FORM OF QUOTATION NOTICE

<table>
<thead>
<tr>
<th>Quotation Number</th>
<th>QTN NO:5/EE/2020-21 Dated 15/07/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of issue of quotations</td>
<td>15/07/2020</td>
</tr>
<tr>
<td>Due date and time for receipt of quotations</td>
<td>06/08/2020 3.00 PM</td>
</tr>
<tr>
<td>Date and time for opening of quotations</td>
<td>07/08/2020 2.00 PM</td>
</tr>
<tr>
<td>Date up to which the rates are to remain firm for acceptance</td>
<td>60days</td>
</tr>
<tr>
<td>Designation and address of officer to whom the quotation is to be addressed</td>
<td>Executive Engineer, Hydrology Division, Irrigation Complex, Chembukkavu, Thrissur -20, Kerala.</td>
</tr>
<tr>
<td>Superscription: Quotation for</td>
<td>Supplying and Installing the manual instruments at Sheni under Hydrology Section, Kasargod 2019-2020</td>
</tr>
</tbody>
</table>

Sealed quotations are invited for the supply of the materials specified in the **Schedule and Technical Specification** attached below/overleaf. The rates quoted should be for delivery of the articles at the place mentioned below the schedule. The necessary superscription, due date for the receipt of quotations, the date up to which the rates will have to remain firm for acceptance and the name and address of officer to whom the quotation is to be sent are noted above. Any quotation received after the time fixed on the due date is liable to be rejected. The maximum period required for delivery of the articles should also be mentioned. Quotations not stipulating period of firmness and with price variation clause and/or ‘subject to prior sale’ condition are liable to be rejected.

The acceptance of the quotations will be subject to the following conditions:

1. Acceptance of the quotation constitutes a concluded contract. Nevertheless, the successful tenderer must within a fortnight/a month after the acceptance of his quotation furnish **5 per cent of the amount of the contract** as security deposit and execute an agreement at his own cost for the satisfactory fulfillment of the contract, if so required.

Purchaser

Supplier
2. Withdrawal from the quotation after it is accepted or failure to supply within a specified time or according to specifications will entail cancellation of the order and purchases being made at the offerers expenses from elsewhere, any loss incurred thereby being payable by the defaulting party. In such an event the Government reserves also the right to remove the defaulter’s name from the list of Government suppliers permanently or for a specified number of years.

3. Samples, duly listed, should be forwarded if called for under separate cover and the unapproved samples got back as early as possible by the offerers at their own expenses and the Government will in no case be liable for any expenses on account of the value of the samples or their transport charges, 207 etc. In case, the samples are sent by railway; the railway receipt should be sent separately, and not along with the quotation since the quotation will be opened only on the appointed day and demurrage will have to be paid if the railway parcels are not cleared in time. Quotations for the supply of materials are liable to be rejected unless samples, if called for of the materials tendered for are forwarded. The approved samples may or may not be returned at the discretion of the undersigned. Samples sent by V.P. Post or “freight to pay” will not be accepted.

4. No representation for enhancement of price once accepted will be considered during the currency of the contract.

5. Any attempt on the part of tenderers or their agents to influence the Officers concerned in their favour by personal canvassing will disqualify the tenderers.

6. If any license or permit is required, tenderers must specify in their quotation and also state the authority to whom application is to be made.

7. The quotation may be for the entire or part supplies. But the tenderers should be prepared to carry out such portion of the supplies included in their quotation as may be allotted to them.

