

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

e - mail: [mrptkuzhalmannam@ihrd.ac.in](mailto:mrptkuzhalmannam@ihrd.ac.in), [mrpckm@gmail.com](mailto:mrpckm@gmail.com)

Web: [www.ihrd.ac.in](http://www.ihrd.ac.in)

**Tender Notice**

**No. P/80/2015/mrpckm**

**Date 07.04.2016**

**Inviting sealed tender for  
Machinery and Equipments for Material Testing lab**

Sealed tenders are invited from Dealers for **Machinery and Equipments for Material Testing 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** from 18.04.2016 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 - Original Copy each :** Rs. 2940 /- (Inclusive of VAT @ 5%)
- **Cost of Tender form - Duplicate copy each :** Rs. 1470 /- (Inclusive of VAT @ 5%)
- **Starting date of sale and receipt of sealed tender form :** 18.04.2016 9:30 AM
- **Last Date and Time of Sale of Tender Forms :** 18.05.2016 2:00 PM
- **Last date & Time for receipt of tender :** 18.05.2016 3:00 PM
- **Date and Time for opening of tender :** 18.05.2016 3:30 PM

| Sl No. | Item description  | Quantity |
|--------|---|----------|
| 1      | <p><b><u>Electronic Universal Testing Machine ( 40 T)</u></b></p> <p><b>Specifications:</b></p> <p><b>Straining Unit :</b></p> <ul style="list-style-type: none"> <li>• This consists of a cylinder motor with chain and sprocket drive and a table coupled with the ram of the hydraulic cylinder, mounted on to a robust base.</li> <li>• The cylinder and the ram are individually lapped to eliminate friction. The upper crosshead is rigidly fixed to the table by two strengthened columns.</li> <li>• The lower crosshead is connected to two screwed columns which are driven by a motor. Axial loading of the ram is ensured by relieving the cylinder and ram of any possible side loading by the provision of ball seating.</li> <li>• An displacement scale with a minimum graduation of 1mm, is provided to measure the deformation of the specimen.</li> <li>• Tension test is conducted by gripping the test specimen between the upper and lower cross-heads and the table.</li> <li>• The lower cross-head can be raised or lowered rapidly by operating the screwed columns, thus facilitating ease of fixing of the test specimen.</li> </ul> <p><b>Control Panel :</b><br/>The control Panel consists of a power pack complete with drive motor and an oil tank, control valves and electronic display unit.</p> <p><b>Power Pack :</b><br/>The power pack generates the maximum pressure of 200 kgf/cm<sup>2</sup>. The hydraulic pump provides continuously non-pulsating oil flow. Hence the load application is very smooth.</p> <p><b>Hydraulic Controls :</b><br/>Hand operated wheels are used to control the flow to and from the hydraulic cylinder. The regulation of oil flow is infinitely variable. Incorporated in the hydraulic system is a regulating valve, which maintains a practically constant rate of piston movement. Control by this valve allows extensometer readings to be taken.</p> <p><b>Electronic Control Unit :</b><br/>Microprocessor based panel incorporating state of art technology with following features.</p> <ul style="list-style-type: none"> <li>• Front panel membrane type key board for machine operation with numeric keys for data entry.</li> <li>• 7- segment display.</li> <li>• Data entry with numeric keyboard of test parameters including speeds, rupture % peak, preload, modulus data, test data &amp; specimen data etc.</li> <li>• 20 input data set storage, 50 results storage maintains data results during power off.</li> <li>• Batch test facility for generating batch &amp; statistic result using same data set.</li> <li>• RS 232C serial port.</li> <li>• Printer port for printer interface</li> </ul> <p>Electronic Universal Testing Machine comply with BS : 1610 : and IS-1828. An accuracy of <math>\pm 1\%</math> is guaranteed from 2% to 100% of the capacity of the machine.<br/>Instruction manual/User Guide,<br/>Onsite Warranty : 3 years or more.<br/>Price should include all taxes/ freight/delivery/unloading/installation.</p> | 1 No.    |

|   |        |                           |
|---|--------|---------------------------|
| Maximum Capacity  | kN     | 400                       |
| Measuring Range   | kN     | 0-400                     |
| Load Resolution (20,000 counts full scale)                        | N      | 20                        |
| Load Range with Accuracy of measurement $\pm$ 1.0%                | kN     | 8 to 400                  |
| Resolution of piston movement (Displacement)                      | mm     | 0.1                       |
| Clearance for tensile at fully descended working piston.          | mm     | 50-700                    |
| Clearance for compression test at fully descended working piston. | mm     | 0-700                     |
| Clearance between columns.  | mm     | 500                       |
| Ram Stroke  | mm     | 200                       |
| Straining/piston speed (at no load)                               | mm/min | 0-150                     |
| <b>Connected Load</b>   |        |                           |
| Power   | kW     | 1.7                       |
| V   |        | 400-440                   |
| Ø   |        | 3                         |
| Dimensions  |        |                           |
| L x W x H ( approx. )   | mm     | 2060 x<br>750 x<br>2180 x |
| Weight (approx.)  | kg-    | 2500                      |
| <b>Standard Accessories</b>                                       |        |                           |
| For Tension Test  |        |                           |
| Clamping jaws for round specimens of Diameters.                   | mm     | 10-25<br>25-40            |
| Clamping jaws for flat specimens of thickness.                    | mm     | 0 - 15<br>15 - 30         |
| Width   | mm     | 65                        |
| For Compression Test  |        |                           |
| Pair of compression plates of dia.                                | mm     | 120                       |
| For Transverse Test   |        |                           |
| Table with adjustable rollers width of rollers.                   | mm     | 160                       |
| Diameter of Rollers   | mm     | 30                        |
| Maximum clearance between supports                                | mm     | 500                       |
| Radius of punch tops.   | mm     | 12, 16                    |
| <b>Shear Test attachment</b>                                      |        |                           |
| <b>Mechanical extensometer</b>                                    |        |                           |

