

MODEL RESIDENTIAL POLYTECHNIC COLLEGE KUZHALMANNAM
KANNANUR PO., PALAKKAD DIST, KERALA, PIN 678 702,
PHONE 04922 272900
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Tender Notice

No. P/178/2014/mrpckm

Date: 16.12.2014

**Inviting sealed tender for
Machinery and Equipments for Hydraulics Lab**

Sealed tenders are invited from Dealers for **Machinery and Equipments for Hydraulics Lab** to this institution. Interested dealers may submit sealed tenders to the **Principal, Model Residential Polytechnic College Kuzhalmannam, Kannanur PO., Palakkad Dist, Kerala, PIN 678702, Phone 04922 272900** on all State Government working days from 09:30 AM to 4:30PM.

Tender documents can be collected from **the Principal, Model Residential Polytechnic College Kuzhalmannam, Kannanur PO., Palakkad Dist, Kerala, PIN 678 702, Phone 04922 272900** on all State Government working days from 09:30 AM to 4:30PM on payment of cost of tender form by cash or DD payable **at Kuzhalmannam branch.** in favor of the **Principal, Model Residential Polytechnic College Kuzhalmannam,** Tender form can also be availed by post on payment of **Rs. 50/-** as extra over the cost of tender documents.

Cost of Tender form	Rs. 840 /- (Inclusive of VAT @ 5%)
Last Date and Time of Sale of Tender Forms	16.01.2015 2:00 PM
Last date & Time for receipt of tender	16.01.2015 3:00 PM
Date and Time for opening of tender	16.01.2015 3:30 PM

Sl No.	Description	Quantity (Nos.)
1	Venturi meter & Orifice meter	1
2	Flow Over Notch	1
3	Bernoulli's Theorem Apparatus	1
4	Pipe Friction Apparatus	1
5	Reciprocating Pump Test Rig	1
6	Centrifugal Pump Test Rig	1

Tenderers are advised to quote their Rate after careful study of the tender's technical specifications as well as the following terms and conditions:-

1. Tender envelop(s) must be sealed and super scribed "**P/178/2014/MRPCKM – Tender for Machinery and Equipments for Hydraulics Lab**" which shall be addressed to the **Principal, Model Residential Polytechnic College Kuzhalmannam, Kannanur PO., Palakkad Dist, Kerala, PIN 678 702, Phone 04922 272900**
2. Every tenderer should submit EMD equal to 1% of the total quoted value in the form of FDR or Demand Draft drawn in the favour of the Principal, Model Residential Polytechnic College, Kuzhalmannam, and payable at SBT Kuzhalmannam, along with their tender. If Government have exempted any firm from furnishing the EMD, they should produce relevant documents proving exemption along with tender
3. The tenders should reach this office by **03:00 PM on 16th January 2015** as per tender notice.
4. The Bids will be opened on **16th January 2015 at 03:30 PM**. In case the office is closed on this date due to any of the reasons or it is not possible for us to open the quotations on this date because of any of the reasons, the quotations will be opened at 03:30 PM on the next working day.
5. The Manufacturers / Distributors should submit minimum 3 references of Govt. Organizations/ educational institutions/ public/private sectors where they supplied the equipments with similar purpose.
6. The tendering firm will demonstrate their products before Technical Committee for assessing its suitability/compatibility as per tender's Technical Specifications within short period.
7. The tender fee is non refundable.
8. **Incomplete tender will not be accepted.**
9. **Conditional tender will not be accepted.**
10. **Optional tender will not be accepted.** The firm should have to quote only one model. The option either in model or in rates will not be accepted and the tender will be rejected straightway.
11. The Tenderer must quote the price **In Indian Rupees and should be (inclusive all taxes/govt. levis and the charges for freight/supply)** Quote the price both in words as well as in figures. Any over writing/cutting etc. render the tender invalid.
12. **The item should be delivered at free of cost at Model Residential Polytechnic College Kuzhalmannam within two weeks from the date of supply order.**
13. Tenderer would not be permitted to alter or modify their bids after expiry of the deadline for receipt of Bids.
14. If the supply is found inferior to on inspection by the Purchase/Technical Committee, the consignment will be rejected. The supplier will have to take back the consignment at his own cost and replace it with fresh stock as per approved samples within 15 days.
15. The purchase committee, in order to satisfy itself can order on the spot enquiry to verify the soundness, capability, viability and any other information given by the tendering firms.

