	TOTAL			
1	Supervision, programming, testing and Drawing preparation Charges		1	Lot
E	SERVICE - PAS			
6	Supply and Installation of 12U Rack for Keeping controller and Amplifier setup	Reputed	1	No's
5	2 Inch FRLS Casing and capping	Reputed	100	Mtr
4	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	100	Mtrs
3	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB . Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required.		6	No's

The format for submitting the financial bid is given below.

	SUPPLY AND INSTALLATION C	F FAS AND PA SYSTEM F	OR LIBE	RARY(Fo	or IISC Bangalore ba	asis in INR Only)		
SI	Mana Dagarinkian	Males O Madal	Otro	Unit	SUPPLY	IN INR	INSTALLA	TION IN INR
No	Item Description	Make & Model	Qty	Unit	Unit Rate	Amount	Unit Rate	Amount
1	Addressable 4 Loop Fire Alarm Control panel (FACP) with battery back up for 48 hours normal operation and 30 minutes alarm operation. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual colour coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10 th Edition requirement and FM approved. If the panel programming requires a dongle/key then the same shall be supplied along with the panel.	Notifier or Bosch or Siemens	1	Nos				
2	Analogue Addressable Flash scan multi-sensing, low-profile detector(Acclimate type) having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bi-colour LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm. Detector shall comply UL 268, 7th edition requirements	Notifier or Bosch or Siemens	411	Nos				
3	Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.	Notifier or Bosch or Siemens	21	Nos				
4	Addressable Hooter cum strobe unit as per NFPA, No external 3 rd party power supply shall be permitted. Vendor to include all accessories.	Notifier or Bosch or Siemens	20	Nos				
5	Addressable Manual Pull Stations or Manual Call Point (MCP) of action type with an integrally mounted addressable module that monitors and reports contact status.	Notifier or Bosch or Siemens	20	Nos				
6	Analogue Addressable Control module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	6	Nos				

7	Addressable power supply unit with battery backup for hooters with suitable MS enclosure	Notifier or Bosch or Siemens	1	Nos		
В	CABLE & ACCESSORIES					
8	2c x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	5850	Mtr		
9	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	Reputed	478	Nos		
10	Glands for the Detector Back Box	Reputed	956	Nos		
11	Telephone Dialler to integrate with FAS panel with Required cables	Reputed	1	Nos		
12	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot		
Α	PA System					
1	Supply, installation ,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , built in 500W ,input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. As per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's		
2	Supply, installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, in case of CPU failure as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's		
3	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98Db . Frequency response of 160Hz-20KHz. The speaker 38should have tapping's at 15W/7.5W as per technical specification etc. as required.	Bosch/TSG/Ateis	117	No's		
4	500W Amplifier	Bosch/TSG/Ateis	4	Nos		
5	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	2965	Mtrs		
6	Supply and Installation of 24U Rack for Keeping controller and Amplifier setup	Reputed	1	No's		
7	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot		
	TOTAL					

	SUPPLY AND INSTALLATION OF FAS AND	PASYSTEM FOR CHV GUE	ST(For	IISC Ba	angalore basis	in INR Only)		
SI	Item Description	Make & Model	Qty	Unit	SUP	PLY IN INR	INSTALLA	TION IN INR
No	·	IVIARE & IVIOUEI	Qty	Oilit	Unit Rate	Amount	Unit Rate	Amount
Α	FIRE ALARM SYSTEM							
1	Addressable 4 Loop Fire Alarm Control panel (FACP) with battery back up for 48 hours normal operation and 30 minutes alarm operation. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual colour coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10th Edition requirement and FM approved. If the panel programming requires a dongle/key then the same shall be supplied along with the panel.	Notifier or Bosch or Siemens	1	Nos				
2	Analogue Addressable Flash scan multi-sensing, low-profile detector(Acclimate type) having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bi-colour LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm. Detector shall comply UL 268, 7th edition requirements	Notifier or Bosch or Siemens	250	Nos				
3	Analogue Addressable Heat Detector, White, low-profile intelligent rate- of-rise thermal sensor, Flash Scan Detector shall comply UL 268, 7th edition requirements	Notifier or Bosch or Siemens	3	Nos				
4	LPG Gas Leak detector	Notifier or Bosch or Siemens	2	Nos				
5	Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.	Notifier or Bosch or Siemens	6	Nos				

6	Addressable Hooter cum strobe unit as per NFPA, No external 3rd party power supply shall be permitted. Vendor to include all accessories.	Notifier or Bosch or Siemens	37	Nos		
7	Addressable Manual Pull Stations or Manual Call Point (MCP) of Single action type with an integrally mounted addressable module that monitors and reports contact status.	Notifier or Bosch or Siemens	37	Nos		
8	Analogue Addressable Control module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	14	Nos		
9	Analogue Addressable Monitor module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	2	Nos		
10	Addressable power supply unit with battery backup for hooters with suitable MS enclosure	Notifier or Bosch or Siemens	2	Nos		
В	CABLE & ACCESSORIES					
11	2c x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	6500	Mtr		
12	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	Reputed	349	Nos		
13	Glands for the Detector Back Box	Reputed	698	Nos		
14	Telephone Dialler to integrate with FAS panel with Required cables	Reputed	1	Nos		
15	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot		
Α	PA System					

1	Supply, installation, testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone, input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's		
2	Supply,installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility,LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's		
3	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB . Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required.	Bosch/TSG/Ateis	93	No's		
4	500W Amplifier	Bosch/TSG/Ateis	3	Nos		
5	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	2596	Mtrs		
6	Supply and Installation of 24U Rack for Keeping controller and Amplifier setup	Reputed	1	No's		
7	Installation Supervision Programming Testing & Commissioning charges		1	Lot		
	TOTAL					

	SUPPLY AND INSTALLATION OF FAS AND	PASYSTEM FOR MAIN G	UEST(Fo	r IISC Ba	angalore basis	s in INR Only)		
SI		Make & Model		Unit		PLY IN INR	INSTALLA	TION IN INR
No	Item Description	iviake & iviodei	Qty	Unit	Unit Rate	Amount	Unit Rate	Amount
Α	FIRE ALARM SYSTEM							
1	Addressable Single Loop Fire Alarm Control panel (FACP) with battery back up for 48 hours normal operation and 30 minutes alarm operation. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual color coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10th Edition requirement and FM approved. If the panel programming requires a dongle/key then the same shall be supplied along with the panel.	Notifier or Bosch or Siemens	1	Nos				
2	Analogue Addressable Flash scan multi-sensing, low-profile detector(Acclimate type) having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bi-color LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm. Detector shall comply UL 268, 7th edition requirements	Notifier or Bosch or Siemens	70	Nos				
3	Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.	Notifier or Bosch or Siemens	4	Nos				
4	Addressable Hooter cum strobe unit as per NFPA,No external 3rd party power supply shall be permitted. Vendor to include all accessories.	Notifier or Bosch or Siemens	16	Nos				
5	Addressable Manual Pull Stations or Manual Call Point (MCP) of Single action type with an integrally mounted addressable module that monitors and reports contact status.	Notifier or Bosch or Siemens	16	Nos				
6	Analogue Addressable Control module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	5	Nos				

