

[Name of the Laboratory/Instt/Unit]

PROCUREMENT PLAN*

(*Please read the note given at the end)

A	FOR THE FINANCIAL YEAR 2025-26
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A (a)	EQUIPMENT
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(i)	Equipment: Out of CSIR Infra Grant
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Sr. No.	Name Category of Equipment/ Vehicle Item	Quantity (Nos.)	Approximate Cost (Rs. In Lakhs)
ACSC			
1.	Furnace	01	15.00
2.	Doubled distilled water apparatus	01	2.00
3.	Concrete pan mixer	01	8.00
4.	Salt Spray Chamber	01	20.00
5.	Digital Analytical balance (220 gm)	01	3.00
6.	Humidity Chamber	01	5.00
7.	Magnetic Stirrer	01	0.25
8.	Desktop computer with UPS	01	1.50
9.	Colour Printer	01	0.30
10.	Rheometer for Cement & Mortar	01	70.00
11.	Convection Laboratory Oven	01	10.00
12.	Adiabatic concrete calorimeter	01	40.00
13.	Oxygen Permeability Tester	01	8.00
14.	Mobile Hollow Block Making Machine	01	15.00
15.	All in One Desktops with UPS	04	8.00
16.	Mercury Porosimeter (High pressure)	01	45.00
17.	Maturity Meter	01	10.00
18.	Consistometer	01	2.00
19.	LVDT/Displacement laser sensor: (i) 200/100/500 mm	04	6.00
20.	Load cells: (i) 5000 kN (ii) 500 kN	01 01	3.00
21.	Data Acquisition System (32 channel)	01	5.00
22.	Disc Pelletizer	01	3.00
23.	LVDTs (50 mm and 100 mm)	04	1.50
24.	Concrete Mixture	01	6.00
25.	Jaw Crusher	01	3.00
26.	Rheometer and Accessories	01 Set	90.00
27.	Laptop	01	1.50
28.	ATENA Full + GiD	01	12.00
TOTAL			394.05
APEE			
29.	U Value Apparatus Chamber	01	183.00
30.	Workstation	07	21.00
31.	Laptop	07	14.00
32.	Printer	07	5.00
33.	Environment Chamber for Solar Thermal Testing	01	25.00
34.	Laser Cutting Machine	01	23.00
35.	Surface Coating System	01	18.00
36.	Data Logger	01	10.00
37.	Fabrication of Smart Hybrid Solar Community Kitchen	01	10.00
38.	8 Channels Acoustic Emission System Expandable To 32 Channels	01	45.00
39.	Auto Desk Software (Auto Cad)	01	25.00
40.	Pool Boiling Setup for Heat Transfer Analysis	01	5.00
41.	Gas/Air Leak Checker	01	3.00
42.	3D Printer for printing small size heat transfer related component	01	5.00
43.	Handheld Density Meter	01	5.00
44.	Surface Tensiometer	01	18.50
45.	Handheld Contact Angle Meter	01	28.50
46.	Color Spectrophotometer	01	8.50
47.	Homogenizers	01	40.50
48.	Non flicker lights (continuous light)	03	8.00
49.	Nono quartz Distilled water plant (5ltr/hr capacity)	01	2.50

50.	Bomb calorimeter with all accessorise	01	5.00
51.	Differential pressure gauge	01	1.00
52.	Thermal image camera	01	4.00
53.	Solar power meter or irradiance meter	01	0.50
54.	Insulation tester	01	0.90
55.	Non- contract infrared thermometer	01	0.50
56.	Battery checker	01	2.00
57.	PIV	01	100.00
58.	Solar reflectance index (SRI) measuring instrument	01	80.00
59.	Probe for visible light Spectrum	01	6.00
60.	Mobile Workstation	01	3.00
61.	Humidity chamber	01	5.00
62.	Environment Chamber	01	10.00
63.	Portable Emissivity Meters	01	1.50
64.	Spectrometers	01	10.00
65.	Spectral Radiance Measurement Devices	01	8.00
66.	Thermal conductivity meters	01	2.50
67.	Differential Scanning Calorimeter	01	10.50
68.	Net radiometer	01	6.50
69.	Thermographic Cameras (Long wave radiative infrared imager, 8-14 um)	01	13.50
70.	Workstation	01	4.50
71.	Printer Colour	01	1.00
72.	UPS (2KV)	01	0.80
73.	Portable weather station with cloud server	01	5.50
74.	Laptop	01	2.50
75.	Pyranometer	02	6.50
76.	Pyrgeometer	01	5.50
77.	Insulation Resistance Tester	01	0.70
78.	Wireless Data Logger	01	8.50
79.	Environment Chamber	01	10.00
80.	Radiative Sky Cooling Test Chambers/Solar radiation test chamber	01	12.50
81.	Valves or Damper	02	2.50
82.	Pyradiometer	01	8.50
83.	Handheld Digital Solar Power Meter	01	0.90
84.	Humidity and temperature controller	02	3.50
85.	Emissivity Measurement Tools (Leslie's Cube)	01	0.80
86.	Radiative Sky Cooling Test Chambers	01	3.50
87.	Solar irradiance meter (sky radiance meter)	01	0.80
88.	Spectral Radiance Measurement Devices	01	5.50
89.	Albedometer	01	1.00
90.	Flux Radiometer	01	2.50
91.	Infrared Radiometer	01	3.50
92.	Energy Meters	05	0.80
93.	Sky radiance meter	01	2.50
94.	Flow Meter/Rotameter	02	2.00
95.	Workstation	01	5.00
96.	Manometer	01	1.50
97.	Workstation	01	5.00
98.	24 Channel DAQ with internet connectivity (web server)	03	7.50
99.	Video Recording Camera	01	4.00
TOTAL			893.20
BMES			
100.	UV/VIS/NIR spectroscopy Diffuse Reflectance spectrometer	01	50.00
101.	Manual carbonation chamber with cylinder and CO2 detector fitted with it	01	12.00
102.	Potentiostat/ Galvanostat portable	01	30.00
103.	Shredder machine for crushing solid scrap samples into fine particle	01	10.00
104.	Powder grinding machine	01	10.00
105.	TDS, pH, Ionic conductivity meter, other minor physical parameter measurement instrument	01	0.50
106.	mixer grinder	01	0.10
107.	Electric water boiler (Glass) transparent	01	0.10
108.	DC source 1-12 volts with digital voltage, ampere readings	01	0.50
109.	Multimeter for Volts/Amp Measurement reading	01	0.10
110.	Milli Q water system	01	8.00
111.	X-ray Fluorescence (XRF)	01	100.00
TOTAL			221.30

CAR			
112.	Ball Milling Machine	01	1.50
113.	PCB printing machine	01	10.00
114.	Workstation	02	6.00
115.	High end PC	02	2.00
116.	CNC Lathe machine	01	25.00
117.	CNC milling machine	01	25.00
118.	Sheet bending machine	01	15.00
119.	Workstation (Replacement)	02	6.00
120.	Sheet Cutting machine	01	5.00
TOTAL			95.50
FSE			
121.	SBI Test Apparatus	01	150.0
122.	Flame radiating panel test apparatus	01	40.0
123.	Salt fog test chambers	01	30.0
124.	Accelerated & Real-Time Aging Chamber	01	30.0
125.	PH meter	01	0.5
126.	Viscometer	01	2.5
127.	High-Pressure Slurry Spray Paint Machine	01	7.0
128.	Accelerometers with impact hammer	04	10.0
129.	Rebound hammer	01	2.0
130.	UPV	01	6.0
131.	Needle vibrator	01	0.3
132.	Hydraulic pressure pump	01	0.5
133.	Spraytec	01	60.0
134.	Distilled water unit	01	3.0
135.	Benchtop Vibration Table	01	10.0
136.	UPS 20 KVA	01	5.00
137.	Computer Workstation for fire simulation studies	01	5.00
TOTAL			361.80
GEGH			
138.	Cyclic Triaxial	01	150.00
139.	Resonant Column Apparatus	01	200.00
140.	Simple Cyclic Shear Apparatus	01	200.00
141.	Load Cell	01	10.00
142.	Seismic down/cross hole Equipment	01	55.00
143.	Cyclic Testing Apparatus	01	50.00
144.	SWCC	01	35.00
145.	Small Value Apparatus, Instruments, and Accessories etc, (upto to Rs. 5 Lakhs) Sensors - Pore Pressure (3 Nos.), Acceleration (3 Nos.), Soil Moisture (1 No.), Earth Pressure (3 Nos.), Hot Plate (1 No.), Fabrication of Geosynthetics Mould (2 Nos.), Digital Multimeter (1 No.)	01	40.00
146.	Engineering Seismograph for MASW test	01	35.00
147.	Barton's comb profilometer for measurement of roughness profile of rock	01	3.00
148.	Rebound hammer for rocks, N-type and L-type (1 each)	02	6.00
149.	Tilt test equipment for rocks	01	7.50
150.	A land streamer for MASW geophones	01	25.00
151.	RS2 software	01	25.00
152.	IT Products & Accessories	01	1.00
153.	UPS	01	2.00
154.	Laptop	01	2.00
155.	Small Value Apparatus, Instruments, and Accessories etc, (upto to Rs. 5 Lakhs) Sensors - Pore Pressure (4 Nos.), Acceleration (4 Nos.), Soil Moisture (2 No.), Earth Pressure Cell, static and dynamic (5 Nos.), Strain Gauges, Lab chemical etc	01	20.00
TOTAL			866.50
HSS			
156.	Closed Loop Pneumatic Pressurization System with Digital Controller for Testing of Facades under Simulated Wind Pressure	01	500.00
157.	Antenna for GPR	01	40.00
158.	3D Terrestrial Laser Scanner with accessories and processing software suite/plugin	01	50.00
159.	Vibration Shaking Table	01	20.00
160.	Gate for Flash flood simulator	01	10.00
161.	Sensors (Load cells, Earth pressure cells, Accelerometer, Pore Pressure Sensors, Potentiometers, Test Setups, Fabricated Setup)	-	10.00
162.	SHM Setup for Historic Masonry and Tall Buildings	01	150.00
163.	Ultrasonic Imaging setup for metals (Phased array)	01	20.00
164.	Flexural, tensile and compression test setup for concrete and masonry	01	80.00

