



**TAMIL NADU AGRICULTURAL UNIVERSITY,  
COIMBATORE – 641003, TAMIL NADU.  
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**LIST OF ANNEXURE OF RATE CONTRACT DOCUMENT**

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## **ELIGIBILITY OF SUPPLIER**

Tamil Nadu Agricultural University, Coimbatore invites Rate Contract under dealership from manufacturer for the supply of ISI Marked Drip Irrigation System who qualifies for Rate Contract under the prescribed terms and conditions.

- (i) Supplier should be a manufacturer of ISI Marked Laterals as per BIS Specification IS: 12786 :1989 (with latest amendments) ISI marked emitters as per IS 13487:1992 / emitting pipe system (in line drippers) as per BIS specification IS:13488:2008 (with latest amendments) and capable of supplying complete set (tailor made model) Drip irrigation system including other required items such as ISI marked main / sub-main PVC pipe as per IS 4985:2000 (with latest amendments), ISI marked Screen Filter as per IS: 12785:1999, control valve, flush valve, by pass assembly and other required fitting & accessories in complete package.

(Self Certified Photo Copy of documents supporting the same to be submitted as detailed in Annexure II)

- (ii) Other necessary requirements for eligibility shall be as mentioned in Rate Contract document

Comptroller,  
TNAU, Coimbatore

## **GENERAL CONDITIONS OF RATE CONTRACT (RC)**

### **1. Purchase of Rate Contract (RC):**

- 1.1 Rate Contract can be obtained in person on payment of `1575.00 (non refundable) up to 1.00 p.m of **15.09.2016** and in case the documents are required by post a sum of Rs.100.00 will be charged extra upto 1.00 p.m of **07.09.2016**. However, Comptroller, TNAU, Coimbatore will not be responsible for any kind of delay in postage.
- 1.2 The Rate Contract form will be available in the Office of the Comptroller, TNAU, Coimbatore from **17.08.2016** up to 1.00 p.m. during office hours.
- 1.3 It is mandatory for the supplier to submit the Rate Contract duly issued by the Comptroller, TNAU, Coimbatore in favour of the supplier, failing which no offer will be accepted.

### **2. Quoting Rates:**

- 2.1 The supplier should quote the final selling rates inclusive of all applicable taxes, duties. Rates should be given in Annexure – V & VI.
- 2.2 The prices of ISI Marked Micro irrigation System components submitted by the supplier and accepted by the TNAU will be the part of this Rate Contract for the year 2016-17 and onwards.
- 2.3 Complete Break up of Price & Tax should be given along with the offer as per Annexure VI.
- 2.4 The supplier should quote their lowest price, in accordance with the prevailing rates of the Company / their authorized dealer & market condition.
- 2.5 The price charges for the material or accessories supplied, under this contract by the supplier are the prices on which TNAU and supplier have agreed upon.
- 2.6 Supplier must enclose / self certified copy of manufactures Printed list of Maximum Retail Price (MRP).
- 2.7 Rates should be quoted both in words and figures for the supply on F.O.R. Destination to Tamil Nadu Agricultural University, Coimbatore and its affiliated colleges and research stations spread all over Tamil Nadu including all taxes and levies and margin payable to TNAU. In case of difference in words and figures of the rates quoted, the rates offered in words shall be considered.
- 2.8 The Rate Contract will be valid up to 31<sup>st</sup> March 2017.

### **3. Submission of offer:**

- i. Not more than one offer will be accepted from any supplier. If any individual participating in the offer, representing more than one firm in one or different names and it comes to University knowledge at any point of time, all such offer will not be entertained and shall be liable for rejection.
- ii. Individual signing the offer and or any related documents will have to provide authority in original to sign on behalf of the supplier.

- iii. The financial offer should be in the prescribed format, as per **Annexure – V& VI**, accompanied with all necessary documents as per **Annexure – IV** and elsewhere mentioned in Rate Contract document.
- iv. Rate Contract form should accompany with a demand draft of **Rs.20,000.00 (Rupees twenty thousand only)** as Earnest Money Deposit (EMD) in favour of “The Comptroller, TNAU, Coimbatore” payable at SBI, TNAU Branch, Coimbatore. No offer will be entertained without deposit of desired amount of EMD.
- v. The envelope containing complete Rate Contract should be clearly superscripted as **“Offer for the supply of ISI MARKED MICRO IRRIGATION SYSTEM COMPONENTS for the year 2016-17”**
- vi. Offer should be completed in all respect should be deposited in the offer box kept in the **Office of the Comptroller, TNAU, Coimbatore** upto 3.00 p.m. on **15.09.2016**.
- vii. When the Rate Contract is delivered through special messenger, the same should be deposited in the offer box as per clause 3 vi. Nobody is authorized to receive or issue receipt for the offer, delivered through special messenger.
- viii. The TNAU will not be responsible for delay on any account in receipt of Rate Contract documents. If the Rate Contract documents (duly filled) are received after the specific date and time, even if the delay in receipt was caused in postal transit or any other reason, whatsoever, the same shall not be considered and the offers will be returned unopened.
- ix. Submission of the Rate Contract shall be deemed to be acceptance by the supplier of all the Terms and Conditions herein.
- x. **TELEGRAPHIC OFFERS SHALL NOT BE ENTERTAINED.**

#### **4. Negotiations**

It is clarified that the TNAU will make no negotiation on the offer and therefore the supplier should quote their lowest prices only.

#### **5. Opening of offer**

Offer received in the offer box up to due date and time as mentioned in clause 3 (vi & vii) shall be opened at 4.00 p.m. on **15.09.2016** in the presence of the supplier who wishes to be present. However, if the date and time of opening of offer is changed due to any unforeseen reason the new date and time of opening will be displayed on the Notice board of the TNAU.

#### **6. Execution of Agreement**

- (a) The TNAU will intimate the successful supplier regarding acceptance and request him to execute the agreement in the given time limit. In case the supplier fails to execute agreement within the prescribed time limit, the EMD submitted along with the offer shall stand forfeited.
- (b) The successful supplier shall have to execute an agreement as per Annexure - VII with the TNAU on non-judicial stamp paper of Rs. 100/- . (to be purchase by the supplier)

## **7. EARNEST MONEY DEPOSIT**

- A. (i) Rate Contract should accompany with a demand draft of Rs 20000.00 (Rupees twenty thousand only) as EMD as per clause 3 (iv).  
(ii) Earnest Money of all unsuccessful suppliers will be returned as soon as the Rate Contract is finalized.  
(iii) No interest is payable on the amount of Earnest Money at the time of refund.
- B. Earnest Money shall be forfeited if:-  
(i) The supplier is withdrawn at any time prior to its rejection.  
(ii) Before or after the acceptance is communicated to the supplier.  
(iii) If the successful supplier fails to execute the agreement within prescribed time limit as per clause no. 6
- C. Earnest money of successful supplier will be adjusted as Security Deposit (SD) on execution of the agreement. (such supplier will become supplier).

## **8. SECURITY DEPOSIT**

- (i) The SD will remain with the TNAU during the tenure of the contract and till successful execution of all the order placed during the tenure of the contract and will be refunded to the supplier without interest in case of no dispute and after getting clearance / NOC *from the purchasing officer of Tamil Nadu Agricultural University*
- (ii) Security deposit will be forfeited in case of failure of supply of the material as mentioned in the purchase order, in time and as per the approved specifications, or for any breach of terms and condition of the agreement and Rate Contract document.

## **9. MINIMUM TECHNICAL SPECIFICATIONS OF THE ITEMS**

Minimum Technical specifications of the items covered in this Rate Contract are mentioned in Annexure - I & II. Supplier should submit details of item offered as per Annexure - I & II.

## **10. EVALUATION PROCEDURE**

- (i) The bidder should have the financial, technical and production capability necessary to perform the contract and meet the criteria outlined in the Rate Contract document
- (ii) All the system components and corresponding accessories needed for 1 ha ideal design layout of the micro irrigation system will be worked out to prepare the design estimate.
- (iii) The rate for each component offered by the bidder will be loaded in the designed estimate to obtain the total estimation cost.
- (iv) The rate offered by the bidder which derives the lowest estimated cost is considered as substantially lowest responsive bidder.
- (v) The design will be made only for evaluation purpose.

## 11. PLACEMENT OF ORDER

Deans, Director and Heads of Departments / Research Stations of TNAU shall place the purchase order to the approved supplier for the approved rate.

## 12. SCHEDULE AND MODE OF SUPPLY / DELIVERY

- (a) The supplier has to supply and deliver the ordered quantity within time period as mentioned in the order. Failure on the part of the Supplier for timely supply, shall lead to forfeiture of Security Deposit and the offer shall stand cancelled and agreement shall be terminated. TNAU can also claim loss of goodwill as deemed fit and the same shall be payable by the supplier.
- (b) If the indenting authority suffers any loss due to inordinate delay in effecting supply/ dispatch or arrival of the material at the destination, the same shall be the responsibility of the supplier who shall make good the entire loss suffered by the indenting authority. *The Purchaser will assess and intimate the supplier the extent of loss*, and the same will be acceptable to the supplier. The supplier shall ensure that the ordered material being supplied by him reach to the consignee at destination in good condition. As such it will be the sole responsibility of the supplier to ensure desired quality and standard of the material.
- (c) The ordered item as specified in the order shall be in conformity with approved size and quality specifications mentioned in Annexure – I & II, of the Rate Contract and elsewhere in the offer documents. Material shall be supplied in batches in any or all the sizes and in quantities as per delivery schedule ordered by the ordering authority of the TNAU. The delivery schedule may however be revised by the ordering authority, if warranted by exigency of the work of the TNAU. The successful supplier shall be bound to effect deliveries in accordance with the changed supply schedule without claiming revision in rates. The dates of supply shall be the date on which the consignment reaches the required destination.
- (d) Ordered item may be required to be supplied to the consignee securely packed so as to withstand rough handling and protection from vagaries of nature during transit.
- (e) Relevant L.R. shall be sent free and direct to the consignee (s) freight paid. The order No. of TNAU should be mentioned in the bill, against which the material is supplied.
- (f) The TNAU shall not be responsible for damages, losses, thefts, pilferage, fire, accidents and demurrages etc. if any, incurred to the consignment during transit and these shall be borne by the supplier.
- (g) The dispatch of consignment shall be immediately communicated to the TNAU consignee with the relevant details of L.R. and Bill Nos.
- (h) **Transit Insurance** The Supplier will arrange for Transit Insurance and Material supplied should be covered under Transit insurance for Road Risk, Theft, Pilferage, and Non Delivery Risk (**RRTPND**).

