



Bio-Resources Development Centre

(A Government of Meghalaya R & D Institution under Science & Technology, Planning Department)

5½ Mile, Upper Shillong, Shillong – 793009, Meghalaya.



0364-2561530 |



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EXPRESSION OF INTEREST (EOI) DOCUMENT

ENGAGEMENT OF SERVICE PROVIDER

FOR

OPERATING, MAINTAINING & MANAGING

THE

QUALITY CONTROL AND ANALYTICAL LABORATORY AT THE BIO-RESOURCES DEVELOPMENT CENTRE EXPERIMENTAL FARM, LAITMYNSAW VILLAGE, UPPER SHILLONG

EOI No. P4-PLN/BRDC/01320/2024/NE/ 70

Dated: 27th September, 2024

Bio-Resources Development Centre,
5½Mile, Upper Shillong, Opp. Indo-Danish Project,
Department of Animal Husbandry & Veterinary, Govt. of Meghalaya,
Meghalaya- 793009

EOI Advertisement:

Bio-Resources Development Centre, BRDC	
Request for Expression of Interest (EOI) for	
Engagement of service provider for operating, maintaining & managing the quality control and analytical laboratory at the Bio-Resources Development Centre Experimental farm, laitmynsaw village, upper shillong	
Date of issue	27 th September, 2024
Last date of submission of EOI	Up to 3 PM IST of 30 th October 2024
How to get copy of EOI document	Details of EOI can be downloaded from https://mbda.gov.in , https://megbrdc.nic.in/ "Corrigendum, Addendum" if any, would appear only on the said web sites and not to be published in any News Paper
Contact information	O/o Bio-Resources Development Centre (BRDC), 5 ½ Mile, Upper Shillong, - 793009 Mail ID: brdcshillong@gmail.com
Contact person	Mr. Thomas Iangjuh (8837076630) Dr. Junie Pearl Lyngdoh (6009574748/8794730851)

1. Notice Inviting Expression of Interest (EOI)

Bio- Resources Development Centre (BRDC) invites Expression of Interest (EoI) from experienced and eligible firms/consulting firms for Engagement of Service Provider to Operate, Maintain & Manage the Quality Control and Analytical Laboratory (QCAL) at the Bio-Resources Development Centre's Experimental Farm, Laitmysaw Village, Upper Shillong.

2. Important information and dates:

EoI No	P4-PLN/BRDC/01320/2024/NF/70
Name of the Work	Engagement of Service Provider to Operate, Maintain & Manage the Quality Control and Analytical Laboratory (QCAL) at the Bio-Resources Development Centre's Experimental Farm, Laitmysaw Village, Upper Shillong.
Brief Scope of Work	<ul style="list-style-type: none">➤ Operation and maintenance of facilities, including testing of food samples as per APEDA guidelines.➤ The Bidders are advised to carry out On-site inspection of the existing facilities to ascertain their suitability for use and financial bid.➤ The laboratory will be handed over in as is where is basis to the successful Bidder .➤ Supporting the Manpower through training and capacity building.➤ The contract period will be one year from the date of signing of the contract and may be extended further based on the requirement of BRDC➤ The agency should be NABL accredited.➤ Successful Bidder will engage the Manpower available at the Laboratory and have to make provision for guiding or supporting the existing Manpower for smooth operation of the Quality Control and Analytical Laboratory (QCAL).
Date of Issue of EOI	27 th September 2024
Last date for submission of clarification queries	17 th September 2024 before 3 PM IST
Pre-bid Meeting	18 th September 2024, 1 PM IST O/o Bio-Resources Development Centre (BRDC), 5 ½ Mile, Upper Shillong, -793009 OR Bidders can attend the virtual meeting. Interested bidders will have to mail brdcshillong@gmail.com for the link request

Last date & time of submission of EOI	30 th October 2024 before 3 PM IST
Date & Time of Opening of EOI applications	30 th October 2024 at 3:30 PM IST
Address for communication/ submission of EOI	O/o Bio-Resources Development Centre (BRDC), 5 ½ Mile, Upper Shillong, - 793009 Mail ID: brdcshillong@gmail.com
Proposal Submission	The EoI should be submitted in a sealed envelope with: <ol style="list-style-type: none"> 1. One original copy and one duplicate copy 2. Only short-listed firms will be invited to submit their technical and financial proposal (RFP)