165.	Pix 4D/Metashape/Other software	01	4.00
166.	High Resolution RGB Camara	04	6.00
167.	Handheld EM wave-based Scanner / Handheld GPR	01	15.00
168.	STAAD Pro. Software	01	5.00
169.	ETABS Software	01	5.00
170.	Tables & Chairs for CoE on Heritage		6.00
171.	Server, High end workstation, Computers, All in One, UPS, Printer	01	35.00
172.	Data collection system for monitoring	02	6.00
173.	Geophone with data logging arrangement	01	18.00
174.	3D Printer	01	3.00
175.	Metal Detector	01	5.00
176.	3-D DIC	01	90.00
177.	Automatic CTM	01	30.00
178.	Computers	04	2.50
179.	Printers	04	1.00
180.	Lab Air Conditioners	03	1.00
181.	UPS	03	10.00
182.	Concrete/Lime Mixer Machine	01	1.00
183.	DC Regulated Power Supply	02	1.00
184.	Half Cell Potential	02	14.00
185.	Power Amplifier	01	10.00
186.	Lab Furniture (Stool, Table, storage, chair etc.)	-	1.00
187.	Laboratory minor equipment's (Fan, exhaust fan, wood planer, Bar locator, battery charger, distance meter, power supply, 3phase motor, trolley, strain gauges)	-	1.00
188.	Other necessary minor instruments (Core cutting machine, Steel Cutter, Grinder, Drilling machine, Color meter, moisture meter, stone cutter, grinder, DSLR camera, humidity chamber etc.)	-	3.00
189.	Shock Tube and Blast Testing Facility (length-5m, 3 km/s, and caliber-20 cm)	01	150.00
190.	Load Cell Range 0-30 Tons	01	12.00
191.	High Speed Camera (30,000 fps, 320x256 pixel resolution, ISO 5000, 4GB)	01	75.00
192.	Oscilloscope (500 MHz, 5 GSa/s, 30 MHz-ARB, 4 channels)	01	10.00
193.	Dynamic Spectral Analyzer (25.6 kHz-4 channel, 90 dB, 6 Ms)	01	8.00
194.	Signal conditioner (8 channels, +/-10V, 30 kHz)	01	8.00
195.	Power Amplifier (150V, 70 kHz,-3dB)	01	9.00
196.	Linear stage (X-Y axis) (1 meter slide, 25 rotation/2.5 cm)	01	3.00
197.	MEMS High-G Shock Accelerometers (0-20000g, 60 kHz)	01	16.00
198.	High Frequency, General Purpose Pressure Sensors (345 kPa, 500 kHz)	01	16.00
199.	Preamplifier1/4" Free-field Microphone (6 Hz to 20 kHz, Pre-polarized)	01	16.00
200.	High Frequency, General Purpose Force Sensors (20 KN, 100 kHz)	01	8.00
201.	High Frequency, Piezoelectric strain sensors (50mV/ μ strain , 10,000 g pk)	01	8.00
202.	Time-of-arrival, ICP® Micro-pressure Sensors (345 kPa, 100 kHz)	01	8.00
203.	Ballistic peak pressure monitoring system (Voltage gain 0.1-1000, 50 kHz)	01	10.00
204.	Piezo-Actuator (35 μ m-stroke length, 50 kHz-resonating frequencies)	01	11.00
205.	Academic licence (Annual Subscription based) of LS-DYNA	01	6.00
206.	Ballistic Gas Gun	01	25.00
TOTAL			1552.50
SE			
207.	Ferro Scan(Rebar Scanner)	01	40.00
208.	Impact Echo	01	20.00
209.	Impulse Response	01	20.00
210.	Combination of Impulse response and Empact Echo	01	33.00
211.	Core Cut machine	02	4.00
212.	Live array pro (Advance UPV)	01	38.00
213.	Workstation	01	2.00
214.	Workstation	01	5.00
215.	Data acquisition system	01	25.00
216.	Tomography	01	20.00
217.	Corrosion rate meter(CRM)	01	35.00
218.	B &W photocopier	01	2.00
219.	Colour photocopier	01	8.00
220.	Structural design and Analysis Software (Commercial- Indian)	03	9.00
221.	Structural design and Analysis Software (Educational–10people)	03	9.00
222.	Finite element modelling software	01	15.00

223.	Portable XRF Analyzer	01	40.00
224.	Thermal Infrared Camera	01	40.00
225.	Laser Displacement Sensors	05	25.00
226.	Entensometerfor300tonUTM	01	60.00
TOTAL			450.00
TOTAL-(i)			4834.85

(ii) Equipment: Out of CSIR Funded Projects				
Sr. No	Name Category of Equipment/ Vehicle Item	Quantity (Nos.)	Project Number/ Code	Approximate Cost (Rs. In Lakhs)
APEE				
227.	Fabrication Work of Solar Heat Pump Water Heater for testing purpose	01	FTT-040503	8.00
228.	Fabrication of Smart Hybrid Solar Community Kitchen	01	FTT-040503	10.00
229.	PV Performance Analyzer	01	FBR040304	8.50
230.	Thermal/ Image Camera	01		6.40
231.	Data Acquisition System/ Data Logging and Communication Devices	01		5.50
232.	Energy Meter	01		4.00
233.	Digital Infrared thermometer	01		0.75
234.	Pyrometer	01		0.70
235.	Thermal conductivity facility / and overall heat transfer coefficient value facility	01		2.20
236.	Pyrgeometer	01		4.00
237.	Environment Chamber	01		6.50
238.	Humidity/Vacuum Chamber	01		3.00
239.	Spectrophotometer	01		6.20
240.	Spectro radiometer	01		3.00
241.	Portable Emissivity Meters	01		0.71
242.	Albedometer	01		1.50
243.	Flux Radiometer	01		4.00
244.	Infrared Radiometer	01		6.00
245.	sky radiance meter	01		4.00
246.	Weather station	01		3.00
247.	Fluke 370 FC Series True-RMS Wireless AC/DC Clamp Meters / TRUE RMS CLAMP METERS	01		0.75
248.	True-RMS Electronic Logging Multi meter With Trend capture	01		1.00
249.	Fluke Make Portable Power Analyzer with 4 voltage inputs and 4 current inputs With 2,000A AC/DC Current	01		16.00
250.	DIGITAL STORAGE OSCILLOSCOPE / Fluke Make Colour Scope Meter, 500MHz, 4 channels	01		10.00
251.	Green Hydrogen Gas Cylinder for supplying Hydrogen gas to fuel cell stack	01		0.20
252.	Fuel Cell Stack (up to 2kW)	01		11.00
253.	Batteries (24 to 48V, 150Ah, 2 to 5kWh)	01		1.00
254.	ITECH Make 80V/150A/5KW Bidirectional Programmable DC Power Supply with Solar Array Software / IT6005C-80-150 With SAS1000	01		6.00
255.	Battery Charging Controller	01		0.25
256.	DC to DC Boost Converter	01		3.00
257.	One DC to AC Converter / Inverter for achieving 50Hz, 3 Phase AC / 1 Phase AC	01		6.00