16. **The Bid shall remain valid for six calendar months from the date of opening of the tender.**
17. The payment will be made after receipt/acceptance of goods in good condition. No advance payment will be made. Under no circumstances, sub-standard material will be accepted.
18. The purchase committee reserves the right to reject any tender or all tenders without assigning any reasons thereof.
19. The Competent Authority can terminate/recall the tender due to administrative reasons.
20. A copy of terms and conditions duly signed & stamped by the tenderer, as a token of acceptance of the same should be attached along with the tenders.
21. Only Sales Tax/VAT payee agencies are eligible to fill this tender. Interested agencies must quote their Sales Tax No./VAT in their quotation and also attach documentary proof of having registered with sales Tax/VAT Deptt. for sale of items etc. with technical bid.
22. The copy of latest VAT/Sales Tax Return must be attached with the technical bid.
23. The tender will be rejected straightway without assigning any reasons if the firm declared black listed by any Govt./Semi govt. department/agencies etc.
24. Tenderer(s) shall indicate complete technical specifications and all features of the quoted Diesel Generator Set(s) and also submit its literature/brochures with the bid.
25. The tendering firm will also submit a **certificate** that the product offered by them is as per technical specifications of the tender.
26. The bidder should carry an onsite **comprehensive warranty/guarantee** for a period of at least 24 (Twenty Four) months.
27. If the performance of any individual equipment or System fails to meet the contract specifications then the same shall be replaced by the Supplier free of cost during the term of the warranty/guarantee period.
28. The maintenance services shall be **free of cost** during the warranty/ guarantee period.
29. During the term of warranty/guarantee the service/repair calls will have to be attended by the Supplier within forty eight hours from the time of such calls. The defective card/item/equipment should be repaired the same day at Purchaser's location. In case of major defects requiring the defective card/item/equipment to be taken to the Supplier's workshop, it should be returned within a week duly repaired and an immediate substitute card/item/equipment will be provided by the Supplier for the smooth operation of the System. The to and fro transportation of the card/item/equipment will be the responsibility of Supplier.

NOTE :-

DOCUMENTS REQUIRED TO BE ATTACHED WITH TECHNICAL BID IN THE FOLLOWING ORDER :-

1. The Demand draft for EMD @ 1% of the rate quoted must be attached with tender form.
2. Agreement in Kerala Stamp Paper worth Rs 150 /- in the format prescribed.
3. Certificate regarding registration with DGS&D, etc. if any.
4. Sale Tax/VAT Registration Certificate.
5. Latest Sales Tax Clearance Certificate/Latest VAT deposited receipt.
6. Copy of authorized distributorship/Manufacturer.
7. Technical specifications of the product offered along with literature/brochure.
7. Copy of terms and conditions duly signed with seal of the firm, in token of acceptance of terms and conditions.
8. All the firms/company participating in the tender must submit a list of their owners/partners/directors etc. and a Certificate to the effect that the firm not blacklisted by any Govt. Department.
9. Three references as asked in Sl. No. 6 of terms and conditions with proof.
10. All other supporting documents as required in the tender shall be attached.

