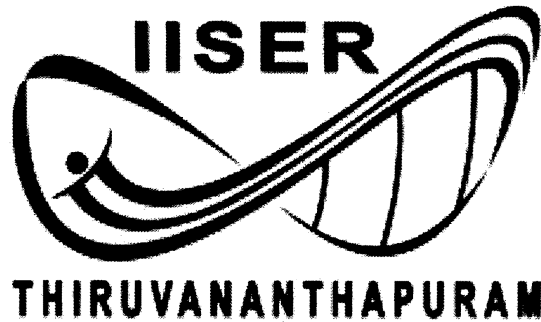


**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH**  
**THIRUVANANTHAPURAM (IISER TVM)**  
*(An Autonomous Institute under MHRD, Govt. of India)*



**TENDER DOCUMENT**

for

***AMC for Refilling of Fire Extinguisher at various locations at  
IISER Campus, Vithura Thiruvananthapuram***



Project Office, IISER TVM, Near Jersey Farm, Maruthamala.P.O., Vithura,  
Thiruvananthapuram-695 551, Kerala, India.  
Tel: +91 472-2815000, E-mail: [pe@iisertvm.ac.in](mailto:pe@iisertvm.ac.in)

**QUOTATION DOCUMENT**


Issued to:

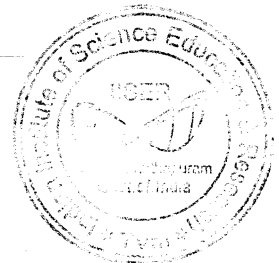
Sealed quotations are invited on behalf of the Director, IISER TVM and will be received in the Superintending Engineer, Estate & Engineering Project Office, IISER TVM Vithura campus from contractors / agencies having minimum three year experience in the relevant field for the following works at IISER TVM Vithura Campus, Thiruvananthapuram District, Kerala.

Name of Work	Estimated Cost
<i>AMC for Refilling of Fire Extinguisher at various locations at IISER Campus, Vithura Thiruvananthapuram.</i>	<b>₹1,36,668.00/-</b>

The filled & duly signed quotation documents which should always be placed in sealed cloth lined cover super-scribing the name of work will be received in the Office of the Superintending Engineer, Estate & Engineering Project Office, IISERTVM Maruthamala PO, Vithura, Thiruvananthapuram - 695551, Kerala, India before 3:30pm on ~~25~~ 25/09/2019 by post or by hand and the quotation will be opened at 4 pm on the same day by authorized officer of IISER TVM.

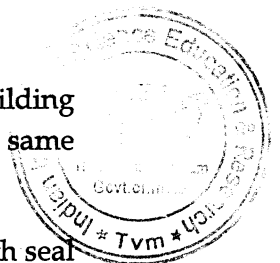
The offer for the work shall remain open for acceptance for a period of 60 days from the date of opening of tender and the work shall be completed within 365 days from the date of receipt of work order.

  
Superintending Engineer  
IISER TVM



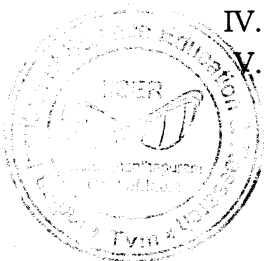
## GENERAL TERMS & CONDITIONS

1. Bidders should have furnish a completion certificate for at least one work preferably of similar nature and value not less than 80 % of the estimated cost during the last three year along with the offer.
2. Bidders are advised to go through the entire general terms and conditions of this tender carefully. The prices should be quoted in the format provided in Schedule of Quantities.
3. After taking prior permission, the contractor can visit the site and clarifications if any required can be had from the undersigned before submitting the quotes.
4. Unless otherwise specified, CPWD Specifications 2013 with up to date correction. Any additional item of work if taken up subsequently shall also conform to the relevant CPWD Specifications mentioned above and confirming to the latest Indian Standard (IS) codes of 14609, 15683, 4303, 4947, 2190, 2932, 15222, 2878, 940, 3203 . Should there be any difference between description of items as given in the schedule of quantities, nomenclature and specifications for individual items of work (special conditions) and IS Codes, work shall be got done in the following order of precedence:
  - i) Description of items as given in schedule of quantities.
  - ii) Special conditions and particular specifications.
  - iii) CPWD specifications.
  - iv) I.S. Codes.
  - v) NBC part 4 fire and safety.
  - vi) Decision of Engineer-in-charge.
5. Contractor has to arrange the transportation of all the materials including loading and unloading charges for refilling and bringing them back to IISERTVM including T&P such as ladders, cutter, Pressure gauge, machines, clamp meter, testing equipment etc. for the completion of work.
6. Record of refilling/installation of all fire extinguishers shall be created building wise and each fire extinguisher shall be numerically numbered and the same



shall be fixed at location as instructed by the Engineer in Charge (EIC). The contractor shall collect the extinguishers from the building for refilling and place it back in the same place shown by the EIC without any extra charges.