258.	Single Phase / Three Phase V33variable (Two in One) Power Factor 10kVA Load Bank	01		4.00
259.	Electrolyzer to generate Hydrogen from Pure Water(H2O) supplied by Water Purifier/RO	01		23.00
260.	2 to 5 kVA Solar Inverter Set (Off Grid/Stand-alone)	01		1.00
261.	Water Distillation Unit			0.30
262.	Oil Filled Room Heater for laboratory	01		0.15
263.	Net Meter	01		0.25
264.	Desktop	01		4.00
265.	UPS for Desktop	01		0.50
266.	Laptop	01		3.00
267.	Wood Carving machine	01		8.00
268.	Workstation	02		10.00
269.	Heat Capacity Measurement	01	OLP-2305	2.50
270.	WorkStation	01	LRF	10.00
271.	Hygrometer	01		0.40
272.	Anemometer	01		0.20
273.	Lux Meter	01		0.40
274.	Globe Thermometer	01		0.10
275.	LiDAR Scanner	01		1.20
276.	Thermography Camera	01		1.00
277.	Air Quality Monitor	01		0.30
278.	Manometer	01		0.30
279.	Decibel Meter	01		0.15
280.	Pyranometer	01		0.30
281.	Inclinometer	01		0.15
TOTAL				214.36
CAR				
282.	Controller system for wall plastering machine including accessories	01	FTT040504	3.00
283.	Controller system for wall painting machine with motors and accessories	01	FTT040504	3.50
284.	CNC control set-up with motors and accessories	01	FTT040504	8.50
285.	AC/DC motors	05	FTT040504	1.50
286.	Control and communication system	05	FTT040504	1.50
287.	AC/DC motor drives	05	FTT040504	1.50
288.	Server for IoT	01	NCP 040304	4.00
289.	Data logging system for Avalanche	01	NCP 040304	0.50
290.	Wireless Camera	01	NCP 040304	1.00
291.	Benchtop multi-meter	01	NCP 040304	1.00
TOTAL				26.00
GEGH				
292.	Microtremor Measurement System	01	Mission mode project coordinated by NGRI	25.00
293.	Cross-hole tomography system	01	Mission mode project coordinated by NGRI	30.00
294.	Workstation	05	CLAIM project coordinated by 4PI	25.00
295.	OPTUM GX software	01	CLAIM project coordinated by 4PI	13.00
TOTAL				93.00
TOTAL (ii)				454.36

(iii) Equipment: Out of Externally Funded Projects (EFP)				
Sr. No	Name Category of Equipment/ Vehicle Item	Quantity (Nos.)	Project Number/ Code	Approximate Cost (Rs. In Lakhs)
ACSC				
296.	UPS 1 KVA	03	SSP-1014	0.40
TOTAL				0.40
APEE				
297.	Thermal Conductivity Apparatus	01	TST	70.00
298.	Electrical properties Earth Resistivity, Insulation, Megger, Di-electric tester	01	TST	10.00
299.	Air conditioning Measurement apparatus	01	TST	10.00
300.	RF Spectrum Analyser with Mono Directional Antenna & Computer set up	01	SSP-0301	10.00
301.	NDT Instruments	04	SSP-0263	7.00
302.	Mobile Workstation	01	GAP-1423	3.00
303.	Workstation	01	GAP-1423	5.00
304.	Misc. office Items	-	SSP-0263 & SSP-0301	2.00
305.	Fabrication Work of Solar Heat Pump Water Heater for testing purpose	01	FTT-040503	8.00
306.	Fabrication of Smart Hybrid Solar Community Kitchen	01	FTT-040503	10.00
307.	Digital Moisture Meter	01	GAP-844	1.60
308.	Resistivity Meter	01	GAP-844	5.20
309.	UPV	01	GAP-844	6.50
310.	Rebound Hammer	01	GAP-844	2.50
311.	Buoyancy Balance	01	GAP-844	1.50
312.	Half Cell- one wheel corrosion analyser	01	GAP-844	15.00
313.	Laptop/Desktop	01	GAP-964	1.00
TOTAL				168.3
BMES				
314.	Laptop	01	SSP 734	1.00
TOTAL				1.00
GEGH				
315.	Temperature control unit for tensile testing Machine-Up gradation	01	GAP 1094	40.00
316.	FBG Sensor Network	01	GAP 1094	80.00
TOTAL				120.00
HSS				
317.	UPV	01	SSP 922, SSP1373 & GAP 311	6.00
318.	Deep Freezer	01		0.25
319.	Airflow Cabinet	01		1.00
320.	Half Cell Potentiometer	01		8.00
321.	Incubator Shaker	01		1.00
322.	Spectrophotometer	01		0.40
323.	Autoclave	01		0.25
324.	Computers	04		2.50
325.	Printers	04		1.00
326.	Air Conditioner	03		1.00
TOTAL				21.40
TOTAL (iii)				311.10

A (b)	CONSUMABLES
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Sr. No.	Category	Expected Procurement Value (Rs. In Lakhs)			
		Out of CSIR Infra Grant	Out of CSIR Funded Projects	Out of Externally Funded Project (EFP)	Total (Rs. In Lakhs)
ACSC					
327.	Chemicals Phenolphthalein, NaCl, NaOH, Nitric Acid, Salt, KOH, Ca(OH) ₂ , Copper Sulphate, Acetone, Aluminium (Metal) Fine Powder, Calcium Carbonate, Calcium Chloride, Calcium Sulphate Dihydrate, Anhydrous Calcium Chloride, Calcium Hydroxide (Hydrate Lime), Calcium Oxide, Silica Fume, Hydrochloric Acid, Nitric Acid, Hydrofluoric Acid, Isopropyl Alcohol, Murexide, Methyl Orange, Isopropyl Alcohol, Admixtures, Foaming Agent, Resin & Hardener, Lacquer, Boric Acid Powder, Sodium Hydroxide Pellets, Hydroxy Propyl Methyl Cellulose, Propanol , Glassware Cleaning Agent, Sulphuric Acid, Polyvinyl Alcohol, Silver Nitrate, Sodium Sulphate, Kaolin, Potassium Hydroxide, Propylene Glycol, Nitro Benzene, Sodium Polyacrylate, Hydrogen Peroxide, etc.	3.00	1.50	7.00	11.50
328.	Other Consumables Aggregates, Steel Plates, Steel Sections, Steel Tubes, Reinforcements, Binding wires, Cement, Sand, Super Plasticizer, Cutting /grinding Blades, Epoxy, latex, Hydraulic Oil, Gear Oil, Bricks, Textiles, FRP, Grids, Adhesives of any , Strain Gauges, Wrench set, Electrical /Strain Gauges Wires, Bolts, Pipes, Nuts, Fabrication of Loading Frame, Test bed, Extension box, Oil Filter, Seal, Pressure Gauge, Crack Meter, DPT Kit, Welding Gauge, Welding Rods, Adhesive Tapes, White Putty, Water Pipe, Cotton /Coir bags, Paints, Primer, POP, Brushes, Oil, Moulds, Bolt and Nuts, Chain Pulley, Sensors-Humidity, Thermal, Temp, Creep Setup fabrication , Flat Jack, Flat Plates, Hyd. Pipes, Couplers, U Bolts, Anchors, Injection able Adhesives, Grease , Steel /Concrete Drill Bits, Anchor Rods/Bolts, Hinges, Water Pump, Trowel Set, Spade, Scoop, Gloves, Shoes, Helmets, Masks, Googles, Safety Nets, Safety Guard Dress, Lab Coats, Aprons, heating elements, Coils, Fibres, Mineral Admixtures, Graphene, Glass wool, Steel Wool, Computer Accessories, Acrylic Sheets, Steel Mesh, Plywood, Power Banks, Dongle, Wires, IOT Sensors with DAQ, Boards, Mobiles, White board, Notice board, Sodium Hydroxide, Sodium silicate, Pigment, GGBS, Fly Ash, Realising Agents, Sand, Coarse Sand , Aggregates, Gunny Bags, Ziplock Bags, HDPE Bags, LDPE Bags, Filter, Paper, Tongs, Clams, Spatula, Scoop, Flat Spoon , Spoon Spatula, Ointment Spatula, Scoop, Blunt Dissecting, Examination Gloves, Mask, PPE kit, Lab Safety Shoes, Lab Safety hat, R&D Raw Materials, Round PP Disposable Cap, etc.	3.00	2.50	9.00	14.50
329.	Glass wares Bottles, glasses, Beakers of different capacity, Desiccators of Different Capacity, Dishes, Measuring Cylinder, Pipette Laboratory Bottles, Reagent Bottles, Specific Gravity Bottle (Pycnometer), Weighing Bottles, Gas Sampling, Tubes, Burettes, Auto burettes, Cones, Condenser, Viscometer, Volumetric Flask, Round Bottom Flask, Conical Flask, Glass Filtration Assembly, Mortar & Pestle, Weighing Scoop, Museum Jars, Funnels, Stirrer Rods, Glass Dryer. Quartz Ware: Beakers, Dishes &Basin, Crucible, Lid, Circular Capsule, Slides, etc.	1.00	0.10	5.00	6.10
330.	Plastic wares Plastic Tub, Buckets, Mugs, Containers, bottle top dispensers, plastic wash bottle, beakers of different sizes, silicone tubing, electronic micropipette, water bottles, LDPE carboy with stopcock, aspirator bottle with stopcock, air-tight containers of different sizes, sample holder and storage, unbreakable plastic tubs, buckets, measuring cylinders, etc	0.25		2.00	2.25
331.	Toner Cartridges.	0.25	0.15	2.15	2.55

