

**MODEL ENGINEERING COLLEGE, THRIKKAKARA**  
**Kochi 682021**

**SHORT TENDER NOTICE**  
**Tender No. 14/2023/MEC**

**No.A2/53/2023/MEC**

**12.1.2023**

Tenders are invited for the supply of Refrigeration Test Rig - 1/3

HP

Last date for receipt of tender will be 25.01.2023 11am . Late tenders will not be accepted. The tenders will be opened at 12.00 noon 25.1.2023 in the presence of the tenderers or their authorized representatives who may be present at that time.


Intending tenderers may, on application to the Principal , Model Engineering , Thrikkakara, Kochi 21 obtain the requisite tender forms on which tenders should be submitted. Application for the tender form should be accompanied by a cash remittance of ₹400 + **18% GST** which is the price fixed for a form/set of forms and which is not refundable under any circumstances. The tender forms are not transferable. Sale of tender forms will be closed at **3pm** on 24.01.2023 . Cheques, postage stamps etc., will not be accepted towards the cost of forms, nor will the forms be sent per V.P.P. Duplicate tender forms, if required will be issued at ₹200 + **18% GST and** per copy.

Every tenderer should send along with his tender, an **earnest money of 1 %** of the total cost of the articles tendered (rounded to the nearest rupee) subject to a minimum of ₹ 1500, if the amount calculated at one per cent of the value of the articles tendered for falls below ₹ 1500. If the Government has exempted any firm from furnishing the EMD, they should produce relevant document along with the tender

The successful tenderer shall, deposit a sum equivalent to **5 %** of the value of the quoted value as **security deposit**, less the amount of money deposited by him along with his tender

Place:Thrikkakara

Date:12.01.2023

  
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**Appendix A**

**Specifications of REFRIGERATION TEST RIG -1/3 HP**

<b>Control Panel</b>	Stand Alone Metallic powder coated panel with Caster Wheels
<b>Compressor</b>	Hermetically Sealed, Reciprocating type 1/3 HP with Thermostat Emerson / LG / Voltas / Equivalent.
<b>Condenser</b>	An air cooled condenser of suitable Capacity with Fan
<b>Expansion System</b>	Capillary Expansion Thermostatic Expansion system with solenoid valve
<b>Evaporator</b>	Copper coiled SS vessel with FRP coating housed in a metallic chamber with proper insulation
<b>Refrigerant</b>	Freon R-134A
<b>Energy meter</b>	Energy meter 2.5- 5 Amps, Bentex / BHEL make
<b>Temperature Indicator</b>	Digital Temperature Indicator, -50 to 150°C with Thermocouple selector switch (TSS)
<b>Thermocouples</b>	Teflon coated Cr -Al (K-type)-5 no.
<b>Flow measurement</b>	Glass tube Rota meter of suitable range, Eureka or Equavalent
<b>Gauges</b>	Pressure and Compound gauges for HP and LP with HP-LP cut-out
<b>Stop Watch</b>	Digital, 1/10 of a second to be provided
<b>Software</b>	Preprogrammed MS Excel workbook to be provided for analysis (Calculation) of Test results.
<b>Experimental Capability</b>	Actual, Theoretical COP
<b>Manual</b>	Self-explanatory Instruction manual, sample calculation & 134A chart



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**MODEL ENGINEERING COLLEGE, THRIKKAKARA**  
**Kochi 682021**

**SHORT TENDER NOTICE**  
**Tender No. 15/2023/MEC**

**No.A2/83/2023/MEC**

**12.1.2023**

**Tenders are invited for the Electrification of IDEA Lab**

Last date for receipt of tender will be 25.01.2023 11am . Late tenders will not be accepted. The tenders will be opened at 12.00 noon 25.1.2023 in the presence of the tenderers or their authorized representatives who may be present at that time.

Intending tenderers may, on application to the Principal , Model Engineering , Thrikkakara, Kochi 21 obtain the requisite tender forms on which tenders should be submitted. Application for the tender form should be accompanied by a cash remittance of ₹500 + **18% GST** which is the price fixed for a form/set of forms and which is not refundable under any circumstances. The tender forms are not transferable. Sale of tender forms will be closed at **3pm** on 24.01.2023 . Cheques, postage stamps etc., will not be accepted towards the cost of forms, nor will the forms be sent per V.P.P. Duplicate tender forms, if required will be issued at ₹300 + **18% GST and** per copy.