3. Executive Summary

1.1 Background

Bio Resources Development Centre is a registered institution under the Meghalaya Society Registration Act XII of 1983 under the Department of Planning, Govt. of Meghalaya. It became operational during the year 2003. The registered office of the BRDC is located at 5 ½ Mile, Upper Shillong. The mandate of the Centre is “Availing biotechnological opportunities and appropriating/ customizing such technologies into meaningful knowledge resources to conserve and sustainably use biological resources for promoting multiple livelihoods and local green economy”. BRDC as an R&D Institution is promoting sustainable green technologies to the farming communities through training and capacity building to the farmers across the State of Meghalaya, promote indigenous system of Medicine through value addition of herbal medicines, documentation of Traditional Knowledge and practices in the state and promote conservation of indigenous orchids, horticultural and agricultural crops through tissue culture techniques. Other programmes include R&D and production of biofertilizers to ensure availability of bio-inputs for various agricultural and horticultural crops, Seed saving initiative for food security is being carried out for indigenous/ local/ heirloom seeds. These programmes and initiatives have made many transformative impacts on various stakeholders of the State.

The Centre is also the state organic certifying agency and it is the authorized Regional Council for PGS-India Certification programme under the Ministry of Agriculture and Farmers’ Welfare, Government of India.

Farming in Meghalaya is basically Organic by practice and therefore there is ample scope for expanding and exploiting the market potential of this sector in the right direction. The Meghalaya Mission Organic is emphasizing on the need to build the entrepreneurial capacity of the farmers towards achieving business acumen in the process of Organic production and marketing in a strategic manner. Organic Certification Programme

associated with this Mission will facilitate linkage of our Organic products with Organic Markets at National and International levels and standards.

Pesticide residue testing, besides other parameters that fulfil the SOPs of Organic practices is highly crucial in validating organic certification under the Third party/National Program on Organic Production (NPOP) and PGS Programmes. Additionally, pesticide residue-free marketing of organic and traditionally farmed produce is also envisaged under BRDC-Trust Organic Brand of the State. Hence, availability of a quality control/testing unit in the State will not only facilitate authentication of local organic produce/products but also offers revenue generating opportunities for the State by catering to the testing requirements of other North Eastern States.

In pursuance to this quality control and testing requirements in the State, the Quality Control and Analytical Laboratory is proposed to be set-up at BRDC Experimental Farm, Laitmynsaw, Upper Shillong, Meghalaya.

1.2 Objectives

This document is a Request for Proposal (RFP) for Engagement of Service Provider to Operate, Maintain & Manage the Quality Control and Analytical Laboratory (QCAL) at the Bio-Resources Development Centre's Experimental Farm, Laitmynsaw Village, Upper Shillong.

1.3 Scope of Work

- (i) To operate and manage the Quality Control and Analytical Laboratory (QCAL).
- (ii) The successful Bidder will conduct qualitative and quantitative analysis of food products as per the parameters defined under APEDA guidelines.
- (iii) The Successful Bidder will provide technical and supporting staff/ human resources at Quality Control and Analytical Laboratory (QCAL) and will operate and maintain the facilities for 1 year which may be extended further on same rates, terms and conditions, subject to satisfactory performance of the successful Bidder. The performance will be reviewed annually from the date of commencement of contract.
- (iv) The Bidder may accept commercial samples and referral samples from MSOCB/RC and any other Authorized Samplers for analysis.
- (v) The laboratory will be handed over in as is where is basis to the successful Bidder and he will be responsible for up keeping and complete operation & maintenance of the laboratory.
- (vi) QCAL will retain the legal identity of the laboratory and the Director of the laboratory, Technical Manager and Quality manager along with the Head Sample Cell will be the employees of QCAL appointed and deputed by QCAL. The Bidder will have to ensure that the analysis of samples is carried out to the full satisfaction of the Director (QCAL).
- (vii) All quality & safety parameters as defined under APEDA guidelines made thereunder shall be covered under APEDA-NABL Integrated assessment accreditation system.
- (viii) Any issues regarding upgradation and day to day operation of Quality Control and Analytical Laboratory (QCAL) after handing over the same to the successful Bidder will be resolved by the Technical Committee or any other committee specifically constituted for the purpose.