**13. WARRANTY PERIOD**

The Supplier has to declare minimum 12 months warranty period. Item supplied by the supplier against any manufacturing defect from the date of Installation. In case of complaint / defect, the supplier shall have to arrange repair /replacement within 10 days from the date of receipt of intimation. The TNAU shall have right to recover the cost or expenditure of loss whatsoever, on this account from the future bills of the supplier or from the security deposit or from any other amount due to the supplier or out of the security or any deposit made by the supplier in other Government Organization.

**14. TRAINING**

The supplier shall impart training to the selected nominated person of purchaser and the concerned person/staff/officers of the TNAU for proper operation and maintenance of Items Supplied.

**15. AFTER SALE SERVICE**

- a. The company must provide free sales service after sales during warranty period through their authorized dealer / distributor.
- b. It shall be the responsibility of the supplier / manufacturer to ensure that necessary spares parts are available to the purchaser /customer of machine/equipments during warranty period and afterwards also. For this purpose supplier shall keep necessary stock of such fast/slow moving parts on consignment with TNAU. Quantity and location of stocking points of such items shall be decided by the supplier as per advice of TNAU. Supplier shall also ensure that proper after sales services are available to the customers.
- c. The supplier shall also make arrangements for repair and after sale service required on continuous basis after expiry of the warranty period and shall ensure that the repairs/maintenance cost incurred by the purchaser are minimum

**16. RIGHT TO REFUSE/REJECT THE SUPPLIES**

- (a) Ordered item shall confirm to the qualities specifications (as per Annexure - I & II) mentioned in supply order. The TNAU reserves the right to refuse to accept the supplied item, if found:-
  - (i) Inferior in quality & not in proper packing or not conforming to the specifications mentioned in Annexure – I & II.
  - (ii) Other than specified and ordered by the TNAU,  
OR
  - (iii) For any other sufficient reason at it's discretion.
- (b) In case the supply of supplied item is rejected / the supply not accepted, shall be lifted by supplier at his own cost within the period granted by the TNAU and in no case TNAU shall be liable for the supply not accepted.
- (c) If the material fails in the quality testing.



**17. QUALITY INSPECTION**

TNAU or its authorized representatives shall be free to conduct inspection of items supplied/ to be supplied at any stage including inspection before dispatch from manufacturing unit. Random checking system shall also be used to ensure supply of quality material. The cost of such testing including cost of material shall be borne by the supplier.

**18. DEFECTIVE SUPPLIES**

The supplier shall replace the defective material or any other part found defective or prematurely worn out within 7 days within warranty period from the date of sale to the consumer, free of cost. If it is proved that supplier has intentionally supplied items of improper quality or not ready to replace or had not replaced defective items during the specified period or in a genuine time period as required minimum, TNAU shall be free to black list the supplier and supplier shall be bound to refund the amount received in lieu of such defective supplies made by the supplier.

**19. PAYMENT**

(a) The TNAU / purchaser will make the payment normally within 30 days on payment after payment condition to the supplier only after receipt of bills along with satisfactory report duly signed by the consignee.

**20. PRICE ESCALLATION CLAUSE**

The variation in price is allowed if any variation is occurred in Excise duty, Central or State Sales Tax any other statutory levies. The variation in rates may be effected only if it is approved by the competent authority of Tamil Nadu Agricultural University.

**21. REASONABILITY OF RATES**

Supplier shall have to offer his lowest rates for the offered item and it should be strictly in accordance with the clause no 2.4. If any dispute arises regarding the rates of item submitted by the supplier at any level, The TNAU shall be entitled to recover the loss whatsoever & will be deducted from the supplier's running bill. Such loss calculated by the TNAU & the decision of the *purchaser will be firm and final*.

**22. DISPLAY & DIPOSITION OF SAMPLES**

One sample of items offered for the year 2016-17 should be submitted by the supplier along with complete nomenclature & write-up. TNAU may decide to examine / check the samples for nomenclature & write up submitted by supplier through recognized laboratories as decided by TNAU.

**23. RANDOM TESTING OF COMPONENTS**

TNAU may select sample by random checking of any or all components of System received at the destination / site and send it to any recognized institute for quality testing. **The cost of such testing including cost of material shall be borne by the supplier.**

**24. Registration with DGS & D**

Supplier having registration with DGS & D as approved supplier must produce copy of registration with approved rates.

**25. Brand Name**

The Supplier is entitled to claim only one particular brand name for the purpose of this contract. Regarding brand name, certificate of brand name, if any, issued by competent authority for this purpose may be enclosed; however the TNAU will not be liable for any dispute on account of brand name or of any kind.

**26. Submission of Required Document**

It is obligatory for the supplier to submit all the necessary documents as mentioned in Annexure -V and mentioned elsewhere in Rate Contract document. All formats should be filled in completely. All the necessary documents should be enclosed with duly self-attestation.

**27. INSTRUCTION TO OFFERER**

**No offer shall be considered valid if: -**

1. The Rate Contract documents have not been purchased by the supplier from the TNAU.
2. It is not submitted in the prescribed form.
3. Not accompanied with Earnest Money Deposit (EMD) as per clause No.3 (iv).
4. The offer is conditional and inconsistent with the terms and conditions of the contract.
5. A manufacturer submits more than one offer or authorizes the submission of more than one offer on its behalf.

**28. REGISTRATION**

**A-** If necessary at any point of time during the currency of this contract, technical registration from any other government agency is made compulsory by the government and the manufacturer/producer/supplier/distributor has to get the registration done with such government agency at their own cost. And after such technical registration, self certified copy of such registration papers along with rates circulated if any has to be submitted to TNAU as and when required.

***B-The supplier having technical registration with Govt. of Tamil Nadu {State Micro Irrigation Committee {SMIC}/ Chief Engineer, Agricultural Engineering, Government of Tamil Nadu, Chennai } must submit the technical registration and approved price list ( if issued by them ) with their offered final selling rates to customer through TNAU.***

**29. ACCEPTANCE OF OFFERS**

***The Comptroller, TNAU Coimbatore reserves the right to accept or reject any or all the offer without assigning any reason whatsoever at any time prior to the award of the contract, without incurring any liability to the affected supplier and any obligation***

to inform the affected supplier of the grounds.

**30. FORCE MAJEURE CLAUSE**

FMC will be applicable in the following circumstances;

- (a) Natural phenomenon including but not limited to weather condition, floods, drought, earthquake and epidemics.
  - (b) Acts of government authority domestic or foreign including but not limited to war declared or properties, quarantine restriction.
  - (c) Accidents or distraction including but not limited to fire, explosion break downs at essential machinery equipment and power shortage.
31. The decision of the Comptroller, TNAU, Coimbatore shall be final and binding to the supplier in case of any dispute.
32. The Comptroller, TNAU, Coimbatore reserves the right to impose penalties at his discretion for breach of the terms and conditions (commensurate with the losses incurred).
33. TNAU shall become Authorized Dealer of the company after execution of agreement with the company during the currency of Rate Contract.
34. The Comptroller, TNAU reserves the right to amend or replace or change any condition without any notice.
35. In case of any dispute arising between the supplier and TNAU the matter shall be referred to TNAU Limited who will act as sole arbitrator finally passes his verdict, which will be binding, to supplier and TNAU.
36. Only *Chennai* Court shall have jurisdiction.

Comptroller,  
TNAU, Coimbatore

## ANNEXURE – I

### MICRO IRRIGATION SYSTEM COMPONENT SPECIFICATIONS

#### *TECHNICAL SPECIFICATIONS (BUREAU OF INDIAN STANDARDS) OF VARIOUS MICROIRRIGATION SYSTEM COMPONENTS*

##### *SPECIFICATION No: 1*

**PRODUCT** : **SCREEN FILTER**  
**I.S. NUMBER** : **IS 12785:1994 with latest amendments**

1.	<b><i>Technical data</i></b>	
	Nominal size (inches)	1.5", 2.0", 2.5", 3.0"
	Nominal operating pressure (kg/cm <sup>2</sup> )	1 – 4
	Range of flow rates	1.5" - 12 m <sup>3</sup> /hr 2.0" - 25 m <sup>3</sup> /hr 2.5" - 40 m <sup>3</sup> /hr 3" - 50 m <sup>3</sup> /hr
	Type of connections to piping network	Male threaded end or Flanged
	Aperture size (microns)	Variable (0.1 to 0.13 mm or 100 - 130μ)
2.	<b><i>Material of construction</i></b>	
	Body	MS or Plastic
	Filter element	Stainless steel or Plastic or combination of both
	Wall thickness of body (mm)	Minimum 3mm
	Filter Element	High Strength Twill weave Mesh (SS 304/316 or Plastic) wound over a supporting element made of either plastic or SS 304/316
3.	<b><i>Coating for metal body filters</i></b>	
	Type	Powder coating
	Thickness (microns)	Minimum 70 microns of pure polyester electrostatic powder coating
4.	Maximum Operating pressure	6 kg/cm <sup>2</sup>
5.	Clean pressure drop	0.05 to 0.2 kg/cm <sup>2</sup> at nominal flow rate
6.	Safe maximum pressure drop	Maximum 0.5 kg/cm <sup>2</sup>

#### **Additional Specifications/Requirements**

##### **Plastic Screen Filters**

- ◆ The mesh/micron size and specification of the filter shall be decided based on the quality of water source and based on the Emitters being used in the Irrigation system.
- ◆ The Mesh/Micron size of the filter element shall be clearly marked on the element.
- ◆ Shall be provided with valve on the drain port.
- ◆ For measuring pressure either a Single pressure gauge with three way valve assembly or two pressure gauges one each on inlet and outlet need to be included in the assembly.