332.	Batteries, etc.	1.00	0.10	1.60	2.70
333.	Gases CO ₂ cylinders etc	0.50			
334.	Maintenance/AMC/repairing of existing equipment AMC of UTM, Maintenance of CTM, Hyd. Cylinder, Hyd. Pump, Load Cells, LVDTs, DAQs Environmental Chamber (PLC Problem, Humidity Sensor, etc.); Dilatometer (Calibration of Equipment, Service, software upgrades, etc.); UV Chamber (Calibration of Equipment, Service, software upgrades, etc.); CTM (Calibration of Equipment, Service, software upgrades, etc.); MOR (Calibration of Equipment, Service, software upgrades, etc.); CTherm (Calibration Of Equipment, Service, software upgrades, etc.); Accelerated Curing Tank (Calibration of Equipment, Service, etc.)	9.50		17.00	26.50
335.	Stationery items Sheets, Markers, Tape, Scale, Files, Note Pads, Registers, Markers, Ink, Ink Pad, Stamp, Stapler, A4 sheet, bond paper reams, register/noting pads, stapler pins, glossy sheets, pens, permanent markers, whiteboard markers, sticker sheets, binding sheets, tape, highlighters, and more,		0.10	0.10	0.20
336.	IT / software-related Items Seismo Struct, Seismo Build, FRP Designer, Antivirus, MS office, etc., 3D designing Software, etc.		12.00	0.5	12.50
337.	Furniture (Name the items required during year)	1.00			1.00
338.	Other Consumables Aggregates, Steel Plates, Steel Sections, Steel Tubes, Reinforcements, Binding wires, Cement, Sand, Super Plasticizer, Cutting/grinding Blades, Welding Rods, strain gauges with wires, Steel Bolts and rods,		5.00	2.00	7.00
APEE					
339.	R&D Consumables for closed loop systems (by equipment name eg. Kits for Illumina sequencer) Cooling Collectors, heat exchangers, Hot & Cold Water Storage Tank (thermal energy storage), Heat Transfer Fluid and Circulation System, Piping or Ductwork Weather Monitoring Sensors,				50.00
340.	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.) Nano particle-based Coatings materials, Metal-dielectric Nano composites, Porous or Nano structured Surfaces				20.00
341.	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.)				50.00
342.	Glass wares (ex- name the different glass wares) Heat Transfer Vessels, Sample Containers, Sight beakers, flasks, and test tubes Glasses,				10.00
343.	Plastic wares (ex- Name the different plastic wares)				10.00
344.	Toner Cartridges.				10.00
345.	Batteries, etc.				10.00
346.	Gases (ex- tentative names)				1.00
347.	Maintenance/AMC/repairing of existing equipment Department Equipment's				100.00
348.	Stationery items (ex- name a few) notepad, A4 SHEET, magnetic duster, Board, binder clip, stapler, paper punch,				20.00
349.	IT / software-related Items (Name the items required during year) TRNSYS, SIMAPRO, IES, COMSOLE-Multi physics, ORIGIN, SIGMA PLOT, TURNITIN, MS office, Virtual Environment, climate data analysis software				50.00
350.	Furniture (Name the items required during year)				50.00

	Executive chair, computer table,				
351.	Electric Items (Name the items required during year) Extension board				50.00
352.	IS Code, Books, Stationary, computer peripheral and Printer Cartridges, Paper reams, Notepads, etc.	2.00	0.50		2.50
353.	Maintenance/AMC/repairing of existing equipment	10.00	1.00		11.00
354.	Surface modification of copper specimen for pool boiling setup		1.00		1.00
355.	Liner heaters with in-built thermocouple		0.80		0.80
356.	Circuit fabrication of Online solar controller		1.00		1.00
357.	Inner surface Condenser coil modification of solar assisted heat pump		1.00		1.00
358.	Evaporator/Condenser		1.00		1.00
359.	Duct for MVHR Setup		0.50		0.50
360.	Fabrication of Vacuum tube solar water heater		2.00		2.00
361.	DC Compressors		0.50		0.50
BMES					
362.	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.) Carbon dioxide cylinder, spraying unit, Phosphoric acid, hydrogen peroxide, glycerol, Heating elements for Furnace, Chemicals (Polyvinyl alcohol, Acetone etc.), Glass ware, Aluminium waste, fly ash, slag waste Repair work, Coarse and fine aggregates, Sample collection containers, glassware, Plasticizers/ water reducers, Lab safety, Wears (Apron, gloves & mask etc.), Molds of different sizes for determination of physico-mechanical properties, Enamel tray (different size/shapes), Rebars, Salts, Wires, Bolts, Nuts, Steel plates, Sieves of different sizes and Other Misc. Items Acetone, Hydrochloric acid, labolene, silver nitrate, potassium thiocyanate, ethanol, isopropanol, sodium hydroxide, sodium chloride, superplasticiser, medical testing items, Resin, CaCO3, Bentinite, GGBS, Acids, Acetone, Silver Sulphate, Water glass, Bentonite, GGBS, Calcine clay, Lab safety, Wears (Apron, gloves & mask etc.)	10.00	5.5	0.25	15.75
363.	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.) Cement (OPC, PPC, Blended cement), rice husk ash, clay, slag, filter paper, zip pouch, tissue rolls, alumina crucible, silica crucible, gloves, mask, ph strips, Imadacloprid 30.5 EC, medical testing items	-	4.75	-	4.75
364.	Glass wares (ex- name the different glass wares) Glassware used in Lab, electrolytic cell compartment/chamber fabrication, filtration/ distillation evaporation unit of glass component Beakers, pipette, burette, volumetric flask, conical flask, pH electrodes	8.00	4.00	-	12.00
365.	Plastic wares (ex- Name the different plastic wares) Tray, bucket, various mould, tub, plastic laminated sheet etc Beakers, containers, tubs for curing	3.00	3.50	-	6.50
366.	Toner Cartridges. Toner B& W, coloured Toner B& W, coloured	2.00	1.50	-	3.50
367.	Batteries, etc.	2.00	-	-	2.00
368.	Gases (ex- tentative names) O ₂ , N ₂ , CO ₂ Argon, N ₂ , CO ₂	4.00	2.00	-	6.00

369.	Maintenance/AMC/repairing of existing equipment Fridge, AC, Oven, distillation unit Ball mill, oven, furnace, carbonation chamber	3.0	2.00	-	5.00
370.	Stationery items (ex- name a few) register, knife gum, duster, file, stapler, pin, highlighter seal, ink etc Notepads, diaries, markers, L folder, ream etc. Notepads, diaries, markers, L folder, ream etc.	2.00	1.50	1.50	5.00
371.	IT / software-related Items (Name the items required during year) Antivirus, MS word etc	1.00		-	1.00
372.	Furniture (Name the items required during year)	2.50		-	2.50
373.	Electric Items (Name the items required during year) Kettle, microwave oven, dryer, air conditioner, Fan, electric extension, LED bulb, Table fan, digital clock (time, temp, humidity CO ₂ , other various parameter), etc	10.0		-	10.00
CAR					
374.	R&D Consumables for closed loop systems (by equipment name eg. Kits for Illumina sequencer) Electronics/mechanical /robotic/IoTs/Drone kits (FTT040504, NCP040304, GAP-0212, IHP240001)				10.00
375.	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.) Chemical for material processing (FTT040504)				10.00
376.	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.) Fabrication of mechanical/robotic systems, procurements of electronic and mechanical elements (NCP040304, GAP0212, FTT040504, IHP240001)				20.00
377.	Toner Cartridges. (NCP040304, GAP0212, FTT040504)				2.00
378.	Batteries, etc. Electronics items and sensors for fabrication of the robotic systems, plastering machine, panel casting machine, drone and snow avalanche system etc. (NCP040304 GAP0212, FTT040504, IHP240001)				20.00
379.	Maintenance/AMC/repairing of existing equipment Renovation of existing Lab, existing equipment (NCP040304 GAP0212, FTT040504, IHP240001)				20.00
380.	Stationery items (ex- name a few) All stationery items for project work (NCP040304, HCP059 IHP240001, FTT040504)				
381.	IT / software-related Items (Name the items required during year) Py Charm, Arduino cloud, Solid works, PCB designing (NCP040304, FTT040504)				20.00
382.	Furniture (Name the items required during year) 1.Component storage steel Almira 2. Storage bins of different sizes for item 3. Modular drawer (4 shelves)				5.00
383.	Electric Items (Name the items required during year) Electric items related to existing infrastructure and new Lab set-up				5.00
FSE					
384.	R&D Consumables for closed loop systems Thermocouples, Loading Frame Setup, Heating Element for muffle furnace, Setup for fire exposed beam testing, Elements for furnace, sensors etc	5.50	0.50		6.00
385.	Chemicals:	7.00	4.00		11.00