A. The scope of the work is divided into following components:

- a) Operation and maintenance of facilities, including testing of food samples as per APEDA guidelines.
- b) The Bidders are advised to carry out On-site inspection of the existing facilities to ascertain their suitability for use and financial bid.
- c) The laboratory will be handed over in as is where is basis to the successful Bidder.
- d) Supporting the Manpower through training and capacity building.
- e) The contract period will be one year from the date of signing of the contract and may be extended further based on the requirement of BRDC.
- f) The agency should be NABL accredited.

B. Manpower:

The QCAL will provide manpower as indicated below:

- a) Successful Bidder will engage the Manpower available at the Laboratory and have to make provision for guiding or supporting the existing Manpower for smooth operation of the Quality Control and Analytical Laboratory (QCAL).
- b) Any additional requirement of Manpower can be stated in the proposal depending on the number of the samples required to be analysed. The educational qualification, experience, etc. of the manpower has to be in accordance with the requirement of ISO 17025 which has to be ensured by the successful Bidder.

Note:

The prospective Bidders may visit the laboratory to overview the layout of the laboratory can inspect the condition of equipment before bidding. Before visiting the site, prior approval from Director, Quality Control and Analytical Laboratory (QCAL) may please be sought.

4. FINANCIAL ARRANGEMENT FOR THE QUALIFIED SERVICE PROVIDERS:

4.1 The Annual operating cost calculated on Monthly basis for analyzing 400 guaranteed samples per month, for 1 year, to be quoted by the Bidders.

Explanatory note: A monthly fixed cost for the complete analysis of 400 samples will be calculated as per proposal submitted by the Bidder and approved by the Competent Designated committee. MSOCB/RC will ensure a minimum of 400 samples per month to the Bidder. In case the samples received for testing in a month are lesser than 400 sample, only the available balance will be carried forward to the subsequent Month.

4.2 In case the number of samples exceed 400 sample per month, testing charges for extra samples will also be determined as per proposal submitted by the Bidder and approved by the Competent Designated committee. The testing charges will be considered from the date of receiving of samples and the Testing Fees should be made available by the Agency and the monthly bill will be submitted against total samples received in a month.

4.3 Further, in case numbers of samples exceeds 400 sample per month, a revenue sharing model may be submitted by the Bidder.

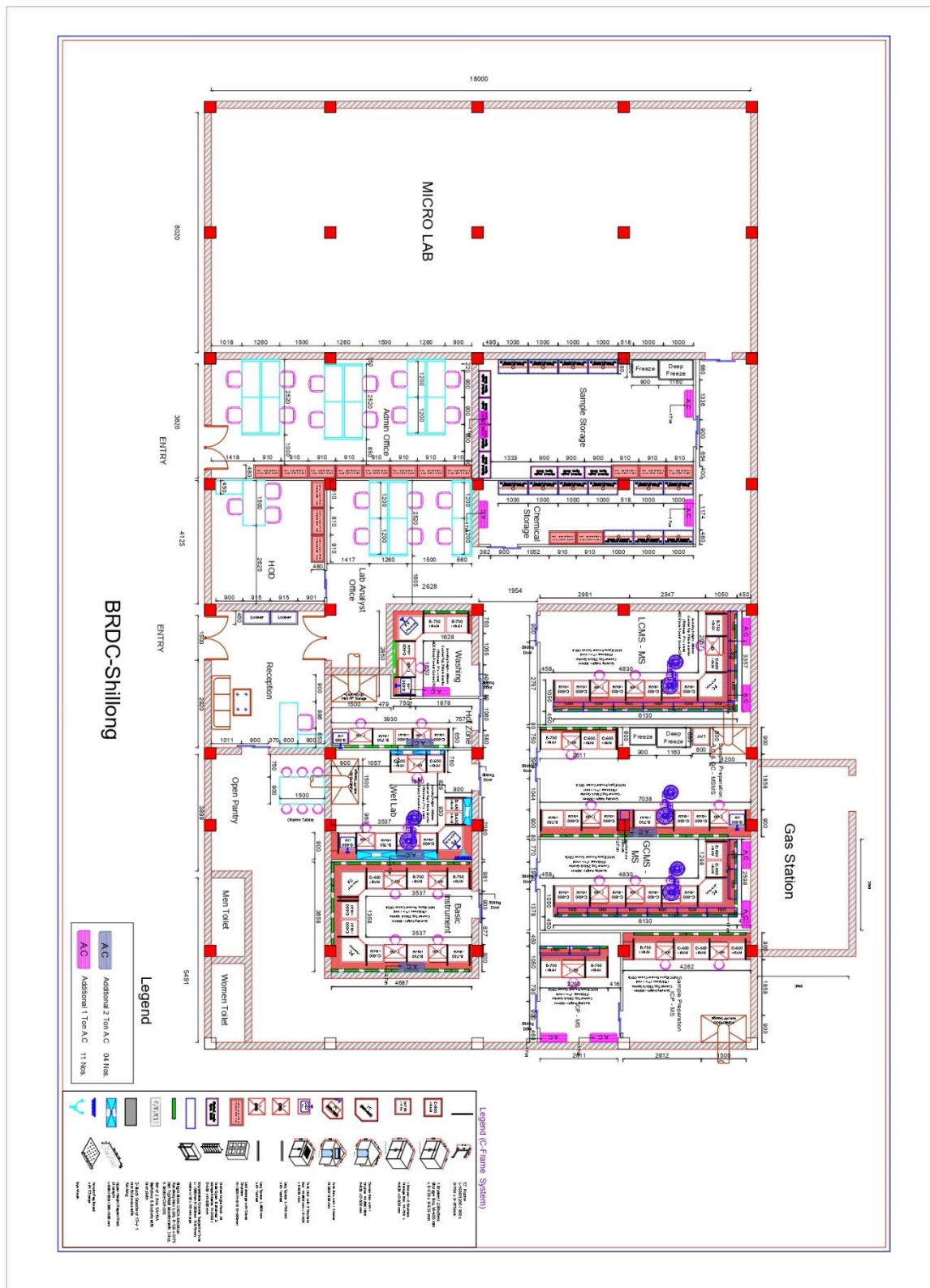
4.4 No other cost per month will be payable to the successful Bidder.