8. (a) In cases where a successful tenderer, after having made partial supplies fails to fulfill the contracts in full, all or any of the materials not supplied may, at the discretion of the Purchasing Officer be purchased by means of another tender/quotation or by negotiation or from the next higher tenderer who had offered to supply already and the loss, if any, caused to the Government shall thereby together with such sums as may be fixed by the Government

Purchaser

Supplier
towards damages be recovered from the defaulting tenderer. (b) Even in cases where no alternate purchases are arranged for the materials not supplied, the proportionate portion of the security deposit based on the cost of the materials not supplied at the rate shown in the tender of the defaulter shall be forfeited and balance alone shall be refunded. (c) Any sum of money due and payable to the contractor (including Security Deposit returnable to him) under this contract may be appropriated by the Purchasing Officer or Government or any other person authorized by Government and set-off against any claim of the Purchasing Officer or Government for the payment of a sum of money arising out of or under any other contract made by the contractor with the Purchasing Officer or Government or any other person authorized by Government.

9. The prices quoted should be inclusive of all taxes, duties, cesses, etc., which are or may become payable by the contractor under existing or future laws or rules of the country of origin/supply or delivery during the course of execution of the contract.

10. (a) Ordinarily payments will be made only after the supplies are actually verified and taken to stock but in exceptional cases, payments against satisfactory shipping documents including certificates of Insurance will be made up to 90 per cent of the value of the materials at the discretion of Government. Bank charges incurred in connection with payment against documents through bank will be to the account of the contractor. The firms will produce stamped pre-receipted invoices in all cases where payments (advance/final) for release of railway receipts/shipping documents are made through Banks. In exceptional cases where the stamped receipts of the firms are not received for the payments (in advance) the unstamped receipt of the Bank (i.e. counterfoils of pay-in-slips issued by the Bank) alone may be accepted as a valid poor for the payment made. (b) The tenderers shall quote also the percentage of rebate (discount) offered by them in case the payment is made promptly within fifteen days/within one month of taking delivery of stores.

11. Any sum of money due and payable to the successful tenderer or contractor from Government shall be adjusted against any sum of money due to Government from him under any other contracts.
12. Special conditions, if any, printed on the quotation sheets of the tenderer or attached with the tender will not be applicable to the contract unless they are expressly accepted in writing by the purchases.

Place: Thrissur

Date: 15/07/2020

Executive Engineer,
(For and on behalf of Governor of Kerala)
Hydrology Division, Irrigation Complex,
Chembukkavu, Thrissur -20,
Email ID: hydrodntsr@yahoo.co.in
Ph No. 0487 2332552
## Schedule and Technical Specification

### SCHEDULE OF REQUIREMENT

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Specifications</th>
<th>Quantity</th>
<th>Unit</th>
<th>Rate without GST (Rs. P.)</th>
<th>Rate without GST (Amt. In Words)</th>
<th>GST (Rs. P.)</th>
<th>Total without GST (Rs. P.)</th>
<th>Total with GST (Rs. P.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supply and installation of Dry bulb Thermometer having specifications as detailed in technical specification item No.1</td>
<td>1</td>
<td>No</td>
<td></td>
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<tr>
<td>2</td>
<td>Supply and installation of Wet bulb Thermometer having specifications as detailed in technical specification item No.1</td>
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<td>No</td>
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<tr>
<td>3</td>
<td>Supply and installation of Stevenson’s Screen Small having specifications as detailed in technical specification item No.2</td>
<td>1</td>
<td>No</td>
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<tr>
<td>4</td>
<td>Supply and installation of Standard Rain Gauge and its accessories having specifications as detailed in technical specification item No.3</td>
<td>1</td>
<td>No</td>
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<tr>
<td>5</td>
<td>Supply and installation of Anemometer having specifications as detailed in technical specification item No.4</td>
<td>1</td>
<td>No</td>
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<td>No</td>
<td>Description</td>
<td>Quantity</td>
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<tr>
<td>6</td>
<td>Supply and installation of Wind Vane having specifications as detailed in technical specification item No.5</td>
<td>1</td>
<td>No</td>
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<tr>
<td>7</td>
<td>Supply and installation of Sunshine Recorder and its accessories having specifications as detailed in technical specification item No.6</td>
<td>1</td>
<td>No</td>
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<tr>
<td>8</td>
<td>Supply and installation of Maximum Thermometer having specifications as detailed in technical specification item No.7</td>
<td>1</td>
<td>No</td>
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<tr>
<td>9</td>
<td>Supply and installation of Minimum Thermometer having specifications as detailed in technical specification No.7</td>
<td>1</td>
<td>No</td>
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<tr>
<td>10</td>
<td>Supply and installation of measuring jar &amp; Thermometer for evaporimeter US class A pan having specifications as detailed in technical specification No.8</td>
<td>1</td>
<td>No</td>
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</tr>
<tr>
<td>11</td>
<td>Supply and installation of measuring jar for rain gauge having specifications as detailed in technical specification item No.9</td>
<td>2</td>
<td>Nos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL**
Period within which goods should be delivered: 45 days