	Acetone, Super plasticizer, Silica Fume, fly ash, GGBS, Oxidizing agents, reducing agents, binders, cross-linking agents, nitrile gloves, face mask N95, Eyeglasses, muslin cloths				
386.	Other Consumables Fibers, Aggregates, bricks, sand, cement CFRP/GFRP material, Steel Plates, Grease, oil, strain gauges, moulds, welding sticks, grinder blades, adhesive, drill bits, extension box, castable refractory, Safety shoes, gloves, masks, safety belts, Hydraulic press oil	16.00	4.50		20.50
387.	Glass wares Beakers, funnel, measuring cylinder	2.50	2.00		4.50
388.	Plastic wares Beakers, funnel, measuring cylinder	1.00	0.50		1.50
389.	Toner Cartridges Black & White, Color Powder and Ink Cartridges , Refilling, Drum Change	2.00	0.50		2.50
390.	Batteries, etc.	1.00	0.50		1.50
391.	Gases LPG for furnace, Mineral Turpentine oil	12.75	0.25		13.00
392.	Maintenance/AMC/repairing of existing equipment	10.0	1.0		11.0
393.	Stationery items Paper reams, Notepads,	2.0	1.0		3.0
394.	IT / software-related Items (Name the items required during year)	1.5	0.5		2.0
395.	Furniture (office furniture)	3.5	0.5		4.0
396.	Electric Items Thermocouple extension wires, relay, Solenoid Valves, heaters, fans	1.8	0.2		2.0
GEGH					
397.	R&D Consumables for closed loop systems (by LVDT, data logger, etc.)	12.00		31.00	43.00
398.	Chemicals (sodium hexametaphosphate, solvents, PluronicF -127, tributyl phosphate, lime, liquid Nitrogen, etc.)	1.00		1.00	2.00
399.	Other Consumables ((Strain gauges, carbon black, nano carbon, nano silica, HDPE powder, PP powder, Copperplates, sand, adhesive, porous stones, gaskets, membrane, cement, multi meter, soldering unit, Gang Mould, rubber sheet etc.)	7.00		3.00	10.00
400.	Glass wares (Desiccator, Beaker, etc.)	1.00			1.00
401.	Plastic wares (Connectors, etc.)	0.50			0.50
402.	Toner Cartridges.	1.00			1.00
403.	Batteries, etc.	1.00			1.00
404.	Gases (Nitrogen)	1.00			1.00
405.	Maintenance/AMC/repairing of existing equipment	6.00		2.00	8.00
406.	Stationery items (A4Budle, Acrylic Paint, Adhesives, Sticky Notes, Pen, etc)	1.00		1.00	2.00
407.	IT / software-related Items (Anti-Virus, Pen Drive, Portable Disk, New/Upgradation of Software, etc)	25.00	1.00		26.00
408.	Furniture (Chairs, Tables for labs, etc.)	15.00			15.00
409.	Electric Items (Extension Box, etc)	1.00			1.00
HSS					
410.	R&D Consumables for closed loop systems (by equipment name e.g. Kits for Illumina sequencer)	10.00	1.00	3.00	14.00
411.	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	5.00		5.00	10.00
412.	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.)	2.00		5.00	7.00
413.	Glass wares (ex- beakers, flask, test tubes etc.)	2.00			2.00
414.	Plastic wares (ex- PLA, ABS etc.)	2.00			2.00
415.	Toner Cartridges.	1.00		2.00	3.00
416.	Batteries, etc.	1.00			1.00
417.	Gases (ex-N ₂)	1.00		1.00	2.00
418.	Maintenance/AMC/repairing of existing equipment	2.00			2.00
419.	Stationery items (ex- files, pens, notebooks etc.)	1.00		1.00	2.00

420.	IT / software-related Items (MS Office, Anti-virus etc.)	5.00		5.00	10.00
421.	Furniture (Tables, Chairs etc.)	30.00		5.00	35.00
422.	Electric Items (Air Coolers, Air Conditioners, UPS, extension cable, cables etc.)	1.00		1.00	2.00
423.	R&D consumables: raw material for concrete, technical textile, steel wire mesh, etc.	5.00		7.00	12.00
SE					
424.	R & D Consumables for closed loop systems (by equipment name e.g. Kits For Illumina sequencer)	2.00			2.00
425.	Chemicals (ex.- Name the different chemical like Solvents, Biochemical/s, Biochemical kits &enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	2.00			2.00
426.	Glass wares (ex-name the different Glass wares)	1.00			1.00
427.	Plastic wares (ex-Name the different plastic wares)				
428.	Toner Cartridges.	5.00			5.00
429.	Furniture (Name the items required during year)	1.00			1.00
430.	Electric Items (Name the items Required during year)	1.00			1.00

B	FOR NEXT 2-4FINANCIAL YEARS (2026-30) (From 01/04/2026 to 31/03/2030)
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B (a)	EQUIPMENT
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Sr. No.	Name of Equipment / Item	Quantity (Nos.)	Approximate Cost (Rs. In Lakhs)
ACSC			
431.	High Temperature Electric furnace (1600°C)	01	20.00
432.	Ultrasonicator	01	1.00
433.	Atomic Absorption Spectrometry	01	35.00
434.	Disc Pelletizer	01	3.00
435.	Load Cell (50 ton)	01	2.00
436.	Load Cell (100 ton)	01	2.00
437.	LVDTs (50 mm and 100 mm)	10	4.00
438.	Concrete Mixture	01	6.00
439.	Jaw Crusher	01	3.00
440.	Rheometer and Accessories	01	90.00
441.	Servo Actuator with accessories (1000 kN)	01	400.00
442.	Acoustic Emission Setup	01	90.00
443.	Data acquisition System	01	6.00
444.	ATENA Full + GiD	01	12.00
445.	Raman Spectrometer	01	50.00
446.	Polishing machine for BSE studies	01	25.00
447.	¹ H, ²⁷ Al & ²⁹ Si- NMR Spectrometer	01	175.00
448.	Transmission Electron Microscope (TEM)	01	350.00
449.	Sima Pro LCA software	01	8.00
450.	Small-scale pilot plant for cement	01	25.00
451.	Load cell: 500 kN, Hydraulic jack: 300 kN capacity	01	4.00
452.	Weighing balance (High precision: 2 mg)	01	2.00
453.	Molds (Cube, Cylinder, Prism) for concrete	30 Nos. each	5.00
454.	Climatic Cabinets for controlled Temp & RH	01	10.00
455.	Small-scale Jar Mills	01	6.00
456.	Maturity Meter for concrete as per ASTM code	01	5.00
457.	Automatic Pull-Off Bond Strength Tester	01	9.00
458.	Zeta potential analyser for measurement of inter-particle Interaction efficacy	01	20.00
459.	Atomic Absorption Spectrometry	01	35.00
460.	Water Bath	01	2.50
461.	Ultrasonic Bath	01	2.00
462.	Stirrers - Max Stir	01	2.00
463.	Electronic Burette	02	3.00
464.	Survismeter	01	3.00
465.	Platinum Crucible of Different Capacity	05	15.00
466.	Super High-resolution imaging (microscope)	01	30.00
467.	Dual Humidity Chamber	01	10.00
468.	Hydraulic hot press 500 tonne	01	25.00