4.5 The samples handed over to the Agency up to the last date of particular month will be included in the total samples for that particular month viz. samples handed over to the successful agency till _____ will be calculated in the month of _____ only. The same cannot be transferred to the next month billing just because of testing can only be possible in the next month.

5. Details of the Quality Control and Analytical Laboratory:

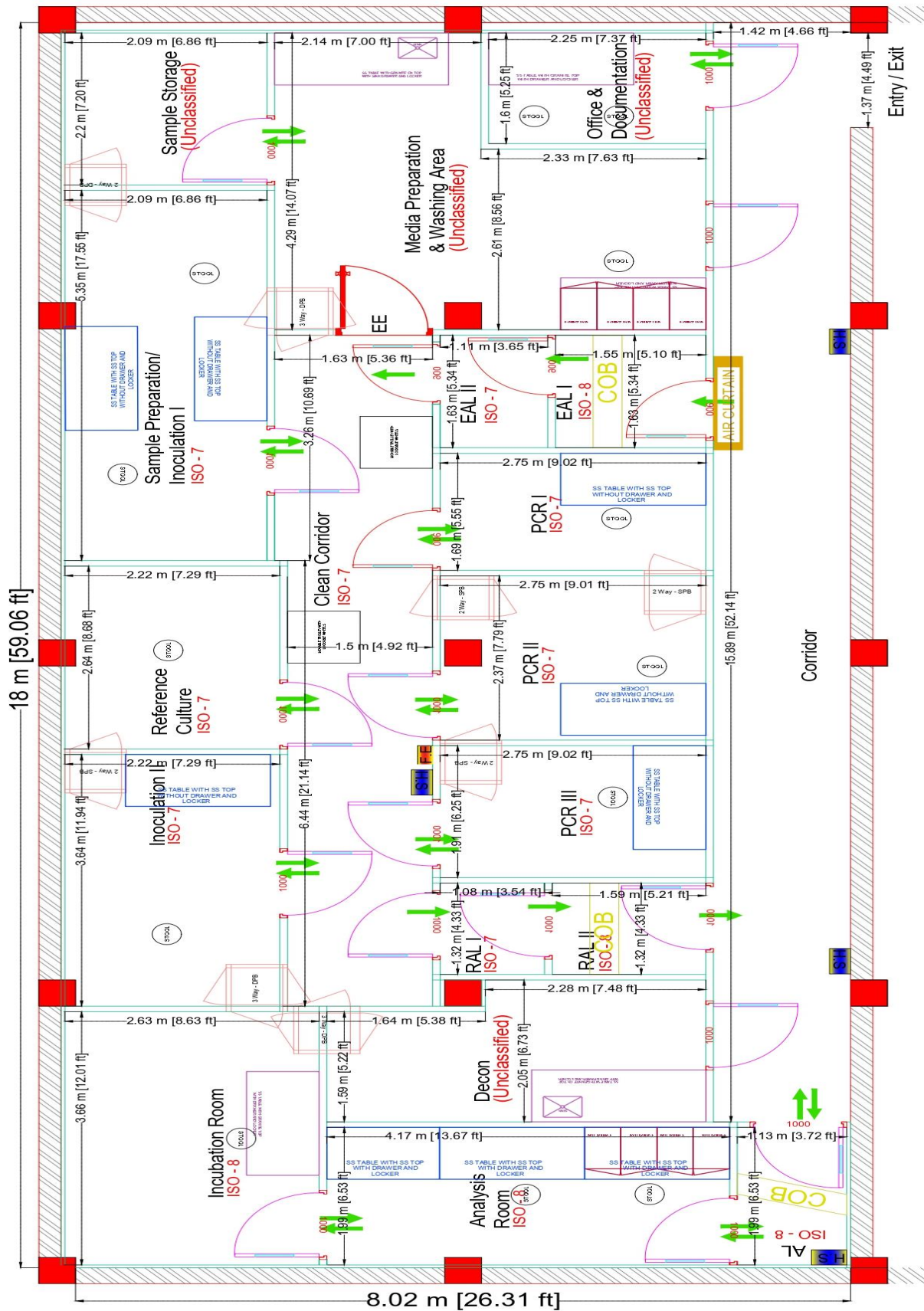
5.1 Drawings and Plans of the Laboratory:

- A. Chemical testing Unit- Proximate testing, Instrumentation Unit and High end Equipment Unit
- B. Administrative Unit



C. Microbiology and Molecular Biology Testing Units

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5.2 List of Equipment and Consumables:

SNo.	Equipment	Application
A	NUTRITIONAL PROXIMATE TESTING IN FRUITS VEGETABLES WATER AND SOIL MATRIX	
1	Butyro Refractometer with temperature control	Refractive index of liquids and oils
2	BOD Incubator	Used for B.O.D. Determinations.
3	BOD Analyzer	Used for B.O.D. Determinations.
4	Clevenger Apparatus Glass assemble	Volatile oil determination
5	COD Digestion Unit	Cod determination of water
6	Conductivity Meter-Benchtop	Conductivity determination
7	pH meter	To measure the pH
8	Flame Photometer	Minerals in soil samples
9	Automated Fiber analyser	Determination of fibre
10	Automated Kjeldahl system	Determination of protein
11	Hot air Oven	For moisture determination
12	High Speed Blender	Sample preparation
13	Kjeldahl for Nitrogen glass assemble	Determination of protein
14	Soxhlet Apparatus glass assemble	Determination of fat
15	Vacuum Desiccator	Sample preparation
16	Variable Volume Micropipette (.5micr to5 ml each1set)	Sample preparation
17	Dessicator (300MM)	Sample preparation
18	Fume Exhaust Hood	Sample preparation
19	Heating Mantle with Energy Regulator	Sample preparation
20	Hot Plate with Energy Regulator.	Heating of different samples
21	Refrigerator (264 L;3-80°C)	Sample and chemical storage
22	Standard Weight (F2)	Intermediate checks on balances
23	Weighing Balance (top loading)	Sample preparation
24	Analytical Balances (0.1mg)	Sample preparation
25	Centrifuges ambient	For the sedimentation
26	Hot plate cum stirrers	Used for mixing along with heating
27	Laboratory Blender	Sample preparation
28	Muffle Furnace 450°C	Determination of total ash
29	Oven Moisture -100°C	For glassware drying
30	Orbital Shakers	Mixing and extraction
31	Solvent Dispensers- Organic &Acids	Sample preparation
32	TDS meter	Determination of TDS of water
33	Waring Blender/grinding mill	Used to grinding
34	Water Bath	Sample preparation
35	UV-Visible Spectrophotometer	Quantitative determination
36	Turbidity Meter	Turbidity of liquids and water
B	HIGH END EQUIPMENT FOR PESTICIDES, METALS AND CONTAMINANT ANALYSIS IN FOOD, SOIL AND WATER SAMPLES	
1	Gas Chromatography (GC-FID with head space)	Determination of fatty acids
2	Gas Chromatography (GC-MS-MS)	Determination of pesticides
3	Liquid chromatography UHPLC with PDA, RI and HD	Determination of colours
4	High Performance Liquid Chromatography LC MS-MS	Determination of pesticides
5	Inductively Coupled Plasma (ICP-MS)	Determination of heavy metals
C	ANCILLARY EQUIPMENT FOR SAMPLE PREPARATION IN HIGH END TESTING	