- ◆ Pressure gauge shall be with minimum 2”/4” Dial capable of measuring pressure up to 6 kg/cm<sup>2</sup> or the System Design pressure whichever is higher.
- ◆ Shall meet or exceed all the tests as specified in IS 12785:1994
- ◆ Additionally, burst pressure test needs to be conducted periodically.

### **Metal Screen Filters**

- ◆ The filter housing shall be pre-treated by a thorough chemical cleaning process followed by pure polyester powder coating using electro static powder coating method from both inside and outside for protection against corrosion.
- ◆ Shall be provided with a valve on the drain port.
- ◆ Shall consist of provisions on both Inlet and Outlet for fixing 1/8” Pressure Gauge.
- ◆ The filter shall be suitable for vertical as well as horizontal installations.
- ◆ For measuring pressure either a Single pressure gauge with three way valve assembly or two pressure gauges one each on inlet and outlet need to be included in the assembly.
- ◆ Pressure gauge shall be with minimum 2”/4” Dial capable of measuring pressure up to 6 kg/cm<sup>2</sup> or the System Design pressure whichever is higher.
- ◆ All filters shall be checked for Dimensions & threads (using GO/NoGO Gauges)
- ◆ Shall meet or exceed all the tests as specified in IS 12785:1994

### **SPECIFICATION No. : 2**

**PRODUCT** : **MEDIA FILTER**  
**I.S. NUMBER** : **IS 14606:1998**

1.	<b><i>Technical data</i></b>	
	Nominal size ( inches)	1.5”, 2.0”, 2.5”, 3.0”
	Nominal operating pressure (kg/cm <sup>2</sup> )	1 – 4
	Recommended range of design flow rates	1.5” - 10 m <sup>3</sup> /hr 2.0” - 25 m <sup>3</sup> /hr 2.5” – 40 m <sup>3</sup> /hr 3” - 50 m <sup>3</sup> /hr
	Type of connections to piping network	Male threaded, Female threaded end & Flange type
	Type of media	Crushed granite, silica, or quartz
	Media grade	300 to 2000 microns (10 – 40 mesh)
2.	<b><i>Material of construction</i></b>	
	Body	MS
	Wall thickness (mm)	Minimum 3 mm
3.	Uniformity coefficient of sand media	1.4 to 1.6
4.	<b><i>Coating</i></b>	
	Type	Powder coating
	Coating thickness (microns)	Minimum 70 microns of pure polyester electrostatic powder coating
5.	Maximum operating pressure	6 kg/cm <sup>2</sup>
6.	Clean pressure drop	0.1 to 0.3 kg/cm <sup>2</sup>
7.	Safe maximum pressure drop	0.5 kg/cm <sup>2</sup>

### Additional Specifications/Requirements

- ◆ Sand Media Filter can be of Horizontal or Vertical type, single tank filters.
- ◆ Filter tank shall have Dish ends.
- ◆ The filter housing shall be pre-treated by a thorough chemical cleaning process followed by pure polyester powder coating using electro static powder coating method from both inside and outside for protection against corrosion.
- ◆ Shall be provided with entire assembly either in Galvanized Iron or HDPE manifold consisting of valves, backwash arrangement and arrangement for measuring pressure.
- ◆ Shall prefer if Screen Filter on the Backwash line for backwashing the filter media with filtered water but not raw water.
- ◆ Shall meet or exceed all the tests as specified in IS: 14606-1998

### SPECIFICATIONS No. : 3

**PRODUCT** : **HYDROCYCLONE FILTER**  
**I.S. NUMBER** : **IS 14743:1999**

1.	<b>Technical data</b>	
	Nominal size (inches)	1.5", 2", 2.5", 3"
	Nominal operating pressure	1.0 to 6.0 kg/cm <sup>2</sup>
	Range of flow rates	1.5" - 15 m <sup>3</sup> /hr 2.0" - 25 m <sup>3</sup> /hr 2.5" - 40 m <sup>3</sup> /hr 3" - 50 m <sup>3</sup> /hr
	Type of connections to piping network	Male threaded & Flanged ends
	Capacity of Collection Chamber	For 15 m <sup>3</sup> /hr – 5 litres For 25 m <sup>3</sup> /hr – 5 litres For 40 m <sup>3</sup> /hr – 10 litres For 50 m <sup>3</sup> /hr - 10 litres
2.	<b>Material Construction</b>	
	Body including collection chamber	MS
	Wall thickness (mm)	Minimum 3mm
3.	<b>Coating for body and collection chamber</b>	
	Type	Powder coating
	Coating thickness (microns)	Minimum 70 microns of pure polyester electrostatic powder coating
4.	Maximum operating pressure	6.0 kg/cm <sup>2</sup>
5.	Clean pressure drop	0.2 to 0.5 kg/cm <sup>2</sup> at nominal flow rate
6.	Safe maximum pressure drop	0.5 kg/cm <sup>2</sup>

### Additional Specifications/Requirements

- ◆ The tank shall have Dish ends.
- ◆ The hydro cyclone housing shall be pre-treated by a thorough chemical cleaning process followed by pure polyester powder coating using electro static powder coating method from both inside and outside for protection against corrosion.
- ◆ For resisting abrasive activity at the end of conical portion of the tank, additional 5mm thick steel stiffener has to be provided from inside of the tank.

**SPECIFICATION No. : 4**

**PRODUCT** : **DISC FILTER**  
**I.S. NUMBER** : **-**

1.	<b><i>Technical data</i></b>	
	Nominal size (inches)	1.5", 2", 2.5" & 3"
	Nominal operating pressure (kg/cm <sup>2</sup> )	1 – 4
	Range of flow rates	1.5" - 15 m <sup>3</sup> /hr 2.0" - 25 m <sup>3</sup> /hr 2.5" - 40 m <sup>3</sup> /hr 3" - 50 m <sup>3</sup> /hr
	Connection type	Threaded or Flanged
	Mesh	120 to 130 ( microns)
	2.	<b><i>Material of construction</i></b>
Body		MS/Plastic
Disc Element		Polypropylene/Plastic
3.	<b><i>Coating for Metal body filters</i></b>	
	Type	Powder coating
	Coating thickness (microns)	Minimum 70 microns of pure polyester electrostatic powder coating
4.	Maximum operating pressure	6.0 kg/cm <sup>2</sup>
5.	Clean pressure drop	Maximum 0.20 kg/cm <sup>2</sup> at nominal flow rate
6.	Safe maximum pressure drop	Maximum 0.50 kg/cm <sup>2</sup>

**Additional Specifications/Requirements**

- ◆ The metal body filters, filter housing shall be pre-treated by a thorough chemical cleaning process followed by pure polyester powder coating using electro static powder coating method from both inside and outside for protection against corrosion.
- ◆ The element shall be made of plastic filter discs of specified mesh/micron size, which may be colour coated. The mesh size and specification shall be decided based on the quality of water souRate Contracte and the requirements of Emitters used in the Irrigation system.
- ◆ Shall be provided with a valve on the drain port.
- ◆ Shall consist of provisions on both Inlet and Outlet for fixing 1/8" Pressure Gauge.
- ◆ The filter shall be suitable for vertical as well as horizontal installations without any need for changes.

**SPECIFICATION No: 5**

**PRODUCT** : **FERTILIZER TANK**  
**I.S. NUMBER** : -

1.	<b><i>Technical data</i></b>	
	Capacity	60, 90 and 120 liter capacities
	Height (cm)	Suitable for the rated capacity of the tank
	Width (cm)	
	Type of connections to piping network	½” to ¾” or 1.0” BSP Thread connection
	Maximum operating pressure at the inlet	6.0 kg/cm <sup>2</sup>
	Fertilizer injection rate in system (lph)	100 – 500
	List of Components	Vacuum breaker valve, pressure gauge with cock, drain valve, elbows, nipples, hose pipe and inlet & outlet valves
	Recommended head loss for fertigation	0.4 kg/cm <sup>2</sup> for fertigation 0.8 kg/cm <sup>2</sup> for chemigation
2.	<b><i>Material of construction</i></b>	
	Body	MS
	Wall thickness (mm)	Minimum 3mm
3.	<b><i>Coating</i></b>	
	Type	Powder coating
	Coating thickness (microns)	Minimum 70 microns of pure polyester electrostatic powder coating
	Resistance to chemicals commonly used during irrigation	Fertilizers and other agricultural chemicals
4.	<i>Safe maximum Pressure drop</i>	0.4 kg/cm <sup>2</sup> for fertigation 0.8 kg/cm <sup>2</sup> for chemigation

**Additional Specifications/Requirements**

- ◆ Fertigation tank shall be made with 3mm thick Dish ends and Overlap welding.
- ◆ The fertigation tank shall be pre-treated by a thorough chemical cleaning process followed by pure polyester powder coating using electro static powder coating method from both inside and outside for protection against corrosion.
- ◆ Capacity of the tank shall be selected based on the Fertigation schedule being recommended to the farmer.