8 CABLE & ACCESSORIES 8 2 x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables. 9 Metal type 4 modules back box for installing the Detectors, MCP and Hooters 10 Glands for the Detector Back Box Reputed 11 Nos 12 Installation Supervision Programming Testing & Commissioning charges Reputed 1 Nos 12 Installation Supervision Programming Testing & Commissioning charges Reputed 1 Lot 1 Lot A PA System Supply, Installation testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone, injury port of emergency microphone on the front panel, must os selected adjustment with digital volume control. as per technical specification etc. as required. Supply, Installation, testing & Commissioning of Voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Complete as required, levely PTS with, selectable gain, spech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, levely many proposed proposed intelligibility, LED indication for zone selection complete as required, levely many proposed proposed filter and limiter for improved intelligibility, LED indication for zone selection complete as required, levely proposed polyass controller, incase of CPU failure as per technical specification etc. as required. 8 bosch/TSG/Ateis 46 No's 1 No's 1 No's 8 bosch/TSG/Ateis 46 No's 8 bosch/TSG/Ateis 50 No's	7	Addressable power supply unit with battery backup for hooters with suitable MS enclosure	Notifier or Bosch or Siemens	1	Nos		
Supply.installation , testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone, input port of emergency microphone or the front panel, music to selected and an All-Eali-Mey, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility.LED indication for zone selection complete as required. Supply, installation, testing & Commissioning of Voice Alarm Cantroller with Expander / Router having features like announcement to 12 zone, input port of emergency microphone on the front panel, music to selected and an All-Eali-Mey, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility.LED indication for zone selection complete as required. Supply, installation, testing & Commissioning of Voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection keys and an All-Eali-Mey, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility.LED indication for zone selection complete as required. Bosch/TSG/Ateis Supply, installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPLIM/IW 98dB , Frequency response of 16OHz-ZOKHIZ. The speaker with max SPLIM/IW 98dB , Frequency response of 16OHz-ZOKHIZ. The speaker should have tappings at 15W/7.5W as per technical specification etc. as required.	В	CABLE & ACCESSORIES					
Hooters Reputed 222 Nos Reputed 222 Nos Telephone Dialler to integrate with FAS panel with Required cables Reputed 1 Nos Installation Supervision Programming Testing & Commissioning charges Reputed 1 Nos Reputed 1 Nos Reputed 1 Nos PA System Supply, installation , testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone, input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files yolume adjustment with digital volume control. as per technical specification etc. as required. Supply, installation , testing & Commissioning of Voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-call-key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required. Supply, installation, Testing & Commissioning of 15Watts Wall Mount speece with max SPLIM/19W 98dB . Frequency response of 150Hz-20KHz. The speaker with max SPLIM/19W 98dB . Frequency response of 150Hz-20KHz. The speaker should have tappings at 15W/7.5W as per technical specification etc. as required.	8	·	Varsha/Polycab	3650	Mtr		
11 Telephone Dialler to integrate with FAS panel with Required cables Reputed 1 Nos	9		Reputed	111	Nos		
12 Installation Supervision Programming Testing & Commissioning charges Reputed 1 Lot A PA System Supply, installation , testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone, input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. as per technical specification etc. as required. Supply, installation , testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required. Supply, Installation, Testing & Commissioning of 15Watts Wall Mount, Speaker with max SPL1M/1W 98dB. Frequency response of 16OHz-2OKHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required. Bosch/TSG/Ateis 46 No's	10	Glands for the Detector Back Box	Reputed	222	Nos		
A PA System Supply, installation , testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. as per technical specification etc. as required. Supply, installation , testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an AII-Call-Key, PTT Switch, Selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required. Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB. Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required. Bosch/TSG/Ateis 46 No's	11	Telephone Dialler to integrate with FAS panel with Required cables	Reputed	1	Nos		
Supply, installation , testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. as per technical specification etc. as required. Supply, installation , testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required. Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB. Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required. Bosch/TSG/Ateis 1 No's Bosch/TSG/Ateis 46 No's	12	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot		
Supply, installation , testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. as per technical specification etc. as required. Supply, installation , testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required. Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB. Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required. Bosch/TSG/Ateis 1 No's Bosch/TSG/Ateis 46 No's							
with Expander / Router having features like announcement to 12 zone , input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. as per technical specification etc. as required. Supply, installation , testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required. Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB . Frequency response of 16OHz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required. Bosch/TSG/Ateis 1 No's 1	Α	PA System					
having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility, LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required. Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB. Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required. Bosch/TSG/Ateis No's No's	1	with Expander / Router having features like announcement to 12 zone, input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files, volume adjustment with digital volume control. as per technical specification etc.	Bosch/TSG/Ateis	1	No's		
speaker with max SPL1M/1W 98dB . Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required. Bosch/TSG/Ateis Hoo's No's	2	having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility,LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure	Bosch/TSG/Ateis	1	No's		
4 500W Amplifier Bosch/TSG/Ateis 2 Nos	3	speaker with max SPL1M/1W 98dB . Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical	Bosch/TSG/Ateis	46	No's		
	4	500W Amplifier	Bosch/TSG/Ateis	2	Nos		

5	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	1850	Mtrs		
6	Supply and Installation of 12U Rack for Keeping controller and Amplifier setup	Reputed	1	No's		
7	Installation Supervision Programming Testing & Commissioning charges		1	Lot		
	TOTAL					