1	Nitrogen evaporators	For evaporation of solvents
2	Automated Solid phase extractor	Sample preparation
3	Deep Freezer -20	Storage of standards
4	pH meter	To measure the pH of any solution
5	Hot air Oven	For moisture determination
6	High Speed Blender	Sample preparation
7	Water purification system with type1 and 2	Used for making type1 and type 2 lab Grade water
8	Variable Volume Micropipette (.5 micr to 5ml each 1set)	Sample preparation
9	Ultrasonic Water bath	For mixing and degassing of mobile phase
10	Desiccator (300MM)	Sample preparation
11	Fume Exhaust Hood	Sample preparation
12	Heating Mantle with Energy Regulator (500 ml)	Sample preparation
13	Hot Plate with Energy Regulator (Temperature range100°C)	Heating of different samples
14	Refrigerator (264 L;3-80°C)	Sample and chemical storage
15	Standard Weight (F2)	Intermediate checks on balances
16	Vacuum Pressure Pump	Sample preparation
17	Weighing Balance (top loading)	Sample preparation
18	Analytical Balances (0.01,0.001 and 0.0001g accuracy)	Sample preparation
19	Hot plate cum stirrers	Sample preparation
20	Laboratory Blender	Sample preparation
21	Oven Moisture-100°C	For glassware drying
22	Orbital Shakers	Mixing and extraction
23	Rotatory Vacuum Evaporator	Large volume evaporations
24	Solvent Dispensers- Organic &Acids	Sample preparation
25	Vortex Mixers	To mix small vials of liquid.
26	Waring Blender/ grinding mill	Used to grinding samples
27	Water Bath	Sample preparation
28	Microwave Sample Digester	Sample preparation of heavymetal
29	Centrifuges refrigerated	Sample preparation of pesticides

ADDITIONAL ITEMS REQUIRED DURING THE 1 ST PHASE		
SNo.	Equipment	Application
A	NUTRITIONAL PROXIMATE TESTING IN FRUITS VEGETABLES WATER AND SOIL MATRIX	
1	Automated Fat analyser	Determination of fat
2	Bottletop burettes	Titration
3	Thermo couple sensor	For calibration of temperature in lab
4	Solvent storage cabinet	Storage of organic solvents
5	Acid storage cabinet	For storage of all acids with exhaust system
6	Mercury Thermometer	Temperature range: 10 to 360°C
B	ANCILLARY EQUIPMENT FOR SAMPLE PREPARATION IN HIGH END TESTING	
1	Nitrogen generator (other than LC-MS-MS)	Sample preparation
2	Digital Stop Watch	Sample preparation
3	Thermo couple sensor	Sample preparation
4	Flow meter	For Calibration of flow
5	Solvent storage cabinet	Storage of organic solvents
6	Acid storage cabinet	For storage of acids

MICROBIOLOGY:

Sl. No.	Name of Equipment
1	Anaerobic Jars
2	Analytical Balance (Macro)
3	Vertical Autoclave
4	Automated Culture Media Preparator with pourer stacker
5	Automated glassware washer
6	Binocular Microscope
7	Bio Safety Cabinet Class II Type B2 (Total Exhaust)
8	BOD Incubator (Fungi, Bacteria, Mycorrhiza)
9	Carbon dioxide incubator
10	Colony Counter
11	Digital pH Meter
12	Frost Free Double door (side by side) Refrigerator
13	Fumigator
14	Hot Air Oven
15	Howard Mold Counter
16	Laminar Air flow
17	Micro Filtration Assembly
18	Micropipettes

19	Orbital shaker
20	Refrigerated Centrifuge
21	Upright Frost Free Vertical Deep Freezer (-25 °C)
22	UV Viewing Chamber
23	Ultrapure Water Purification System