469.	High-resolution 4K projector with a compatible screen	01	5.00
470.	Bluetooth Sound Bar	01	0.25
471.	Conference Room Camera System	01	1.00
TOTAL			1501.75
APEE			
472.	PIV	01	100.00
473.	Solar reflectance index (SRI) measuring instrument	01	80.00
474.	—	01	300.00
475.	Particle Imaging Velocimetry	01	50.00
476.	Power Analyzer	01	70.00
477.	Thermal Conductivity Apparatus	01	25.00
478.	Heat capacity measurement	01	200.00
479.	UV-VIS-NIR Spectrophotometer	01	200.00
480.	Steady State U Value Apparatus	01	20.00
481.	Building Energy simulation Lab Computational Facility with softwares	02	200.00
482.	Psychrometric Chambers	01	10.00
483.	Solar PV panels	01	10.00
484.	Electrical Load Setup	01	5.00
485.	Induction motor with controller	01	5.00
486.	DC motor with controller	01	5.00
487.	BLDC motor with controller	01	2.00
488.	Tachometer	01	2.00
489.	Torque meter	01	2.00
490.	Pressure transmitter	01	2.00
491.	Flow rate controller	01	1.00
492.	Flow rate measurement sensor	01	10.00
493.	Data Logger	01	10.00
494.	High wattage DC supply	01	10.00
495.	High wattage AC supply	01	10.00
496.	AC-DC electronic load convertor	01	20.00
497.	PV Simulator	01	10.00
498.	Different Micro Controller Board	01	10.00
499.	PV with battery bank and invertor (10KW)	01	20.00
500.	Scada/PLC	01	10.00
501.	Workstation	01	5.00
502.	Laptop	01	50.00
503.	Electronic Accessories/Instrumentation/Sensors	01	50.00
504.	Thermal Imagine Camera	01	20.00
505.	Weather Station	01	50.00
506.	CNC Machine / 3D printer	multiple	5.00
507.	Smart meter	01	2.00
508.	fabrication of solar cooker	01	10.00
509.	AC Filter Testing setup	01	5.00
510.	Blower with VFD	01	2.00
511.	Variac	01	1.00
512.	Orifice Meter	01	1.00
513.	Micro Manometer	06	2.00
514.	LVDT (6 Nos)	01	50.00
515.	Solar Simulator		
516.	UPV instrument	01	7.00
517.	Rebound Hammer	01	2.00
TOTAL			1661.00

BMES			
518.	Oven	01	7.00
519.	Furnace	01	8.00
520.	N2, O2, CO2 cylinder with complete valve, regulator set up	01	4.00
521.	Fridge	01	0.50
522.	Water distillation unit	01	2.00
523.	Rotavapour for synthesis	01	3.00
524.	Zeta potential measurement /Electrophoresis instrument set up	01	14.00
525.	Cyclomixer	01	0.40
526.	Heavy duty paint mixer Electric Multipurpose Stirring Machine Rotary Tool	01	0.20
527.	Grinding machine 4"	01	0.20
528.	Glue gun	01	0.10
529.	Blower\dryer	01	0.50
530.	Ultasonicator	01	1.80
531.	Centrifugation apparatus	01	2.00
532.	Weighing machine	01	2.00
533.	Distillation unit	01	3.00
534.	UPS	03	3.60
535.	Atomic Absorption Spectrometry	01	30.00
536.	Potentiometer	01	1.50
537.	Probe sonicator	01	8.00
538.	Magnetic stirrer	01	1.00
539.	Sieve shaker	01	2.00
540.	DSC	01	25.00
541.	XRD	01	150.00
542.	Autoclave	01	10.00
543.	Stirrer	01	1.00
544.	Ball mill	01	5.00
545.	Furnace	01	10.00
546.	Environmental chamber	01	8.00
TOTAL			303.80
CAR			
547.	Workstations	10	25.00
548.	Actuators	10	20.00
549.	Controllers	20	20.00
550.	Sensors	50	30.00
551.	Standard Mechanical items	30	25.00
552.	PCB design machine	01	15.00
553.	All in one CNC machine	01	25.00
554.	Mechanical Handling tools	15	20.00
555.	Data loggers	02	20.00
556.	3D Lase Scanner	01	8.00
557.	CMM Machine	01	10.00
558.	Hydrostatic Weld test Set-up	01	5.00
559.	Weld penetration test set-up	01	10.00
TOTAL			233.00
FSE			
560.	SBI Test Apparatus	01	150.00
561.	Flame radiating panel test apparatus	01	40.00
562.	ASTM E 84 Tunnel	01	90.00
563.	FTIR for stack gas analysis	01	120.00
564.	TGA-IR	01	60.00
565.	Surface Tension Meter	01	20.00
566.	Lyophilizer	01	20.00
567.	8 Channels Acoustic Emission System	01	45.00
568.	Accelerated Aging chamber	01	30.00
569.	Salt fog test chambers	01	30.00
570.	Benchtop Vibration Table	01	10.00
TOTAL			615.00

GEGH			
571.	X Ray CT Scanner	01	200.00
572.	Fabrication of Scaled down TBM	01	100.00
573.	Rainfall simulator nozzles with complete Pressure back up setup	01	30.00
574.	Parallel Seismic Pile Equipment	01	35.00
575.	Small Value Apparatus, Instruments, and Accessories etc, (up to Rs. 5 Lakhs) Accelerometers (9 Nos.) Pore pressure sensors (9 Nos.) Earth pressure sensors (12Nos.) Displacement sensors (9 Nos.) Force sensors (2Nos.) Laser displacement sensors (8Nos.) Portable seismograph (8Nos.) Any other etc.		175.00
TOTAL			540.00
HSS			
576.	Boundary Layer Wind Tunnel	01	150.00
577.	Pressure Scanner	02	30.00
578.	Hot Wire Anemometer/ Cobra Probe	01	10.00
579.	High-frequency force balance equipment	01	15.00
580.	Smoke Detector and Particle Image Velocimetry	01	60.00
581.	High-frequency Camera	02	4.00
582.	2 kW Wind Turbine with Generator	01	10.00
583.	Lab Furniture (Stool, Table, storage, chair etc.)	-	1.00
584.	Laboratory minor equipment's (Fan, exhaust fan, wood planer, Bar locator, battery charger, distance meter, power supply, 3phase motor, trolley, strain gauges)	-	2.00
585.	Other necessary minor instruments (Core cutting machine, Steel Cutter, Grinder, Drilling machine, Colour meter, moisture meter, stone cutter, grinder, DSLR camera, humidity chamber etc.)	-	4.00
586.	Shock Tube and Blast Testing Facility (length-5m, 3 km/s, and caliber-20 cm)	01	150.00
587.	Load Cell Range 0-30 Tons	01	12.00
588.	High Speed Camera (30,000 fps, 320x256 pixel resolution, ISO 5000, 4GB)	01	75.00
589.	Oscilloscope (500 MHz, 5 GSa/s, 30 MHz-ARB, 4 channels)	01	10.00
590.	Dynamic Spectral Analyzer (25.6 kHz-4 channel, 90 dB, 6 Ms)	01	8.00
591.	Signal conditioner (8 channels, +/-10V, 30 kHz)	01	8.00
592.	Power Amplifier (150V, 70 kHz,-3dB)	01	9.00
593.	Linear stage (X-Y axis) (1 meter slide, 25 rotation/2.5 cm)	01	3.00
594.	MEMS High-G Shock Accelerometers (0-20000g, 60 kHz)	01	16.00
595.	High Frequency, General Purpose Pressure Sensors (345 kPa, 500 kHz)	01	16.00
596.	Preamplifier1/4" Free-field Microphone (6 Hz to 20 kHz, Pre-polarized)	01	16.00
597.	High Frequency, General Purpose Force Sensors (20 KN, 100 kHz)	01	8.00
598.	High Frequency, Piezoelectric strain sensors (50mV/μstrain, 10,000 g pk)	01	8.00
599.	Time-of-arrival, ICP® Micro-pressure Sensors (345 kPa, 100 kHz)	01	8.00
600.	Ballistic peak pressure monitoring system (Voltage gain 0.1-1000, 50 kHz)	01	10.00
601.	Piezo-Actuator (35 μm-stroke length, 50 kHz-resonating frequencies)	01	11.00
602.	Academic licence (Annual Subscription based) of LSDYNA	01	6.00
TOTAL			660.00
SE			

603.	3-Dimensional Digital Image Correlation	01	100.00
604.	Structural Steel NDT Equipment's	01	60.00
605.	Ground Penetration Radar	01	80.00
606.	Fibre Bragg Grating Sensors	01	90.00
607.	Split Hopkinson Pressure Bar (HSPB)	01	70.00
608.	High-speed Dynamic Ballistic Impact Setup	01	500.00
TOTAL			900.00
TOTAL B (a)			6414.55