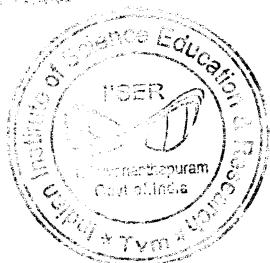
7. The following certificates shall be submitted for Supply/ refilling of extinguishers
  - i. Factory Test Report.
  - ii. BIS Standard Certificate
  - iii. Warranty Certificate
  - iv. ISO certificates
  - v. Test certificate of Dry chemical powder used.
8. All the numbered Fire extinguishers shall be recorded in a register clearly mentioning the Type of extinguisher, Net weight, Expiry date, Inspection, Maintenance, Recharging and Hydrostatic Testing etc. and to be submitted back as mentioned in Annexure-G of IS 2190:2010(latest) and the same shall be produced to E.I.C on demand.
9. The work shall be carried out in presence of The Engineer deputed by IISER TVM and the same shall be verified before going for refilling. Contractor must submit the certificate of quantity of Dry chemical powder used for refilling. All the expired Dry chemical powder /similar extinguishing agents shall be collected in presence of IISER Engineer. Relevant documents which shows the status of refilling/ installation of extinguishers shall be maintained by Contractor.
10. All the fire extinguisher shall be thoroughly checked for nozzles, port hole, vent hole, cap assembly, syphon tube, safety pin/clip, discharge pipe etc. and same shall be replaced with new one in addition to the missing components. —
11. Proper cleaning of interior and exterior of fire extinguisher should be done for the fire extinguisher mentioned by IISER Engineers, Which includes scrapping off the old paints and repainting and polishing the painted portion with wax polish, the brass/gun metal parts with metal polish, chromium plated parts with silver polish if needed, and plastic components to be thoroughly washed with soap solution and sun dried.
1. A small band 5% of surface area shall be painted before installing the extinguisher for distinguishing the different types.
  - I. Water - Red
  - II. Powder-Blue
  - III. Foam-Yellow
  - IV. CO<sub>2</sub> -Black
  - V. Clean Agent- Green.



12. Schedule for hydraulic pressure testing of fire extinguishers mentioned in the work order shall be done in accordance with annexure-e of IS:2190:2010.
13. Any damage occurred during the execution shall be rectified by the contractor at his own cost and material wastes occurred shall be neatly disposed.
14. The rate quoted are inclusive of all cost of materials, Tools/Equipments labour charges, conveyance to site, handling charges, scaffolding charges, loading and unloading charges, hiring charges, clearing of debris, lead, taxes, levies, octroi charges, training charges, delivery charges, installation charges and warranty charges etc. , and no extra claim shall be entertained.
15. IISER TVM reserves the right to accept or reject the Tender either partially or fully without assigning any reason what so ever.
16. The work should be carried out without causing any inconvenience to the public and shall ensure that no damages are caused to the existing site premises.
17. During the execution of work the contractor or authorized representative should be present at site.
18. The materials used shall be strictly as per specification and of good quality.
19. The Contractor has to arrange necessary insurance coverage for the machine, workmen etc. deployed by him. He shall arrange all safety measures to protect his workmen and also the properties of IISER TVM.
20. Penalty shall be imposed at 0.5% per week to a maximum of 5% of the contract value for any delay committed by the contractor in completing the work as per the order.



21. The Quantity shown in the schedule is an approximate estimated quantity. Payable amount would be calculated as per the actual measurement of the entire items at the time of installation based on the unit rates.
22. The method of measurement of completed work shall be in accordance with the standard measurement. Payment will be made on satisfactorily completion of work as per the work order.
23. Security Deposit shall be recovered @5% of the executed value of the work. The security deposit will be released after the defect liability period of Three months.
24. Statutory deductions like income tax, work contract tax, labour welfare fund, cess etc. will be deducted from the bill as per prevailing rules.
25. The bidder shall quote his rates on the basis of the price of best quality products of the brand/make as follows. In any case particular brand of item is not acceptable to the department the bidder shall supply items of other approved brands at no extra cost.