Rates including of all taxes of the item quoted by the tenderer shall be submitted on their Letter Pad in clear terms, in words and in figures. The cutting & over-writing in the price bid is not valid. **The price quoted should be inclusive of all taxes. The option in the rates will not be entertained.**

PRINCIPAL

**MODEL RESIDENTIAL
POLYTECHNIC COLLEGE
KUZHALMANNAM.**

PART-1

TENDER FOR PURCHASE OF
Machinery and Equipments for Hydraulics Lab.
FOR
Model Residential Polytechnic College Kuzhalmannam

1. NAME OF THE FIRM : _____

2. CORRESPONDENCE ADDRESS WITH
TELEPHONE NO. AND E-MAIL ID : _____

3. LOCAL ADDRESS WITH TELEPHONE
NO. AND E-MAIL ID : _____

4. WHETHER REGISTERED WITH NSIC/
DGS&D, IF YES ATTACH COPY : _____

5. SALES TAX/VAT REGISTRATION
PROOF : _____

6. LATEST SALES TAX/VAT RETURN : _____
: _____

7. Earnest Money Deposit (EMD) :Demand Draft No.:
Date:
Bank: Amount
: _____

8. COPY OF TERMS AND CONDITION
DULY SIGNED : _____

Signature and Seal OF TENDERER _____

NAME IN BLOCK LETTERS : _____

FULL ADDRESS : _____

PART-2
PROFORMA FOR PRICE SCHEDULE
TENDER FOR PURCHASE OF
Machinery and Equipments for Hydraulics Lab.
Model Residential Polytechnic College Kuzhalmannam

S. No.	Description of work/ item	Qty.	Model Number	Unit Price In Indian Rupees (including all taxes/govt. levies/freight/supply etc. In Figure as well as in words
A	B	C		D
	(As per the technical Specifications attached herewith)			

- NOTE:**
- 1. RATES SHOULD BE OFFERED ONLY FOR ONE MODEL**
 - 2. OPTIONAL BID WILL NOT BE ENTERTAINED**
 - 3. NO CONDITION SHOULD BE INSERTED IN THE PRICE BID**

It is hereby certified that we have understood all the terms and conditions specified in the tender document and are thoroughly aware of the nature of job required to be done and goods/items to be supplied. We agree to abide by all the tender terms and conditions.

We hereby offer to supply the goods/items detailed above as you specify in the notification of award.

Place:

(Signature and seal of Bidder)

Dated:

NAME IN BLOCK LETTERS: _____

FULL ADDRESS : _____

**TECHNICAL SPECIFICATIONS OF
Machinery and Equipments for Hydraulics Lab.**

Sl No	Description	Quantity (Nos.)
1	<p>Venturimeter & Orificemeter for the study of</p> <ol style="list-style-type: none"> 1) Calibration of venturimeter. 2) Calibration of orifice meter. <p>Specifications</p> <ol style="list-style-type: none"> 1) Sump Tank of 900 x 400x 400 mm size with FRP lining from inside 2) Measuring Tank of 300x400x300 mm size with piezo tube and FRP lining 3) Basic piping-1" 4) Orificemeter & venturimeter inlet & throat diameter 32&15mm resp. 5) Differential manometer with mercury – 400 mm 6) Pump – 0.5 HP with conforming to ISI and of reputed brand 7) Flow control valve. <p>And Should have the following features</p> <ol style="list-style-type: none"> A) Two pipes emerging out from a common manifold with a orifice meter. B) Each line is provided with flow control valve for setting of differential flow rates. C) Pressure of different pipe lines are connected. D) Flow control valve at the end of each line assures for full running of pipe Could be installed within a floor space of 1.5 m.* 2 m. <p>Electricity : 230V AC , 50 Hz.</p>	1
2	<p>Flow Over Notch To determine coefficient of discharge through</p> <ol style="list-style-type: none"> 1) 60⁰ 'V' notch 2) Rectangular notch. <p>Specifications</p> <ol style="list-style-type: none"> 1) Flow Chanel – 200 x 200 x 1200 mm made from crc sheet with powder coating 2) Notches 60° included angle 'V' notch – material brass 3) Rectangular notch.- material - brass 4) Notch interchanges arrangement. 5) Sump Tank of size 900 X 400 x 400 mm with FRP lining to inside 6) Discharge Measuring Tank – 300 X 400 X 300 mm with FRP lining to inside 7) Pump – 0.5 HP , with conforming to ISI and of reputed brand <p>And Should have the following features</p> <ol style="list-style-type: none"> 1)Interchangeable Brass/Aluminium notches. 2)Measurement of head by scale. <p>Could be installed within a floor space of 2 m. x 2 m.</p> <p>Electricity : 230V AC , 50 Hz.</p>	1