**SPECIFICATION No. : 6**

**PRODUCT** : **IRRIGATION LATERALS**  
**I.S. NUMBER** : **IS 12786:1989 with latest amendments**

(ESCR as per ASAE S-435)

<b><i>Technical data</i></b>		
1.	Working pressure	0.25 MPa
2.	Class of pipe	Class – II
3.	Grade of polyethylene	Pipe/Drip tube grade
4.	Carbon black	
	% in material used	2.5 ± 0.5% by mass
	Dispersion	Satisfactory as per IS:2530
5.	Use of rework material (%)	Not more than 10%
6.	<b><i>Dimensions (mm) of lateral (actual)</i></b>	
	Tolerance on outside diameter	+ 0.3mm
	a) Outside diameter	12mm
	b) Wall thickness (mm)	0.9 to 1.1mm
	a) Outside diameter	16mm
	b) Wall thickness (mm)	1.1 to 1.3 mm
7.	<b><i>Mechanical properties</i></b>	
	Tensile strength at 27 ± 1 <sup>0</sup> C (MPa)	Minimum 10.0 MPa
	Elongation at break (%)	Minimum 350%
	Resistance to ESC as per ASAE S-435	Should not develop cracks when tested with 10% Igepal solution at 76.7 <sup>0</sup> C for 48 hours
8.	Limitations of use (fertilizers, chemicals etc)	Free to use with fertilizers & chemicals

**Additional Specifications/Requirements**

- ◆ Lot-wise testing for Carbon black content and dispersion of the incoming raw material should be done.
- ◆ The laterals shall consistently meet or exceed all the tests described under IS 12786 -1989.
- ◆ Weight of each and every coil is to be taken to confirm total length, wall thickness and outside diameter of tube based on average weight per meter.
- ◆ Tubing shall be checked for fitment with injection moulded poly barbed fittings on a routine basis.

**SPECIFICATION No.: 7**

**PRODUCT : EMITTING PIPE (NON-PRESSURE COMPENSATING)**  
**I.S. NUMBER : IS 13488:2008 (ESCR as per ASAE S-435)**

1.	<b><i>Materials of construction</i></b>	
	Grade of polyethylene	Pipe or Drip Tube Grade
	Carbon black content (%)	2.5 ± 0.5% by mass
	Carbon black dispersion	Satisfactory as per IS:2530
	Use of rework material (%)	Not more than 10%
2.	<b><i>Dimensions (mm) of lateral (actual)</i></b>	
	Tolerance on outside diameter	+ 0.3mm
	a) Outside diameter	12mm
	b) Wall thickness	0.8 –1.0mm
	a) Outside diameter	16mm
	b) Wall thickness	0.7 – 0.9 mm
3.	Nominal operating pressure (KPa)	100 KPa or 1.0 kg/cm <sup>2</sup>
4.	Emitter exponent	0.2 to 0.50
5.	Spacing of emitters (range available)	0.30 to 1.50m
6a.	Nominal Discharge rate of emitters	As declared by Manufacturer
6b.	Discharge range	2 to 4.4 lph
7a.	<b><i>Dimensions of emitter flow path</i></b>	
	Length (mm)	Lesser the better
	Width (mm)	More the better
	Depth (mm)	More the better
7b.	Emission uniformity (%)	Category A–95%
8.	Uniformity Category	A
9.	PC or NPC	Non PC
10.	Class of pipe	12mm–Class III, 16mm–ClassII
11.	Working pressure (MPa)	12mm – 0.250 MPa
		16mm – 0.125 MPa
12.	Filtration requirements	100 (150 mesh) to 130 (120 mesh) microns
13.	Manufacturing coefficient of variation Mcv	Category A – 5% maximum
14.	<b>Mechanical properties</b>	
	Tensile strength at 27 ± 1°C (MPa)	Minimum 10 MPa
	Elongation at break (%)	Minimum 350%
	Resistance to ESC as per ASAE S-435)	Should not develop cracks
15.	Limitations of emitters use (fertilizers, chemicals etc)	Free to use with fertilizers & chemicals

**Additional Specifications / Requirements**

- ◆ Lot-wise testing for Carbon black content and dispersion of the incoming raw material should be done.
- ◆ The laterals shall consistently meet or exceed all the tests described under IS 13488: 1992
- ◆ Tubing shall be checked for fitment with injection moulded poly barbed fittings on a routine basis.
- ◆ The wall thickness of emitting pipes shall be as per the Table in IS 13488:1992 repeated below:

**SPECIFICATION No. : 8**

**PRODUCT** : **ONLINE EMITTER**  
**I.S. NUMBER** : **IS 13487:1992**

1.	<b><i>Materials of construction</i></b>	
	Raw material	PP, HD, LDPE, LLDPE, GFPP, PBT
	Protection against UV degradation	U.V. Stabilized
2.	<b><i>Classification</i></b>	
	Nominal emission rate	As declared by manufacturer
	Nominal operating pressure	100 KPa or 1.0 kg/cm <sup>2</sup>
	Emitter exponent (m)	0.2 to 0.5 for NPC less than 0.2 for PC
	Discharge range available	2 to 14 lph
	Emission uniformity	Category A – 95%
	Uniformity Category	Only Category A. Category B drippers are not allowed.
	Pressure compensating or Non Pressure compensating	PC or NON-PC
	Working pressure	0.8 to 1.2 MPa
	Filtration requirements	Minimum 100 to 130 microns
3.	Manufacturing coefficient of variation Mcv (%)	Category A – 5% maximum
4.	Limitations of emitters use (fertilizers, chemicals etc)	Free to use with fertilizers & chemicals

**Additional Specifications**

- ◆ The drippers shall be manufactured out of virgin plastic materials and shall consistently pass all the tests described under IS 13487-1992.
  
- ◆ Incoming raw material testing for Melt flow index, Density and Talc content.
- ◆ Pull out Test for confirming fitment of Online emitters with the tube on a routine basis.

**SPECIFICATION No. : 9**

**PRODUCT** : **GROMMETT, START CONNECTOR, NIPPLE /JOINER, END CAP, MICRO TUBE, AIR VALVE, VACUUM BREAKER VALVE**  
**I.S. NUMBER** : **-**

1.	<i>Grommet for</i> 12mm & 16mm Take Offs	1) Material – Synthetic rubber (Ethylene Propylene Diene Monomer) 2) Material shall not support the growth of algae & bacteria 3) Shall withstand pressures designed for the pipe 4) Should be water tight and exhibit no leakages
2.	Barbed Take Off 12mm & 16mm	1) Material – Polypropylene 2) Withstand pressures designed for the system 3) Material shall not support the growth of algae & bacteria 4) Should be water tight and exhibit no leakages

3.	Joiner 12mm & 16mm (barbed)	1) Material – Polypropylene / ABS 2) Shall withstand pressures designed for the system 3) Should be water tight and exhibit no leakages 4) Protection against UV degradation
4.	End cap 12mm & 16mm (“8” shaped)	1) Material – PE 25 2) Shall withstand pressures designed for the system 3) Should be water tight and exhibit no leakages 4) Protection against UV degradation
5.	<i>Micro tube</i> (Extension Tube)	1) Material – PE 25 with 2.5 ± 0.5% carbon black for UV protection 2) Shall withstand pressures designed for the system 3) Material shall not support the growth of algae & bacteria
6.	Barbed connector for micro tube (Extension Tube)	1) Material – Polypropylene 2) Shall withstand pressures designed for the system 3) Should be water tight and exhibit no leakages 4) Protection against UV degradation
7.	Air valve	1) Material – High strength plastic and corrosion resistant polymer, or cast iron 2) Size – up to 1” in plastic and > 1.0” in CI or plastic 3) Working pressure – 0.2 to 6.0 kg/cm <sup>2</sup> 4) Connection type – Threaded
8.	Vacuum breaker	1) Material – High strength plastic and corrosion resistant polymer, cast iron 2) Size – up to 1” in plastic and > 1.0” in CI 3) Working pressure – 0.2 to 6.0 kg/cm <sup>2</sup> 4) Connection type – Threaded

**SPECIFICATION No. : 10**

**PRODUCT** : **PVC PIPES & FITTINGS**

**I.S. NUMBER** : **IS 4985: 2000**

1.	Diameters useful for the project	40mm, 50mm, 63mm, 75mm, 90mm & 110mm			
2.	Material & Technical data				
	Class of pipes	1	2	3	4
	Maximum Permissible working pressure (kg/cm <sup>2</sup> )	2.5	4	6	10
	Raw material	PVC			
	Type of connection/jointing	Solvent Weld			
	Pipe length (m)	6m			
3.	Use of rework material (%)	As per IS guidelines			
4.	Dimensions (mm) of Pipe (actual)	As per IS guidelines			
5.	Acceptance Tests				
	Dimensions of Pipe & Sockets	Test as per IS: 12235 (Part 1 & 2)			
	Pipe End	Test as per IS: 4985			
	Visual Appearance	Test as per IS: 4985			
	Reversion Test	+ 5% (test as per IS: 13360 (Part 3/Sec 1))			
	Density	1.40 to 1.48 gm/cc (Test as per IS 13360 (Part 3/Sec1))			

	Hydrostatic Characteristics (Acceptance Test)	Shall withstand test pressure for 1 hour when tested as per IS: 12235 (Part 8)
	Resistance to External Blows at 0 <sup>0</sup> C	TIR Max 10% when tested as per IS: 4985
6.	Type Tests	
	Opacity Test	Max. 0.2% when tested as per IS:12235 (Part 3)
	Effect on Water	To be tested as per IS:12235 (Part 4 , 10 & 11)
	Vicat Softening Test	Min. 80 <sup>0</sup> C when tested as per IS: 4985
	Sulphated Ash Content Test	Max 11% when tested as per IS:4985
	Hydrostatic Characteristics (Type Test)	Shall withstand test pressure for 1000 hour as per IS:12235 (Part 8)

