



## Pondicherry University

### Department of Earth Sciences

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**Dr. S. Balakrishnan**

Professor and Head

Ref:No.PU/ES/52/2011-12/

Date: 08.11.2011

Sub: Quotations invited for supply of **pH Meters & Water Analyzer** – Reg.  
Sir,

I invite Sealed Quotations for supply of **pH Meters and Water Analyzer** as per the terms given below:

#### Items and Specifications

1. Bench Top pH meter
2. Portable pH meter
3. Portable water Analyzer

For item no.1 to 3 detailed specifications are mentioned in Annexure – I

#### **Terms & Conditions:**

1. The quotations should be Sealed and superscribed as “Quotation for supply of Water Analyzer and pH Meters”
2. The quotations should reach the undersigned at 3.00 PM on or before **25 -11-2011**
3. The rate quoted should be duly on FOR destination basis and should be inclusive of all taxes.
4. Payment will be made against bill after receipt of items in good condition at our premises
5. University has right to select or reject any quotation partly or fully without assigning any reason

Yours sincerely,

-sd-

(S. BALAKRISHNAN)

Encl: Annexure – I

## **1. Bench top pH Meter:**

### Technical Specification:

	<b>pH</b>	<b>mV</b>	<b>Temperature</b>
pH Range :	0 to 14 pH	±1200	-30 to 150°C
Resolution :	0.01/0.001 pH	±1	± 0.15 to 0.002°C
Accuracy :	± 0.01 pH ±1 digit	1	0.1°C

### Display:

pH/mV	: 7 Segment LED Display
Temp	: Backlit LCD
Keypad	: Alpha Numeric
Input	: >10 <sup>12</sup> Ohms

### Input Impedance:

Standard Buffer Set	: NIST, DIN, USA
Calibration	: Upto 5 Point Auto/Manual Recognition
Temp. Compensation	: -10 to 100°C (Auto/Manual)
Slop control	: 80 to 100%
Operating condition	: Temp 0-80°C
No. of Sample storage:	100 or more
Electrode	: Non Glass/ Poly Coated over glass & Replaceable electrode
Power supply	: 230 Volts 50Hz Single phase.

### Spares & Accessories:

Price of spare pH/temp electrodes, consumables and Printer should be quoted separately.

## **2. Portable pH meter:**

### Technical Specification:

	<b>pH</b>	<b>mV</b>	<b>Temperature</b>
pH Range :	0 to 14 pH	0±200	0 to 100°C
Resolution :	0.01 pH	0.1	0.1°C

Display	: pH and Temp display in Single LCD
Standard Buffer Set	: NIST & USA
Calibration	: Upto 3 Point Auto/Manual Recognition
Operating condition	: Temp 0-80°C
No. of Sample storage:	Minimum 50
Electrode	: Non Glass/ Poly Coated over glass & Replaceable electrode
Power supply	: Internal Battery with charger.

### Spares & Accessories:

Price of spare electrodes, consumables, battery etc., should be quoted separately.

### **3. Portable Water Analyzer:**

#### **Technical Specification:**

##### **pH:**

pH Range : 0 to 14 pH  
Resolution : 0.01/0.001 pH  
Accuracy :  $\pm 0.01$  pH  $\pm 1$  digit  
Sensor : GE & RE/ Comb. Electrodes  
Temp. Compensation: Auto/Manual

##### **D.O:**

Range : 0 to 20 ppm  
Resolution : 0.1 ppm  
Accuracy :  $\pm 1$  of FS  $\pm 1$  digit  $\pm 0.1$   
Sensor : Au/Ag Probe  
Temp. Compensation: Auto/Manual

##### **mV/ORP:**

Range :  $\pm 1999$  mV  
Resolution : 1 mV  
Accuracy :  $\pm 1$  mV  $\pm 1$  digit  
Sensor : GE & RE/ Comb. Electrodes

##### **Temperature:**

Range :  $\pm 0$  to 100°C  
Resolution : 0.1°C  
Accuracy :  $\pm 0.5$ °C  $\pm 1$  digit  
Sensor : PT 100

##### **Colorimeter:**

Range :  $\pm 2.00$  Abs  
0 to 100 % T  
Conc: 0-1999  
Resolution : 0.001 Abs  
Accuracy : 0.0001 Abs, 0.1% T  
Sensor : Photo Diode  
Source : Tungsten Lamp  
Filters : Blue (440 nm)  
Green (540 nm)  
Red (660 nm)

##### **Turbidity:**

Range : 0 to 1 NTU  
0 to 10 NTU  
0 to 100 NTU  
Accuracy :  $\pm 2\%$  of FS  
Sensor : Photo Diode  
Source : Tungsten Lamp

##### **Conductivity/TDS:**

Range : 0 to 100 mS, 5 ranges,  
0 ppm to 100 ppt 5 ranges at TDS factor 0.5(approx.) & TEMPCO 2%  
Accuracy :  $\pm 1\%$  OF FS  $\pm 1$  digit  
Sensor : Glass/PVC cond. Cell (Acceptable from 0.1 to 5.0 cell constant)  
Temp. Compensation: Auto/Manual

##### **Salinity:**

Range : 0 to 40 ppt  
Resolution : 0.1 ppt  
Accuracy :  $\pm 2$  of FS  $\pm 1$  digit  
Sensor : Glass/PVC cond. Cell (Acceptable from 0.1 to 5.0 cell constant)  
Temp. Compensation: Auto/Manual

##### **General Specification:**

Display (LCD) : 2 Line 20 Char. Alphanumeric  
Printer Pot : Centronic Printer interface  
Optional : Pt.Electrode  
Power : 230 V 50Hz  $\pm 10\%$  or Internal Battery with charger  
Dimensions : 420 x 520 x 175mm (DxWxH)  
Weight : 7.5 kg (Approx.)