

COLLEGE OF AGRICULTURAL ENGINEERING
JAWAHARLAL NEHRU KRISHI VISHWA VIDYALAYA, JABALPUR

SHORT- TENDER NOTICE

Sealed tenders are invited from manufacturers/Authorized dealers /Suppliers/Agents for supply **Meteorological Instruments and Electronic Display Board, etc.** for Department of Physics and Agrometeorology . Tender forms with details, terms and condition for supply can be down loaded from the JNKVV website www.jnkvv.org. Last date of submission **06-03-2017**

Dean
Agricultural Engineering

FACULTY OF AGRICULTURAL ENGINEERING
JAWAHARLAL NEHRU KRISHI VISHWA VIDYALAYA, JABALPUR

TENDER DOCUMENT

No. IPRO/DAC/Agromet/2016-17/135

Date: 21.02.2017

TERMS & CONDITIONS

1. Only the manufactures/authorized dealers/Publishers/Suppliers/Agents need submit the tender. The authorized dealers should furnish a copy of the current certificate from the Manufactures for their dealership.
2. No person or Firm shall submit more than one tender for the same item.
3. A broad-based specification of equipment is given in Annexure. The tenders should also take note of the remarks, if any given therein.
4.
 - (a) Tender must be submitted in sealed cover to the **Dean, College of Agricultural Engineering, JNKVV, Jabalpur-482004 (M.P.)** by Registered post or delivered personally so as to reach on or before **06.03.2017 by 3.00 PM**
 - (b) Belated tenders due to postal delay or any other reason will be rejected.
 - (c) The tender in for EACH item should be sent SEPARATELY. The outer cover of the sealed envelope should be superscripted. **'TENDER FOR AGRICULTURAL ENGINEERING (Name of the equipment with Serial No.)** due on **06.03.2017**
 - (d) IF OFFERS FOR MORE THAN ONE ITEM ARE CLUBBED TOGETHER, THE TENDER WILL BE REJECTED.
 - (e) The tender offers should have a validity of 90 days or more from the due date for the rates quoted.
 - (f) The tender will be opened on **06.03.2017 at 3.30 PM** in the office of the undersigned in the presence of the authorized representative of tenders. They should bring proper authority letters.
 - (g) J.N. Krishi Vishwa Vidyalaya; reserve the right to extend the due date and or the date of opening the tenders.
5. The rate quoted should be for delivery at College of Agricultural Engineering, JNKVV, Jabalpur. The rate quoted should be inclusive of Packing and forwarding charges, loading/unloading/handling charges, freight full risk coverage, insurance installation charges etc. Warranty for 03 years & the AMC charges for next two years after warranty period of instruments/equipments.
 - a) The price offered for individual items should invariably be in Indian Currency. The Firms are requested to convert the prices into Indian Rupees if they are offering goods. Prices for accessories if any are quoted separately.
 - b) Excise duty, sales tax (with and without confessional certificate) VAT and other levees, if any, should be shown separately, and the total price of each item should be worked out incorporating the same.

- c) Any other charges, such as technical service charges, cost of training, installation charges etc. if any should be shown separately for each item and sub-item.
 - d) Breakup of the prices for the main item and its sub-item should be given separately. This is necessary to workout prices of a desired configuration.
6. The tender should be accompanied by detailed printed technical literature, specification, make and model No. of each item and each sub-item quoted in the tender, otherwise offer shall be rejected.
7. If asked by JNKVV, the tenderer will have to arrange a demonstration of the equipments/system at JNKVV, Jabalpur without any charge of obligations.
8. All losses during transit will have to be made by the tenderer at his own cost within period of 15 days.
9. The tenderer must guarantee satisfactory functioning of the equipment/system and free service including free replacement of parts for a period of three years from the successful and satisfactory installation of the equipment.
10. The tender must be accompanied by Earnest money deposit for each item, as mentioned in the form of crossed bank draft drawn on a nationalized bank, made infavour of J.N. Krishi Vishwa Vidyalaya, Jabalpur. Without the DD of earnest money deposit the offers are likely to be rejected.
- 11.
- (a) The standard terms and conditions of payment acceptable to JNKVV, are payment in full only after the contract is effected in full and to be satisfaction of JNKVV authorities.
 - (b) In special cases, payment in advance or payment through a bank against the document or payment by opening irrevocable letter of credit with a bank or any other mode of payment may be considered by JNKVV provided in such cases the tenderer furnished as unconditional Bank Guarantee for the full amount to JNKVV with an agreement that in cases of any loss, incomplete supply, delay or breach of contract in any manner, the JNKVV can recover full amount from the supplier through this Bank Guarantee.
 - (c) The tenderer should make it clear in the offer as to whether payment terms 11 (a) or 11 (b) both is acceptable to the tenderer else the tender offer is liable for rejection.
- 12.
- (a) If so desired by JNKVV, the tenderer shall have to enter into an agreement.
 - (b) Any deviation, or non-compliance of the terms and conditions by the tenderer shall be considered as a breach of contract and JNKVV reserve the right to forfeit the amount of earnest money and or security deposit in part or in full and to take actions as per legal arrangement.
13. Should there arise any dispute, the Vice-Chancellor, JNKVV, Jabalpur shall be the sole Arbitrator, whose decision in the matter shall be final and binding.