Warranty: - 1 year from the date of commissioning

Rates should be quoted for delivery of equipments as per schedule of requirement at **office of Assistant Engineer, Hydrology**
Section Kasargod, Vidya Nagar, Kasargod, Pin-671123. Payment will be made after supply, Installation and commissioning of the equipments.

Sd/-

Executive Engineer
Hydrology Division, Thrissur
1. ORDINARY THERMOMETERS (FOR DRY AND WET BULB MEASUREMENTS)

- **Type**: Mercury in glass
- **Range**: -35 to 55 °C
- **Accuracy**: 0.2 °C
- **Graduation interval**: 0.5 °C

Thermometers shall comply with IS 5681-1992.

2. STEVENSON’S SCREEN SMALL

**Purpose**
To protect from direct sun-shine and to provide a universal enclosure to allow for inter station data comparison.

**Conditions and requirements**

- Double layered roof with ventilation provision.
- The screen shall comply with IS 5948 – 1970.
- All dimension requirements shall be met within 5% of specified dimension.
- The screen colour shall be white (to reduce the heating effect of solar radiation)

**Specifications**

- Standard width (small) length between inner slats of louvers: 560 mm
- width between inner slats of louvers: 315 mm
- height between middle of lower roof and floor: 412 mm

3. NON RECORDING RAIN GAUGE

**Purpose**
The rain gauge will be used to collect precipitation in a recipient for quantitative measurement.

**Conditions & Requirements**

- The rain gauge shall be of such a design that it operates reliably and accurately under the prevailing environmental and weather conditions.
- The rain gauge shall be easy to operate and maintain.
- The rain gauge shall be supplied with the accessories as needed for effective deployment.
- All materials on the rain gauge shall be non-corrosive.

**The locking ring shall be of rigid plastic**
- The rain gauge shall have smooth and permanent surface finish to minimise evaporation losses.
- The minimum expected lifetime in open field shall be 15 years.
• All openings of the rain gauge shall be covered with stainless steel net to protect against any insects entering inside.
• The rain gauge shall comply with IS IS 5225/1992

Specifications

i. 200 cm Model
   collecting area 200 cm²
   ID of rim 159.6 mm
   collecting bottles of 4 litres for 200 cm² collector
   nominal capacity 100 mm
   rain measure for 20 mm rainfall, graduation etc. according to IS 5225/1992

ii. Materials
   base and collector preferably FRP
   rim of collector aluminium or gun metal

ii. Accessories
   collecting bottles of 4 litres for 200 cm² collector and overflow Jar

4. COUNTER TYPE ANEMOMETER

Purpose
The anemometer will be used to measure wind travel by counting revolutions of a cup assembly.

Conditions & Requirements
• The instrument shall be of such a design that it operates reliably and accurately under the prevailing environmental and weather conditions.
• The instrument shall be easy to operate and maintain.
• The instrument shall be supplied with the accessories as needed for effective deployment.
• All materials on the instrument exterior shall be non-corrosive.
• The instrument shall have an expected technical lifetime of not less than 10 years.
• An operator’s manual, related to the type and model of the instrument, shall be part of the delivery.
• A suitable non-reset direct-drive revolution counter adding one count for each one-tenth revolution of the drive shaft in one direction shall be used.
• The ratio between gears shall be such that 1 count equals 100 m/s.
• The anemometer shall comply to IS IS 5912-1970.