### Additional Specifications

- ◆ Following Incoming Raw material tests need to be conducted on lot wise basis:  
Bulk density, % purity of Titanium Dioxide (TiO<sub>2</sub>), Metal content, Melting point, Acid value, Saponification value, Iodine value, % coating on fillers, Specific gravity, Tristimulus L, a & B values of pigments
- ◆ Following additional tests need to be conducted on the PVC pipes on routine basis:  
Acetone test, Methylene chloride test, Tensile strength, High temperature test for Porosity

### SPECIFICATION No. 11

**PRODUCT** : VALVES (Gate Valve & Non-return valve)  
**I.S. NUMBER** : IS 778:1984 for GM valves, No IS standard for Plastic valves

1.	Nominal sizes	40mm (1½”), 50mm (2”), 65 (2½”), 80mm (3”) & 100mm (4”)		
2.	Working Pressure	Class 1 - 1.0 MPa	Class 2 - 1.6 MPa	
3.	Material			
	Body	a) Brass b) Leaded tin bronze c) UPVC d) Poly propylene (PP) e) Gun metal		
	Bonnet or cover	a) Brass b) Leaded tin bronze c) Forged brass d) UPVC e) PP f) Gun metal		
	Stuffing box, disc hinge, check nut, stem nut, disc retaining nut, gland, gland nut, gland flange, body seat rings and disc or wedge facing rings	a) Leaded tin bronze b) Extruded brass rod c) Forged brass d) Brass e) UPVC f) Nitriaile rubber	g) PP h) POM i) Teflon (PTFE) j) Gun metal	
	Stem, hinge pin and plug	a) Extruded brass rod b) High-tensile brass c) Forged brass d) UPVC	f) PP g) POM h) Teflon (PTFE) I) Nitriaile rubber	
	Ball for ball type NR Valves	Chromium steel, PVC/PP		
	Bolts, nuts & seal	Mild steel, Nitriaile Rubber		
Hand wheel	Cast iron			

	Gasket	Compressed asbestos fibre					
	Gland packing	a) Hemp and jute b) Asbestos					
	Spring	Phosphor bronze wire					
	Seating ring	Synthetic rubber					
4.	<i>Minimum length of threaded portion</i>						
	Nominal size	40mm	50mm	65mm	80mm	100mm	
	Length of threaded portion	13.5mm	17mm	19mm	21.5mm	26mm	
5.	<i>Minimum wall thickness of body and bonnet</i>						
	Nominal size (mm)		40	50	65	80	100
	Minimum wall thickness (mm)	Class 1	2.3	2.5	2.7	3.0	3.5
	Minimum wall thickness (mm)	Class 2	2.9	3.2	3.6	3.9	4.5
6.	Hydrostatic body & seat test for leakages	No leakages					
7.	Type of end connections	Screwed or Flanged					

**SPECIFICATION No. : 12**

**PRODUCT : VENTURY TYPE FERTIGATION ASSEMBLY**

- ◆ Shall be based on Ventury Principle using minimum ¾” plastic Ventury and to work based on the differential pressure available across a throttling valve.
- ◆ Shall operate with the help of system pressure with no additional motive energy. The maximum pressure differential required to operate the ventury shall not exceed 0.5 kg/cm<sup>2</sup> or 5m.
- ◆ Assembly shall consist of ¼” transparent plastic suction tubing along with a suction inlet filter.
- ◆ Entire assembly shall be easy to assemble with the help of suitable compression fittings and union nuts.

**SPECIFICATION No. 13**

**PRODUCT : PRESSURE GAUGE**  
**I.S. NUMBER :**

1.	Dial sizes	40 mm, 50 mm, 63 mm and 100 mm
2.	Dial	Aluminium
3.	Working Pressure	1 – 5 ksc
4.	Scale	Ksc/Bar/psi
5.	Case & Ring	M.S (mild steel painted black / plastic ABS)
6.	Pointer	Standard non adjustable (Non ferrous)
7.	Bourdon Tube	Brass
8.	Mounting	Bottom connecting direct mounting
9.	Option	Dry / Glycerin filled
10.	Accuracy	± 2 % FSD

**SPECIFICATION No. : 14**

**PRODUCT** : **HDPE Pipes & HDPE Pipes (Quick coupled)**

**I.S. NUMBER** : **IS 14151 (Pt 1):1999; IS 14151 (Pt 2):2008**

1.	Diameters useful for the project	40 to 200 mm			
2.	Material & Technical data				
	Class of pipes	1	2	3	4
	Maximum Permissible working pressure (kg/cm <sup>2</sup> )	2.5	3.2	4	6
	Raw material	HDPE grade PE63 or above			
	Type of connection/jointing	Quick coupled			
	Pipe length (m)	6m			
3.	Use of rework material (%)	As per IS guidelines			
4.	Dimensions (mm) of Pipe (actual)	As per IS guidelines			
5.	Acceptance Tests				
	Dimensions of Pipe & Sockets	Test as per IS 14151 (Pt 1):1999; IS 14151 (Pt 2):2008			
	Pipe End	Test as per IS 14151 (Pt 1):1999; IS 14151 (Pt 2):2008			
	Visual Appearance	Test as per IS 14151 (Pt 1):1999; IS 14151 (Pt 2):2008			
	Reversion Test	At 110±2°C for 60 minutes			
	Density	Base density 940.4 to 958.4 Kg/m <sup>2</sup>			
	Hydrostatic Characteristics (Acceptance Test)	At 80° C & 3.5 MPa induced stress for 165h			
	MFR at 190°C	0.2 to 1.1			
	Carbon black content	2.5±0.5%			
	Antioxidant	0.5% by mass			

**SPECIFICATION No. : 15**

**PRODUCT** : **MISCELLANEOUS COMPONENTS FOR MICRO IRRIGATION SYSTEMS**

The specifications for the components are covered under following Indian standards:

S.No.	Products	IS Number
1.	PVC Fabricated Fittings	IS 10124 - 1988
2.	PVC Moulded Fittings	IS 7834 - 1995
3.	Microtube	IS 14482 - 1997
4.	G. I. Pipes	IS 1239 - 1990
5.	G. I. Fittings	IS 1879 - 1987
6.	C. I. Sluice Valve	IS 780 - 1984
7.	C. I. Non Return Valve	IS 5312 - 1969
8.	Water meters	IS 779 - 1994
9.	Irrigation Equipment - Design, Installation and Field Evaluation of Micro Irrigation Systems –Code of	IS 10799 - 1999

	Practice (First Revision)	
10.	GM Valves	IS 778 - 1984
11.	Design of Sprinkler Irrigation System.	IS 14792:2000
12.	HDPE pipe	IS 14151(Pt1):1999
13.	HDPE Pipes (Quick coupled)	IS 14151(Pt2):2008
14.	Rotating Sprinkler : Part1 Design and operational requirement (first revision)	IS 12232 (Pt1) : 96 / ISO 7749-1:1995
15.	Rotating Sprinkler : Part2 Design and operational requirement (first revision)	IS 12232 (Pt2) : 96 / ISO 7749-1:1990
16.	Irrigation Equipments – Micro sprayers specifications	IS14605:1998 / ISO 8026:1995
17.	Riser pipes	IS: 1239



## ANNEXURE II

### UNIT PRICES OF VARIOUS MICRO-IRRIGATION SYSTEM COMPONENTS (The unit price shall be quoted as net price, inclusive of all taxes and discounts if any)

S.No.	Name of the System Component	(unit price in Rs.)
<b>PVC Pipes for Main and Sub main pipeline (Class III pipes) (Rs./m) (give separate quotes)</b>		
1.	A. 20 mm (10 Kg/cm <sup>2</sup> )	
2.	40 mm (6 Kg/cm <sup>2</sup> )	
3.	50 mm (6 Kg/cm <sup>2</sup> )	
4.	63 mm (6 Kg/cm <sup>2</sup> )	
5.	75 mm (6 Kg/cm <sup>2</sup> )	
6.	90 mm (6 Kg/cm <sup>2</sup> )	
7.	110 mm (6 Kg/cm <sup>2</sup> )	
<b>PVC Pipes for Main and Sub main pipeline (Class II pipes) (Rs./m) (give separate quotes)</b>		
8.	B. 63 mm (4 Kg/cm <sup>2</sup> )	
9.	75 mm (4 Kg/cm <sup>2</sup> )	
10.	90 mm (4 Kg/cm <sup>2</sup> )	
11.	110 mm (4 Kg/cm <sup>2</sup> )	
<b>PVC Elbow</b>		
12.	A. 20 mm (10 Kg/cm <sup>2</sup> )	
13.	40 mm (6 Kg/cm <sup>2</sup> )	
14.	50 mm (6 Kg/cm <sup>2</sup> )	
15.	63 mm (6 Kg/cm <sup>2</sup> )	
16.	75 mm (6 Kg/cm <sup>2</sup> )	
17.	90 mm (6 Kg/cm <sup>2</sup> )	
18.	110 mm (6 Kg/cm <sup>2</sup> )	
19.	B. 63 mm (4 Kg/cm <sup>2</sup> )	
20.	75 mm (4 Kg/cm <sup>2</sup> )	
21.	90 mm (4 Kg/cm <sup>2</sup> )	
22.	110 mm (4 Kg/cm <sup>2</sup> )	
<b>PVC TEE</b>		
23.	A. 20 mm (10 Kg/cm <sup>2</sup> )	
24.	40 mm (6 Kg/cm <sup>2</sup> )	