J.N.Krishi Vishwa Vidyalaya reserve the right to accept or reject any or all offers in full or in part without assigning any reason (s) therefore. It also reserves the right to place an order wholly or in part with one or more than one firm as they may be convenient to JNKVV.

14. The tenderer shall have to give an undertaking that the terms and conditions as mentioned above of this tender are acceptable to the tenderer.

Note: The details of tender documents can be obtained in website [http: www.jnkvv.org](http://www.jnkvv.org). The tender document can also be downloaded from JNKVV website, which will be acceptable only deposited along with DD of Rs. **200/- (Non refundable)** in favour of **Dean, College of Agricultural Engineering, JNKVV, Jabalpur** payable at Jabalpur up to **06.03.2017**.

Dean

Agricultural Engineering

METEOROLOGICAL EQUIPMENTS/ITEMS

1.	NON-RECORDING RAIN GAUGE WITH RAIN MEASURES EMD RS. 300	<p>A 200 cm² collector with small base, 4 litres of bottle having a normal capacity of 200 mm of rainfall. Collector, base, bottles, and additional cylinder shall confirm to IS 5225:1992. In addition, it should also be provided with a rain measure (colorless and transparent glass) of 20 mm capacity suitable for collectors of 200 cm². The glass shall be well annealed and of uniform thickness of 2 mm.</p>
2.	THERMOMETER SCREEN/SINGLE STEVENSON SCREEN DOUBLE STEVENSON SCREEN EMD Rs.500/-	<p>As per IS: 5948-1970 standards (BIS) for placing four meteorological thermometers. The dimensions include length (between inner slots of louvers) is 560 mm, breadth (between inner slots of louvers) is 315 mm, and height (between middle of lower roof and floor) is 412 mm. All dimensions within $\pm 5\%$. The screen should be constructed with teak wood with angle iron stand, and painted with non-hygroscopic zinc oxide paint.</p> <p>As per IS 5948-1970 made of teak wood with angle iron stand</p>
3.	THERMOMETER EMD Rs. 500/-	<p>The thermometers shall be of liquid-in-glass, solid stem type with enamel back as follows:</p> <p>(a). Maximum thermometer: Mercury-in-glass, having a range from -35 °C to + 55 °C. As per IS: 5681.</p> <p>(b). Minimum thermometer: Alcohol-in-glass, having a range from -40 °C to + 50 °C. As per IS: 5681</p> <p>(c). Ordinary thermometers (Wet and dry bulb): Mercury-in-glass, having a range from -35°C to + 55 °C.</p> <p>(d). Soil thermometers: Mercury-in-glass having a range from -20 °C to +65 °C at a depth of 5, 10, and 20 cm. As per IS:6592. Iron stand is also needed along with the thermometers.</p>
4.	WINDVANE EMD Rs. 500/-	<p>As per IS: 5799-1970. Given along with the stand.</p> <p>Suitable material for the various components of the instruments are suggested</p>

