

**Office of the Dean Research and Development
Indian Institute of Engineering Science & Technology (IEST), Shibpur,
Howrah-711 103**

Project Code: DRC/DST/IT/IB/020/16-17

**Department of Information Technology
Indian Institute of Engineering Science and Technology, Shibpur,
Howrah – 711103**

Notice Inviting Quotations

Sealed quotations are invited for the supply of (i) Windows Office 2016 or latest Professional academic edition (ii) Wireless Water Monitoring Node as per the following technical specification. The relevant bidding document can be downloaded from the website. For any clarification may contact: Dr. Indrajit Banerjee, between **10.30 a.m.** and **4.00 p.m.** on all working days. Last date of submission of sealed quotation is **18thOctober 2017** by **04.00 p.m.**

Dean (R & D)

(A. Code DRC-T052/17-18)

Indian Institute of Engineering Science and Technology,
Shibpur, Howrah – 711103



BIDDING DOCUMENT

(Project Code: DRC/DST/IT/IB/20/2016-2017)

For Supply of

- (i) Windows Office 2016 or latest Professional academic edition
- (ii) Wireless Water Monitoring Node

Under DST-WTI Project Scheme Govt. of India

Department of Information Technology

SECTION I: TERMS & CONDITIONS AND IMPORTANT INSTRUCTIONS FOR BIDDERS

1. Bidders are to invited to submit sealed quotation as per the technical specifications for tendered item to office of the Information Technology Department, on any working day between 11 A.M. to 4.30 P.M.except Saturday, Sunday and other public holidays.
2. The last date of receipt of tenders is **18thOctober 2017** up to **04.00 P.M.** at the office of the Department of Information Technology. Quotations received later will not be entertained under any circumstances.
3. Date and time of opening of bid is **20thOctober 2017** at **04.00 P.M.** and the place of opening of bid is in the Meeting Room of the Department of Information Technology, IEST, Shibpur, Howrah-711103.
4. Bidders are to submit the quotations in Sealed Cover, mentioning the following address:

Dr. Indrajit Banerjee
Department of Information Technology
Indian Institute of Engineering Science and Technology, Shibpur,
Howrah – 711103, India

Quotation must be submitted to **the office of the Information Technology Department, IEST, Shibpur.**

5. The price quoted should be inclusive of all Taxes, duties and levies at the premises of the Information Technology Department. All Taxes, Freight, Insurance charges etc. should be clearly indicated. Inclusion of Tax/Levy or any other charges at a later stage will not be accepted. At the end, the total price of a single item must be indicated as: **TOTAL PRICE: Rs. *** ONLY, INCLUDING ALL.**
6. The items must be supplied within a period of one month after the receipt of the Purchase Order. Installation, if applicable, must be completed by six weeks after the receipt of the Purchase Order.
7. If the supply is not completed within the stipulated period as indicated in the Work Order, a Liquidated Damage @ ½ per cent per week will be imposed subject to maximum of 5% of the value of work order.
8. For Indian purchase (This clause is applicable only for Indian purchase and not applicable for foreign purchase):

Bills in triplicate should be presented for payment within 15 days of Supply / Completion of work. No Advance Payment can be made. All bills are to be accompanied by Order copies and Challan Receipt. The Order Number is to be noted on both the Challan and the Bill.

9. Documents to be submitted with the tender:

Tender Documents/Terms & Conditions in Original duly signed by the Proprietor / Partner/ Director of the Company as a token of acceptance of Terms & Conditions of Tender.

10. Customs Duty & Excise Duty

- The Institute will not issue any C or D form availing of concessional Tax.
- The Institute will issue Customs Duty Exemption Certificate or Excise Duty Exemption Certificate for foreign purchase, if required.

11. Indian Institute of Engineering Science and Technology, Shibpur, Howrah reserves the right to accept / reject all or any of the tenders without assigning any reason whatsoever.

We accept the above terms and conditions.

Signature of Bidders/Suppliers

Dated: With date & Seal

Item I: Windows Office 2016 or latest Professional academic edition

Number of license: Five Numbers

Microsoft Office 2016 or latest for PC - Professional - Academic Edition

Item II:

1. Wireless Water Monitoring Node

The supplier has to fabricate the water monitoring node as per following specifications [a) system specification]. The supplier has to make necessary arrangements for all electrical connections [b) Electrical specification]. The data logging system should be integrated as per the given specification [c) Data logger specification].