	SUPPLY AND INSTALLATION OF FAS FO	OR MATERIAL ANN	EX 2 (F	or IISC I	Bangalore bas	is in INR Only)		
SI	there Describelies	84-l O 84-d-l	Ot-	11!4	SUPPI	Y IN INR	INSTALLA	TION IN INR
No	Item Description	Make & Model	Qty	Unit	Unit Rate	Amount	Unit Rate	Amount
1	Microprocessor based UL listed 8 Zone conventional fire alarm control panel, the system has 16 X 2 LCDcharacter, 8 zones detection circuit,3 common potential free contacts &2 common NAC sounder output, inbuilt Rs-485 for repeater connectivity,bwall/ceiling mounted, Switch mode power supply- SMPS & Battery polarity & Deep discharge protection with Battery backup	Ravel/Cease fire/Edward	1	Nos				
2	Conventional UL Approved Multi sensor Detector, Dual LED's for 360° visibility, Advanced detection and communication protocol, Regular 100mm base, Operating Voltage 9 $^{\sim}$ 33V DC, Start-Up Current 120 Ma, Smoke Sensitivity (1.9 \pm 0.76) % / ft, Thermal Rating 59 °C (138 °F), Rate of Raise of Temp 11.1°C / min (20°F/min)	Ravel/Cease fire/Edward	8	Nos				
3	Conventional UL Approved Heat Detector, is a fixed cum rate of rise heat detector using a thermistor. These detectors will raise an alarm when the detector O reaches 59 C(Fixed) or when the change in temperature exceeds O the rate of rise of 11 C / min	Ravel/Cease fire/Edward	2	Nos				
4	Hooter cum Strobe, Sound Level 88 db +/- 5dB @ 30cm, Tone Type 1. Ambulance 2. Police car 3. Fire Engine, Operating Temperature - 10 to 50OC,	Ravel/Cease fire/Edward	4	Nos				
5	Conventional Manual Call Point, Alarm status is indicated By Red colour LED, Operates on 24 VDC, 1 No's of CO & NC Output (Optional), IP-50 IP Rating, Operating Current 30mA	Ravel/Cease fire/Edward	4	Nos				

6	UL Listed Control Module to integrate with Conventional Audible devices like Sounder, Sounder cum strobe, strobe, bell etc., Also having supervisory features for NAC circuit as well as the power supply input. Capable to connect multiple notification devices in single module having RED colored LED for status indications with 8 digit Dip switch for address settings.	Ravel/Cease fire/Edward	1	Nos		
7	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	250	Mtrs		
8	Installation Supervision Programming Testing & Commissioning charges		1	Lot		
	TOTAL					

	SUPPLY AND II	NSTALLATION OF F	AS FOR	SCRAN	1 JET (For IISC Bangal	ore basis in INR O	nly)	
SI					SUPPLY	N INR	INSTALLA	TION IN INR
No	Item Description	Make & Model	Qty	Unit	Unit Rate	Amount	Unit Rate	Amount
1	Microprocessor based UL listed 8 Zone conventional fire alarm control panel, the system has 16 X 2 LCD character, 8 zones detection circuit,3 common potential free contacts &2 common NAC sounder output, inbuilt Rs-485 for repeater connectivity ,bwall/ceiling mounted, Switch mode power supply-SMPS & Battery polarity & Deep discharge protection with Battery backup	Ravel/Cease fire/Edward	1	Nos				
2	Conventional UL Approved Multi sensor Detector, Dual LED's for 360° visibility, Advanced detection and communication protocol, Regular 100mm base, Operating Voltage 9 $^{\sim}$ 33V DC, Start-Up Current 120 Ma, Smoke Sensitivity (1.9 \pm 0.76) % / ft, Thermal Rating 59 °C (138 °F), Rate of Raise of Temp 11.1°C / min (20°F/min)	Ravel/Cease fire/Edward	4	Nos				
3	Conventional UL Approved Heat Detector, is a fixed cum rate of rise heat detector using a thermistor. These detectors will raise an alarm when the detector O reaches 59 C(Fixed) or when the change in temperature exceeds O the rate of rise of 11 C / min	Ravel/Cease fire/Edward	17	Nos				
4	Hooter cum Strobe, Sound Level 88 db +/- 5dB @ 30cm, Tone Type 1. Ambulance 2. Police car 3. Fire Engine, Operating Temperature - 10 to 50OC,	Ravel/Cease fire/Edward	7	Nos				
5	Conventional Manual Call Point, Alarm status is indicated By Red colour LED, Operates on 24 VDC, 1 No's of CO & NC Output (Optional), IP-50 IP Rating, Operating Current 30mA	Ravel/Cease fire/Edward	7	Nos				
6	UL Listed Control Module to integrate with Conventional Audible devices like Sounder, Sounder cum strobe, strobe, bell etc., Also having supervisory features for NAC circuit as well as the power supply input. Capable to connect multiple notification devices in single module having RED coloured LED for status indications with 8 digit Dip switch for address settings.	Ravel/Cease fire/Edward	2	Nos				