		<p>below:</p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Material</u></th> <th style="text-align: center;"><u>Component</u></th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>Aluminium</td> <td>: Base, mounting ring for direction arms, collar, arm support and horizontal arm.</td> </tr> <tr> <td>b)</td> <td>Aluminium alloy</td> <td>: Fin and bearing housing cap</td> </tr> <tr> <td>c)</td> <td>Aluminium casting</td> <td>: Support tube</td> </tr> <tr> <td>d)</td> <td>Brass</td> <td>: Spindle and cap nut</td> </tr> <tr> <td>e)</td> <td>Galvanised steel</td> <td>: Main support and direction letter</td> </tr> <tr> <td>f)</td> <td>Mild steel</td> <td>: Balance weight and direction letter</td> </tr> <tr> <td>g)</td> <td>Tin bronze</td> <td>: Bearing brush</td> </tr> </tbody> </table>		<u>Material</u>	<u>Component</u>	a)	Aluminium	: Base, mounting ring for direction arms, collar, arm support and horizontal arm.	b)	Aluminium alloy	: Fin and bearing housing cap	c)	Aluminium casting	: Support tube	d)	Brass	: Spindle and cap nut	e)	Galvanised steel	: Main support and direction letter	f)	Mild steel	: Balance weight and direction letter	g)	Tin bronze	: Bearing brush
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5.	<p>ANEMOMETER</p> <p>EMD Rs. 500/-</p>	<p>As per IS:5912-1970. The specifications of the materials are as follows:</p> <p>(a). Cups: Copper or aluminum sheets 0.71 mm thickness</p> <p>(b). Centre spindle: Stainless steel rod</p> <p>(c). Worm on center spindle: Cut from manganese bronze alloy.</p> <p>(d). Worm wheel: Hard brass.</p> <p>The tolerance limit is ± 1 kmph for speed less than 10 km/hr, and $\pm 10\%$ for more than 10 km/hr.</p>																								
6.	<p>OPEN PAN</p> <p>EVAPORIMETER</p> <p>EMD Rs. 1000/-</p>	<p>Made of copper sheet with fixed point gauge still well with measuring cylinder, wood rack platform, and thermometer clamp.</p> <p>Specification of the material is as follows:</p> <p>(a). Pan evaporimeter: Copper sheet of thickness 1.0 ± 0.1 mm</p> <p>(b). Fixed point gauge and still well-Brass</p> <p>(c). Measuring cylinder: Clean cast seamless acrylic plastic tubing or brass sheet.</p> <p>(d). Bottom plate: Acrylic plastic sheet.</p> <p>(e). Thermometer clamp: Brass</p> <p>(f). Platform: Rot resistant treated with effective wood preservative.</p> <p style="text-align: center;">The dimensions should be as per the standards of IMD.</p>																								
7.	<p>SUNSHINE</p> <p>RECORDER</p> <p>EMD Rs. 800/-</p>	<p>As per IS: 7243-1974. The specifications of the materials are as follows:</p> <p>(a). Base: Good quality marble or similar stone, black or white</p> <p>(b). Sphere: Uniform and well annealed glass.</p> <p>(C). Bowl: Tin bronze</p>																								

		(d). Pivot: Brass
8.	THERMOGRAPH: EMD Rs. 500/-	As per IS: 5901-1970. The material for base and cover shall be either a light or durable metal, e.g. aluminum or glass reinforced polyester. The material used for remaining components of the instrument shall be brass, aluminum, or similar material. This should come with the quartz clock. The thermograph shall indicate the change in temperature correct to within $\pm 1^{\circ}\text{C}$ throughout its working range of -20°C to $+60^{\circ}\text{C}$. The recording mechanism shall be free enough to denote clearly on the chart a change in temperature of the order of 0.2°C .
9.	HYGROGRAPH EMD Rs. 500/-	: As per IS: 5900 -1970. It should come with a quartz clock. The material for base and cover include light and durable like aluminum or glass reinforced polyester. The remaining components are of stainless steel or brass.
10.	Dew plates with iron stand Rs. 200/-	As per IMD specification for both the plates and stand
11.	Electronic Display board Rs. 500/-	Electrical Display board to display weather parameters in alphabetical words and numbers in different sizes (heading, and working letters) in the display board.