B (b)	CONSUMABLES
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Sr. No.	Category	Expected Procurement Value (Rs. In Lakhs)
ACSC		
609.	R&D Furnace- Heating Element, Tensile Grip for UTM/CTM, Load Cell setup for Hyd. Cylinder, LVDT Setup for Hyd. Cylinder, Loading Frame Setup, Loading Frame Repair, Electrode for Chloride Ion Meter, Servo Valve for Existing Pump, Furnace 1800°C (Elements, Base, Alumina Crucible Different Capacity, Etc.), Curing Tank (Element, RCCB, Relay, Temperature Sensor, Etc.), CTM (Hydraulic Oil), Concrete Mixer Gearbox (Hydraulic Oil, Hydraulic Pipe, Etc.), Foam Generator (Air Pressure Regulator, Relay, Etc.), Ball Mill Balls of Different Sizes, pH & TDS Meter Electrode, Distillation Plant (Accessories, Elements, Etc.), Oven (elements, Temp. Controller & Sensor, etc.), Abrasion testing machine (abrasion powder, Counter, etc.), UV Chamber (UVA/UVB Lamps, Adapter, Lamp Ignitor, etc.)	52.00
610.	Chemicals Phenolphthalein, NaCl, NaOH, Nitric Acid, Salt, KOH, Ca(OH)₂, Acetone, Aluminium(Metal) Fine Powder, Calcium Carbonate, Calcium Chloride, Calcium Sulphate Dihydrate , Anhydrous Calcium Chloride, Calcium Hydroxide (Hydrate Lime), Calcium Oxide, Silica Fume, Hydrochloric Acid, Nitric Acid, Hydrofluoric Acid, Isopropyl Alcohol, Murexide, Methyl Orange, Isopropyl Alcohol, Admixtures, Foaming Agent , Resin & Hardener , Lacquer, Boric Acid Powder, Sodium Hydroxide Pellets, Hydroxy Propyl Methyl Cellulose, Propanol, Glassware Cleaning Agent, Sulphuric Acid, Polyvinyl Alcohol, Silver Nitrate, Sodium Sulphate, Kaolin, Potassium Hydroxide, Propylene Glycol, Nitro Benzene, Sodium Polyacrylate, Hydrogen Peroxide, etc., acetone and isopropyl alcohol, metals such as fine powder aluminium, calcium compounds like calcium carbonate, calcium chloride, calcium sulphate dihydrate, anhydrous calcium chloride, calcium hydroxide, and calcium oxide. Additionally, there are substances like silica fume, hydrochloric acid, nitric acid, hydrofluoric acid, murexide, methyl orange, admixtures, foaming agents, resin and hardener, lacquer, boric acid powder, sodium hydroxide pellets, hydroxypropyl methyl cellulose, propanol, glassware cleaning agents, sulphuric acid, polyvinyl alcohol, silver nitrate, sodium sulphate, kaolin, potassium hydroxide, propylene glycol, nitrobenzene, sodium polyacrylate, hydrogen peroxide, and more. Biological supplies may include biochemicals, biochemical kits and enzymes, diagnostic kits, sequencing materials, oligonucleotides, Coupling agent, alcohol, buffers solutions, acids alkalis, formic acid, sodium chlorite, sodium hypo chlorite, polymers, indigenous chemicals and others	35.00
611.	Other Consumables Aggregates, Steel Plates, Steel Sections, Steel Tubes, Reinforcements, Binding wires, Cement, Sand, Super Plasticizer, Cutting/grinding Blades, Epoxy, latex, Hydraulic Oil, Gear Oil, Bricks, Textiles, FRP, Grids, Adhesives of any, Strain Gauges, Wrench set, Electrical/Strain Gauges Wires, Bolts, Pipes, Nuts, Fabrication of Loading Frame, Test bed, Extension box, Oil Filter, Seal, Pressure Gauge, Crack Meter, DPT Kit, Welding Gauge, Welding Rods, Adhesive Tapes, White Putty, Water Pipe, Cotton/Coir bags, Paints, Primer, POP, Brushes, Oil, Moulds, Bolt and Nuts, Chain Pulley, Sensors-Humidity, Thermal, Temp, Creep Setup fabrication, Hyd. Pipes, Couplers, U Bolts, Anchors, Injection able Adhesives, Grease , Steel /Concrete Drill Bits, Anchor Rods/Bolts, Hinges, Water Pump, Trowel Set, Spade, Scoop, Gloves, Shoes, Helmets, Masks, Goggles, Safety Nets, Safety Guard Dress, Lab Coats, Aprons, heating elements, Coils, Fibres, Mineral Admixtures, Graphene, Glass wool, Steel Wool, Computer Accessories, Acrylic Sheets, Steel Mesh, White board, Notice board, OPC 43 Grade Cement, PPC Cement, and White Cement, as well as POP (Plaster of Paris), pigment, GGBS (Ground Granulated Blast Furnace Slag), and fly ash. Other essential items comprise realizing agents, sand, coarse sand, aggregates, gunny bags, Ziplock bags, HDPE bags, LDPE bags, filter paper, and various tools like tongs, clamps, spatulas, scoops, flat spoons, spoon spatulas, and ointment spatulas. Additionally, safety equipment like examination gloves, masks, PPE kits, lab safety shoes, and lab safety hats are crucial for maintaining a safe working environment. R&D raw materials and round PP disposable caps are also part of the inventory for research and development activities.	48.00
612.	Glass wares	33.00

	Bottles, glasses, Beakers (various capacities) Desiccators Flasks, Beaker's Different Capacity, Desiccators Different Capacity, Dishes, Measuring Cylinder, Pipette Laboratory Bottles, Reagent Bottles, Specific Gravity Bottle (Pyknometer), Weighing Bottles, Gas Sampling, Tubes, Burettes, Auto burettes, Cones, Condenser, Viscometer, Volumetric Flask, Round Bottom Flask, Conical Flask, Glass Filtration Assembly, Mortar & Pestle, Weighing Scoop, Museum Jars, Funnels, Stirrer Rods, Glass Dryer. Quartz Ware: Beakers, Dishes & Basin, Crucible, Lid, Circular Capsule, Slides, reaction kettle, Soxhlet extractor, funnels etc.	
613.	Plastic wares Plastic Tub, Buckets, Mugs, Containers, bottle top dispensers, plastic wash bottle, beakers of different sizes, silicone tubing, electronic micropipette, water bottles, LDPE carboy with stopcock, aspirator bottle with stopcock, air-tight containers of different sizes, sample holder and storage, unbreakable plastic tubs, buckets, measuring cylinders, Face shield etc.	21.00
614.	Toner Cartridges. Black & White, Colour Powder and Ink Cartridges, Refilling, Drum Change etc.	12.00
615.	Batteries, etc. UPS batteries etc.	7.50
616.	Gases Liquid Nitrogen, CO ₂ , Nitrogen gas etc	11.00
617.	Maintenance/AMC/repairing of existing equipment AMC of UTM, Maintenance of CTM, Hyd. Cylinder, Hyd. Pump, Load Cells, LVDTs, DAQs, Environmental Chamber (PLC Problem, Humidity Sensor, etc.); Dilatometer (Calibration of Equipment, Service, software upgrades, etc.); UV Chamber (Calibration of Equipment, Service, software upgrades, etc.); CTM (Calibration of Equipment, Service, software upgrades, etc.); MOR (Calibration of Equipment, Service, software upgrades, etc.); C-Therm (Calibration of Equipment, Service, software upgrades, etc.); Accelerated Curing Tank (Calibration of Equipment, Service, etc.)	62.00
618.	Stationery items Papers, Photo Print Sheets, Markers, Tape, Scale, Files, Note Pads, Registers, Markers, Ink, Ink Pad, Stamp, Stapler, A4 sheet, bond paper reams, register/noting pads, stapler pins, glossy sheets, pens, permanent markers, whiteboard markers, sticker sheets, binding sheets, tape, highlighters, and more.	11.50
619.	IT / software-related Items Seismo Struct, Seismo Build, FRP Designer, Antivirus, MS office, etc., 3D designing Software, etc.	22.00
620.	Furniture Visitor Chair, Officer Chair, Tables, Office Chairs, Tables, Sofa set, File rack, Almira, Rack, Office stool, Conference table etc.	32.00
621.	Electric Items LED Lights, Junction box for extension, Heating Elements, Switches, Wires, Exhaust Fan, Air Circulator, LED light, circulated room heater, etc.	8.00
APEE		
622.	R&D Consumables for closed loop systems (by equipment name)	100.00
623.	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	50.00
624.	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.)	50.00
625.	Glass wares (ex- name the different glass wares)	5.00
626.	Plastic wares (ex- Name the different plastic wares)	5.00
627.	Toner Cartridges.	20.00
628.	Batteries, etc.	5.00
629.	Gases (ex- tentative names)	2.00
630.	Maintenance/AMC/repairing of existing equipment	200.00
631.	Stationery items (ex- name a few)	10.00
632.	IT / software-related Items (Name the items required during year)	20.00
633.	Furniture (Name the items required during year)	50.00
634.	Electric Items (Name the items required during year)	50.00
BMES		
635.	R&D Consumables for closed loop systems (by equipment name)	
636.	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	10.00
637.	Other Consumables (ex- Insecticide, Raw Materials, Packing Material, Column, Syringes, Transcriptome and Metagenome Analysis, Metabolites analyses, Farm Consumables, TLC	10.00

