

eNOTICE INVITING TENDER (NIT)

NIT No.: ICAT/LT/ETC/FILTERS/2022-23/3 Manesar, 12th April 2022

The Director, International Centre for Automotive Technology (ICAT), a division of NATRIP Implementation Society (NATIS), Govt. of India, hereby invites sealed bid for "ARC for Calibration of "B" Category Equipment's" at ICAT Manesar as per following details:

Tender Activity Schedule

ender Activity Schedule	
Product Requirement	Calibration for "B" Category Equipment's (As per list enclosed below)
Equipment Detail	As per list enclosed
Eligibility Criteria	Minimum Eligibility Criteria: • Laboratory should be ISO/IEC 17025 Accredited (Certificate to be provided along with sealed bid). • Bidder should have in-house capability to do calibration, although only 25% instruments can be outsourced to any other associates having ISO/IEC 17025 accreditation. • CMC (Calibration Measurement Capability) should be provided along with bid. • Service provider should have minimum 3 years of experience in the field of "Calibration of different type of instruments within the various defined NABL Calibration disciplines".
Payment Terms	100% Payment against submission of Invoice.
Calibration ARC Period	12 Months from the date of ARC Contract
Delivery Terms	FOR Up to ICAT Site
Delivery/Billing Address	International Centre For Automotive Technology (Centre – 1), Plot No. 26, Sector – 3, Near HSIIDC, IMT Manesar, Gurgaon 122050 GST No. 06AAATN7662F1ZI
Last Date of submission of Sealed Techno-Commercial Bid	Up to 1400 Hrs. on 22 nd April' 2022, at ICAT Centre – 1, Manesar, Gurgaon, India.



- Bidders to comply with Rule 144 (xi) of GFR 2017 (refer Office Memorandum of Department of Expenditure dated 23rd July 2020
 - https://doe.gov.in/sites/default/files/OM%20dated%2023.07.2020.pdf
- **Preference to Make in India:** As per the revised order issued by Department of Industrial Policy and Promotion (DIPP) vide No. P-45021/2/2017-PP (BE-II) dated 04.06.2020. The purchaser reserves the right to give preference to the local supplier. https://dpiit.gov.in/sites/default/files/PPP%20MII%20Order%20dated%204th%20June%202020.pdf

Sealed Envelope should be marked with "ARC for Calibration Services of "B" Category Equipment's"

Interested suppliers/service providers who meet our requirements should submit no regret techno commercial proposal along with product catalogue in a **sealed envelope** *latest by* **22**nd **April' 2022 by 17:00 Hrs.** at below given address

To,

The Purchase Department, International Centre For Automotive Technology Plot N. 26, Sector-3, HSIIDC, IMT Manesar Gurgaon 122050 (Haryana) Contact No. +91 9971150821

Note: ICAT reserves the right to reject/modify/cancel the tender without assigning any reason thereof.



Annexure A

Proposal Invited for "Annual Rate Contract for Calibration of Instruments in FY 2022-23

At ICAT Centre - 1 & 2, Manesar (Haryana)"

International Centre for Automotive Technology is pleased to invite you for <u>"Annual Rate Contract for Calibration of Instruments for FY 2022-23 at ICAT Centre – 1 & 2, Manesar (Haryana) As per Attached Annexure-A"</u>. You are requested to submit your proposal via Sealed Quote for the same latest by 22nd April' 2022 by 17:00 Hrs.

1. Calibration can be performed at both Onsite as well as at Lab, as per the NABL procedure.

2. Eligibility Criteria:

- Laboratory should be ISO/IEC 17025 Accredited (Certificate to be provided along with sealed bid).
- Bidder should have in-house capability to do calibration, although only 25% instruments can be outsourced to any other associates having **ISO/IEC 17025 accreditation**.
- CMC (Calibration Measurement Capability) should be provided along with bid.
- Service provider should have minimum 3 years of experience in the field of "Calibration of different type of instruments within the various defined NABL Calibration disciplines".

3. General Terms & Conditions:

- Sealed bid to be submitted with filling the Attached "Annexure A & B" after duly filled and signed on Letter head.
- **Instruments** would be available for **calibration on monthly basis** as per ICAT Internal Calibration plan.
- Transportation and Loading/Unloading Charges shall be under the scope of Service Provider.
- **Instrument Return Period**: Instruments should be returned within 15 days after the submission of instruments sent for calibration.
- Any Damage/Missing of instruments & Auxiliary items during transportation/calibration will be borne by Bidder/Service provider.
- At the time of placing ARC Contract, the equipment's quantity mentioned in the Tender Document may vary.
- The contract will be valid for one year from the date of award. However, ICAT shall be entitled to terminate the contract earlier than 12 months without any notice if in the opinion of the ICAT, the performance of the service provider is not satisfactory, the service provider engages in any unlawful act, or due to any other reasons, at the sole discretion of the company.
- The Contract will be valid for a period of one year from the date of award. However, the contract may be extended for a further three months thereof, on the same rates, terms and conditions, with the mutual consent of both, the service provider and the company.
- ICAT reserves the right to split the tender quantity for placement of ARC contract if more than one bidder is found to be technically and commercially acceptable against the tender.



- 4. **Proposal Validity Period:** Bids validity should be of at least **12 Months** from the last date of submission of Bids. Any Bid having validity lower than that specified above shall be rejected by ICAT as being nonresponsive. However, ICAT may request the Bidders to extend the Bid unconditionally beyond the Bid validity period up to an additional period of **ninety (90) days** without any modification and without giving any reason thereof. Conditional extension of bid validity shall not be accepted and ICAT reserves right to reject such bid/s and proceed with the bidding process with the remaining bidders.
- 5. Scope of Services: As per the attached List of Instruments (See Annexure-A).
- 6. Price should be quoted in FOR ICAT Manesar.
- 7. **Billing:** All Bills and accompanying documents should be raised and submitted in original; as per the Payment Terms, and should be accompanied by original copies of duly receipted/certified Delivery Challan/Work Progress or Completion Certificate, as applicable. No payment shall be released against any duplicate bills, work progress report or Completion Certificate or delivery challan. All applicable taxes such as GST, Service tax, Works Contract Tax shall be mentioned separately in the invoice.



<u> Annexure – A</u>

List of Instruments for Calibration in FY2022-23 for ARC"

SI No.	Instruments	Quantity	Certificate to be provided with NABL Symbol Yes/No	Accredited CMC	Lab(L)/ Site(S)	Outsource (Yes/No)
1	Digital micrometer (0 - 25 mm)	6				
2	Digital micrometer (25-50 mm)	2				
3	Digital micrometer (0-150 mm)	2				
4	Digital vernier Caliper (0- 150 mm,0 - 200 mm)	14				
5	Digital vernier Caliper (0-300 mm)	7				
6	Digital vernier Caliper (0 - 600 mm)	5				
7	Digital Height gauge (0- 1000 mm),(0 - 2000 mm)	2				
8	Digital Height gauge (0-300 mm)	3				
9	Digital Depth Caliper (0 - 200 mm)	3				
10	Torque Wrench (0.3-6 Nm, 2.5-11Nm, 3-23Nm, 5-50Nm, 12-68Nm, 0-100Nm,25-135Nm, 0-150Nm, 50-225Nm)	26				
11	Torque Wrench (70-330 Nm,60-340 Nm,0-420 Nm,140-560 Nm, 0-500 Nm,50-560Nm)	8				
12	Torque Wrench (135-675Nm, 150-750 Nm, 480-940Nm, 200-1000 Nm,200-1400 Nm)	5				



13	Digital Torque Wrench (0.3-6.0Nm,6.8-135 Nm, 0 - 30 Nm,0 340 Nm)	5		
14	Ampere meter (50 A/1000 A)	3		
15	Digital Timer (1-59 Sec/1 - 999.99 Min. / 99min. / 9999.9 min/1-999 sec.)	25		
16	RPM Meter with Indicator (up to 5000, 9999 rpm, 200km/hr)	10		
17	Hour meter (0-99999.9 Hour)	15		
18	Cycle Counter (1 to 100000 Count)	7		
19	Air flow Meter (50 to 500 ml/Min) (Rotameter)	6		
20	Flow meter (Water) (0 - 15/60/100/150 LPM)	8		
21	Weights (Mass) up to 10 kg	78		
22	Weights (Mass) above 10 ~ 20 kg ,25 kg, 45kg	57		
23	Weighing Pad With Display (1000 kg 16 Nos,1500Kg 4 Nos ,)	24		
24	Weighing Pad With Display (,5000 kg 4Nos) Working Range: upto 3000 Kg	4		
25	Weighing Balance (300Kg) Class 2	1		
26	Speed Sensor With Indicator (10 to 900/ 4000 rpm)	6		



27	Pressure Transmitter with Indicator (Pneumatic & Hydraulic) (-1bar/0.4 bar/0.5 bar/1bar/3bar/4bar/6 bar/7 bar/9 bar/10bar/20 bar/25 bar/21 BAR/30bar/40bar/50bar)	310		
28	Pressure Transmitter with Indicator (Pneumatic & Hydraulic) (250/400bar/1000bar/12 00/2000 bar/150bar/600bar) Working Range: upto 1000 bar	25		
29	Pressure Gauge (Pneumatic & Hydraulic) 10bar/300bar/400bar/6 00bar/700 bar	64		
30	Pressure Gauge (Oxygen) 0 to 315 bar	6		
31	Pressure Gauge (Hydraulic) 0 to 1400 bar Working Range: upto 1000 bar	5		
32	Steel Scale (Length) 150mm,300 mm	16		
33	Steel Scale (Length) 530mm, 350 mm, 600 mm	8		
34	Steel Scale (Length) 800mm, 1000mm	8		
35	Measuring Tape 5.5m- Digital,	2		
36	Measuring Tape 3 m to 10m Manual	20		



37	Measuring Tape 15m Manual	3		
38	Measuring Tape 30m,50m Manual	5		
39	Pull push gauge (up to 500 N)	5		
40	Pull push gauge (up to 1000 N)	3		
41	Chamber temperature calibration (9 sensors) (-60°C to 200° C) & RH(10% to 95% RH)(Single Point)	32		
42	Chamber humidity calibration (10% to 95% RH) 9 sensors	1		
43	Digital Stop Watch (0 - 24 Hour)	14		
44	Wet & Dry Thermometer (-10°C to 50°C)	30		
45	Digital Hygrometer (0-70°C, -20°C - 60°C /5-95%RH)	23		
46	Vacuum Gauge (-100 to 100 kpa, -29.5 to 0 inch Hg)	3		
47	Pedal force sensor (0-150 kg) Working Range: 1 to 100Kg	7		
48	High Voltage Tester (0-10 KV at 100Ma, 0-3kV, 5 kV)	2		
49	Spark Tester (0 - 10KV at 1 KVa)	1		
50	Granite Surface Plate (1m x 1m)	3		



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51	HUMIDITY & TEMP. PROBE (10-95%RH/0-70°C)	55		
52	ABSOLUTE PR. SENSOR (0.72-1.1 bar/500-1100 hpa/0.8-1.2bar)	69		
53	DIFFERENTIAL PR. SENSOR (0to(-)1bar/0- 200 mbar/0- 300kpa,400kpa)	62		
54	Digital Temp. Controller with Sensor (0-400°C)	114		
55	Temp. sensor (RTD / Thermocouple)-40 to 250°C/ 0 to 1000°C/ - 50°C to 100°C/ -200°C to 1200°C (With indicator) Working Range: -60 °C to 1000 °C	102		
56	Contact & Non-Contact Tachometer up to 10000 rpm & 1-250000 rpm(3 Nos) Working Range: 1 to 100000 rpm	15		
57	Regulated AC/DC Power Supply (30V&30Amp,40V&38A,6 0V,20A-, 60V,50A, 60V,85A,65V,10A)	29		
58	DIGITAL POWER METER(0 - 600 V AC/DC, 0-20 Amp AC/DC, 100 Power 1 W- 4.5 KW, Power in Hrs. 100-5000Wh, THD voltage & Current At 230V, PF & Frequency 50-60 Hz)	6		
59	Data Logger for Temperature & R. H. With Display(-40°C to 105°C/ 10% to 95%RH)	9		
60	Digital Engine Tachometer (1 to 5000 rpm)	4		



Digital Multimeter (Bench					
Top) 6½ Digit	6				
Profile Projector (X=0-250MM, Y=0-100mm, 0°-360°)	1				
Hand Force Sensor With Indicator (0-50kg)	6				
Barometric Pressure Sensor With Indicator (660-1070 mbar,59.26 to 110.06 kpa, 350hpa - 1100hpa)	5				
Clamp Meter(0 to 1000VDC,0 to 750 VAC,0 to 1000A AC/DC & Resistance)	14				
Meggar (Earth Resistance Meter)(Res: 100Ω to 1GΩ @ 250 V, 500 V & 1000 V)	4				
Stereo Zoom Microscope (25 ×)	1				
Spherometer (Dial Gauge) 5mm/10 mm/20mm	42				
Digital Tyre Inflator (1 psi to 150 psi)	6				
Measuring Cylinder(Beaker) (50ml/100ml/500ml/100 0 ml/2000ml,5000ml)	5				
Manometer / U-TUBE MANOMETER (500-0-500 mm Wc)	2				
Beta Calibrator(DC Volt 0-20V,DC Current 0- 20MA,T/C°C - K,N,T,J,R,&S Type, RTD	3				
	Profile Projector (X=0-250MM, Y=0-100mm, 0°-360°) Hand Force Sensor With Indicator (0-50kg) Barometric Pressure Sensor With Indicator (660-1070 mbar,59.26 to 110.06 kpa, 350hpa -1100hpa) Clamp Meter(0 to 1000VDC,0 to 750 VAC,0 to 1000A AC/DC & Resistance) Meggar (Earth Resistance Meter)(Res: 100Ω to 1GΩ @ 250 V, 500 V & 1000 V) Stereo Zoom Microscope (25 ×) Spherometer (Dial Gauge) 5mm/10 mm/20mm Digital Tyre Inflator (1 psi to 150 psi) Measuring Cylinder(Beaker) (50ml/100ml/500ml/100 o ml/2000ml,5000ml) Manometer / U-TUBE MANOMETER (500-0-500 mm Wc) Beta Calibrator(DC Volt 0-20V,DC Current 0-20MA,T/C°C -	Top) 6½ Digit 6	Top) 6½ Digit	Top) 6½ Digit 6 Profile Projector (X=0-250MM, Y=0-100mm, 0°-360°) 1 Hand Force Sensor With Indicator (0-50kg) 6 Barometric Pressure Sensor With Indicator (660-1070 mbar, 59.26 to 110.06 kpa, 350hpa - 1100hpa) 5 Clamp Meter(0 to 1000VDC,0 to 750 VAC,0 to 1000A AC/DC & Resistance) 4 Meggar (Earth Resistance Meter)(Res: 100Ω to 1GΩ @ 250 V, 500 V & 1000 V) 4 Stereo Zoom Microscope (25 ×) 1 Spherometer (Dial Gauge) 5mm/10 mm/20mm 42 Digital Tyre Inflator (1 psi to 150 psi) 6 Measuring Cylinder(Beaker) (50ml/100ml/500ml/100 0 ml/2000ml,5000ml) 5 Manometer / U-TUBE MANOMETER (500-0-500 mm Wc) Beta Calibrator(DC Volt 0-20V,DC Current 0-20MA,T/C°C -	Top) 6½ Digit 6 Profile Projector (X=0-250MM, Y=0-100mm, 0°-360°) 1 Hand Force Sensor With Indicator (0-50kg) 6 Barometric Pressure



	DW 100 0 / 75000 0		-	
	PT-100 - 0 to 750°C & RESISTANCE 5 to 4000			
73	Range Finder with Inclinometer (0-80Mtr/0- 180°)	3		
74	Feeler gauge (0.04-1.00mm)	2		
75	Rubber hardness tester (0-100 shore-A)	1		
76	Digital Dial gauge (0-12.7 mm, L. C0.001mm)	2		
77	Radius gauge set (0.5-15.0mm)	3		
78	Dial indicator (Puppy dial) 2.00mm	1		
79	Glass Thermometer (- 10°C to 300°C)	1		
80	Bore Gauge With Dial Gauge (35-60 mm,18-35 mm,10-18.5 mm,6-10 mm,3.5-7.3 mm, 50-150 mm)	6		
81	Air Flow Anemometer (0 to 30/45 m/s)	8		
82	Thermal Shock Chamber (Hot Zone 50°C to 200°C, & Cold Zone -80°C to 100°C,-60°C to 200°C)	3		
83	Energy Meter (Voltage: 1-600 V AC, Current: 0.1 A-15 A, Power 1W-1000W, PF, & Frequency 50-60 Hz	2		
84	Micro Burette(0 - 1 ml)	1		
85	Pipette (0 -100 ml)	1		
86	Glass Bottle (Glass Ware) 0-1000 ml	1		



87	Test Probe B (Test Fingure)	2		
88	Digital Pressure Switch (0 to 1 Mpa, 0 - 10 bar)	3		
89	Try Square 0 152 mm, 300 mm & 90 deg. (600*350mm),(150*100m m)	2		
90	Digital Inclinometer - FMH 360 deg.	4		
91	Digital Inclinometer 4* 90 deg.	10		
92	Circumference Measuring Tape(60-950,300- 650,600-900,1100-1500, 2190-3460, 3450-4720 mm)	5		
93	Torque Meter (0-100 Nm, 0-500 Nm)	2		
94	Set Square 90 deg	1		
95	L - Scale 500x350, 300x150 mm	2		
96	L - Scale (Black) 600 mm	2		
97	Digital Pressure Gauge(Pneumatic & Hydraulic) (-1 to 25 bar,0- 350 bar,0-5/150psi,0- 700kpa,0-2bar,0-20bar,0 to 10 bar)	9		
98	10-CHANNEL HANDY- TYPE DATA LOGGER (DC voltage 1mV to 50V/K type temp200°C to 1300°C/%RH 10 to 100)	1		
99	Resistance Box (Range: 0 to 2000Ω, 0 to 50W)	2		
100	DECADE BOX(Resistance-	1		



	Capacitance-Substitue)(Res: 1Ω to $10M\Omega$ /Cap.: $1nF$ to $100\mu F$)			
101	MEMORY Hi LOGGER-15 channel (DC voltage 0mV to200mV/0 V to 100V/ K type temp200°C to 1300°C)	3		
102	Leakage Current Tester (10μA to 30mA)	1		
103	Regenerative Charge and Discharge Tester(60V/13A/600W per channel/ 8 channels)	3		
104	POWER ANALYZER-4 channel(DC/AC voltage- 0 to 1000V@ 50Hz/ DC /AC current 0 to 1000 Amp /Power-1 watt to 10 kW @UPF & 50Hz/ Frequency-10 Hz to 500Hz)	5		
105	Height Gauge 35 mm (Tracking Tester)	1		
106	Distance Gauge 4mm/ 100 mm/Split Gauge (Tracking Tester)	2		
107	High Voltage & IR Tester (High Voltage:0.05 to 5kV AC / 0.05 to 6kV DC Current: AC 5kV/100mA (4kV/120mA); DC:25mA Timer: 0.3 ~ 999 sec IR Tester:1MΩ ~ 50GΩ	1		
108	Torque Screw Driver(1 to 6 Nm)	1		
109	Weight (Cord Retention)(0.1Nm/0.25N m/0.35Nm/20N/30N)	7		



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	Weight (Mandrel Test				
110	Setup)(1N/50N)	5			
	1,7, ,				
	Vicat Softening Test				
111	apparatus(Weight	3			
	3N/7N/40N)				
110	Plunger Type Dial				
112	Gauge(upto 1mm)	1			
110	Temp. & Data Logger(4				
113	channel)(5°C to 85°C)	1			
	Test Sphere impact test				
114	setup with ball(Dia-	2			
	50mm/Weight-500g)	_			
	AC/DC Programmable				
115	Power Supply(25kW) 0 to	11			
	60V & 0 to 400A				
4.4.5	Standard Resistance Jig				
116	(10 Mohm to 100 Mohm)	1			
	DC Electronic Load				
117	(Voltage:15V Current:	3			
	720A)				
110	Hydrometer (Range: 1.100	2			
118	to 1.300 Sp.gr)	2			
	LEN Current Transducer				
119	with PCB interface (0-	3			
	5V/0-2000A)				
100	Current clamp along with	2			
120	PCB's (0-5 V)	2			
101	Fuel line pressure sensor	1			
121	(0-10 V)	1			
100	AC/DC Current	1			
122	Probe(1000A)	1			
	Battery Emulator(1100V				
123	DC/ 900A DC)	1			

* In case of any technical query, please feel free to contact: Contact Person: Mr. PL Chaudhary - QCL Dept.

Contact No.: **+91-9654337996** Email ID: pl.chaudhary@icat.in



Annexure – B Financial Bid – ARC for Calibration of Instruments FY 2022-23

Sr. No.	INSTRUMENTS	Number of Instruments	Unit Rate Per Instrument	Total Amount (INR)
1	Digital micrometer (0 - 25 mm)	6		
2	Digital micrometer (25-50 mm)	2		
3	Digital micrometer (0-150 mm)	2		
4	Digital vernier Caliper (0- 150 mm,0 - 200 mm)	14		
5	Digital vernier Caliper (0-300 mm)	7		
6	Digital vernier Caliper (0 - 600 mm)	5		
7	Digital Height gauge (0- 1000 mm),(0 - 2000 mm)	2		
8	Digital Height gauge (0-300 mm)	3		
9	Digital Depth Caliper (0 - 200 mm)	3		
10	Torque Wrench (0.3-6 Nm ,2.5-11Nm, 3-23Nm, 5-50Nm, 12-68Nm, 0-100Nm,25-135Nm, 0-150Nm, 50-225Nm)	26		
11	Torque Wrench (70-330 Nm,60-340 Nm,0-420 Nm,140-560 Nm, 0-500 Nm,50-560Nm)	8		
12	Torque Wrench (135-675Nm, 150-750 Nm, 480-940Nm, 200-1000 Nm,200-1400 Nm)	5		
13	Digital Torque Wrench (0.3-6.0Nm,6.8-135 Nm, 0 - 30 Nm,0 340 Nm)	5		
14	Ampere meter (50 A/1000 A)	3		
15	Digital Timer (1-59 Sec/1 - 999.99 Min./ 99min./ 9999.9 min/1-999 sec.)	25		
16	RPM Meter with Indicator (up to 5000, 9999 rpm, 200km/hr)	10		
17	Hour meter (0-99999.9 Hour)	15		
18	Cycle Counter (1 to 100000 Count)	7		



	Air flow Meter (50 to 500		
19	ml/Min)	6	
	(Rotameter)		
20	Flow meter (Water) (0 -	8	
	15/60/100/150 LPM)		
21	Weights (Mass) up to 10 kg	78	
22	Weights (Mass) above 10 ~ 20 kg ,25 kg, 45kg	57	
	Weighing Pad With Display		
23	(1000 kg 16 Nos,1500Kg 4	24	
	Nos,)		
	Weighing Pad With Display	4	
24	(,5000 kg 4Nos)		
	Working Range: upto 3000		
	Kg Weighing Balance (300Kg)		
25	Class 2	1	
06	Speed Sensor With Indicator	6	
26	(10 to 900/ 4000 rpm)	6	
	Pressure Transmitter with		
	Indicator (Pneumatic & Hydraulic)		
27	(-1bar/0.4 bar/0.5	310	
21	bar/1bar/3bar/4bar/6 bar/7	310	
	bar/9 bar/10bar/20 bar/25 bar/21		
	BAR/30bar/40bar/50bar)		
	Pressure Transmitter with		
	Indicator (Pneumatic &		
28	Hydraulic) (250/400bar/1000bar/1200/2	25	
	000bar/150bar/600bar)		
	Working Range: upto 1000 bar		
	Pressure Gauge (Pneumatic	64	
29	& Hydraulic) 10bar/300bar/400bar/600		
	bar/700 bar		
20	Pressure Gauge (Oxygen) 0		
30	to 315 bar	6	
	Pressure Gauge (Hydraulic)	5	
31	0 to 1400 bar Working Range: upto 1000		
	bar		
2.5	Steel Scale (Length)		
32	150mm,300 mm	16	
33	Steel Scale (Length)	8	
	530mm, 350 mm, 600 mm		
34	Steel Scale (Length) 800mm,	8	
	1000mm Measuring Tape 5.5m-		
35	Digital,	2	
26	Measuring Tape 3 m to	20	
36	10m Manual	20	
37	Measuring Tape 15m	3	
01	Manual		



38	Measuring Tape 30m,50m Manual	5	
39	Pull push gauge (up to 500 N)	5	
40	Pull push gauge (up to 1000 N)	3	
41	Chamber temperature calibration (9 sensors) (-60°C to 200° C) & RH(10% to 95% RH)(Single Point)	32	
42	Chamber humidity calibration (10% to 95% RH) 9 sensors	1	
43	Digital Stop Watch (0 - 24 Hour)	14	
44	Wet & Dry Thermometer (- 10°C to 50°C)	30	
45	Digital Hygrometer (0-70°C, -20°C - 60°C /5-95%RH)	23	
46	Vacuum Gauge (-100 to 100 kpa, -29.5 to 0 inch Hg)	3	
47	Pedal force sensor (0-150 kg) Working Range: 1 to 100Kg	7	
48	High Voltage Tester (0-10 KV at 100Ma, 0-3kV, 5 kV)	2	
49	Spark Tester (0 - 10KV at 1 KVa)	1	
50	Granite Surface Plate (1m x 1m)	3	
51	HUMIDITY & TEMP. PROBE (10-95%RH/0- 70°C)	55	
52	ABSOLUTE PR. SENSOR (0.72-1.1 bar/500-1100 hpa/0.8-1.2bar)	69	
53	DIFFERENTIAL PR. SENSOR (0to(-)1bar/0-200 mbar/0-300kpa,400kpa)	62	
54	Digital Temp.Controller with Sensor (0-400°C)	114	
55	Temp. sensor (RTD / Thermocouple)-40 to 250°C/ 0 to 1000°C/ -50°C to 100°C/ -200°C to 1200°C (With indicator) Working Range: -60 °C to 1000 °C	102	
56	Contact & Non Contact Tachometer up to 10000 rpm & 1-250000 rpm(3 Nos) Working Range: 1 to 100000 rpm	15	
57	Regulated AC/DC Power Supply	29	



	(30V&30Amp,40V&38A,60V		
	,20A-, 60V,50A,		
	60V,85A,65V,10A)		
58	DIGITAL POWER METER(0 - 600 V AC/DC, 0-20 Amp AC/DC, 100 Power 1 W- 4.5 KW, Power in Hrs. 100-5000Wh, THD voltage & Current At 230V, PF & Frequency 50-60 Hz)	6	
59	Data Logger for Temperature & R. H. With Display(-40°C to 105°C/ 10% to 95%RH)	9	
60	Digital Engine Tachometer (1 to 5000 rpm)	4	
61	Digital Multimeter (Bench Top) 6½ Digit	6	
62	Profile Projector (X=0- 250MM, Y=0-100mm, 0°- 360°)	1	
63	Hand Force Sensor With Indicator (0-50kg)	6	
64	Barometric Pressure Sensor With Indicator (660-1070 mbar,59.26 to 110.06 kpa, 350hpa - 1100hpa)	5	
65	Clamp Meter(0 to 1000VDC,0 to 750 VAC,0 to 1000A AC/DC & Resistance)	14	
66	Meggar (Earth Resistance Meter)(Res: 100Ω to 1GΩ @ 250 V, 500 V & 1000 V)	4	
67	Stereo Zoom Microscope (25 ×)	1	
68	Spherometer (Dial Gauge) 5mm/10 mm/20mm	42	
69	Digital Tyre Inflator (1 psi to 150 psi)	6	
70	Measuring Cylinder(Beaker) (50ml/100ml/500ml/1000 ml/2000ml,5000ml)	5	
71	Manometer / U-TUBE MANOMETER (500-0-500 mm Wc)	2	
72	Beta Calibrator(DC Volt 0-20V,DC Current 0-20MA,T/C°C -K,N,T,J,R,&S Type, RTD PT-100 - 0 to 750°C & RESISTANCE 5 to 4000	3	



	Range Finder with		
73	Inclinometer (0-80Mtr/0-	3	
'5	180°)	0	
74	Feeler gauge (0.04-1.00mm)	2	
1 -	Rubber hardness tester (0-		
75	100 shore-A)	1	
	Digital Dial gauge (0-12.7		
76	mm, L. C0.001mm)	2	
	Radius gauge set (0.5-		
77	15.0mm)	3	
78	Dial indicator (Puppy dial) 2.00mm	1	
79	Glass Thermometer (-10°C to 300°C)	1	
	,		
	Bore Gauge With Dial		
80	Gauge (35-60 mm,18-35 mm,10-18.5 mm,6-10	6	
80	mm,3.5-7.3 mm, 50-150	O	
	mm)		
	Air Flow Anemometer (0 to		
81	30/45 m/s)	8	
	Thermal Shock Chamber		
	(Hot Zone 50°C to 200°C, &		
82	Cold Zone -80°C to 100°C,-	3	
	60°C to 200°C)		
	Energy Meter (Voltage: 1-	2	
	600 V AC, Current: 0.1 A-		
83	15 A, Power 1W-1000W, PF,		
	& Frequency 50-60 Hz		
84	Micro Burette(0 - 1 ml)	1	
85	Pipette (0 -100 ml)	1	
	Glass Bottle (Glass Ware) 0-		
86	1000 ml	1	
87	Test Probe B (Test Fingure)	2	
	Digital Pressure Switch (0 to		
88	1 Mpa, 0 - 10 bar)	3	
	Try Square 0 152 mm, 300		
89	mm & 90 deg.	2	
	(600*350mm),(150*100mm)		
90	Digital Inclinometer - FMH	4	
90	360 deg.	4	
91	Digital Inclinometer 4* 90	10	
91	deg.	10	
	Circumference Measuring		
92	Tape(60-950,300-650,600-	5	
94	900,1100-1500, 2190-3460,		
	3450-4720 mm)		
93	Torque Meter (0-100 Nm, 0-	2	
	500 Nm)		
94	Set Square 90 deg	1	
95	L - Scale 500x350, 300x150	2	
	mm		
96	L - Scale (Black) 600 mm	2	



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97	Digital Pressure Gauge(Pneumatic & Hydraulic) (-1 to 25 bar,0-350 bar,0-5/150psi,0-700kpa,0-2bar,0-20bar,0 to 10 bar)	9		
98	10-CHANNEL HANDY-TYPE DATA LOGGER (DC voltage 1mV to 50V/K type temp 200°C to 1300°C/%RH 10 to 100)	1		
99	Resistance Box (Range: 0 to 2000Ω, 0 to 50W)	2		
100	DECADE BOX(Resistance-Capacitance-Substitue)(Res: 1Ω to $10M\Omega$ /Cap.: $1nF$ to $100\mu F$)	1		
101	MEMORY Hi LOGGER-15 channel (DC voltage 0mV to200mV/0 V to 100V/ K type temp200°C to 1300°C)	3		
102	Leakage Current Tester (10µA to 30mA)	1		
103	Regenerative Charge and Discharge Tester(60V/13A/600W per channel/ 8 channels)	3		
104	POWER ANALYZER-4 channel(DC/AC voltage- 0 to 1000V@ 50Hz/ DC /AC current 0 to 1000 Amp /Power-1 watt to 10 kW @UPF & 50Hz/ Frequency- 10 Hz to 500Hz)	5		
105	Height Gauge 35 mm (Tracking Tester)	1		
106	Distance Gauge 4mm/ 100 mm/Split Gauge (Tracking Tester)	2		
107	High Voltage & IR Tester (High Voltage:0.05 to 5kV AC / 0.05 to 6kV DC Current: AC 5kV/100mA (4kV/120mA); DC:25mA Timer: 0.3 ~ 999 sec IR Tester:1MΩ ~ 50GΩ	1		
108	Torque Screw Driver(1 to 6 Nm)	1		
109	Weight (Cord Retension)(0.1Nm/0.25Nm/ 0.35Nm/20N/30N)	7		
110	Weight (Mandrel Test Setup)(1N/50N)	5		



111	Vicat Softening Test apparatus(Weight 3N/7N/40N)	3		
112	Plunger Type Dial Gauge(upto 1mm)	1		
113	Temp. & Data Logger(4 channel)(5°C to 85°C)	1		
114	Test Sphere impact test setup with ball(Dia- 50mm/Weight-500g)	2		
115	AC/DC Programmable Power Supply(25kW) 0 to 60V & 0 to 400A	11		
116	Standard Resistance Jig(10 Mohm to 100 Mohm)	1		
117	DC Electronic Load (Voltage:15V Current: 720A)	3		
118	Hydrometer (Range: 1.100 to 1.300 Sp.gr)	2		
119	LEN Current Transducer with PCB interface (0-5V/0-2000A)	3		
120	Current clamp along with PCB's (0-5 V)	2		
121	Fuel line pressure sensor (0-10 V)	1		
122	AC/DC Current Probe(1000A)	1		
123	Battery Emulator(1100V DC/ 900A DC)	1		
	Total Value (INR)			
	GST%			
	Grand Total Inclusive of GST (INR)			

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