S.No.	Name of the System Component	(unit price in Rs.)
25.	50 mm (6 Kg/cm <sup>2</sup> )	
26.	63 mm (6 Kg/cm <sup>2</sup> )	
27.	75 mm (6 Kg/cm <sup>2</sup> )	
28.	90 mm (6 Kg/cm <sup>2</sup> )	
29.	110 mm (6 Kg/cm <sup>2</sup> )	
30.	<b>B.</b> 63 mm (4 Kg/cm <sup>2</sup> )	
31.	75 mm (4 Kg/cm <sup>2</sup> )	
32.	90 mm (4 Kg/cm <sup>2</sup> )	
33.	110 mm (4 Kg/cm <sup>2</sup> )	
<b>PVC Reducer</b>		
34.	40 X 50 mm (6 Kg/cm <sup>2</sup> )	
35.	50 X 63 mm (6 Kg/cm <sup>2</sup> )	
36.	63X 75 mm (6 Kg/cm <sup>2</sup> )	
37.	75 X 90 mm (6 Kg/cm <sup>2</sup> )	
38.	90 X 110 mm (6 Kg/cm <sup>2</sup> )	
<b>PVC SADDLE</b>		
39.	40 X 12 mm (10 Kg/cm <sup>2</sup> )	
40.	63 X 32 mm (6 Kg/cm <sup>2</sup> )	
41.	75 X 32 mm (6 Kg/cm <sup>2</sup> )	
42.	90 X 32 mm (6 Kg/cm <sup>2</sup> )	
43.	110 X 32 mm (6 Kg/cm <sup>2</sup> )	
<b>PVC - FTA</b>		
44.	63 mm (6 Kg/cm <sup>2</sup> )	
45.	75 mm (6 Kg/cm <sup>2</sup> )	
46.	90 mm (6 Kg/cm <sup>2</sup> )	
<b>PVC - MTA</b>		
47.	63 mm (6 Kg/cm <sup>2</sup> )	
48.	75 mm (6 Kg/cm <sup>2</sup> )	
49.	90 mm (6 Kg/cm <sup>2</sup> )	
<b>GI TEE – Class B - ISI</b>		
50.	2"	

S.No.	Name of the System Component	(unit price in Rs.)
51.	2 1/2"	
52.	3"	
<b>MS FLANGE – Class B - ISI</b>		
53.	2"	
54.	2 1/2"	
55.	3"	
<b>GI PIPE NIPPLE – Class B - ISI</b>		
56.	2"	
57.	2 1/2"	
58.	3"	
<b>GI ELBOW – Class B - ISI</b>		
59.	2"	
60.	2 1/2"	
61.	3"	
<b>GI REDUCER – Class B – ISI</b>		
62.	2" × 2 1/2"	
63.	2 1/2" × 3"	
64.	<b>GALVANISED MS ROD 6 MM X 1.0 METER – Class B – ISI</b>	
65.	<b>RISER MS ROD 8 MM X 1.0 M – Class B – ISI</b>	
<b>Plain Laterals</b>		
66.	Plain Laterals -Min OD 12(mm) (0.25mpa) - Max OD 12.3 mm - Min WT 0.9 mm - Max WT 1.1 mm - PC 20.25 Mpa	
67.	Plain Laterals -Min OD 16(mm) (0.25mpa) - Max OD 16.3 mm - Min WT 0.9 mm - Max WT 1.1 mm - PC 20.25 Mpa	
<b>Online Dripper (Rs./piece or number)</b>		
68.	2 LPH Model	
69.	4 LPH Model	
70.	8 LPH Model	
71.	2 LPH (Pressure compensating) Model	
72.	4 LPH (Pressure compensating) Model	
73.	8 LPH (Pressure compensating) Model	

S.No.	Name of the System Component	(unit price in Rs.)
<b>PP Ball Valve / Control Valve (Rs./unit)</b>		
74.	40 mm	
75.	50 mm	
76.	63 mm	
77.	75 mm	
78.	90 mm	
<b>Flush Valve (Rs./unit)</b>		
79.	40 mm	
80.	50 mm	
81.	63 mm	
82.	75 mm	
<b>PVC Ball Valve / Control Valve (Rs./unit)</b>		
83.	40 mm	
84.	50 mm	
85.	63 mm	
86.	75 mm	
87.	90 mm	
	<b>Solenoid Valve (Rs./unit)</b> <i>9-12V DC (Latch type)</i> <i>Max. operating pressure : 150 PSI</i> <i>Coil insulation &amp; protection class : F class; IP65 (CE certification)</i> <i>Coil duty cycle : 100 % ED</i> <i>Electrical connection : LED display</i> <i>Temp : -10<sup>0</sup>C to 50<sup>0</sup>C</i> <i>Body Material : PA 66 (Nylon, Engineered plastic)</i> <i>Armature tube : Brass</i> <i>Plug &amp; Spring : Stainless steel</i>	
88.	2"	
89.	3"	
<b>Screen Filter (Rs./unit)</b>		
90.	10-12 m3/ hr x 1.5"	
91.	15 - 20 m3/hr x 1.5"	
92.	25-30 m3 / hr x 2"	

S.No.	Name of the System Component	(unit price in Rs.)
93.	40 m <sup>3</sup> / hr x 2.5"	
94.	50 m <sup>3</sup> / hr x 3"	
<b>Sand Filter with Backwash facilities (Rs./unit)</b>		
95.	10-20 m <sup>3</sup> /hr X 1.5"	
96.	20 –30 m <sup>3</sup> / hr x 2"	
97.	40 m <sup>3</sup> / hr x 2.5"	
98.	50 m <sup>3</sup> / hr x 3"	
<b>Hydro-cyclone (Rs./unit)</b>		
99.	15-20 m <sup>3</sup> / hr x 1.5"	
100.	25 – 30 m <sup>3</sup> / hr x 2"	
101.	40 m <sup>3</sup> /hr x 2.5"	
102.	50 m <sup>3</sup> /hr x 3"	
<b>Disc Filter (Rs./unit)</b>		
103.	25 m <sup>3</sup> /hr x 2"	
104.	40 m <sup>3</sup> / hr x 2.5"	
105.	50 m <sup>3</sup> / hr x 3"	
<b>Emitting pipe (Integral drip lateral) Class III (Rs./m) in different discharge rates and dripper spacing Wall Thickness Minimum: 0.8 mm Maximum : 1.0 mm</b>		
106.	(a) 12mm – 2 LHP (i) - 30cm (ii) - 40cm (iii) - 50cm (iv) - 60cm (v) - 75cm	
107.	(b) 12mm – 4 LPH (i) - 30cm (ii) - 40cm (iii) - 50cm (iv) - 60cm (v) - 75cm	
<b>Emitting pipe (Integral drip lateral) Class II (Rs./m) in different discharge rates Wall Thickness Minimum: 0.7mm Maximum : 0.9 mm</b>		
108.	(a) 16mm – 2 LPH (i) - 30cm	

S.No.	Name of the System Component	(unit price in Rs.)
	(ii) - 40cm (iii) - 50cm (iv) - 60cm (v) - 75cm	
109.	(b) 16mm - 4 LPH (i) - 30cm (ii) - 40cm (iii) - 50cm (iv) - 60cm (v) - 75cm	
<b>Fertilizer Tank (Rs./unit)</b>		
110.	30 Litres	
111.	60 Litres	
112.	90 Litres	
<b>Grommet with Takeoff (Rs./unit)</b>		
113.	12 mm	
114.	16 mm	
<b>Takeoff Female Thread (Rs./unit)</b>		
115.	12/8 mm	
116.	13/9 mm	
<b>Barbed Nipple (Rs./unit)</b>		
117.	12 MM	
118.	16 MM	
<b>Joiner (Rs./unit)</b>		
119.	12 MM	
120.	16 MM	
<b>Barbed End Cap (Rs./Unit)&amp; Barbed Elbow, Barbed Tee and Lateral end cap '8' shape) straight connetor</b>		
121.	12 MM	
122.	16 MM	
<b>Micro Tube (Rs./m)</b>		
123.	6 mm	
124.	8 mm	
125.	Micro Tube Barbed Connector (Rs./unit)	

S.No.	Name of the System Component	(unit price in Rs.)
<b>Non – return valve(Rs./unit)</b>		
126.	1.5"	
127.	2"	
128.	2.5"	
129.	3"	
<b>Air valve (Rs./unit)</b>		
130.	1/2"	
131.	3 / 4"	
132.	1"	
133.	1.5"	
<b>PP Throttle valve (Rs./unit)</b>		
134.	1 ½"	
135.	2"	
136.	2 ½"	
137.	3"	
<b>Vacuum breaker valve (Rs./unit)</b>		
138.	½"	
139.	3/4"	
140.	<b>Pressure Gauge with adopter (Rs./unit)</b>	
141.	<b>Ventury</b> ¾" 1.5" 2"	
142.	<b>Fertigation Manifold</b> ¾" 1.5" 2"	
<b>Gun metal control valve</b>		
143.	1½"	
144.	2"	
145.	2 ½ "	
146.	3"	
147.	<b>Goof plug / Dripper Plug (Rs./unit)</b>	
148.	<i>Bye Pass Assembly</i>	

