# CSIR-North East Institute of Science and Technology Procurement Plan (Equipments) 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): P50

Financial Year 2025-2026

SI. No.	Name of the Equipment/Item	Quantity	Approximate Cost (Rs. In Lakhs)
1	Network Attached Storage (NAS)-Equipped with server and network switch	1	30.00
2	Rotor Centrifuge 2-16P (As spare parts) Sigma Cat. No. 12071, Rotor angle for 12 x 15ml culture e.g. no. 15115 and 6 x 50ml culture e.g. no. 15151	1	2.00
3	Shaking incubator	1	12.00
4	Culture rack	1	3.00
5	BOD Incubator	2	2.50
6	Laminar Airflow	1	1.20
7	Gas Chromatogram (GC)	1	18.00
8	Kjelhahl system	1	7.00
9	Lyophilizer	1	15.00
10	FT-IR	1	30.00
11	Flash Chromatography	1	50.00
12	Horizontal laminar airflow	1	3.00
13	Plant Tissue Culture Facility with cooling system	1	12.00
14	Biosafety Cabinet	1	6.00
15	Gradient Thermocycler	1	4.00
16	Gel Doc System	1	15.00
17	Micromode Reader	1	40.00
18	Tensiometer	1	40.00
19	Refrigerated Table Top Centrifuge	1	15.00
20	Photosynthetic Apparatus	1	50.00
21	Automated DNA Extractor	1	20.00
22	Photoperiod-controlled plant tissue culture racks	2	3.60
23	GCMS with ECD/FID detector	1	95.00
24	PCR GRADIENT	1	5.00
25	Microwave oven	1	0.18
26	Shaker Incubator	1	14.00

27	Long Read Real Time Nanopore Sequencing System (Upgradation of existing Nanopore system as the existing model is now obsolete)	1	15.00
28	TGA-MS	1	120.00
29	Film making machine	1	20.00
30	Dehumidifier	1	7.00
31	Fume hood	1	5.00
32	Multimode Microplate reader	1	30.00
33	Chemiluminescent gel doc system	1	30.00
34	Mini Spray Dryer	1	10.00
35	Western blot apparatus complete with all accessories	1	5.00
36	Agarose Gel electrophoresis system	1	4 .0
37	-80 Deep Freezer	1	12.00
38	CO2 incubator	1	10.00
39	Rotarod Apparatus	1	3.00
40	Refrigerator (-20°C)	1	2.50
41	Vacuum pump with controller	1	3.00
42	IVC cage system	3	50.00
43	Automated rotatary microtome for histology	1	12.00
44	Glass Reflux Reaction Cum Fractional Distillation	1	12.00
45	Recirculating Chiller	1	10.00
46	Chiral HPLC system	1	50.00
47	UV-Vis-NIR Spectrophotometer	1	5.00
48	Fume Hoods	18	125.00
49	Rotary evaporators	3	20.00
50	CHNS	1	90.00
51	TDS /Conductivity meter (multiparameter)	1	3.00
52	Turbidity meter	1	1.80
53	Mechanicalshaker(reciprocating)	1	1.60
54	Multimode Elisa Plate Reader	1	18.00
55	Lyophilizer	1	15.00
56	Centrifuge 40C (15000rpm) Multirotor	1	8.00
57	Photoluminescence spectrometer	1	15.00
58	Combiflash	1	25.00
59	Permeablity/porosity meter	1	10.00
60	Hollow fiber coating machine	1	80.00
61	Membrane set up for Produced Water Treatment	1	20.00

62	Reactor with electrical heating arrangement, VFD controlled stirring - 25 lit	1	10.00
63	Pressure Nutsche Filter	1	5.00
64	Opto digital Microscope for 2D and 3D imaging	1	70.00
65	Automatic Outdoor Environment weather station with accessories for data analysis	1	15.00
66	Radiographic/ NDT Testing Set up for Steel and Metal	1	25.00
67	Workstation for simulation and modelling software	3	25.00
68	Magneto-Telluric Equipment	1	80.00
69	Multi-channel Analysis of Surface Waves Equipment (48 Channel)	1	100.00
70	Portable Gas Analyser	1	10.00
71	High-end desktop computer/server	1	2.00
72	Portable water quality analyser	1	1.50
73	L2 Featured Managed Network Switch and Restructuring of Institutional LAN	1 Set	130.00
74	Online Gas Chromatography	1	80.00
75	Rota Vapor	1	10.00
76	Hoods	2	14.00
77	Water Vapour Permeability Analyser	1	10.00
78	NIR Laser System with variable wavelength	1	20.00
79	Multipurpose Stirrer	4	10.00
80	Optical Tensiometer	1	10.00
81	Surface Plasma Cleaner	1	15.00
82	Teflon Lined Hydrothermal Autoclave	1	2.00
83	Hot plate Magnetic Stirrer with Temperature Knob	5	4.50
84	Assemble Light measuring meter with portable dark cabinet. (Range: 0% darkness)	1	20.00
85	Humidity Chamber	1	4.96
86	Portable Multi-Gas Analysers	2	34.00
87	Desktop	67	73.70
88	Laptop	2	1.90
89	Plant Growth and hardening Facility for Genome Edited Plants (PGHFGEP)	1	30.00
90	High-End Storage Server	1	30.00
91	Network Switch	1	3.00
92	High Capacity water Purification System	2	10.00
93	Ultrasonic Pulse Velocity (UPV) Testing Equipment	1	8.00
94	fume Hoods	5	40.00
95	Filament extruder	1	6.00
96	Flammability Testing Equipment	1	5.00

97	Pin on Disc Wear Testing Machine	1	5.00
98	Thermal Conductivity Measuring Apparatus/ Setup Composite	1	5.00
	Board		
99	Laboratory Ball Mill	1	4.00
100	Humidity Chamber	1	5.00
101	Semi-automated Rotary Microtome (Semi motorized)	1	15.00
102	Non-refrigerated Centrifuge	1	0.97
103	Recirculating Chiller	1	2.50
104	Vertical Deep Freezer	1	0.85
105	High Performance Desktop Computer, Intel i7	9	9.54
106	Cement concrete mixture machine (half bag) with 2KW electric motor.	1	1.00
107	Desktop Computer with UPS	1	1.20

	Next 3-5 Years			
SI. No.	Name of the Equipment/Item	Quantity	Approximate Cost (Rs. In Lakhs)	
1	Cluster Server (Equipped with Five High-end servers with recent configuration, infiniBand High Data Transfer Switch, Network Switch with suitable rack)	1	170.00	
2	One Gradient Thermocycler (PCR)	1	6.00	
3	Lyophilizer of 4 litres with compressor and vacuum pump for freeze drying at -110 °C	1	5.00	
4	Water Distillation unit of 50 litres/hour	1	6.00	
5	Nanodrop	1	12.00	
6	Multi-mode microplate reader	1	55.00	
7	Ultra-Centrifuge	1	30.00	
8	Microwave extraction unit	1	20.00	
9	Fraction collector for existing HPLC	1	20.00	
10	Type I and Type II water purification system	1	15.00	
11	Flow cytometry	1	40.00	
12	Liquid Chromatography-Mass Spectrometry (MS-triple quadruple)	1	300.00	
13	Tower workstation (56 cores, 256 GB RAM)	1	10.00	
14	Vertical autoclave	3	8.00	
15	Digital pH meter	3	3.00	
16	Light Microscope with Imaging Facility for cell biology work	1	7.00	
17	Automated Ice flaking machine for molecular biology work	2	6.00	
18	BioMerieux VITEK 2 COMPACT System	1	15.00	
19	Ultra Refrigerator -20°C & -80°C	2	14.00	

20	Power Backup for Instruments (2 KVA)	3	10.0
21	Shaker Incubator	1	10.0
22	Refrigerated Centrifuge	1	10.0
23	Graphite furnace	1	200.0
24	XRD	1	500.0
25	Glove Box	1	30.0
26	Aerosol monitoring station	1	40.0
27	DMA	1	150.0
28	Mini Capsule Filling Machine	1	5.0
29	4 Degree Fridge	1	1.0
30	Maze system (animal house)	1	12.0
31	CO2 Incubator	1	10.0
32	Refrigerated table top centrifuge	1	7.0
33	Stability chamber	1	3.0
34	Lyophilizer	1	15.0
35	Automated flash chromatography system	1	20.0
36	NIR laser with thermal imaging system for photothermal therapy and other biomedical application	1	20.0
37	Microwave synthesizer	1	30.0
38	FT-IR	1	80.0
39	Hot air oven	1	6.0
40	Portable unblock electronic Balance	1	1.0
41	Double Door FREEZER	1	5.0
42	Clevenger Apparatus	1	1.0
43	Probe Sonicator	1	8.0
44	Shelf Life Measurement Device	1	35.0
45	Continuous Distillation Unit	1	70.0
46	NF membrane testing machine	2	30.0
47	Stirrer	4	3.0
48	Oven	1	5.0
49	Muffle Furnace	1	8.0
50	Shaker bath	1	2.0
51	Lyophilizer	1	10.0
52	Ultrasonic processors	1	11.0
53	Advanced overhead stirrer	1	5.0
54	Laboratory furniture	1	20.0
55	Refrigerators	2	1.6
56	Laboratory ball mill	1	1.5

57	Inert gas chamber	1	15.00
58	Laboratory Water Chiller	1	5.00
59	Metal 3d Printer with wash station and sinter station with gas supply accessories	1	350.00
60	Laser cutting machine with accessories	1	200.00
61	Broadband seismograph	5	125.00
62	Strong motion accelerograph	5	75.00
63	Radon monitoring system for water and soil	1	15.00
64	High-end servers	2	8.00
65	Petrographic microscope with complete rock sample preparation kit	1	80.00
66	VoIP Telephone Network	1 Set	50.00
67	Audio Visual Equipment for Dr J N Auditorium	1 Set	150.00
68	High Pressure Reactor	2	60.00
69	UV-Visible Spectroscopy with NIR and Low Temperature	1	30.00
70	TGA-DSC	1	35.00
71	Gas sorption analyzer	1	120.00

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

	Timanda Tea 2020 2020				
SI.	Name of the Equipment/Item	Quantity	Approximate	Project	
No.			Cost (Rs. In	Number/Code	
			Lakhs)		
1	Solid State Fermenter and Accessories (Bioreactor)	1 No.	35.00	FTT020509	
2	Feed Pellet Maker	1 No.	6.00	FTT020509	
3	Customized Bio-floc Based Farming Units	4 No.	7.00	FTT020509	
4	Plant Growth and Hardening Facility for Genome- Edited Plants	1	30.00	MMP-025301	
5	Plant Tissue Lysis System	1	9.00	MMP-025301	
6	Fluorescence Imaging System	1	15.00	MMP-025301	
7	Pilot scale setup/reactor system and accessories	1	15.00	FTT080509	
8	GC	1	30.00	H2T Misson	
9	Electrochemical work station for H2 evolution reaction	1	30.00	H2T Misson	
10	Membrane Reactor	1	3.00	Proposed Natural Hydrogen Mission	
11	Membrane Gas separation portable system	1	3.00	FBR080306	
12	Centrifuge	1	2.50	FBR080306	
13	Membrane bioreactor system	1	3.00	FBR080306	

14	Ultrasonic bath	1	0.50	FBR080306
15	Hollow fiber casting machine (small scale)	1	3.00	FBR080306
16	Different experimental equipments for demonstration for students under jigyasha project along with computer and camera	01 set	13.00	HCP-0101
17	Portable Gas Analyser	3	36.00	CSIR H2T
18	Multi-channel electrical resistivity meter	5	125.00	CSIR-Mission
19	High-end desktop computers	10	15.00	CSIR-Mission
20	Overhauser magnetometer (for MPGO)	1	80.00	CSIR-Mission
21	Gravity separation set-up	1	5.00	FTT080509
22	Sieve Shaker set-up	1	5.00	FTT080509
23	Flotation column	1	5.00	FTT0805-09
24	Vacuum pump with filtration unit	1	3.00	CSIR-Mission
25	Centrifuge	1	6.00	CSIR-Mission
26	Autoclave	1	1.00	CSIR-Mission
27	Heating mantle	5	4.00	CSIR-Mission
28	Muffle Furnace	1	2.00	CSIR-Mission
29	Hot Air Oven	1	2.00	CSIR-Mission
30	Portable Multi-Gas Analysers	2	34.00	MMP065202
31	CNC Machine facility with CNC simulator	1	70.00	HCP-2502
32	Welding simulator with battery operated welding demonstration	1	26.00	HCP-2502
33	Upgradation of solid works software	1	16.00	HCP-2502
34	Workstation and storage	1	12.00	HCP-0101

	Next 3-5 Years				
SI. No.	Name of the Equipment/Item	Quantity	Approximate Cost (Rs. In Lakhs)	Project Number/Code	
1	Broadband seismograph	10	250.00	CSIR Mission	
2	Long-period seismograph	10	250.00	CSIR Mission	
3	Strong motion accelerograph	5	75.00	CSIR Mission	

	<ul><li>3: Equipment for procurement during the FY 202!</li><li>ed Projects (EFP):</li></ul>	5-20 aliu ive	at 5-5 years un	uei Externally	
Financial Year 2025-2026					
SI. Name of the Equipment/Item Quantity Approxin No. Cost (R				Project Number/Code	
			Lakhs)	-	
1	Network Attached Storage Cluster (Equipped with server and network switch)	1	30.00	Proposed in a DBT project	
2	Shaking Plant Growth Refrigerated Incubator	1	15.00	GPP0434	

3	Ultra freezer	1	9.50	Not allotted
4	Workstation (20 core, 128 GB RAM)	1	5.00	Not allotted
5	BSL-2	1	8.00	GPP-0423
6	Gas analyser (CAAQMS)	1	50.00	GPP325
7	Coal biomass gasifier with gas engine	1	25.00	GPP425
8	Magnetic stirrer	2	1.50	GPP430
9	UV visible cabinet	1	0.50	GPP430
10	Vacuum pump	1	1.50	GPP430
11	Oven	1	1.00	GPP430
12	Chiller	1	1.50	GPP430
13	Self-Standing single bore porous tube manufacturing unit	1	22.50	GPP-0433
14	Broad-band seismograph	45	1125.00	ASDMA-
15	Weather monitoring system	45	225.00	sponsored ASDMA-
13	Weather monitoring system	45	223.00	sponsored
16	High-end computer/server system	10	100.00	ASDMA-
17	Photo clostro chomical system	1	15.00	sponsored
17	Photo electro chemical system	1	15.00	GPP0431
18	Biodiesel Production Unit	1	10.00	ANRF
19	Viscosity Meter	1	5.00	ANRF
20	Density Meter	1	0.05	ANRF
21	Oil Extractor	1	3.00	ANRF
22	Cloud Point Apparatus	1	1.50	ANRF
23	Flash Point Apparatus	1	0.30	ANRF
24	Fire Point	1	0.25	ANRF
25	Injet 3D Printer	1	16.00	ANRF
26	Stirrers	6	5.00	DRDO
27	Self standing single bore porous tube manufacturing unit	1	22.50	GPP0433
28	Plant growth chamber	1	7.50	GPP0434
29	Fabricated system: Floatable water wheel system with flow enhancement device along with mooring arrangement. System will consist of generator, power conditioner, power converetr, MCBs etc. as tailor made.	1	35.00	GPP0436
30	Shaker Incubator	1	8.00	GPP0438
31	CO2 analyzer	1	9.00	GPP0438
32	BOD Incubator	1	2.00	GPP0438
33	COD analyzer	1	4.00	GPP0438
34	Weighing Machine	1	1.00	GPP0438

35	PH meter	1	0.80	GPP0438
36	UV Vis	1	3.20	GPP0438
37	Freezers (-20)	1	1.45	GPP0441
38	Ultra deep freezer	1	4.00	GPP0441
39	Freeze dryer	1	7.00	GPP0441
40	Bead Beater Homogenizer	1	3.50	GPP0441
41	Electrophoresis set up	2	1.60	GPP0441
42	Gel documentation system	1	5.00	GPP0441
43	Thermal cycler	1	3.00	GPP0441
44	UV-Vis spectrophotometer	1	7.00	GPP0441
45	Luminex machine	1	60.00	GPP0441
46	Infrared and thermal DSLR	1	2.10	GPP0441
47	Miscellaneous (Multichannel pipet, Laminar air flow, shaker incubator, multi-plate reader)	1	5.00	GPP0441
48	Spin Coater	1	3.00	GAP0833
49	Shaker incubator	1	3.00	GAP0834
50	Biosafety Cabinet	1	3.00	GAP0842
51	Binocular microscope	1	0.70	GAP0844
52	Laminar Airflow	1	1.30	GAP0844
53	Fabrication of seed bioreactor	1	7.00	GPP0440
54	Fabrication of cooling system	1	2.50	GPP0440
55	Herbarium Cabinet	1	0.56	GPP0442
56	Desktop Computers	8	12.00	GPP0427
57	Vacuum Refrigerated Concentrator	1	9.00	GPP0427
58	Horizontal Gel Electrophoresis	1	3.00	GPP0427
59	Pipettes, Multi Channel, variable volume	1	4.00	GPP0427
60	Digital Vortex Shaker	1	0.20	GPP0427
61	Membranes fabrication unit by temperature induced phase separation (TIPS)	1	200.00	GPP0439
62	Membrane modulation unit	1	60.00	GPP0439
63	Membrane distillation unit	1	20.00	GPP0439
64	Vacuum pump	1	20.00	GPP0439
65	Gas permeability measurement system	1	50.00	GPP0439
66	Gas separation unit with gas distribution	1	30.00	GPP0439
67	Electro reactor	1	25.00	GPP0439
68	Solar Simulator	1	15.00	GPP0439
69	Environment control high temperature furnace	1	40.00	GPP0439
70	High power ultra sonicator	1	20.00	GPP0439

71	Bioreactor	1	120.00	GPP0439
72	Lubricity Tester	1	20.00	GPP0439
73	Fuel analyser	1	70.00	GPP0439
74	Cleveland Flash Point Apparatus	1	20.00	GPP0439
75	Bio diesel analyser	1	21.00	GPP0439
76	Grease wax testing analyser	1	20.00	GPP0439
77	Oil content from water tester	1	20.00	GPP0439
78	Automatic smoke point apparatus	1	19.00	GPP0439
79	Cloud and Pour Point Apparatus	1	28.00	GPP0439
80	Acid no tester	1	20.00	GPP0439
81	Ash content tester	1	15.00	GPP0439
82	Closed cup flash point apparatus	1	30.00	GPP0439
83	Automatic softening point apparatus	1	35.00	GPP0439
84	Density tester	1	10.00	GPP0439
85	Bitumen and ashphaltene tester	1	30.00	GPP0439
86	Automatic freezing point tester	1	30.00	GPP0439
87	Total sediment tester	1	18.00	GPP0439
88	Liquid hydrocarbon tester	1	20.00	GPP0439
89	Octane no tester	1	25.00	GPP0439
90	HRTEM	1	800.00	GPP0439
91	High energy XRD system	1	240.00	GPP0439
92	Centrifuge	1	30.00	GPP0439
93	Contact angle analyser	1	30.00	GPP0439
94	Atomic Force Microscope (AFM)	1	250.00	GPP0439
95	Gas analyser	1	200.00	GPP0439
96	Fluorescence microscope	1	32.00	GPP0439
97	Dynamic light scattering instrument	1	45.00	GPP0439
98	Cyclic voltameter	1	28.00	GPP0439
99	Electrometer	1	10.00	GPP0439
100	Minor equipment and accessories (Laptop, MAC book, water bath, sonicator, desktop etc)	2	10.00	GPP0439
101	Colour measurement instrument	1	30.00	GPP0439
102	Thermo gravimetric anlyzer (TGA)	1	62.00	GPP0439
103	Differential Scanning Calorimetry (DSC)	1	60.00	GPP0439
104	Fuel Cell apparatus	1	20.00	GPP0439
105	Lab furniture		46.00	GPP0439
106	FT-IR	1	28.00	GPP0439
107	Microscope with imaging system	1	7.00	GPP0426

108	Surgical Platform	1	1.00	GPP0426
109	Inhalation anaesthesia chamber	1	3.00	GPP0426
110	Air sampling probes/ sampler/ sensors for CO NDIR, H2 TCD, CH4 NDIR	1	7.50	GPP0425
111	Hammer Mill	1	0.70	GPP0425
112	Mass Flow Controller	1	1.50	GPP0425
113	Water Flow Controller	1	1.00	GPP0425
114	1.2 KVA LPG & Propane powered portable Generator	1	0.80	GPP0425
115	Deep Freezer (-80C)	1	9.50	GPP0450
116	Workstation with UPS and Printer	1	5.00	GPP0450
117	Vacuum Concentrator	1	10.00	GPP0444

### Note:

- The above procurement plan is dynamic and could be revised as often as may be necessary with the approval of the Competent Authority.
- The procurement of the equipments would be based on the need and ongoing requirement of R&D activities of Lab/Instt.
- The procurement is subject to the fund's availability/release of sufficient grant from CSIR / funding agency.
- ➤ The costs indicated as above are approximate/estimate cost only.

# CSIR-North East Institute of Science and Technology Procurement Plan (Consumables)

## [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):** 

SI. 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.)	409.00
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.)	166.00
3	Glass wares (ex- name the different glass wares)	58.40
4	Plastic wares (ex- Name the different plastic wares)	70.50
5	Cartridges, Batteries, etc.	61.00
6	Gases (ex- tentative names)	74.50
7	Maintenance/AMC/repairing of existing equipment	287.50
8	Stationary items (ex- name a few)	29.50
9	IT / software-related Items: Material Studio, MATLAB, ARCGIS, BioRender, CLC Genomic Workbench Software and Network License, Desktop Computer (5 nos), Sigma Plot Software, Qiagen CLC genomic workbench, Commander Software with GTGPU high performance compute system with data storage for the above Long Read Real Time Nanopore Sequencing System, etc.	142.70
10	IT / software-related Items : GAMMA SAR Remote Sensing and IPTA Software	7.50
11	Furniture: chair, Lab stool, lab bench	178.25
12	Electric Items (Air conditioner/Fan)	50.50
13	Raw materials, tools, chemicals and consumables etc. to be used during skill development training	15.00
14	Consumables tools for students experimentation	10.00

#### Note:

<sup>&</sup>gt; The above procurement plan is dynamic and could be revised as often as may be necessary with the approval of the Competent Authority.

- The procurement of the chemicals & consumables would be based on the need and time to time requirement of the R&D activities of CSIR-NEIST.
- > The procurement is subject to the funds availability/release of sufficient grant from CSIR / funding agency.
- > The indicated procurement value is an estimate only.

The procurement Plan is updated with the approval of the competent authority.