3	<p>Bernoulli's Theorem Apparatus for the study of Bernoulli's Theorem</p> <p>Specifications</p> <ol style="list-style-type: none"> 1) Supply Tank – 200 x 200 x 600 mm – 2 No. 2) Flow channel 750mm long, transparent acrylic. 3) Manometric tubes fixed over the flow channel – 9 No. at distance of 7 Cm. 4) Supply with flow control valve. 5) Measuring tank. – 300x400x300mm with FRP Lining 6) Sump tank.- 900x400x400mm with FRP Lining. 7) 0.5 H.P. pump with conforming to ISI and of reputed brand 8) Supply tank is fitted on heavy pipe frame. 9) Stop watch of reputed brand <p>And Should have the following features</p> <ol style="list-style-type: none"> a) Steady flow arrangement. b) Transparent flow section. c) Independent measurement of Pressure Head d) Variable flow rate arrangement. e) Self sufficient unit. <p>Could be installed within a floor space of 2 m. x 2 m.</p> <p>Electricity : 230V AC , 50 Hz.</p>	1
4	<p>Pipe Friction Apparatus</p> <ol style="list-style-type: none"> A) To determine coefficient of friction for pipes. B) To plot relation between pressure loss and flow rates for a particular pipe diameter <p>SPECIFICATIONS</p> <ol style="list-style-type: none"> 1) Sump Tank – 900 x 400 x 400 mm with FRP lining 2) Measuring Tank – 300 x 400 x 300 mm with FRP lining 3) Three pipes of 28 mm, 21 mm.& 17mm. diameter G.I. Pipe. Length of pipe 1 m. 4) Flow control valve. 5) Differential manometer – 400 mm 6) Stop watch of reputed brand <p>And Should have the following features</p> <ol style="list-style-type: none"> 1) Testing of two pipes of different diameters. 2) Measurement of head loss in the pipes at various flow rates. 3) Calculation of pipe friction at various flow rates. <p>Electricity : 230V AC , 50 Hz.</p>	1

5	<p>Reciprocating Pump Test Rig</p> <p>To study the following characteristics at different speeds</p> <ol style="list-style-type: none"> 1) Discharge Vs Head. 2) Discharge Vs Input of pump. 3) Discharge Vs Pump efficiency. <p>SPECIFICATIONS</p> <ol style="list-style-type: none"> 1) Reciprocating pump:-3/4" x 3/4" size provided with 1H.P. D. C. Motor & speed controller with conforming to ISI and of reputed brand 2) Sump tank-900x400x400 mm 3) Measuring tank-400x300x400 mm 4) Energy meter for motor input measurement. 5) Pressure & vacuum gauge for measurement of head. 6) Stop watch of reputed brand <p>Could be installed within a floor space of 3m x 3m.</p> <p>Electricity : 230V AC , 50 Hz.</p>	1
6	<p>Centrifugal Pump Test Rig</p> <p>To study the following characteristics at different speeds</p> <ol style="list-style-type: none"> 1) Discharge vs. Head 2) Discharge vs. Input to pump 3) Discharge vs. pump efficiency. <p>SPECIFICATIONS</p> <ol style="list-style-type: none"> 1) Centrifugal pump:-1"x1" size, 2) Motor – Variable Speed P.M. D. C. motor with conforming to ISI and of reputed brand 3) Speed Controller for Motor. 2) Sump tank: 900X400X400MM 3) Measuring Tank: 400X400X400MM. 4) Energy meter for motor input measurement. 5) Pressure & vacuum gauge for measurement of head. 6) Stop watch of reputed brand 7) The assembly of pump & control are mounted on the sump tank. <p>Could be installed within a floor space of 1 m. x 1 m.</p> <p>Electricity : 230V AC , 50 Hz.</p>	1

PRINCIPAL