



DEPARTMENT OF PHYSICS
SAVITRIBAI PHULE PUNE UNIVERSITY

Ref. No./PHY/RCK/45

Date: 24/11/2018.

Name of the Administration
Department: PHYSICS

Quotations are invited for the supply of following goods/carrying out the work, so as to reach this office on or before

24/12/2018

Sr. No.	Description of Material/Item/work	Approximate Quantity	Rate Per unit	Amount (Rs.)	Remarks
1.	Impedance Analyzer (Specification attached)	1 No.			

1. GST Exemption Certificate will be provided.
2. Excise duty/Custom duty Exemption Certificate will be issued if applicable.

Note : For other terms and conditions see overleaf.



Head, Department of Physics
S.P.PUNE UNIVERSITY
Pune - 411 007.

Signature

(Supplier)
(With Stamp)

TERMS AND CONDITIONS

1. Mention quotation No. on the envelope.
2. Quote rate per unit and date of validity, Date of Validity should be minimum of 30 days from the last date of submitting the quotation.
3. Submit sample/Catalogue of the material with quotation if necessary.
4. Quotation must be sent along with the covering letter on your letterhead quoting your sales tax Registration ,GST Registration number.
5. Conditional quotation will not be accepted.
6. Delivery within ...~~60~~... days from the date of order at Department Physics, Savitribai Phule Pune University .
7. Work to be completed within days from the date of order of the University of Pune.
8. Quotation will be rejected in case of even a single correction or overwriting. Only clear and uncorrected quotation will be accepted.
9. Payment as per actual measurements wherever applicable.
10. Payment will be made by cross cheque only.
11. Income tax will be deducted as per prevailing rule.
12. Water charges 2% will be recovered, if used.
13. In case of works and service contracts Security Deposit will have to be deposited by the contractor in following manner:
 - (a) 2.5% before commencing the work.
 - (b) 2.5% will be deduced from the R.A. Bill.
14. Electricity charges will be recovered as per rules if used.
15. The S.P.P.University will issue GST Exemption Certificate,
16. Excise duty/Custom Duty exemption Certificate will be issued, if applicable.
17. Rates quoted should be Inclusive of all taxes with Tax details e.g. Excise duty, Custom duty, Sales tax, Packing forwarding etc.
18. The above terms and conditions are acceptable.

Signature of the Supplier/Contractor
(With Stamp)

Impedance Analyzer Specifications

- 1. A base Impedance Analyzer**
2. The Impedance Analyzer shall be able support measurements in the **frequency Range of $\leq 20 \text{ Hz} - 10 \text{ MHz}$ or wider.**
3. The Impedance Analyzer system shall support 2 and 4 wire measurements with standard (manufacturer specified and furnished) and custom (user designed and built) sample cells.
4. **Measurement Parameters (Some parameters can be excluded):** Capacitance (C) , Inductance (L), Resistance (R), Reactance (X), Conductance (G), Susceptance (B), Dissipation Factor (D), Quality Factor (Q), Impedance (Z), Admittance (Y), Phase Angle (\emptyset)
5. Should able to record Cp, Cs, Rp, Rs, Z, q, Ls, Lp ... simultaneously.
6. Automatic computer interfaced data acquisition system.
7. The set up should be capable to measure dielectric properties as a function of temperature and frequency
8. Frequency resolution: 1 Hz.
9. Data acquisition speed: 1 m sec.
10. Impedance data analysis software should be provided.

Additional Accessories

1. Suitable Furnace, Temperature Range Room Temperature (RT) to $\geq 600 \text{ }^\circ\text{C}$.
2. Solid Sample holder for Bulk Samples (RT - $\geq 600 \text{ }^\circ\text{C}$)
3. If possible Sample holder for Bulk, Thick Sample (-150°C to Room Temp.)