S.No.	Name of the System Component		(unit price in Rs.)
		1.5 x1.5" 2 x1.5" 2 ½" x 2" 3 x2	
149.	<b>Solvent Cement/lit</b>		
150.	<b>Teflon Tape (Rate /10 m)</b>		
<b>Installation Charges (Rs./ha)</b>			
151.	<b>Inline</b>	<1.2 m	
		1.2 m to 1.6 m	
		1.6 m to 2.5 m	
		2.5 m to 5 m	
152.	<b>Online</b>	<1.2 m	
		1.2 m to 1.6 m	
		1.6 m to 2.5 m	
		2.5 m to 5 m	
		>5 m	
153	<b>HDPE Pipes with quick action coupled (Class III pipes) (Rs./m) (give separate quotes)</b>		
	<b>A. 63 mm (4 Kg/cm<sup>2</sup>)</b>		
	75 mm (4 Kg/cm <sup>2</sup> )		
	90 mm (4 Kg/cm <sup>2</sup> )		
	110 mm (4 Kg/cm <sup>2</sup> )		
154.	<b>HDPE Pipes with quick action coupled (Class II pipes) (Rs./m) (give separate quotes)</b>		
	<b>B. 63 mm (3.2 Kg/cm<sup>2</sup>)</b>		
	75 mm (3.2 Kg/cm <sup>2</sup> )		
	90 mm (3.2 Kg/cm <sup>2</sup> )		
	110 mm (3.2Kg/cm <sup>2</sup> )		
155.	<b>HDPE sprinkler coupler with foot batten assembly quick action (Class III pipes)</b>		
	<b>A. 63 mm (4 Kg/cm<sup>2</sup>)</b>		
	75 mm (4 Kg/cm <sup>2</sup> )		
	90 mm (4 Kg/cm <sup>2</sup> )		
	110 mm (4 Kg/cm <sup>2</sup> )		



S.No.	Name of the System Component	(unit price in Rs.)
<b>156.</b>	<b>HDPE sprinkler coupler with foot batten assembly quick action (Class II pipes) (Rs./unit) (give separate quotes)</b>	
	<b>B.</b> 63 mm (3.2 Kg/cm <sup>2</sup> )	
	75 mm (3.2 Kg/cm <sup>2</sup> )	
	90 mm (3.2 Kg/cm <sup>2</sup> )	
	110 mm (3.2Kg/cm <sup>2</sup> )	
<b>157.</b>	<b>HDPE Bend with coupler (Rs./unit)</b>	
	<b>A.</b> 63 mm (4 Kg/cm <sup>2</sup> )	
	75 mm (4 Kg/cm <sup>2</sup> )	
	90 mm (4 Kg/cm <sup>2</sup> )	
	110 mm (4 Kg/cm <sup>2</sup> )	
	<b>B.</b> 63 mm (3.2 Kg/cm <sup>2</sup> )	
	75 mm (3.2 Kg/cm <sup>2</sup> )	
	90 mm (3.2 Kg/cm <sup>2</sup> )	
	110 mm (3.2Kg/cm <sup>2</sup> )	
<b>158.</b>	<b>HDPE TEE with coupler (Rs./unit)</b>	
	<b>A.</b> 63 mm (4 Kg/cm <sup>2</sup> )	
	75 mm (4 Kg/cm <sup>2</sup> )	
	90 mm (4 Kg/cm <sup>2</sup> )	
	110 mm (4 Kg/cm <sup>2</sup> )	
	<b>B.</b> 63 mm (3.2 Kg/cm <sup>2</sup> )	
	75 mm (3.2 Kg/cm <sup>2</sup> )	
	90 mm (3.2 Kg/cm <sup>2</sup> )	
	110 mm (3.2Kg/cm <sup>2</sup> )	
<b>159.</b>	<b>HDPE Elbow/Reducer (Rs./unit)</b>	
	<b>A.</b> 63X50 mm (4 Kg/cm <sup>2</sup> )	
	75 X 40 mm (4 Kg/cm <sup>2</sup> )	
	75 X 63 mm (4 Kg/cm <sup>2</sup> )	
	90X 75 mm (4 Kg/cm <sup>2</sup> )	
	110X90 mm (4 Kg/cm <sup>2</sup> )	
<b>160.</b>	<b>HDPE end plug (Rs./unit)</b>	

S.No.	Name of the System Component	(unit price in Rs.)
	63 mm (4 Kg/cm <sup>2</sup> )	
	75 mm (4 Kg/cm <sup>2</sup> )	
	90 mm (4 Kg/cm <sup>2</sup> )	
	110 mm (4 Kg/cm <sup>2</sup> )	
<b>161.</b>	<b>HDPE Service saddle (Rs./unit)</b>	
	63 mm (4 Kg/cm <sup>2</sup> )	
	75 mm (4 Kg/cm <sup>2</sup> )	
	90 mm (4 Kg/cm <sup>2</sup> )	
<b>162.</b>	<b>HDPE Flow line coupler (Rs./unit)</b>	
	63 mm (4 Kg/cm <sup>2</sup> )	
	75 mm (4 Kg/cm <sup>2</sup> )	
	90 mm (4 Kg/cm <sup>2</sup> )	
<b>163.</b>	<b>HDPE Pump connecting coupler / Nipple Quick action (Rs./unit)</b>	
	63 mm (4 Kg/cm <sup>2</sup> )	
	75 mm (4 Kg/cm <sup>2</sup> )	
	90 mm (4 Kg/cm <sup>2</sup> )	
<b>164.</b>	<b>HDPE flow line adopter</b>	
	Male thread 20 mm	
	Female thread 20 mm	
<b>165.</b>	<b>PVC Riser pipe (Rs./unit)</b>	
	20 mm (10 Kg/cm <sup>2</sup> )	
<b>166.</b>	<b>HDPE Sprinkler stand (Height) (Rs./unit)</b>	
	75 cm	
	100 cm	
	120 cm	
	150 cm	
<b>167.</b>	<b>Low capacity twin nozzle sprinkler Class III (Rs./m) in different nozzle size and operating pressure range of (2 to 4 Kg/cm<sup>2</sup>)</b>	
	(i) 2.5 mm	
	(ii) 2.8 mm	

S.No.	Name of the System Component	(unit price in Rs.)
	(iii) 3.0 mm (iv) 3.2 mm (v) 3.5 mm (vi) 4.0 mm	
<b>168.</b>	<b>Low capacity twin nozzle sprinkler Class III (Rs./unit) in different nozzle size and operating pressure range of (2 to 4 Kg/cm<sup>2</sup>)</b>	
	(i) 2.8 mm X 2.5mm (ii) 3.0 mm X 2.5mm (iii) 3.2 mm X 2.5mm (iv) 3.5 mm X 2.5mm (v) 4.0 mm X 2.5mm	
<b>169.</b>	<b>Medium capacity twin nozzle sprinkler Class III (Rs./unit) in different nozzle size and operating pressure range of (2 to 5 Kg/cm<sup>2</sup>)</b>	
	(i) 3.5 mm (ii) 4.0 mm (iii) 4.5 mm (iv) 5.0 mm (v) 5.5 mm (vi) 6.0 mm	
<b>170.</b>	<b>Medium capacity twin nozzle sprinkler Class III (Rs./unit) in different nozzle size and operating pressure range of (2 to 5 Kg/cm<sup>2</sup>)</b>	
	(i) 3.5 mm X 2.5 mm (ii) 4.0 mm X 2.5 mm (iii) 4.5 mm X 2.5 mm (iv) 5.0 mm X 2.5 mm (v) 5.5 mm X 2.5 mm (vi) 6.0 mm X 2.5 mm	
<b>171.</b>	<b>High capacity twin nozzle sprinkler Class III (Rs./unit) in different nozzle size and operating pressure range of (4 to 6 Kg/cm<sup>2</sup>)</b>	
	(i) 5.0 mm (ii) 5.5 mm (iii) 6.0 mm (iv) 6.3 mm (v) 7.0 mm (vi) 7.5 mm (vii) 8.5 mm	

S.No.	Name of the System Component	(unit price in Rs.)
172 .	<b>High capacity twin nozzle sprinkler Class III (Rs./unit)in different nozzle size and operating pressure range of (4 to 6 Kg/cm<sup>2</sup>)</b>	
	(i) 5.0 mm x 3.2 mm (ii) 5.5 mm x 3.2mm (iii) 6.0 mm x 3.2mm (iv) 6.3 mm x 3.2mm (v) 7.0 mm x 4.2mm (vi) 7.5 mm x 4.2mm (vii) 8.5 mm x 4.2mm	
173.	<b>Micro sprinkler Class III (Rs./unit)in different nozzle size and operating pressure range of (1.0 to 2.5 Kg/cm<sup>2</sup>)</b>	
	(i) 0.85 mm (ii) 1.0 mm (iii) 1.2 mm (iv) 1.4 mm (v) 1.6 mm (vi) 1.8 mm (vii) 2.0 mm	

**ANNEXURE III**  
**TAMIL NADU AGRICULTURAL UNIVERSITY, COIMBATORE**

LETTER OF UNDERTAKING AND DECLARATION

We.....hereby offer for the supply of ISI MARKED MICRO IRRIGATION SYSTEM COMPONENTS conforming to the Specifications as mentioned in Rate Contract.

We undertake to supply such quantities of material as per Specification as mentioned in Rate Contract, as we may be called upon to supply and install under the conditions here-to enclosed during the allotted period from the date of execution of the agreement on the rates agreed upon, at the places to be specified by the Tamil Nadu Agricultural University within the specified delivery period.

We undertake that our firm has neither been Blacklisted/Debarred by any Government / Government Undertaking /Bank nor penalized on the same ground. We also undertake that no legal proceeding is pending in any Courts on the same grounds.

We hereby agree to abide by and fulfill all the terms and conditions of contract annexed hereto and in default thereof to forfeit and pay to the Tamil Nadu Agricultural University, the penalties or sum of money mentioned in the said conditions.