	Plates, Filter papers, Planting materials, seeds, Chemical standards, Essential oils, Standard aroma molecules, Animal feed, Cell Lines, Agriculture accessories, etc.)	
638.	Glass wares (ex- name the different glass wares)	20.00
639.	Plastic wares (ex- Name the different plastic wares)	15.00
640.	Toner Cartridges.	8.00
641.	Batteries, etc.	10.00
642.	Gases (ex- tentative names)	10.00
643.	Maintenance/AMC/repairing of existing equipment	35.00
644.	Stationery items (ex- name a few)	10.00
645.	IT / software-related Items (Name the items required during year)	65.00
646.	Furniture (Name the items required during year)	12.00
647.	Electric Items (Name the items required during year)	7.00
CAR		
648.	R&D Consumables for closed loop systems (by equipment name)	20.00
649.	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	20.00
650.	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.)	30.00
651.	Glass wares (ex- name the different glass wares)	
652.	Plastic wares (ex- Name the different plastic wares)	
653.	Toner Cartridges.	3.00
654.	Batteries, etc.	5.00
655.	Gases (ex- tentative names)	
656.	Maintenance/AMC/repairing of existing equipment	15.00
657.	Stationery items (ex- name a few)	2.00
658.	IT / software-related Items (Name the items required during year)	20.00
659.	Furniture (Name the items required during year)	10.00
660.	Electric Items (Name the items required during year)	10.00
FSE		
661.	R&D Consumables for closed loop systems Thermocouples, Loading Frame Setup, Heating Element for muffle furnace, Setup for fire exposed beam testing, Elements for furnace, sensors etc	35.00
662.	Chemicals: Acetone, Super plasticizer, Silica Fume, fly ash, GGBS, Oxidizing agents, reducing agents, binders, cross-linking agents, nitrile gloves, face mask N95, Eyeglasses, muslin cloths	20.00
663.	Other Consumables Aggregates, bricks, sand, cement, fibers CFRP/GFRP material, Steel Plates, Grease, oil, strain gauges, moulds, welding sticks, grinder blades, adhesive, drill bits, extension box, castable refractory, Safety shoes, gloves, masks, safety belts, Hydraulic press oil	50.00
664.	Glass wares Beakers, funnel, measuring cylinder	6.00
665.	Plastic wares Beakers, funnel, measuring cylinder	6.00
666.	Toner Cartridges Black & White, Color Powder and Ink Cartridges , Refilling, Drum Change	6.00
667.	Batteries, etc.	4.00
668.	Gases LPG for furnace, Mineral Turpentine oil	50.00
669.	Maintenance/AMC/repairing of existing equipment	38.00
670.	Stationery items Paper reams, Notepads,	6.00
671.	IT / software-related Items (Name the items required during year)	4.50
672.	Furniture (office furniture)	9.00
673.	Electric Items Thermocouple extension wires, relay, Solenoid Valves, heaters, fans	6.00
GEGH		
674.	R&D Consumables for closed loop systems (data logger, LVDT, etc.)	20.00
675.	Chemicals (sodium hexameta phosphate, solvents, Pluronic F -127, tributyl phosphate, lime, liquid Nitrogen, etc.)	15.00
676.	Other Consumables ((Strain gauges, carbon black, nano carbon, nano silica, HDPE powder, PP powder, Copperplates, sand, adhesive, porous stones, gaskets, membrane, cement, multimeter, soldering unit, etc.)	30.00

677.	Glass wares (Dessicator, Beaker, etc.)	6.00
678.	Plastic wares (Connectors, etc.)	3.00
679.	Toner Cartridges.	4.00
680.	Batteries, etc.	3.00
681.	Gases (Nitrogen)	2.00
682.	Maintenance/AMC/repairing of existing equipment	10.00
683.	Stationery items (A4Budle, Acrylic Paint, Adhesives, Sticky Notes, Pen, etc)	7.00
684.	IT / software-related Items (Antivirus, Pen Drive, Portable Disk, New/Upgradation of Software, etc.)	100.00
685.	Furniture (Chairs, Tables for labs, etc)	10.00
686.	Electric Items (Extension Box, etc.)	2.00
HSS		
687.	R&D Consumables for closed loop systems (by equipment name)	50.00
688.	Chemicals (ex.- Name the different chemicals like Solvents, Biochemical/s, Biochemical kits & enzymes, Diagnostic kits, Sequencing, Oligonucleotides, etc.)	30.00
689.	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.)	20.00
690.	Glass wares (ex- name the different glass wares)	10.00
691.	Plastic wares (ex- Name the different plastic wares)	10.00
692.	Toner Cartridges.	5.00
693.	Batteries, etc.	5.00
694.	Gases (ex- tentative names)	5.00
695.	Maintenance/AMC/repairing of existing equipment	30.00
696.	Stationery items (ex- name a few)	10.00
697.	IT / software-related Items (Name the items required during year)	20.00
698.	Furniture (Name the items required during year)	50.00
699.	Electric Items (Name the items required during year)	10.00
700.	R&D consumables: raw material for concrete, technical textile, steel wire mesh, etc.	20.00

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 chemicals & consumables 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 indicated procurement value is an estimate only.

Priority list of equipment for Central Testing Facility

Sr.	Person	Name of Equipment	Cost in Cr
1.	Dr Srinivasan	XRD: Identifying unknown crystalline substances, such as minerals or inorganic compounds.	1.0
2.	Dr. S. Maiti	XRF:an analytical technique used to determine the elemental composition of materials	1.0
3.	Dr. R. Siva Chidambaram	100T UTM Controller and Software Update	0.50
4.	Dr. Anindya Pain	Ground Penetrating Radar(GPR)	1.5
5.	Dr. Siddharth Behera	3D Laser Scanner and software	0.60
6.	Dr. SK Singh	Eddy Current System for Steel Structures	0.25
7.	Dr. SK Singh	Phase array ultrasonic Testing for Steel Structures	0.35
8.	Dr. Anindya Pain	Cyclic Simple Shear Apparatus	1.5
9.	Nagesh Babu Balam	Instrument set-up for measuring Acoustic properties of materials and room with Environmental noise measurement and assessment unit and Impedance Tube	0.90
10.	Nagesh Babu Balam	Instrument for measuring Solar Reflectance Index (SRI)	0.40
11.	Dr. R.K. Verma	Dynamic Light Scattering Instrument	0.50
12.	Sh. Kantilal Solanki	VMC (Vertical Machining Center)	0.60
13.	Nagesh Babu Balam	9kVA Programmable Electronic Load Bank	0.50
14	Dr. Siddharth Behera	Ground Penetrating Radar : Accessories	0.60 (Will be discussed further)
16	Dr. Anindya Pain	Resonant Column Apparatus	1.80
17	FR LAB	Spray particle and spray droplet size measurement	0.70
18	FR LAB	Steiner Tunnel: ASTM E84 Tunnel apparatus	0.30
19	FR LAB	Radiant heat source floor panel	0.45
20	CAR Group	CNC Lathe	0.30
21	CAR Group	PCB Printing Machine	0.12
List of equipment for Individual Group as asked by Heads (To be decided by Central Equipment Resource committee)			
1	CAR Group	6-axes CNC Controller set-up with actuators and accessories	0.20
2	FR LAB	High pressure slurry paint spray machine	0.055 Lakh
3	Dr. PC Thapliyal	Retrofit UH-A/C/I-1000Kn XR w/o Indicator, 3 Phase 415 V	\$(USD) 33500
4	Dr Saurabh Jain	Rheometer	0.50
5	Dr Saurabh Jain	Doctor blade coating machine	0.10
6	Dr Saurabh Jain	Gas Analyzer	0.15
7	Dr Saurabh Jain	Ultrasonic Probe Sonicator	0.10
8	Dr Saurabh Jain	Single burning Item test Apparatus EN13823	1.5
9	Dr Saurabh Jain	Muffle furnace Up to 1200 oC (automatic)	0.70
10	Dr Saurabh Jain	Compression testing machine – load and displacement control	0.20 Lakh
11	FR LAB	Spray particle and spray droplet size measurement	0.70
12	FR LAB	Steiner Tunnel: ASTM E84 Tunnel apparatus	0.30
13	FR LAB	Radiant heat source floor panel	0.45