A) SYSTEM SPECIFICATION

Mechanical Specification:

MATERIAL: MS

GAUGE: 22

BOX RATING: IP55

WATER PIPE DIA: 2"

SENSOR MOUNT LIST

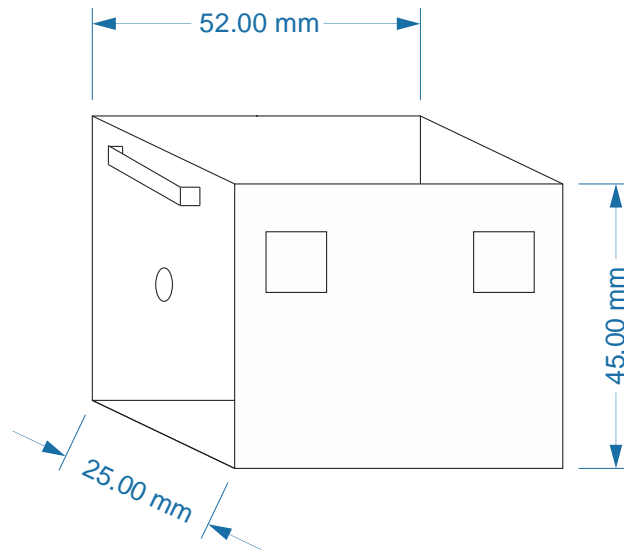
pH SENSOR CONNECTION: 3/4" BSP Male

TDS SENSOR CONNECTION: 1/2" BSP Male

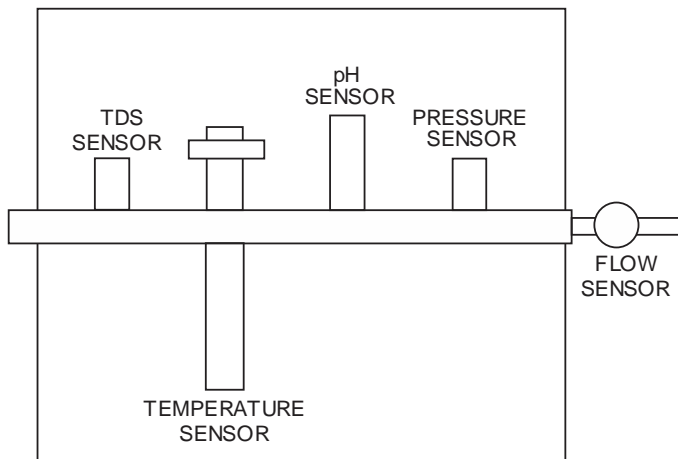
PRESSURE SENSOR CONNECTION: 1/2" BSP Male

PRESSURE SENSOR CONNECTION: 1/2" BSP Male Adjustable (SS)

FLOW SENSOR CONNECTION: 1/2" BSP Male



DIMENSION IS IN 10:1 RATIO



b) ELECTRICAL SPECIFICATION:

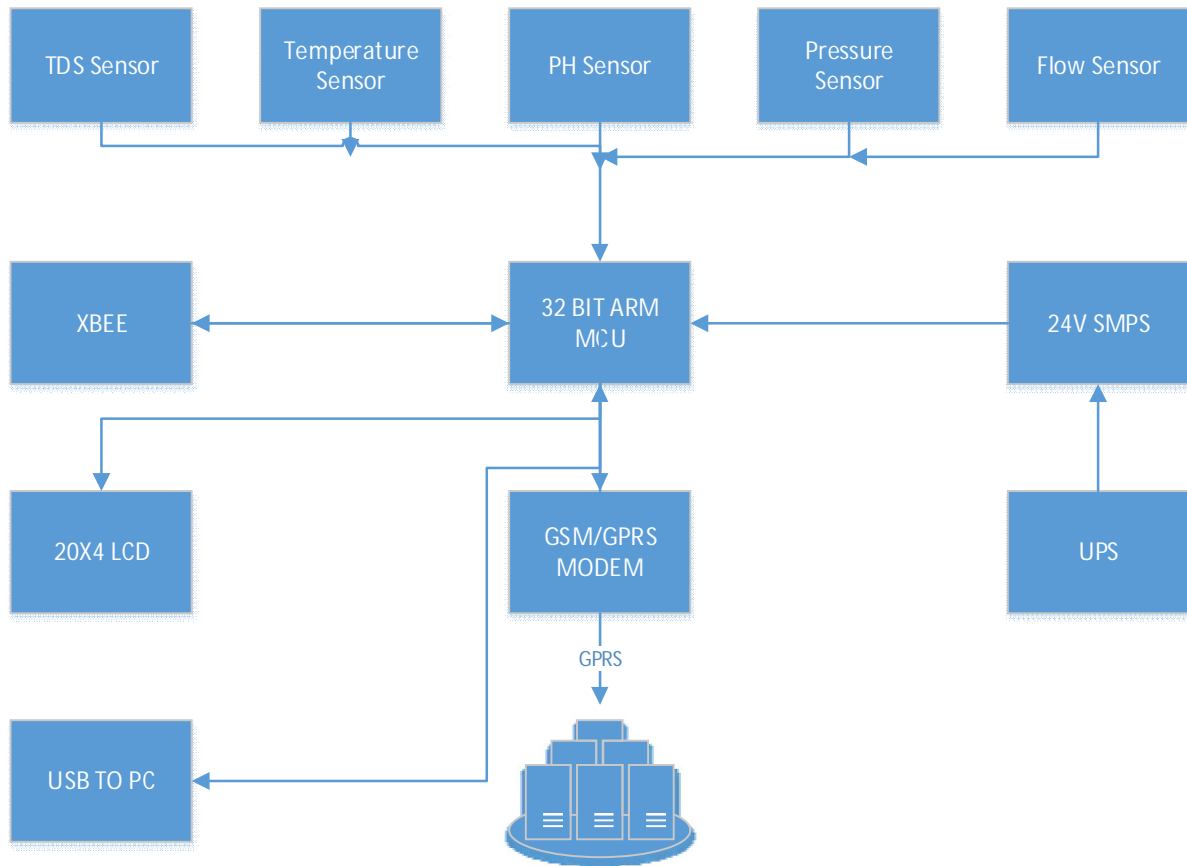
The sensor which should be interface are described below:-