Specifications
i. Sensing
   range 50 m/s
   accuracy up to 2.5 m/s, 0.25 m/s
   above 2.5 m/s, 10% FS
ii. Materials
- cups: copper or aluminium sheet 0.71 mm thickness
- centre spindle: stainless steel rod
- worm on spindle: manganese bronze alloy
- worm wheel: hard brass

5. WINDVANE
- Pointer: counter balanced
- Direction arms: 8, with direction letters for N, E, S, W
- Mounting Materials: aluminium (ring for direction arm, arm support & horizontal arm)
- Fin & Bearing Housing Cap: aluminium alloy
- Spindle: brass
- Direction Letters: galvanised steel painted red
- When the complete instrument on final assembly is held firm at bottom and the balance weight imparted an impact by a hammer with a mass of 0.72 kg and having a handle length of 240 mm, it shall make not less than five and not more than ten complete revolutions.
- The general arrangement and main dimensions of wind vane shall comply with 5799-1970.

6. SUNSHINE RECORDER
Purpose
Accurate measurement of the duration of bright sunshine at a place

Conditions & Requirements
- The sunshine recorder and cards shall comply with IS 7243-1974

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>base 200 mm, sphere radius 79.6 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>base</td>
<td>good quality marble or similar stone, black or white</td>
</tr>
<tr>
<td>sphere</td>
<td>uniform and well annealed glass and having a focal length of 74.9 ± 0.25 mm</td>
</tr>
<tr>
<td>bowl</td>
<td>tin bronze</td>
</tr>
<tr>
<td>pivot</td>
<td>brass</td>
</tr>
</tbody>
</table>

Sunshine Cards, made of white paste board

<table>
<thead>
<tr>
<th>properties</th>
<th>when dry</th>
<th>after immersion in water for 18 hours</th>
<th>after drying</th>
</tr>
</thead>
<tbody>
<tr>
<td>length down board</td>
<td>127 mm</td>
<td>127 mm</td>
<td>not less than 125.7 mm</td>
</tr>
<tr>
<td>width across board</td>
<td>25.4 mm</td>
<td>not more than 25.9 mm</td>
<td>not less than 25.1 mm</td>
</tr>
<tr>
<td>thickness</td>
<td>0.43 to 0.48 mm</td>
<td>not more than 0.76 mm</td>
<td></td>
</tr>
</tbody>
</table>
7. LIQUID IN GLASS THERMOMETERS

**Purpose**
Accurate measurement of air temperature

**Conditions & Requirements**
- The thermometers shall comply with IS 5681-1983.
- The delivery shall include matching muslin wicks for the wet-bulb measurements, in a number sufficient for one year of continuous operation.

**Specifications**

i. **Maximum thermometer**
   - **type**: Mercury in glass
   - **range**: 35 to 55 °C
   - **accuracy**: 0.2 °C
   - **graduation interval**: 0.5 °C

ii. **Minimum thermometer**
   - **type**: Alcohol in glass
   - **range**: 40 to 50 °C
   - **accuracy**: 0.3 °C
   - **graduation interval**: 0.5 °C

8. Measuring cylinder for evaporimeter, US class A pan

- **material**: clean cast seamless acrylic plastic tubing or brass sheet
- **bottom plate**: acrylic plastic sheet
- **thermometer clamp**: brass
- **platform**: rot resistant timber treated with creosote or other effective wood preservative
- **inner diameter**: 122 mm
- **graduation**: in cm.

**Water thermometer for Evaporimeter, US class A pan**

9. MEASURING GLASS JAR FOR RAIN GAUGE

- **rain measure** for 20 mm rainfall, graduation etc. according to IS 5225-1992

Sd/-
Executive Engineer
Hydrology Division, Thrissur