Every tenderer should send along with his tender, an **earnest money of 1 %** of the total cost of the articles tendered (rounded to the nearest rupee) subject to a minimum of ₹ 1500, if the amount calculated at one per cent of the value of the articles tendered for falls below ₹ 1500. If the Government has exempted any firm from furnishing the EMD, they should produce relevant document along with the tender

The successful tenderer shall, deposit a sum equivalent to **5 %** of the value of the quoted value as **security deposit**, less the amount of money deposited by him along with his tender

Place:Thrikkakara

Date:12.01.2023



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**Estimate for the Electrification of IDEA LAB**

SL.No	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	Supply, Installation, Testing and commissioning of 63A TP MCB in the Existing VTPN DB	No	1		
2	Supply, Laying, testing and commissioning of the following PVC Insulated Armoured Aluminium L.T.Cables through cable trays, built up cable trenches, hume pipes, existing excavated trenches, including supply and fixing of clamps, nuts and bolts, screws, etc. required for clamping intervals as necessary				
a)	4Cx16sq.mm cable	Mtr	40		
b)	2Cx6sq.mm cable	Mtr	10		
c)	3.5 x35sqmm Cable	Mtr	25		
3	Supply of all materials and termination of the following PVC Insulated Armoured Aluminium L.T.Cables (AYWY / AYFY) using single compression type cadmium plated brass cable glands, Coppercrimped type cable lugs, cable identification tags and including gland earthing using copper conductor of adequate size, AL-CU strip for termination of Cables etc.				
a)	4Cx16sq.mm	NOS	4		
b)	2Cx6 sq.mm	NOS	2		
c)	3.5x35sqmm	No	2		
4	MCB DISTRIBUTION BOARDS AND ENCLOSURES:- Supply, Erection, Testing and Commissioning of the following double door type MCB Distribution Boards as per following specifications.				
a)	4 Way 63 A, VTPN DB				
	Incomer:				
	a) 63A, 100mA ELCB +63 A 4P MCB - 1No				
	Outgoings				
	a) 32A TP MCB -3Nos				
	b) 10/16/25A SP MCB -3 Nos	No	1		
b)	8 Way 40A, SPN DB				
	Incomer:				
	a) 40A DP Isolator + 40A, 30mA ELCB - 1No				
	Outgoings				
	a) 6A SP MCB -2 No				
	b) 16 SP MCB -3 Nos	No	1		
5	POINT WIRING				





	Supply of all materials and carrying out point wiring by using 3runs 1sqmm PVC insulated Copper wire through 20mm PVC conduit with all accessories. The points controlling by using modular type switches fix in a factory made metal boxes. The wiring carried out the following configuration.				
A	One light controlled by One switch	No.	1		
B	Two light controlled by One switch	No.	2		
C	Three Light controlled by Switch	No.	2		
D	One light controlled by Two switch	No.	1		
6	Supply , Installation of Ceiling fan point along with 1 No 100W 2 module step type Fan Regulator, controlled by 1 No 6A, SP Switch.	Nos	4		
7	1 No, 16A Modular Socket outlet and 1No 16A SP Switch controlling the Socket outlet in independent	Nos	3		
8	Supply and fixing of 6A Socket outlet controlled by 1 No 6A, SP in an independent position.	Nos	4		
9	Circuit mains wiring using two runs of 1.5 sq.mm PVC insulated copper wires along with one run of 1.5 sqmm wire for continuous earthing	Mtrs	100		
10	Circuit mains wiring using two runs of 2.5sq.mm PVC insulated copper wires along with one run of 1sqmm wire for continuous earthing	Mtrs	50		
11	Supply, Installation of LED Tube Light group controlled by 1 No 6A, SP Switch.	Nos	11		
12	Supply, installation ,Testing and commissioning of 1200mm Ceiling fan with standard down road	Nos	4		
13	Design ,fabrication ,Testing and commisioning of Fan hook fixed in the existing structure	Nos	4		
14	Suppy ,installation ,Testing and commisioning of 10W metalic protected Bulk head Light	No	1		
15	Earthing				
a.	10SWG	Mtrs	40		
b	Supply of all materials and providing independent pipe earth pit and its connection.	No	2		
16	Documentation and Approval from the Electrical Inspectorate	LS			



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