Sl No.		Specification
1	pH Sensor	Make : MicroSet Model : MS pH 02 Range : 0 to 14 pH

		<p>Body : CPVC Max Temp : 0 to 80°C Operating Pressure : 0 to 6 Bar Junction : Four Ceramic Ref: Ag / AgCl Process Connection : ¾" BSP Male Cable Length: 05 Meter with BNC</p>
2	pH Indicating Transmitter	<p>Make : MicroSet Model : MS pH 19 Display : 4 digit LED Range : 0 to 14.00 pH Resolution : 0.01 pH Accuracy : ± 0.1 pH Calibration : 2 Point Manual Retransmission Output : 4 to 20 mA DC Isolated Mounting : Panel Mounted Dimensions : 96 x 96x 100 mm Supply : 230 VAC</p>
3	TDS Sensor	<p>Make : MicroSet MOC of Body : Derlin MOC of Electrodes :SS 316 Max Operating Pressure : 2.5 Bar Max Operating Temp. : 60°C Process Connection : ½" BSP Male Cable : 4 Meter</p>
4	TDS Indicating Transmitter	<p>Model : MS TDS 18 Display : 4 digit LED Range : 0 to 1999 ppm Resolution : 1 ppm Accuracy : ± 1% of full scale @30°C Calibration : 1 Point Manual Retransmission Output : 4 to 20 mA Isolated Mounting : Panel Mounted Dimensions : 96 x 96x 100 mm Supply : 230 VAC</p>
5	Pressure Transmitter	<p>Make : MicroSet Media : Water Model : MS PR CT Range : 0 to 10 Bar Sensing Element : Piezoresistive Accuracy :± 0.5% FS Operating temp : - 40 to 100°C Output : 4 to 20 mA (2 Wire) Process Connection : 1/4" BSP Male Electrical Connection: 4 Pin DIN Connector Supply : 10 to 30 VDC</p>
6	Temperature Sensor with Built in	<p>Make : MicroSet Type : PT 100 Simplex Range : 0 to 100°C</p>

	Transmitter	Diameter : 6 mm Insertion Length : 300 mm Process Connection : 1/2" BSP Male Adjustable (SS) Enclosure : Aluminum Di cast – Weatherproof Cable Entry : PG 9 Output : 4 to 20 mA Supply : 24 VDC
7	Flow Sensor	Working voltage: dc 5v-24v Maximum operating current: 15 ma (dc 5v) load capacity: 10 ma (dc 5v) use temperature: 80 C Operating humidity range: 35 percent -90 percent rh Material: nylon and fiberglass

c) DATA LOGGING SYSTEM CONSISTS OF FOLLOWING



SYSTEM SPECIFICATION

Item	Specification	
1	Processor	32 bit ARM Cortex M3
2	ADC resolution	12 bit/ 1 MSPS
3	Sampling Rate	6 samples/ minute
4	Sensor Input	As per sensor and sensor transmitter described above
5	Input Power	24 VDC/3A
6	Modem	Quad Bang GSM/GPRS modem with DC-DC converter inbuilt
7	ZigBee	2.4 GHz S2 type
8	Communication	Configurable XBEE and GPRS API
9	Software	Open source Based Platform
10	Firmware	Source Code and documentation
11	Enclosure	IP66 ABS
12	PC interface	USB 2.0 Full speed
	Display	20 X 4 Alphanumeric display
	UPS	230V / 600VA