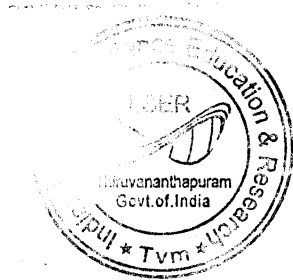
**Schedule of Quantities**

**AMC for Refilling of Fire Extinguisher at various locations at IISER Campus, Vithura Thiruvananthapuram**

ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATE (rates shall be shall be written in words and figures for per unit Item )	AMOUNT (shall be written in words and figures)
1.0	<p>Servicing and Refilling of stored pressure Dry Chemical Powder type (ABC Stored Pressure Type) fire extinguishers with Mono Ammonium Phosphate based dry chemical powder (MAP min 50%) &amp; Hygroscopicity less than 1.5% confirming to IS: 14609, IS 15683:2006 capable of fighting class A, B, C types of fires with Dry Nitrogen based propellant 15Kg/Cm2 and minimum effective discharge Time of 13 Seconds. If necessary as per the site condition the fire extinguisher shall be provided with accessories/spares like Pressure Gauge, Safety Pin, Bracket, Valve assembly, Horn &amp; Hose etc. complete for safe operation as per IS standards, Instruction sticker, scratching off rusts and repainting with suitable shade confirming to IS: 2932) and fixing on wall and transportation complete in all aspects as per IS: 2190 as directed by EIC.</p> <p><i>(The operating temperature range, Net weight, the effective discharge time &amp; throw, Expiry date shall be clearly mentioned in the extinguisher.)</i></p>				
a)	4kg	Nos	150.0		

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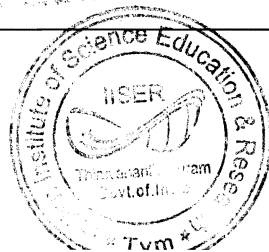
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***AMC for Refilling of Fire Extinguisher at various locations at IISER Campus, Vithura Thiruvananthapuram***

ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATE (rates shall be shall be written in words and figures for per unit Item )	AMOUNT (shall be written in words and figures)
2.0	<p>Servicing and Refilling of stored pressure Dry Chemical Powder type fire extinguishers with Sodium-Bi-Carbonate (SBC) suitable for B and C Class Fire (as per IS:4308 latest revision, IS:15683),with gas cartridge having Propellant of 120 grams CO2 stored as per IS: 4947, having a Minimum Effective Discharge Time of 8seconds. All the extinguisher shall be Hydraulic Pressure Testing as per IS: 2190. If necessary as per the site condition the fire extinguisher shall be provided with accessories/spares like Pressure Gauge, Safety Pin, Bracket, Valve assembly, Horn &amp; Hose etc. complete for safe operation as per IS standards, repainting with suitable shade confirming to IS: 2932, Labour cost, transportation complete as required including all the taxes complete in all aspects as directed by EIC.</p> <p>(The operating temperature range, Net weight, the effective discharge time &amp; throw shall be clearly mentioned in the extinguisher.)</p>				
a)	5 kg ( BC Type )	Nos	20.0		
3.0	<p>Servicing and Refilling of existing CO2 based Fire Extinguisher of following capacity at various location at IISER Campus with carbon dioxide gas conforming to IS:15222, IS:2190,IS: 2878,IS:15683 if necessary It shall have anti corrosive treatment as per IS 3203. The extinguisher shall be clearly and permanently marked in accordance with IS: 940(latest amendment), repainting with suitable shade confirming to IS: 2932.etc complete in all aspects as directed by EIC.</p> <p>(The operating temperature range, Net weight, the effective discharge time &amp; throw, Expiry date shall be clearly mentioned in the extinguisher.)</p>				

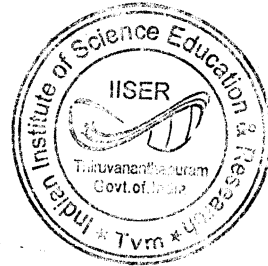
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**AMC for Refilling of Fire Extinguisher at various locations at IISER Campus, Vithura Thiruvananthapuram**

ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATE (rates shall be shall be written in words and figures for per unit Item )	AMOUNT (shall be written in words and figures)
a)	4.5 Kg	Nos	25.0		
4.0	<p>Servicing and Refilling of existing stored pressure Fire Extinguisher of Water (3A type fire) /Foam (AFFF-6% for A and B Class Fire), with Gas cartridge having Propellant of 120 grams CO2 stored according to IS 4947, IS: 15683, it shall have a minimum effective discharge Time 13 Seconds and shall be moisture free and 99% pure and shall conform to the requirement of IS 15222. If necessary it shall have an Epoxy powder coating of 50 microns thickness shall be applied on external surface of the body as per IS 3203 . The extinguisher shall be clearly and permanently marked in accordance with IS: 940 (latest amendment).etc. complete in all aspects as directed by EIC.</p> <p><i>(The operating temperature range, Net weight, the effective discharge time &amp; throw, Expiry date shall be clearly mentioned in the extinguisher.)</i></p>				
a)	9 liter	Nos	50.0		



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- iii) No. of additions: