

CSIR- Central Glass & Ceramic Research Institute

Procurement Plan [Financial Year 2025-26]

[A] Equipment:

Table 1: Equipment for procurement during the FY 2025-26 and subsequent 3 – 5 years (under **Non-project mode**; out of **CSIR Grant / Lab Grant**):

Financial Year 2025-2026		
S. No.	Name of Equipment / Item	Approximate Cost (Rs. in Lakhs)
4M		
1	Waveform generator >100 MHz, Amplifier 50 V pp, GPIB interface	9.00
2	Source Meter	8.00
3	10 KVA UPS for Rigaku XRD System	5.00
4	Turbomolecular Pump (TMP) for FIB- 1 no. (Shifted to P07)	15.00
5	Vacuum Cleaner	0.20
6	Mercury Intrusion Porosimeter	70.00
ACCD		
1	Glove box	15.00
2	Atomic force microscope	98.00
BMDD		
1	Xolography Based Volumetric 3D Printing System	24.00
EMDD		
1	ISA-220 Integrating Sphere for EVO 220/260/One Plus with accessories	10.40
2	Gas chromatography instrument with tcd-methanizerfid for analysis of h2, n2, o2, co, co2, methane and hydrocarbons upto c6	44.50
FMDD		
1	Micro-volume Analyte Concentration and Purity Analyzer	16.00
2	High Resistance Measurement unit including electrometer, sourcemeter and software	22.00
3	20 Kg Force Gauge	0.20
FOPD		
1	Photodiode	3.50
2	Oscilloscope	4.00
3	Power Meter / Sensor Meter Display	4.00
4	Laser Power Sensor and Power Meter (10 W)	2.50

5	40 kVA online UPS with external batteries	7.00
6	Exhaust system with motors and scrubber system	15.00
MSTD		
1	Total Organic Carbon (TOC) Analyser with auto sampler	16.50
2	Fluorimetry-based uranium analyser	10.00
3	Ceramic support tube extruder	18.00
RTCD		
1	Control Atmosphere Furnace (1600C)	15.00
2	Hot Modulus of Rupture Apparatus (1400C)	10.00

SGD		
1	Scattered light polariscope	15.00
2	Magnetron Sputtering Unit	15.00
3	Glass Cutting Machine	6.00
4	Magnetic seperator rod	2.50
5	Vibrating table	4.00
Central F/C		
1	Movable mould heating system	2.50
2	Gas manifold system -two nos.	1.50
Central WS		
1	CNC Lathe	36.00
Compumat Grp		
1	42U Rack Enclosures Networking/Server Rack.	1.30
IITD		
1	Desktops – 44 Nos.	44.00
2	Laptops – 1 no Mac.	1.00
3	Printers-cum-scanners – 2 Nos.	0.60
4	Label printer	0.50
5	Firewall 201F (For Backup)	10.00
INSTRUMENTATION		
1	Wireless Lapel Mic System - 03 nos	1.00
2	Delegate Unit Microphone - 02 nos	1.00
3	Handheld wireless microphone -02 sets	0.70
4	Omni-directional Boundary Layer Microphone - 02 nos.	0.80
5	Instrument microphone - 01 no.	0.50
6	Condenser microphone -01 no.	0.12
7	Projector - 02 nos.	5.80
8	Audio Amplifier - 02 nos.	2.80
9	Digital Mixer 32 channel -01 no.	4.00
10	Table top small LED backlit IPS panel with touch technology and writing stylus - 01 no.	0.45
11	PTZ camera - 03 nos.	4.20

12	Mini conference system - 04 nos.	2.00
13	Passive Front Loudspeaker - 02 nos	3.40
14	Passive Side Loudspeaker- 02 pairs	2.00
15	LED Display Panel 55 inch - 01 no.	0.70
16	Industrial DC power supply, 200V, 50A, 3kW	3.55
KHURJA		
1	CNC Vertical Machining Center	75.00
2	X-Ray Fluorescence (XRF) spectroscopy	90.00
3	X-Ray Diffraction (XRD)	90.00
4	Rapid pot mill	2.00
NARODA		
1	Universal Gauge as per IS 13630 and ISO 10545	18.00
2	CCS machine 5000 KN capacity	15.00
3	Single color portable infrared thermometer, Temp range - 600-2000C	2.50
4	Particle Size Analyser	60.00
5	Roller hearth furnace	17.00
6	Digital vernier calipr, 600 mm, QTY 1	0.75
7	Digital vernier calipr, 150 mm, QTY 2	0.35
8	Digital vernier calipr, 300 mm, QTY 1	0.40
9	Screwgauge 0-25 mm range / 0.001 mm least count.	0.20
10	MOR machine for tiles of size 1200 x 1200mm	4.50
11	Standard weight box with calibration certificate (0-100 g)	0.10
12	Jaw Crusher	1.00
13	Pulverizer	2.00
14	Torsion Viscometer	2.75
BDPD		
1	Multifunction Scanner cum Printer	2.49
2	Digital Poster Stand (02 nos.)	3.20
3	Wide angle lens for existing camera	0.60

Next 3-5 Years				
S. No.	Name of Equipment / Item	Quantity (Nos.)	Approximate Cost (Rs. in Lakhs)	Requisition given by
1	Hip joint simulator with advanced features; 6-station together mimicking body environment, load and physiological condition; actual implant-stem combination; facility of volumetric wear calculation, fatigue, displacement; temperature controller and soaking liquid level automatic sensor; facility of various loading profile as per ISO (for level walking, staircase movements, running, etc.); Options for suitable fixture	1	250.00	Dr. B. Kundu

	for dental implants			
2	6-axis CNC grinding and polishing machine for ceramic hip and knee implants; 6 CNC axis for grinding and polishing of complex shapes; programmable pressure; reproducible and repeatable material removal; Advanced controller with integrated operator panel; Solid continuous one-piece machine; Robust belt drive; Capable to achieve < 30 nm Ra of ceramic hip and knee implants after grinding and polishing.	1	400.00	
3	Selective Laser Sintering (SLS) machine suitable for ceramic processing with following tentative spec; Laser and Scanning: 100 watt CO2 laser; Additional laser source with 500 W output; Physical maximum build envelope: Approx. W 380 x D 330 x H 450 mm ($\pm 10\%$); Input data file format: *.STL; CAD/CAM module: 3D shop having capability of typical standard Read/Write formats like IGES, STEP, VRML, STL, B-Rep etc.	1	400.00	
4	PE-CVD	1no.	200.00	
5	Rapid Thermal Annealing	1no.	200.00	
6	Magnetron Sputtering	1no.	110.00	
7	Bench Top Solution Blowing System	1no.	20.00	
8	Controlled Atmosphere High Temperature UTM	1no.	0.85	
9	Cold Isostatic Press	1no.	1000.00	
10	Atomic Force Microscopy	1no.	60.00	
11	Spectrofluorometer	1no.	200.00	
12	Vacuum Hot Press 50mm dia.	1no.	30.00	
13	Low speed precision cutter	01	10.00	
14	Multi-product electrical calibrator	01	30.00	
15	Up-gradation of audio system in Meghnad Saha Auditorium	01	20.00	
16	Computers	70	67.00	
17	Switches (Core, Distribution)	4 + 20	80.00	
18	Servers	4	30.00	
19	Firewall	1	15.00	
20	UPS	2	20.00	
21	Modular Steady-state and time resolved Phosphorescence and Fluorescence Lifetime Spectrometer (TCSPC)	1	190.0	
22	Strain measurement system of optical fiber (Model No: SPL 500-3-18596)	1	190.0	
23	Tuneable Laser Source	1	60.0	
23	Micro-pore Analyzer with Turbo-molecular pumping System and Vacuum Degasser	1	50.00	
24	High Resolution X-Ray Diffractometer: Specifications: High Resolution XRD for powder and Thin Film analysis using Bragg-Brentano and parallel Beam geometry.	1	165.00	
25	Wavelength Dispersive X-Ray Fluorescence Spectrometer	1	290.00	

	(WD-XRF)			
26	Roller hearth furnace, length 21 feet, working temperature 1250, max temp 1300, useful volume - 250 (w) X 50 (H) X 2000 (L) mm,	01	20.00	
27	UPS for 12 Nos. of PC's of CGCRI, Naroda Centre	12	0.90	
28	4k Ultra HD 43-inch smart LED TV, for committee room	02	1.00	
29	4k Ultra HD 65-inch smart LED TV, for committee room	01	1.50	
30	CCS machine of 5000 Tons capacity, with computer and necessary software	01	18.00	
31	Split Air Conditioner, 2.0 Ton, 5 Star Rating, Inverter type, Total no. 05 ICP, FTIR, chemical lab and Characterization Lab	08	6.4	
32	PL Spectrometer (200 nm - 870 nm)	01	110.00	
33	Dryer - size 1 mtr x 1 mtr x 2 mtr (inner useful space), temperature max - 250 deg C, stainless steel construction, heavy duty suitable for heating tiles. Including six numbers of SS trays	01	3.00	
34	MUFFLE CUM TUBE FURNACE with working temperature 1600 °C and size approx. 200 mmX200 mmX200 mm with MFC and accessories	01	11.00	
35	Laptop (i7)-Windows 11 (12th generation), For Dr. Asha anil and use in Committee room and external training program presentations	02	2.40	

Table 2: Equipment for procurement during the FY 2025-26 and Next 3-5 years under **CSIR-Funded Projects (CSIR Project Mode):**

Financial Year 2025-2026				
S. No.	Name of Equipment / Item	Quantity (Nos.)	Approximate Cost (Rs. in Lakhs)	Project Number/Code
1	Spectral-domain OCT spectrometer	1	35.00	FTT0080505
2	Roll-to-Roll Electrode Fabrication unit	1	25.00	HCP0054 (W27.1)
3	Manual Electrode Winding Machine	1	25.00	HCP0054 (W27.1)
4	RO water purification system capacity- 25 ltr per hour for office use & Chemical Lab.	02	1.6	NWP – 100 / HCP 0054/ TSP 0008
5	Multifunction Colour Printer technology: Laser Features: Print, Scan, Copy Paper type supported: A4, Letter, A5, A6, Executive, Legal , Interface: Wifi+USB Mounting Hardware: Printer, Power Cable, USB Cable Toner/cartridge included: Yes Operating System: Windows	01	0.7	NWP – 100 / HCP 0054/ TSP 0008
6	Multifunction monochrome Printer technology: Laser Features: Print, Scan, Copy Paper type supported: A4, Letter, A5, A6, Executive, Legal , Interface: Wifi+USB Mounting Hardware: Printer, Power Cable, USB Cable Toner/cartridge included: Yes Operating System: Windows	01	0.5	NWP – 100 / HCP 0054/ TSP 0008
7	Digital Vernier calliper 150 mm	02	0.4	NWP – 100 / HCP 0054/ TSP 0008
8	Digital vernier calliper 300 mm	01	0.85	NWP – 100 / HCP 0054/ TSP 0008
9	Digital vernier calliper 600 mm	01	0.70	NWP – 100 / HCP 0054/ TSP 0008
10	Digital Optical Pyrometer	01	2.75	NWP – 100 / HCP 0054/ TSP 0008
11	Electric Induction Heater	01	0.4	NWP – 100 / HCP 0054/ TSP 0008
12	Stainless steel Tong		0.1	NWP – 100 / HCP 0054/ TSP 0008
13	Stainless steel Dies		0.9	NWP – 100 / HCP 0054/ TSP 0008
14	Ultrasonic Bath/cleaner with heater	01	01	NWP – 100 / HCP

	and timer			0054/ TSP 0008
15	Audio system 80 -watt capacity, portable wireless blue tooth speaker, with 2 cordless mic.	01	0.7	NWP – 100 / HCP 0054/ TSP 0008
16	Hand Pellet truck 550x 600 mm size	01	0.3	NWP – 100 / HCP 0054/ TSP 0008
17	Industrial Folding Ladder for servicing and maintenance work, working at height, such as repairing of tube lights, ceiling fans	01	0.25	NWP – 100 / HCP 0054/ TSP 0008
18	Certificate Lamination machine	01	0.4	NWP – 100 / HCP 0054/ TSP 0008
19	High intensity Electromagnet	01	2.5	NWP – 100 / HCP 0054/ TSP 0008
20	Servers	05	30.00	
21	Workstations	06	12.00	
22	Desktop	05	6.00	
23	High end Laptop	01	2.00	
24	Printer with Scanner	02	0.70	

Next 3-5 Years				
S. No.	Name of Equipment / Item	Quantity (Nos.)	Approximate Cost (Rs. in Lakhs)	Project Number/Code
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Table 3: Equipment for procurement during the FY 2025-26 and Next 3-5 years under Externally Funded Projects (EFP):

Financial Year 2025-2026				
S. No.	Name of Equipment / Item	Quantity (Nos.)	Approximate Cost (Rs. in Lakhs)	Project Number
1	pH meter	1	1.00	
2	Precision weighing balance	2	1.50	
3	High power ultrasonic probsonicator	1	10.00	
4	Digimat-Am Hexagon software	1	40.00	GAP0277
5	Desktop Computer for project staff	1	1.00	
6	Desktop Workstation	1	3.50	
7	Mixer Mill	1no.	34.00	GAP0276
8	Digital Vernier Callipers	1no.	0.50	
9	All in One Printer	1no.	0.32	
10	Fibre Drawing Set-Up	1no.	1.00	GAP0280
11	Vacuum Filtration System	1no.	1.10	
12	Single mode diode mount, TEC, Driver	15	10.00	GAP0186
13	Glass processing unit	1	300 .00	
14	De humidifier	2	1 .00	
15	Mechanical diode mount, heat sink etc.	15	3 .00	
16	Fiber heat sink with custom design	2	2 .00	
17	Visible range spectrometer	1	5 .00	
18	Process Chiller (40 - 50 LPM, > 10 kW, I/P Load 4 - 10 kW)	1	6 .00	
19	10 kVA UPS (Industrial Grade)	1	2 .00	
20	Real Time Spectrum Analyser (0.2 to maximum 0.5 GHz) for narrow-linewidth laser characterization	1	15 .00	
21	Optical Power Meter	2	5 .00	GAP0183
22	FBG Interrogator	2	40 .00	
23	FPGA Development Platform	1	12 .00	
24	Digital Storage Oscilloscope	1	10 .00	
25	Splicing Machine	2	7 .00	

26	Signal Generator	2	5 .00
27	Regulated Power Supply	2	3 .00
28	Optical Spectrum Analyser	1	60 .00
29	Spectrum Analyser	1	5 .00
30	Spectrometer	1	14 .00
31	Light Source	1	2 .00
32	Bath Sonicator	1	1.50
33	Probe Sonicator	1	2.50
34	Sputter Coater	1	16 .00
35	Optical Microscope	1	12 .00
36	Syringe Infusion Pump	2	9 .00
37	Air Compressor	1	2 .00
38	Thermal Camera	1	1 .00
39	UPS	4	1.50
40	Monitor	6	1.50
41	Desktop computer	6	4.50
42	Workstation	2	6 .00
43	Laptop Computer	4	3.20
44	Machine Vision Camera	1	6 .00
45	Printer – colour and b/w	4	1.70
46	Advanced Optical Fiber Clever	1	1 .00
47	Strain gauge calibration system with tensile, compressive, and flexural	1	70.00
48	High power narrow bandwidth LASER for distributed sensing along with driver module (Tuneable DFB laser diode with driver module)	1	23 .00
49	Narrow line width single frequency optical source	1	16 .00

Next 3-5 Years				
S. No.	Name of Equipment / Item	Quantity (Nos.)	Approximate Cost (Rs. in Lakhs)	Project Number
1	Upgradation of existing MCVD-VPCD system	1	380	Projects Under consideration /submitted
2.	Outside Plasma Deposition System	1	1215	
3.	Upgradation of fiber drawing tower (Control Panel)	1	350	
4.	Glass processing unit for fiber combiner making.	1	290	
5.	Fiber Analyser	1	230	
6.	Preform Analyzer	1	250	
7.	Large diameter cleaver and splicer	2	65.0	
8.	1000 class clean room facility	1	200	
9.	OPO crystals and components	3	50.00	
10.	Real time storage oscilloscope	1	100.00	
11.	Rubidium Clock	1	25.00	
12.	IFA-100 fiberanalyzer	1	50.00	
13.	Soft glass processing unit	1	300.00	
14.	Soft glass fiber drawing tower	1	900.00	
15.	Desktop computer	3	3.00	
16.	Printer – colour and b/w	2	0.50	
17.	UPS	5	0.25	
18.	Optical Intensity, Phase, Frequency Modulator Drivers	1	10.0	
19.	High frequency RF synthesizers	1	100.0	
20.	PRBS Generator	1	50.0	
21.	Scanning spectrometer ranging for sub-millimeter to millimeter wave	1	100.0	
22.	Temperature controlled oven for nonlinear crystal housing	1	10.0	
23.	Low noise RF amplifier	1	100.0	
24.	100 - 300 GHz RF Source	1	200.0	
25.	Photo Multi-plier Tubes	2	5.0	
26.	Single pixel detectors in NIR region	2	5.0	
27.	Electrical driver & controller for high power laser module	2	10.0	

28.	IR Viewer range: 350 nm - 2000 nm	1	5.0	
29.	Femtosecond laser with output avg. power upto 5W	1	65.0	
30.	Optical spectrum analyzer for mid-IR spectral domain	1	130.0	
31	Optical Spectrum Analyser	1	60.0	GAP0183
32	Raman spectrometer	1	25.0	
33	UPS	10	5.0	
34	Monitor	10	2.5	
35	Desktop computer	10	6.0	
36	Workstation	3	10.0	
37	Laptop Computer	10	8.0	
38	3D Printer	1	11.0	
39	Solidworks	1	5.00	
40	Autocad	1	1.00	
41	Labview	1	5.00	
42	Working tables (Vibration isolation type and standard and granite top)	7	15.00	
43	Wavelength Monitoring systems (high precision)	2	40.00	
44	Wavelength monitoring system custom built	3	24.00	
45	Climate Chamber	2	13.00	
46	Oven	2	5.00	
47	Oven	1	25.00	
48	Controller for calibration setup:	1	6.00	
49	DAQ(PXI)	1	20.00	
50	Custom built Fixtures with motorized translation stages for sensor calibration	1	20.00	
51	Reference piezo pressure sensors	2	2.00	
52	Thermocouple calibrator	1	15.00	
53	Sine Table (0° -45°)	2	1.00	
54	Universal data logger	3	16.50	
55	Test beds for SHM sensor evaluation		45.00	
56	FBG inscription system Custom built with Femto-second IR Laser	1	350.00	
58	Bench-top Materials Printer	1	80.00	
59	Dew pointmeter	1	4.00	

60	Furnace	1	20.00	
61	Dip Coater	1	3.00	
62	Screen printer	1	4.00	
63	Arbitrary function generator	2	9.00	
64	Support facilities for equipment installation e.g. Chiller plant, power supply distribution including UPS, Compressor, Equipment platforms, Dust protection enclosures, clean room etc.		120.00	
65	Standard Sensors and data logger for field trials in buildings, bridges as reference		65.00	
66	Standard Sensors and data logger for field trials in Mines as reference		30.00	

CSIR- Central Glass & Ceramic Research Institute
Procurement Plan
[Financial Year 2025-26]

[B] Consumables:

The following categories of consumables are likely to be procured during the FY 2025-26.

Table 3: Consumables likely to be procured during **Financial Year 2025-26** (Annual):

S. No.	Category	Expected Procurement Value * (Rs. In Lakhs)
1	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	163.80
2	Other Consumables (ex- Insecticide, Raw Materials, Packing Material, Column, Syringes, Transcriptome and Metagenome Analysis, Metabolites analyses, Farm Consumables, TLC Plates, Filter papers, Planting materials, seeds, Chemical standards, Essential oils, Standard aroma molecules, Animal feed, Cell Lines, Agriculture accessories, etc.)	819.80
3	Glass wares (ex- name the different glass wares)	94.00
4	Plastic wares (ex- Name the different plastic wares)	21.85
5	Cartridges, Batteries, etc.	27.25
6	Gases (ex- tentative names)	204.85
8	Maintenance/AMC/repairing of existing equipment	177.30
9	Stationary items (ex- name a few)	11.80
10	IT / software-related Items (Name the items required during year)	107.50
11	Furniture (Name the items required during year)	5.70
13	Electric Items (Name the items required during year)	17.00

**Value is subsequently changing as per the list being updated and further sanction obtained*

Detailed list of the consumables planned for procurement for division(s) is attached as per Annexure-A and Annexure-B below:

Sl. No.	Item Name (Approved under Priority List of P-07)	Estimated Cost
4M		
1	Maintenance Service and Spares for Specimen Preparation Equipments	3.00
2	300 mesh Carbon coated TEM-specimen support Grid	2.00
3	Gases (Nitrogen, Argon, Oxygen)	0.50
4	Liquid Nitrogen	0.75
5	Acetone, IPA, Methanol, Ethanol, Chloroform, Solvents and other chemicals	0.20
6	Ampoules, Plain Tissue Paper, Lint Free Tissue paper, Disposable Gloves, Aluminum Foil, Colin, Zip Packet, Liquid Soap, Johnson Buds, Tooth Pick, Teflon Tape, Micro Glass Slides, Carbon Tape (single sided), Carbon Tape(double sided), Fuse for TMP, White Bulb, Batteries of Different sizes, Lab Slippers, Lint free cloths, Covered Dust Bin, Jug to pour Liquid Nitrogen, Solder metal, Solder Paste, Packing Tape, Cello Tape and miscellaneous Laboratory consumables	0.20
7	Laser Printer Cartridges	0.75
8	RF supply 300W with auto matching network, Loadlock chamber with 300 degree C preheater (2") and pirani gauge, gate valve between main chamber and loadlock, magnetic transfer arm	12.00
9	TWO MFC: (0-500 sccm) for UHP argon gas and UHP Helium gas with power supply and connector fitting assembly in XPS	4.50
10	Repair kit for 2 Turbo Molecular Pumps (TMP)	4.00
11	Pirani Gauge in Intro Chamber (XPS)	0.70
12	Essential Ultra High Vacuum Component: leak valve (Swagelok): 2 nos, CF below 2 metre 2 nos, isolation valves nos 2 , O-ring (nos 10), Clamp (nos 10); OFHC Copper Gasket for XPS Lab (different size)	3.60
13	Silver paste; Indium balls; (UHV compatible), Mo boat, Si/SiO ₂ calibration samples Ag, Au and Cu; Tantalum foils	1.00
14	Printer Cartridge for Laser Jet M1136 (Compatible) for XPS Lab	0.15
15	Aceton (5 lit), IPA (lit), Lint free Tissue & cloths (10 nos), Normal Tissue (10 nos), UHV Gloves (10 nos), Aluminium foil (2 packs)	0.70
16	AMC (XPS/UPS)	9.00
17	Ultra High purity (99.9999 %) Helium Gas (1 no), UHP Argon Gas (6 nos), H ₂ S-Gas-2, N ₂ -Gas (6 nos)	1.50
18	Spares for Ultima IV Rigaku XRD system (Cables, Zero base sample holders etc)	5.00
19	Spares for Brukers XRD system (Main CPU board, 4-Axis indexer board, Capillary sample holders, etc)	15.00
20	Spares for AXIOS XRF system (Cable for detector, CPU board etc)	5.00
21	Gun consumables, Cable, Filament (for FESEMs) , IGP, Vacuum gauge, Aluminum Foil, Microtips, Ampoules etc.	15.00
22	Gun consumables, Cable, Filament (for FESEMs) , IGP, Vacuum gauge, Aluminum Foil, Microtips, Ampoules, Spares requires during emergency breakdown etc	15.00

23	AMC for Brukers XRD System :	5.50
24	AMC for two UPS for Bruker XRD system, :	0.80
25	AMC for Rigaku XRD system (Ultima IV) :	2.50
26	On Call Basis Visit Charge for 3 visits - Preventive maintenance of XRF - AXIOS (PANalytical)	2.50
27	AMC for Sigma FESEM System (Carl Zeiss)	6.00
28	AMC for Supra 35 VP FESEM System (Carl Zeiss)	6.00
29	AMC for UPS attached with Supra 35 VP FESEM System (Carl Zeiss)	0.30
30	Gas Cylinders (Argon, Nitrogen) for FESEM and XRF Laboratory	0.50
31	Printers Cartridge	0.50
32	Non-Compressive Annual Maintenance Contract of ICP-AES Instrument, Model: Spectro Ciros Vision Sl. No. 122167	2.00
33	Non-Compressive Annual Maintenance Contract of ICP-AES Instrument, Model: Spectro Arcos II Sl. No. 144584	2.00
34	Chemicals (ex.- SRM, CRM, Hydrofluoric acid, HCl, HNO ₃ , H ₂ SO ₄ , Perchloric acid, Orthophosphoric acid, TEA, EDTA, Ammonium Thiocyanate, H ₂ O ₂ etc.)	4.00
35	Other Consumables (ex- Micro pipette, Filter paper, Tissue Paper, Indicator, chemical reagents etc.)	1.00
36	Glass wares (ex- Volumetric flask, Beaker, Weighing Tube, Watch glass, Burette, Pipette, funnel etc.)	1.00
37	Plastic wares (ex- Polyethylene beaker, polyethylene watch glass, distilled water bottle, burette stand, reagent bottle, dropping bottle, funnel etc.)	1.00
38	Gases (ex- Argon gas)	1.00
39	Chiller for water circulation	4.80
40	Online UPS 6 kVA	1.25
41	Servicing of desktop SEM after transfer from EMDD	15.00
42	Cuvette	1.50
43	Filter	1.00
44	Vacuum pump	5.00
45	Penetrometers	5.00
46	Liquid nitrogen	0.75
47	Gases	1.50
48	Breakdown servicing and spare parts of all characterization equipments at CMCF	13.50
49	SRM for different characterization equipments at CMCF	12.00
50	Tool kits and small electronic components	1.00
51	Stationaries, cleaning solvents and chemicals	3.00
52	Essential componets and tools related to Calibration of Equipment & Process for NABL (Digital Hygrometer, Thermometer, etc. Pl. see Sheet 2 for details)	1.60
53	Caibration of Load-Cells & Cross-head motions to comply with NABL Accreditation	6.75
54	Repair & Maintenance / AMC of existing Online UPS (10 KVA) a) Repair of existing 10 KVA UPS b) AMC for Online UPS (attached with UTM instrument)	0.90
55	Interface with upgraded Software for NanoIndentation Instrument	15.00
56	SRM (Std. Referance Mmaterials) /CRM (Certified Reference Materials)	3.00

	for Various Mechanical Testing for NABL Accreditation	
57	Chemicals & Solvents for sample preparation & Testing on day-to-day basis (Chemicals & Solvents like Iso-propyl alcohol, Acetone, Dimethyl formamide (DMF), N-Methyl pyrrolidone (NMP), Propylene Carbonate (PC), Nitric acid, Hydrochloric acid, etc., regularly require for undertaking the mechanical testing jobs Pl. see Sheet 2 for details)	5.40
58	Glass Wares and related items for sample preparation & Testing on day-to-day basis (Glasswares: Glass Beakers of diff capacity, Measuring cylinders, Filtering flasks, Glass desiccators with base (6 & 8 inch), etc.	0.85
59	Other consumables: like Machine grease, Vacuum grease, Vac. Pump oil, Filter paper, Diamond cutting wheel, High-speed Hacksaw blades, Emary papers, etc. (pl. see Sheet 2 for details)	0.70
60	Printer Cartridge Printer cartridges/toners for existing printer	0.35
61	Replacement of existing TMP of the FIB	15.00
62	Lens Power Heatsink LPH (FEI - 4022 268 00196) 1 nos. + Oncall Charges for LPH Installation (2 nos.)	5.70
TCC		
1	NABL related expenditure	40.00
ACCD		
1	Micro-CT HV Generator	7.00
2	Thermocouple of Astro furnace	0.50
3	Thermocouple, Vacuum sensors & other spares of centorr make controlled atmosphere furnace	7.00
4	Fixture for high temp. UTM	1.00
5	Opto Mechanical Diamond Cutting Tool	5.00
6	Repairing of Chiller pump for Astro furnace	2.00
7	Spare parts of spectrofluorometer	14.00
8	Ultrasonic probe	2.45
9	Process Gas connection at old canteen	1.25
10	VOC Gas detector	3.00
11	Hot Pressing of 250mm Cf/SiC composite including supply of graphite mould	2.00
BMDD		
1	Motion control drive of LENS additive manufacturing machine	50.00
2	Spare for Air Plasma spray chiller unit (digital controller) alongwith water replacement and duct gasket service	1.00
3	Repair, service, reconditioning of existing Cold Isostatic Press (CIP)	30.00
EMDD		
1	PARTS FOR RIGAKU XRD MODEL Smartlab 9KW: (i) GONIO IF MKY PCB (part no. 170200AC)-Qty: 1 no, (ii) PULSE14-2 for Smartlab Step 2 (Part no. 180501AO)-Qty: 1no and (iii) Part no. PCB, Sensor 5 (D2Z03H)- Qty: 2 nos	5.50
2	MP5 Additional Channel (± 10 V, 5A)	10 (\$11,500)
3	Booster (± 10 V, 20 A) spare	11 (\$12,700)

FMDD		
1	a) OBJN2005EPI, Objective 5X 0.15NA 23.5WD, Brightfield objective 5X NA 0.15 WD 23.50 m b) OBJN2010EPI, Objective 10X 0.3NA 17.5WD Brightfield objective 10X NA 0.30 WD 17.50 mm	5.50
2	Scroll Pump (nXDS10i 100-127/200-240V 1ph, 50/60Hz)	5.50
3	Mass Flow Controller (SEC-E40), 2 nos.	3.00
4	Service of Clean room, Pre Filter of AHU Clean room 06, Fine filter 06 A.H.U Motor service unit, Remote, Pre filter box type, Micro hepa filter	5.00
5	Technical service, Power supply, UV Lamp Control unit	2.00
FOPD		
1	CAMC for 60 KVA UPS	1.82
2	Capacitor, Metallized Polypropylene Film, Panel Mounted, Stud terminal, For 60 KVA Online UPS Capacitor, Aluminum Electrolytic, Panel Mounted, Screw Lead, For 60 KVA Online UPS	0.84
3	Stainless still (SS-316) tubes with associated connector for MCVD gas lines	20.00
4	Measuring head ODAC 14XY-J; Measuring head ODAC 14XY-J+10m cable length to USYS 200; Connection cable, 10m (L6-A8); Connection cable, 10m (L6-L6); USYS 200-0000-B, standard with controller; CP card (N6.CP.311.A5) for USYS-2100; Scanner motor with rotating mirror for 15XY J; Driver PCB for; Clipper PCB for 15XY J	35.00
MSTD		
1	Arsenic test kit (range 0.005 - 0.50 mg/l) & Iron test kit (range 0.01 - 5.0 kg/l)	1.00
2	Microbiological (Total Coliform, E. coli & MPN count) test of drinking water (consumable, reagent chemicals & kit)	0.50
3	pH electrode & TDS electrode for Hach multimeter	1.50
4	Hg/HgO reference electrode	0.10
5	UV Curing lamp (300 W)	0.90
6	Spares cartridge filters of Ultrapure water unit (AT-250)	0.30
7	TG-DTA sample carrier system with acceseries	5.00
8	Calibration sample kit for DTA-TG calibration	2.50
9	Die for cutting Dumbbell shaped Specimen Rubber; Elastomers As per ASTM D412	0.20
10	Glove box service and repair	18.00

RTCD		
1	Eurotherm temperature controller & thyristor for 1800oC chamber furnace	2.50
2	AMC of CCS and MOR testing equipment	1.00
3	SiC load stamp for HMOR, Netzsch	1.00
4	Alumina pressure stamp with metal flange for Creep testing machine, Netzsch	4.00

5	Heating elements for the PLCR furnace, which should go up to 1800oC, (MoSi ₂)	5.00
6	Repairing of 100T pressing machine	1.00
SGD		
1	Annual Maintenance Contract for FRS 1800 Furnace Viscometer	1.10
2	AMC for DSC machine	1.00
3	AMC for Micro Hardness Tester	1.20
4	Non-comprehensive Annual maintenance Contract for 5 nos. Bry-Air Dehumidifiers.	1.50
5	Non-comprehensive Annual Maintenance Contract of (i) FTIR with Diffuse Reflection Accessories & Frontier Diffuse Reflectance Accy (ii) UV-VIS-NIR Spectrophotometer	1.75
6	AMC (Model: 12" MSPT with RF/DC Sputtering & Thermal Evaporation System)	1.20
7	AMC of Clean Room related to 15 L Induction Furnace	10.50
8	AMC of 3kW Microwave Furnace	1.90
9	One-time maintenace Glass cutting machine	1.00
10	One-time maintenace Optical Clean Room	1.00
11	IT / software-related Items: Glass database Software : Interglad	3.00
12	Solid State Drive/Harddrive	8.00
13	Computer Accessories	4.00
Central F/C		
1	SiC heating elements of different sizes (43 nos.)	1.40
2	MoSi ₂ (6/12, Lu=325, Le=250, A=50,1800°C grade)-06 nos. MoSi ₂ (6/12, Lu=200, Le=140, A=50,1700°C grade) - 06 nos. MoSi ₂ (6/12, Lu=225, Le=125, A=25,1800°C grade) - 06 nos.	8.60
3	3-phase back to back SCR module, 40A-2 Nos. 2-phase back to back SCR module, 40A-2 Nos.	0.90
4	Contactor ,wire, terminal, led, push buttons etc.	1.10
5	Thermocouple, 0.5 mm dia. 1.5 ft length – B type- 1 nos. Thermocouple, 0.5 mm dia. 1.5 ft length - S type- 1 nos.	0.50
6	Safety items (gloves, safety googles, tongs, safety shoes, etc.)	0.40
7	Rail mechanism for pulling of the hearth for the two glass melting furnaces 2 nos.	1.00
8	Consumables for gas purging system like quartz pipe, Teflon tape etc.	0.10
9	Tools for maintenance and melting	0.15
10	Fabricated fume & dust extraction system - 1 no.	3.50
Central WS		
1	Controller for magnetic chuck of ELB Surface Grinding Machine	3.00
2	Workshop machine name board with specifications	0.25
3	Reconditioning of polish plate with hanger assembly for lapping machine	0.35
IITD		
1	Virtualization software and support	20.00

2	Server Storage 2.5 in – 10 Nos.	1.20
3	Cat6 Patch Panel – 24 ports loaded - 10 Nos.	0.60
4	CAT6 Information outlet – 100 Nos.	0.40
5	Internal SSD with SATA (1TB) – 10 Nos.	0.80
6	Internal SSD card (1TB) – 10 Nos.	0.80
7	Printer cartridge (137A x 4, 78A x 2, 88A x 2) - 8 Nos.	0.20
8	Printer cartridge Officejet Pro 8100 (HP 950XL Black – CN045AA, HP 951XL Cyan – CN046AA, HP 951XL Yellow – CN048AA, HP 951XL Magenta – CN047AA) (01)	0.10
9	Pen Drive C-USB 128 GB, Pen Drive C-USB 16GB – 5 Nos.	0.15
10	Miscellaneous Networking Items (Cable ties - 04 packets, Lan testing Tool /multifunction network cable tester - 2 Nos., Lan crimping tool – 4 Nos., IO clip - 100 Nos., RJ 45 clip - 100 Nos.)	0.25
11	Miscellaneous Computer Items (Computer cleaning kit - 10 Nos., Wireless keyboards and Mouse – 5 Nos., Mouse Pad – 15 Nos., Power Extension Bard – 5 Nos.)	0.30
12	Battery for 2 UPS (20 KVA), 9V Battery - 5 Nos., AAA battery – 10 Nos. AA Battery – 10 Nos., Battery for 0.6KVA UPS – 50 Nos.	5.00
13	Miscellaneous Converters (USB-C to LAN converter, USB to LAN converter, USB HUB, HDMI to VGA - each 5 Nos.)	0.40
14	8 Port unmanaged switch – 30 Nos.	0.60
15	Wifi router – 20 Nos.	2.50
16	Portable hard drive – (4TB HDD x 4 Nos.)	0.50
17	Portable USB CD drive – 4 Nos.	0.15
18	Fibre laser light – 04 Nos. and Fibre Optic Cable Organizer	0.10
19	Web Cam and Computer Speaker – 05 Nos.	0.80
20	UTP Cable roll – 300 mtrs	0.10
21	Network rack – 4 Nos.	0.30
22	SSL Certificate	0.50
INSTRUMENTATION		
1	Comprehensive AMC of EPABX system (Main Office)	3.30
2	Comprehensive AMC of EPABX system (Guest House)	0.33
3	Battery for telephone exchange and different UPS of Committee Rooms	0.50
4	Telephone Handset (analogue and digital)	0.80
5	Repairing of BPE make 3 KVA UPS with replacement of all six nos. 12 volt 7 Ah batteries (2 set)	0.50
6	Different Adapters, Splitte , Distribution splitter XLR, Converter, Socket, Extender, Receiver, etc for Audio-visual system	1.00
7	Battery charger, Rechargable & Non-rechargable Battery, button cell, Pointer , Extension Board , Mouse , Keyboard, etc. of different size & ratings	1.00
8	HDMI wireless extender - 2 nos	1.00

9	Tools (such as plier , tin cutter , rechargeable light/torch , lock & key for audio equipments , Screw Drivers , Crimping Tool, Cutter , wheel for cutter, hole shoe cutter , Drill Bit, Measuring Tape etc.) 01 set	0.50
10	Helium Gas - 01 cylinder	0.55
11	HDMI Cables of different sizes .	1.00
12	Different electronics component	0.50
13	FRLS insulated cable of different sizes for control panel	1.00
14	Telephone wire and socket	0.15
15	PVC Pipe 20 mm with accessories	0.15
16	Electrical Item (like push button , led indicator , contactor , mcb , fuse , controller , thyristor drive , terminal post , panel meter etc)	1.00
17	3-phase phase angle controlled back to back SCR module, 40A, Input 4-20mA - 2Nos.	0.50
18	3-phase phase angle controlled solid state relay 50A, input 4-20mA - 4Nos.	0.20
19	2-phase phase angle controlled back to back SCR module, 400V, 40A - 2Nos.	0.25
20	Printer cartidge-4 Nos.	0.30
KHURJA		
1	Repairing and servicing of filter press(spare: filter bags 24 nos.)	0.35
2	Repairing and servicing of double headed roller jigger (spares: motor, mould, die, profile etc.)	0.35
3	Calibration of testing equipment	0.10
4	Calibration of Universal Gauge (spares: Flatness nuts etc.)	0.15
5	Repairing and Servicing	0.10
6	Drill Machine with tool kit	0.10
7	LED Batten 20 watt, LED bulbs, electricl switches, electrical wire (1.5mm Wire (2 Core, 3 Core), 2.5 mm wire (2 Core, 3 Core)	0.80
8	Laboratory Glass ware, Apron, Gloves, Spectacles, Nose mask, tongs, chemicals required for chemical analysis of samples	0.80
9	I. Mp MFP 1005 12 amp Tonner (2 No.) II. HP 166A Blk Original Laser Toner Cartridge-W1660 (2 No.)	0.30
10	Syrotech BSNL modem	0.05
NARODA		
1	AMC Diesel Generator set	0.50
2	Water tank cleaning	0.10
4	Diamond impregnated cutter Blade for RUL samples	0.80
5	AMC / repairing of RO water purification system	0.40
6	Heating Elements for thermal conductivity furnace	2.50
7	Thermocouple set for thermal conductivity furnace	
8	Kanthal elements for electric furnace as per design	
9	Different spares of hot MOR furnace, service and repair	1.00
10	Repairing, servicing of autoclave including spare parts	0.25
11	Repairing, servicing of autoclave including spare parts	0.15

12	Calibration of measuring and monitoring devices	3.00
13	PCE cones (standard ORTON cones for reference) / buller rings	1.00
14	Alumina powder for deep abrasion test.	0.10
15	Steel balls for deep abrasion test	0.20
16	Repairing and servicing of MOR apparatus- QTY 3 Nos	1.00
17	Screw driver set	0.02
18	Spanner Set I each, round and fix	0.04
19	S.S. Tongue 12 inch (qty 6 Nos)	0.05
20	measuring cylinder 100 ml glass Qty 12 nos.	0.10
21	glass beaker 100 ml Qty 12 nos	0.10
22	50ml Grinding Bowl of Zirconium Oxide	4.76
23	AMC XRD (1Nos.) 3 yrs	7.90
24	AMC UPS (2Nos.) 1yr	0.26
25	FT-IR Power Supply Assembly	3.00
26	Glasswares	1.50
27	Pipette bulb, Nitrile gloves, Lab Mask	0.20
28	Chemical Standards for ICP	1.50
29	Pipette 1-10 ml	1.20
30	Pipette 0.5-5 ml	1.5
31	Pipette 100-1000 μ L	1.20
KRC		
1	2 TB Wired Portable Hard Disk (1 nos.)	0.08
2	Canon OEM Toner Cartridge NPG-88 Cyan (1 nos.)	0.14
3	Canon OEM Toner Cartridge NPG-88 Magenta (1 nos.)	0.14
4	Canon OEM Toner Cartridge NPG-88 Yellow (1 nos.)	0.14
5	Canon OEM Toner Cartridge NPG-88 Black (2 nos)	0.27
6	Ball Pen (40 nos) + Self adhesive tape 4 inch* 90 metre (2 nos) + Room Freshener (220ml) (5 nos)	0.03
7	Miscellaneous	0.10
BDPD		
1	Canon NPG-67 (Black, Yellow, Cyan, Magenta)	0.32
2	Canon Cartridge 054 (Black, Yellow, Cyan, Magenta)	0.30
3	Canon NPG-67 (Black, Yellow, Cyan, Magenta)	0.32
4	Canon NPG-88 (Black, Yellow, Cyan, Magenta)	0.32
5	Canon NPG-59 (Black)	0.06
6	Cartridge No. Q2612 AC	0.10
7	Cartridge No. Q2612 AC	0.10
8	Cartridge No. Q2612 AC	0.10
9	Cartridge No. Q2612 AC	0.10
10	Cartridge CC 388 AC	0.09
11	Cartridge CC 388 AC	0.09
12	Cartridge CC 388 AC	0.09
13	Cartridge HP 803 (Black and Tri-colour)	0.05
14	Cartridge HP CE 505 AC (Black Tinta Negra)	0.08

15	Cartridge HP 201A CF400A (Black, Yellow, Cyan, Magenta)	0.48
16	COREL DRAW 24 (LATEST VERSION): Multiuser (2 minimum)	1.20
17	CANVA PRO (ONLINE)(One year Subscription for one person)	0.04
18	AMC of 3 Nos of Multifunction Scanner cum Printer (including 01 no of Table Top Printer)	3.00
19	2TB External Hard Disk(SSD) (Qty: 4)	0.32
20	Camera Accesaries	0.16
21	Exhibition materials/Posters/ Double sided Tape/Etc	0.50
22	Stationary Items	0.72
23	Display Standee (08 nos.)	2.00
24	Exibition Content Updation and related accessories	6.00
	Total	721.02

Table-1

Sr. No	Category	Expected procurement value (Rs. in Lakhs)
1.	Chemicals: - <ul style="list-style-type: none"> Silicon Tetrachloride (SiCl_4) Purity: 99.9999% i.e; 6N Grade Germanium Tetrachloride (GeCl_4) Purity: 99.9999% i.e 6N Grade Poshphorous Oxychloride (POCl_3) Purity: 99.9999% i.e 6N Grade. Ytterbium (III) Tetramethyl heptanedionate [$\text{Yb}(\text{thd})_3$] Purity: 99.999% i.e 5N Grade or better. Cerium (IV) Tetramethylheptanedionate [$\text{Ce}(\text{thd})_4$] Purity: 99.999% i.e 5N Grade or better. Thulium (III) Tetramethylheptanedionate [$\text{Tm}(\text{thd})_3$] Purity: 99.999% i.e 5N Grade or better. Holmium Tetramethylheptanedionate [$\text{Ho}(\text{thd})_3$] Purity: 99.999% i.e 5N Grade or better. Acetone Isopropyl Alcohol Ethanol Low RI resin PC-375LAP along with normal primary & secondary coating (LS-2211, LS 3211 & LP-1635) 	<p>50.0</p> <p>40.0</p> <p>50.0</p>
2.	Other R & D consumables: - <ul style="list-style-type: none"> Pump diodes, Isolators, combiner, FBG, water cooled heat sink, Specialty Fibers (ex. Component fiber, photosensitive fiber,pump fiber etc.) related to standard 2.0 kW high power laser test bed system Phase mask and optical components for FBG writing system Stainless steel bubbler of chelate delivery system MFC's related to the GCM of MCVD system Optical Components (Mirrors, Lenses, Objectives, Gratings, Non-Linear Crystals, Combiners, etc) Laser Pump Diodes (Wavelength Stabilised and Non-Stabilised) Opto-mechanical Components (Stands, Holders, Transitional stage. Isolation Stage. Cleaving Blades. 	<p>170.0</p> <p>85.0</p> <p>15.0</p> <p>25.0</p> <p>60.0</p> <p>120.0</p> <p>40.00</p> <p>55.00</p>

	<p>Holders and Filaments for Glass Processing Unit, etc)</p> <ul style="list-style-type: none"> Optical Gain Fibers (Active Fibers) Coolant Optical mounts, bulk optics, fixtures, mirrors, beam routing/focusing assembly Optical Intensity, Phase, Frequency Modulator SM Pump diodes (in the range of 300 - 1000 mW) TEC cooled 14 pin butter fly Dispersion managing fibers Highly nonlinear fibers PM and Non-PM Active Fibers Pulse compression gratings Fibre Optic Phase Shifter Analyses of dopants distribution along the core of fiber by EPMA Grinding and Polishing of circular preform into octagonal shaped structure by automatic grinding and polishing machine Spare parts of Fibre drawing Tower UI Display Board for Packaging FBG Interrogation Module Spectral Analyser module Signal Analyser module Optical Tunable Filter Optical Image Sensor Signal Processing Board Data Processing Board Optical Filter Fiber Optic Circulator Fiber Optic Isolator Fiber Optic Power Sensor Light Source module FPGA/Microcontroller based development board Fiber Polishng Supplies Fiber Optic Interferometer module 	<p>2.00</p> <p>10.00</p> <p>10.00</p> <p>20.00</p> <p>2.00</p> <p>2.00</p> <p>2.00</p> <p>20.00</p> <p>6.00</p> <p>5.00</p> <p>25.00</p> <p>30.00</p> <p>5.00</p> <p>25.00</p> <p>5.00</p> <p>4.00</p> <p>10.00</p> <p>5.00</p> <p>5.00</p> <p>3.00</p> <p>3.00</p> <p>5.00</p> <p>3.00</p> <p>5.00</p> <p>5.00</p> <p>2.00</p> <p>2.50</p> <p>17.00</p>
3.	<p>Glass wares (Ex. Name the glass wares):</p> <ul style="list-style-type: none"> Silica Tubes (20/17mm, 20/12mm and 10/4mm) Fluorine-Doped Fused Silica Capillary Tube, 750 μm ID, 1500 μm OD, 170 mm Long Model: FTB02 	<p>80.0 0</p> <p>10.00</p>
4.	<p>Plastic wares (Ex. Name the different plastic wares):</p> <ul style="list-style-type: none"> Millipore filter, Gaskets, O-rings etc for of MCVD-VPCD system 	<p>20.00</p>
5.	<ul style="list-style-type: none"> Toner Cartridges Batteries (UPS Batteries replacement) 	<p>10.00</p> <p>5.00</p>

6.	<p>Gases (Ex. Tentative names): For specialty optical fiber's development and combiner making: -</p> <ul style="list-style-type: none"> High purity gases such as: Commercial H₂ (99.5%) and O₂ (99.97%) fuel gases High purity nitrogen gases of 99.999% High purity (99.999%) He and Argon inert gases Very high purity (99.9995%) He gas Very high purity (99.9995%) O₂ gases Very high purity (99.999%) SiF₄ gases Very high purity (99.999%) CF₄ gases Very high purity (99.999%) Cl₂ gas 	200.00
7.	<p>Maintenance/AMC/Repairing existing equipment:</p> <ul style="list-style-type: none"> Maintenance/Repairing job related to upgradation of existing MCVD-VPCD system, the OPD system and upgradation of fiber drawing tower through making of all kind of gas lines, suction hoods, scrubber etc. AMC of UPS connected to MCVD-VPCD system, old MCVD system etc. Water Line and Gas Line Servicing of high temperature tubular furnace 	70.00 15.00 3.00 0.40
8.	<p>Stationary items:</p> <ul style="list-style-type: none"> Note book, File cover, file board, Sticky note, Papers Eraser, Marker, stapler, punching machine, Tape, scissors etc 	10.00
9.	IT/Software related items (Name the items required during year)	0.00
10.	Furniture (Name the items required during year)	0.00
11.	Electric items (Name the items required during year):- 3-phase line for chiller, high VA SMPS, LD driver (total 15 - 20 kW load)	5.00

Table-2

S. No.	Category	Expected Procurement Value (Rs. In Lakhs)
1	Chemicals -- Chemicals & Solvents like Iso-propyl alcohol, Acetone, Dimethyl formamide (DMF), N-Methyl pyrrolidone (NMP), Propylene Carbonate (PC), Nitric acid, Hydrochloric acid, etc., epoxy Resins, etc. regularly require for undertaking the mechanical testing jobs.	5.00
2	Other Consumables - Machine grease, Vacuum grease, Vac. Pump oil, Filter paper, Diamond cutting wheel, High-speed Hacksaw blades,	3.00

	Emery papers, etc.	
3	Glass wares - Glass Beakers of diff capacity, Measuring cylinders, Filtering flasks, Glass desiccators with base (6 & 8 inch), etc.	1.00
4	Plastic wares -	Nil
5	Cartridges, Batteries, etc. Printer cartridges/toners for existing printer, replacement of faulty Batteries for UPS	1.50
6	Gases (ex- tentative names) N2 gas (refillable),	0.35
7	Maintenance/AMC/repairing of existing equipment <ul style="list-style-type: none"> • Repair of existing 10 KVA UPS • AMC for Online UPS (attached with UTM instrument) • Repair of existing i-Nano NanoIndentation Instrument 	15.00
8	Stationary items (ex- name a few)	0.10
9	IT / software-related - <ul style="list-style-type: none"> • LASX - Microscope Image analysis Software 	25.00
10	Furniture (Name the items required during year)	Nil
11	Electric Items (Name the items required during year)	Nil