7	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	1950	Mtrs		
8	Installation Supervision Programming Testing & Commissioning charges		1	Lot		
	TOTAL					

	SUPPLY AND INSTALLATION OF FAS AND PA SYSTEM FOR PHYSICAL SCIENCE (A,B,C &D Wing) DEPARTMENT BUILDING (For IISC Bangalore basis in INR Only)								
SI						PLY IN INR	INSTALLATION IN INR		
No	Item Description	Make & Model	Qty	Unit	Unit Rate	Amount	Unit Rate	Amount	
1	Addressable 4 Loop Fire Alarm Control panel (FACP) with battery back up for 48 hours normal operation and 30 minutes alarm operation. It shall include a full featured operator interface control and annunciation panel having liquid crystal display, individual colour coded system showing the status through LEDs, and a alphanumeric keypad for the field programming and control of the fire alarm system. The panel including enclosure shall be UL listed complying to UL 864, 10th Edition requirement and FM approved. If the panel programming requires a dongle/key then the same shall be supplied along with the panel.	Notifier or Bosch or Siemens	1	Nos					
2	Analogue Addressable Flash scan multi-sensing, low-profile detector(Acclimate type) having Rotary, decimal addressing system with standard base, junction box and other accessories as required. The detector shall be with Visible bicolour LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm. Detector shall comply UL 268, 7th edition requirements	Notifier or Bosch or Siemens	320	Nos					
3	XCD Gas Detector, 4 to 20 mA output, UL/c-UL/INMETRO, 2 x 3/4" NPT entries, painted 316SS, includes catalytic sensor cartridge 0 to 100%LEL, user selectable FSD between 20% and 100%LEL (10%LEL resolution), includes nylon weather protection and considered necessary addressable module	Notifier or Bosch or Siemens	2	Nos					
4	Analogue addressable Fault isolator module capable of monitoring shorted loop circuit and automatically restore communications when shorted conditions are corrected. Module shall be with back box, LED indication and other accessories all complete as required. It shall work on suitable DC voltage.	Notifier or Bosch or Siemens	17	Nos					

5	Addressable Hooter cum strobe unit as per NFPA, No external 3rd party power supply shall be permitted. Vendor to include all accessories.	Notifier or Bosch or Siemens	52	Nos	
6	Addressable Manual Pull Stations or Manual Call Point (MCP) of action type with an integrally mounted addressable module that monitors and reports contact status.	Notifier or Bosch or Siemens	52	Nos	
7	Analogue Addressable Control module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	18	Nos	
8	Analogue Addressable Control relay module having Rotary, decimal addressing system and shall be capable of providing DPDT contact rated at 24v DC, 2A	Notifier or Bosch or Siemens	2	Nos	
8	Addressable power supply unit with battery backup for hooters with suitable MS enclosure	Notifier or Bosch or Siemens	4	Nos	
В	CABLE & ACCESSORIES				
9	2c x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	8600	Mtr	
10	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	Reputed	110	Nos	
11	Glands for the Detector Back Box	Reputed	320	Nos	
12	Telephone Dialler to integrate with FAS panel with Required cables	Reputed	1	Nos	
13	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot	
_	DA Custom				
Α	PA System Supply installation testing & Commissioning of				+
1	Supply,installation ,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , built in 500W ,input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files,volume adjustment with digital volume control. as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's	

2	Supply,installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility,LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's		
3	Supply, Installation, Testing & Commissioning of 6Watts Ceiling Mount speaker with max SPL1M/1W 98dB . Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 6/3W as per technical specification with necessary back box	Bosch/TSG/Ateis	151	No's		
4	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB . Frequency response of 160Hz-20KHz. The speaker shoud have tappings at 15W/7.5W as per technical specification etc. as required.	Bosch/TSG/Ateis	110	No's		
5	500W Amplifier	Bosch/TSG/Ateis	6	Nos		
6	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	2965	Mtrs		
7	Supply and Installation of 24U Rack for Keeping controller and Amplifier setup	Reputed	1	No's		
8	Installation Supervision Programming Testing & Commissioning charges	Reputed	1	Lot		
	TOTAL					

SUPPLY AND INSTALLATION OF FAS FOR CULA LAB Buildings								
SI	Harry Description	Bales O Bassisi	04	11	SUPPLY IN INR		INSTALLATION IN INR	
No	Item Description	Mke & Model	Qty	Unit	Unit Rate	Amount	Unit Rate	Amount
Α	CONVENTIONAL FIRE ALARM SYSTEM							
1	Microprocessor based UL listed 8 Zone conventional fire alarm control panel, the system has 16 X 2 LCDcharacter, 8 zones detection circuit,3 common potential free contacts &2 common NAC sounder output, inbuilt Rs-485 for repeater connectivity,bwall/ceiling mounted, Switch mode power supply-SMPS & Battery polarity & Deep discharge protection with Battery backup	Ravel/Cease fire/Edward	1	Nos				
2	Conventional UL Approved Multi sensor Detector, Dual LED's for 360° visibility, Advanced detection and communication protocol, Regular 100mm base, Operating Voltage 9 $^{\sim}$ 33V DC, Start-Up Current 120 Ma, Smoke Sensitivity (1.9 \pm 0.76) % / ft, Thermal Rating 59 °C (138 °F), Rate of Raise of Temp 11.1°C / min (20°F/min)	Ravel/Cease fire/Edward	29	Nos				
3	Hooter cum Strobe, Sound Level 88 db +/- 5dB @ 30cm, Tone Type 1. Ambulance 2. Police car 3. Fire Engine, Operating Temperature - 10 to 50OC,	Ravel/Cease fire/Edward	5	Nos				
4	Conventional Manual Call Point, Alarm status is indicated By Red colour LED, Operates on 24 VDC, 1 No's of CO & NC Output (Optional), IP-50 IP Rating, Operating Current 30mA	Ravel/Cease fire/Edward	3	Nos				
В	CABLE & ACCESSORIES							
1	2c x 1.5 sq. mm, PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	1250	Mtr				-
2	Metal type 4 modules back box for installing the Detectors, MCP and Hooters	Reputed	37	Nos				-
3	Glands	Reputed	50	Nos				
4	2 Inch FRLS Casing and capping Jointing accessories	Reputed	1	Lot				-
5	2 Inch FRLS Casing and capping	Reputed	100	Mtr				-
6	50X50 truffe for cabling	Reputed	100	Mtr				-
7	Telephone Dialer to integrate with FAS panel with Required cables	Reputed	1	Nos				
С	SERVICE - FAS							
1	Supervision, programming, Drawing charges, Testing & Commissioning and Ladder(18 to 18 feet) charges		1	Lot		-		
D	PA System							

1	Supply,installation ,testing & Commissioning of Voice Alarm Controller with Expander / Router having features like announcement to 12 zone , built in 500W ,input port of emergency microphone on the front panel, music to selected zones can be played, built in 1 GB memory for audio files,volume adjustment with digital volume control. as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's		-
2	Supply,installation ,testing & Commissioning of voice Alarm Call Station having gooseneck condenser Microphone with 12 zone Selection Keys and an All-Call-Key, PTT Switch, selectable gain, speech filter and limiter for improved intelligibility,LED indication for zone selection complete as required, Emergency Microphone bypass controller, incase of CPU failure as per technical specification etc. as required.	Bosch/TSG/Ateis	1	No's		-
3	Supply, Installation, Testing & Commissioning of 15Watts Wall Mount speaker with max SPL1M/1W 98dB . Frequency response of 160Hz-20KHz. The speaker should have tappings at 15W/7.5W as per technical specification etc. as required.	Bosch/TSG/Ateis	3	No's		-
4	2c x 1.5 sq. mm, twisted pair PVC insulated FRLS copper armoured conductor multi core cables.	Varsha/Polycab	800	Mtrs		-
5	2 Inch FRLS Casing and capping	Reputed	100	Mtr		
6	Supply and Installation of 12U Rack for Keeping controller and Amplifier setup	Reputed	1	No's		-
E	SERVICE - PAS					
1	Supervision, programming, testing and Drawing preparation Charges		1	Lot		
	TOTAL					
	GRAND TOTAL OF ALL BOQs (Exc GST)					
	Total GST Value@18%					
	NET TOTAL OF ALL BOQs INCLUDING GST					

Note: Material supply follows BOQs, while installation quantities follow Table A-G (Section 9.1). BOQ quantities are lower due to existing stock

9.2 Annexure D: Format for Performance Bank Guarantee
To be submitted by the successful bidders after placement of the purchase order.

Annexure-D
To
The Registrar, Indian Institute of Science (IISc), Bangalore – 560 012, Karnataka India

Subject: Performance Bank Guarantee (PBG)

Reference: IISc Purchase Order No.______, dated ______

Dear Sir,

We hereby issue a Bank Guarantee as follows: -Bank Guarantee No. :_____

Amount of Guarantee Rs :_____ Date :_____

Guarantee covers from :______ To_____ Last Date for Lodgment of claim :______

This deed of guarantee executed by the **[Name of Bank]** having its Central Office at **[location]** and amongst other places a branch at **[local branch location]** (hereinafter referred to as "The Bank") in favor of The Registrar, Indian Institute of Science, Bangalore – 560 012 (hereinafter referred to as IISc) for an amount of not exceeding Rs. **[Amount]** (Rupees **[Amount in words]** only) at the request of M/s **[Vendor]** (hereinafter referred to as "Supplier").

IISc has entered into an agreement with Vendor; vide IISc Purchase Order No. [PO Number] dated [date] with vendor to carry out Annual maintenance contract of fire hydrant and sprinkler system at Indian Institute of Science, Bangalore as per their above order, the Supplier agreed to execute a Bank Guarantee for 3 % of the total order value viz. Rs. [Amount] (Rupees [Amount in words] only) towards performance Security / performance guarantee obligation for a period of 1 years from [start date] to [end date]

We, the [Bank Name], [Branch] (hereinafter referred to as a Guarantor) at the request of the supplier, irrevocably undertake to indemnify and to keep indemnify IISc, without any demur to the extent of Rs. [Amount] (Rupees [Amount in words] only) in the event of the aforesaid Supplier failing to comply the Warranty / contractual Obligations as per the agreed terms to the full satisfaction of the Company as mentioned in the IISc. Purchase order.

The Guarantor guarantees that in the event of the said Supplier failing to abide by any of the conditions referred in tender document / purchase order/ performance of the equipment / Machinery / service, etc. this Bank shall pay to Indian Institute of Science, Bangalore on demand and without protest or demur Rs. [Amount] (Rupees [Amount in words] only).

Guarantor, further agrees that the guarantee herein contained shall remain in full force and affect

during the period that would be taken for the performance of the equipment and / or services as stated in the Purchase Order issued by IISc and that it shall continue to be enforceable till the completion of the period and certified that warranty and contractual obligations have been fully carried out by the supplier and accordingly discharges the Guarantee subject. However, IISc shall have no right under after the expiry of the Guarantee on **[end date]**. Guarantor undertakes not to revoke this Guarantee, during its currency except with the previous consent of IISc. in writing.

Notwithstanding anything contained herein, the liability of the Guarantor under the Bank Guarantee shall not exceed Rs. [Amount] (Rupees [Amount in words] only). The guarantee shall remain in force until, unless a demand or claim under the guarantee is made on our Bank in writing on or before[end date] all your rights under the said guarantee be forfeited and we shall be relieved and discharged from all liabilities there under. Guarantor is liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if IISc serve upon us a written claim or demand on or before expiry of date,

i.e. **[end date]**. This Guarantor further agrees that the decision of Indian Institute of Science, Bangalore as to whether the said Supplier has committed a breach of any of the conditions referred in tender document

/ purchase order shall be final and binding. This Guarantor further agrees that the claims if any, against this Bank Guarantee shall be enforceable at branch office at [local branch location].

Details of the Guarantor are given below:

Name of the Bank	
Branch Name	
Branch Code	
IFSC Code	
E-mail Id	
Phone / Mobile No.	

Seal & Signature of the Bank