The sum of Rs. 20,000.00 (Twenty thousand only) in the form of Demand draft or any of the form specified in the Rate Contract Documents is herewith forwarded as Earnest Money which shall be retained by The Tamil Nadu Agricultural University, on account of Security Deposit as specified in the clause 8 of the said conditions of contract, should this offer be accepted.

"I have read and fully understood the terms and conditions of supplies etc. mentioned in the documents.

Name :.....  
Designation:.....  
(Signature with Office Seal..)

Witness:

- 1.
- 2.

THE RATE CONTRACT OFFER IS HEREBY ACCEPTED BY ME ON BEHALF OF  
M/s.....

SIGNATURE OF THE ACCEPTING AUTHORITY

**Note: Letter of acceptance of offer is to be submitted on non judicial stamp of Rs 20.00**

## ANNEXURE IV

### LIST OF ESSENTIAL DOCUMENTS TO BE SUBMITTED ALONG WITH THE RATE CONTRACT

Following documents are essentially to be submitted along with the offer

- (i) Letter of acceptance of offers as per Annexure III
- (ii) List of Components Manufactured by the offerer and not manufactured by the offerer as per Annexure - II. Rate Contract documents along with Rates in Annexure - V& VI, duly signed on each page.
- (iii) Printed Maximum price List i.e. MRP of the manufacturer / self certified photocopy of valid printed Maximum price list of the manufacturer.
- (iv) If Manufacturer is registered with DGS & D, self Certified Photocopy of registration with DGS & D as approved supplier along with approved rates.
- (v) **If the Manufacturer is registered by State Micro Irrigation Committee State of Tamil Nadu under Central sector Scheme Micro Irrigation Project as approved supplier, self Certified Photocopy of registration must be produced along with approved rates.**
- (vi) Self certified photocopy of Valid BIS license for Laterals as per BIS specification IS: 12786:1989 (with latest amendments) and for emitters as per IS: 13487:1992 (with latest amendments) or emitting pipes as per IS: 13488:2008 (with latest amendments) issued in favour of manufacturer by BIS.
- (vii) Self certified photocopy of valid BIS licence for screen filter as per BIS specification IS: 12785:1994 issued in favour of manufacturer issued by BIS with valid Authority letter in original in favour of the offerer (as per clause 1 of Rate Contract as the case may be).
- (viii) Self certified photocopy of valid registration certificate of particular brand name issued by component authority.
- (ix) Self certified photocopy of TIN registration.
- (x) **Details of their authorized Dealer / Distributor in Tamil Nadu.**
- (xi) Earnest Money in specified form / Details of EMD as per clause 7 (iv).
- (xii) Other documents as mentioned in different clauses of Rate Contract offer Document.
- (xiii) Supplier shall have to submit self certified adequate literature, leaflet of technical details manual etc.
- (xiv) Complete write-up of item offered for the year 2016-17. TNAU may decide to check all samples submitted by firm in that case firm has to produce all samples before the technical committee decided by the **competent authority of TNAU**
- (xv) **Photocopy of Technical Registration from State Micro Irrigation Committee { SMIC } & Chief Engineer, Dept. Agriculture Engineering, Government of Tamil Nadu, Chennai**
- (xvi) Certificate of last three years company business turn over duly certified by Chartered accountant

**ANNEXURE V**  
**TAMIL NADU AGRICULTURAL UNIVERSITY, COIMBATORE**  
**FINANCIAL OFFER FORM**

1.	Name of firm	:	
2.	Address	:	
3.	Name & Address of Director	:	
4.	Phone No. Fax No. E Mail	:	
5.	Name of Person of representing RATE CONTRACT	:	
6.	Designation of Representing Person along with Mobile No.	:	

**1. PIPES (for PVC / HDPE)**

S. No.	Size in mm (OD)	Class	IS No.	CM/L No. Validity	Operating Pressure kg / cm <sup>2</sup>	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP
1.							
2.							

**2. Laterals**

S. No.	Type	Size in mm (OD)	Dripper spacing (cm)	Class	IS No.	CM/L No. Validity	Operating Pressure kg / cm <sup>2</sup>	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP
1.	Plain								
	a)								
	b)								
2.	Inline								
	a)								
	b)								

**3. Emitters**

S. No.	Type	Discharge rate (LPH)	IS No.	CM/L No. Validity	Pressure rating as per production kg / cm <sup>2</sup>	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP
1.	Dripper PC						
2.	Dripper NPC						

3.	Others (Specify)								
----	---------------------	--	--	--	--	--	--	--	--

#### 4.Filters

S. No.	Type	Size cu.mt./hrs capacity	IS No	C/M/L No validity	Model No	Nominal size (Inlet & Outlet)	Operating pressure	Range of recommended flow rate	Product specification	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP
1.	Screen										
2.	Disk										
3.	Sand										
4.	Cone										
5.	Other (Specify)										

#### 5. Valves

S. No.	Name of valve	Size in mm	IS No.	C/M/L No. Validity	Type	Product Specification	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP
1.	Gate valve gun metal							
2.	PVC ball							
3.	Flush							

#### 6. Bypass Assembly

S. No.	Bypass Assembly	Size in mm	Specification as per company production	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP

#### 7.Fertigation

S.No.	Name of Item	Size	IS No.	C/M/L No. Validity	Capacity	Class	Product Specification	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP
1.	Fertigation tank / equipment								
2.	Complete Ventury Assembly set								



## 8. Pressure Gauge

S.No.	Pressure range	Manufacturing Company	Quality specifications	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP

## 9. Sprinklers

S. No.	Type	Nozzle size in mm	Discharge rate (LPH)	IS No.	CM/L No. Validity	Pressure rating as per production kg / cm <sup>2</sup>	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP
1.	Low capacity							
2.	Medium Capacity							
3.	High capacity							
4.	Micro sprinklers							
3.	Others (Specify)							

## 10. Accessories

S.No.	Name of Item	IS No.	CM/L No. Validity	Product Specification	Final selling rate to customer through TNAU as per clause no.2 of the RATE CONTRACT	MRP
A	PVC Fitting					
1.	Tee					
2.	MTA					
3.	FTA					
4.	Thread end cap					
5.	Elbow					
6.	Other (Specify)					
B	Drip Fitting					
1.	Take off					
2.	St Connector					
3.	End Cap					
4.	Grommer					

5.	Tee					
6.	Elbow					
7.	Other (Specify)					
C	Sprinkler fitting					
1.	HDPE sprinkler coupler with foot batten assembly quick action					
2.	HDPE TEE with coupler					
3.	HDPE lbow/Reducer					
4.	HDPE end plug					
5.	HDPE Service saddle					
6.	HDPE Flow line coupler					
7.	HDPE Pump connecting coupler / Nipple Quick action					
8.	HDPE Riser pipe					
9.	Sprinkler stand					
10.	Others (Specify)					

Seal & signature of the Supplier

Note: Separate sheet may be used if necessary.

## ANNEXURE VI

### PRICE BREAK UP OF RATE OFFERED

Price Break up for Rate Submission if supplier is Billing from Tamil Nadu State

S.No.	Item	Size	Class / Grade	Purchase Price Excluding Tax ( <b>Basic Price</b> )	Value Added Tax (VAT) on Basic Price		Tax Paid Purchase Price of TNAU	TNAU Margin of Col. No. 4		VAT on Margin		Final selling rate to customer including Margin	MRP
					%	Amount		%	Amount	%	Amount		
1	2	3	4	5	6		7	8		9		10	11

Price Break up for Rate Submission if supplier is Billing from out of Tamil Nadu State (any other state other than Tamil Nadu)

S.No.	Item	Model	Tax Paid Purchase Price of TNAU	Entry Tax if applicable		TNAU Margin of Col. No. 4		Total	VAT		Final selling rate to customer	MRP
				%	Amount	%	Amount		%	Amount		
1	2	3	4	5		6		7	8		9	10

**ANNEXURE VII**  
**AGREEMENT**

This agreement made at Coimbatore this day of \_\_\_\_\_, between The Comptroller, Tamil Nadu Agricultural University, Coimbatore, having registered office at Coimbatore, Tamil Nadu, India hereinafter referred to as 'TNAU' which expression shall unless repugnant to the context or meaning there of include its successors and assigns on the one part.

AND

M/s. ----- having its office at ----- acting through its -----(hereinafter referred to as the Supplier which expression unless repugnant to the context and meaning there of includes its assigns, successors and administrations on the other part.

WHEREAS the TNAU invited Rate Contract offer for supply of ----- on the terms and conditions envisaged in the terms schedule issued with the Rate Contract Document and purchased by the supplier.

AND WHEREAS the supplier has accepted each and every term and condition contained in the Rate Contract Document, while submitting his offer. The supplier has agreed to supply of quality materials and equipments on consignment basis on the terms and conditions of this agreement to the TNAU.

AND WHEREAS the TNAU accepted the offer submitted by the supplier vide its letter of acceptance no. .... dated ----- --in consideration of the mutual premises and undertakings hereinafter specified and for other good and valuable consideration this agreement witness and is hereby agreed on the conditions of the Rate Contract and the following documents shall form and be constructed a part of the Agreement Deed: -

- a) The terms & conditions of the Rate Contract Document
- b) Specifications of material
- c) The letter of acceptance dated -----
- d) The offer submitted by the supplier.
- e) The rates mentioned in annexure to agreement.

The aforesaid documents shall be taken as complementary and mutually explanatory of one another but in case of discrepancies and ambiguities shall take precedence in the order set out above. In this regard the decision of the Comptroller, TNAU, Coimbatore shall be final.

For Supplier

.....  
.....

For

TNAU, Coimbatore

Signature with Office Seal

Comptroller, TNAU, Coimbatore

Witnesses

- 1.
- 2.

Witnesses

- 1.
- 2.