|                              |  |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
|------------------------------|--|---------------|-----|----------------|--------------|----------------------|-----|---------------------------|-----------------|------------------------------|-------|---------------------------|-------|--------------------------|------|------------|----|----------------------|-----|-------|
| 2                            | <p><b>Torsion Testing Machine, Cap:500Kgm</b></p> <p><b>With digital display of load , fitted with gear motor and gear box with all standard accessories and conforming to IS standards</b></p> <p><b>Specifications:</b></p> <table border="1" data-bbox="272 285 1107 634"> <tr> <td>Capacity kg-m</td> <td>100</td> </tr> <tr> <td>Ranges in kg-m</td> <td>100, 50 &amp; 20</td> </tr> <tr> <td>No. of divn. on dial</td> <td>500</td> </tr> <tr> <td>Torsion Speed &amp; Direction</td> <td>Fixed / Reverse</td> </tr> <tr> <td>Clearance Between Grips (mm)</td> <td>0-500</td> </tr> <tr> <td>Grips for round bars (mm)</td> <td>10-34</td> </tr> <tr> <td>Grips for flat bars (mm)</td> <td>5-15</td> </tr> <tr> <td>Width (mm)</td> <td>50</td> </tr> <tr> <td>Gear motor 3 ph (ph)</td> <td>0.5</td> </tr> </table> | Capacity kg-m | 100 | Ranges in kg-m | 100, 50 & 20 | No. of divn. on dial | 500 | Torsion Speed & Direction | Fixed / Reverse | Clearance Between Grips (mm) | 0-500 | Grips for round bars (mm) | 10-34 | Grips for flat bars (mm) | 5-15 | Width (mm) | 50 | Gear motor 3 ph (ph) | 0.5 | 1 No. |
| Capacity kg-m                | 100  |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| Ranges in kg-m               | 100, 50 & 20   |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| No. of divn. on dial         | 500  |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| Torsion Speed & Direction    | Fixed / Reverse  |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| Clearance Between Grips (mm) | 0-500  |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| Grips for round bars (mm)    | 10-34  |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| Grips for flat bars (mm)     | 5-15   |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| Width (mm)                   | 50   |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| Gear motor 3 ph (ph)         | 0.5  |               |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| 3                            | <p><b>Impact Testing Machine pendulum type</b></p> <p>Analogue type Charpy /Izod Impact Testing Machine, Cap.300J<br/>According to BS 10045 With complete set of gauges</p>  | 1 No.         |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| 4                            | <p><b>Spring Testing Machine, 100Kgf</b></p> <p>With digital display of load and manual load application through handle, with suitable accessories for tension and compression, Dial gauge, 0-25mm range L.C: 0.01mm and Magnetic base stand.<br/><b>conforming to IS standards</b></p>  | 1 No.         |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| 5                            | <p><b>Rockwell cum Brinell hardness tester 250Kgf</b></p> <p>With Rockwell loads of 60,100,150Kgf and Brinell Load of 187.5 &amp; 250Kgf. The machine will have automatic zero setting dial gauge and load selection system. Supplied with standard blocks and other accessories.<br/><b>conforming to IS standards</b></p>  | 1 No.         |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |
| 6                            | <p><b>Compression Testing Machine, Cap: 200 T</b></p> <ul style="list-style-type: none"> <li>• Capacity 200 Tones (2000 KN) Electrically Cum Manually Operated</li> <li>• Suitable to test concrete cubes of 15 X 15 x 15 cm</li> <li>• And cylinders of 15 X 30 cm</li> <li>• 4 pillar type load frame</li> <li>• Specimens duly hardened and surface grinded for excellent smooth finish</li> <li>• Suitable to operate on 220/230 V single phase</li> <li>• <b>conforming to IS standards</b></li> </ul>  | 1 No.         |     |                |              |                      |     |                           |                 |                              |       |                           |       |                          |      |            |    |                      |     |       |

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 **"No. P/80/2015/mrpckm – Tender for Machinery and Equipments for Material Testing 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 favor 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 18<sup>th</sup> May 2016** as per tender notice.
4. The Bids will be opened on **18<sup>th</sup> May 2016 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 / Technical 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 Dept. 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 equipments 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 36 (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 200 /- 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 Material Testing 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 Material Testing Lab.**  
**Model Residential Polytechnic College Kuzhalmannam**

| S.<br>No. | Description of item  | Qty. | Make and<br>Model<br>Number | Unit Price<br>In Indian Rupees<br>(including all<br>taxes/govt.<br>levies/freight/supply etc.<br>In Figure as well as in<br>words |
|-----------|--|------|-----------------------------|---|
| A         | B  | C    |                             | D   |
|           | (As per the technical Specifications<br>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 : \_\_\_\_\_