Consumables list (for the tests)

S.No.	Chemicals	Description
1	Acetic acid	Acetic Acid LCMS Grade
2	Formic acid	Formic Acid LCMS Grade
3	Acetonitrile	Acetonitrile LCMS Grade
4	Methanol	Methanol LCMS Grade
5	Ethyl Acetate	Ethyl Acetate MS grade
6	Nitric Acid	Nitric acid, 67-70%, for trace metal analysis
7	H2O2	Hydrogen Peroxide Trace Metal Grade
8	Tuning Solution for ICP-MS	Tuning Solution for ICP-MS
9	Pierce Triple Quadrupole Calibration Solution	Pierce Triple Quadrupole Calibration Solution
10	GCMS Tuning Standard - PFTBA	GCMS Tuning Standard - PFTBA
11	Primary Secondary Amine (PSA) Agilent	
12	Graphitized Carbon Black Agilent	
13	Sodium Acetate Anhydrous Agilent	
14	Sodium Chloride, Agilent	
15	Magnesium sulfate, Agilent	
16	C18	
17	Diethylene Glycol AR	
18	Ethyl acetate, HPLC Grade	
19	Anhydrous Sodium Sulfate, AR Grade	
20	Ammonium formate, MS Grade	
21	Syringe filter 0.22 micron	

S.No.	Consumables	Description
1	Column GC -MS-MS	GC COLUMN 30MX0.25MMX0.25UM
2	Column LC -MS-MS	HYPERSIL,100X2.1MM 1.9UM GOLDHILIC
3	Column LC -MS-MS	HYPERSIL GOLD C18 1.9UM 100X2.1MMCOLUMN
4	10 Microliters injection syringe	10 microliter fixed needle syringe
5	QUECHERS extraction kit	QUECHERS extraction kit with 50 ml tube
6	QUECHERS cleanup kit	QUECHERS cleanup kit 15ml tubes for fruits and vegetables
7	2 ml vials	LC-MS and GC-MS Vials
8	2 ml vials cap septa	LC-MS and GC-MS cap Septa
9	0.2 micro nylon syringe filter	13mm diameter, 0.22um poresize
10	2 ml disposable syringe	2 ml disposable syringe
11	5 ml disposable syringe	5 ml disposable syringe
12	Centrifuge Tubes 15ml	Centrifuge Tubes 15ml
13	Centrifuge Tubes 50ml	Centrifuge Tubes 50ml
14	Nitrile gloves large	Large Gloves Nitrile power free
15	Nitrile gloves medium	Medium Gloves Nitrile power free
16	Volumetric flask 10 ml	10 ml Volumetric Flask with class A certification 17025 compliance
17	Volumetric flask 25 ml	25 ml Volumetric Flask with class A certification 17025 compliance
18	Volumetric flask 50 ml	50 ml Volumetric Flask with class A certification 17025 compliance
19	Volumetric flask 100 ml	100 ml Volumetric Flask with class A certification 17025 compliance
20	Beaker 100 ml	100 ml Beaker with class A certification 17025 compliance
21	Beaker 500 ml	500 ml Beaker with class A certification 17025 compliance
22	Beaker 50 ml	50 ml Beaker with class A certification 17025 compliance

23	Beaker 1000 ml	1000 ml Beaker with class A certification 17025 compliance
24	Plastic volumetric flask 50 ml	50 ml PFA wares For trace analysis
25	CRM storage vials 10 ml amber colour	10 ml amber Vials with screw caps for CRMs storage
26	Moisture Trap	
27	Gas Cylinders	Argon
28	Gas Cylinders	Helium

S.No.	ISO-17034 Traceable CRMs-Mixed/individual Standards	
Proximate		
1	Pot. Hydrogen phthalate	
2	Pot. Dicromate	
3	Pot. Carbonate	
4	Sod chloride	
5	Caffine	
6	Pot Chloride	
7	pH 4 ,7 and 9	
8	Toluene	
9	Sucrose	
Heavy metals		
1	Lead	
2	Copper	
3	Arsenic	
4	Tin	
5	Cadmium	
6	Mercury	
7	Iron	
8	Indium	
9	Thulium	
10	Lutetium	
11	Gold	
12	Nickel	
13	Chromium	
14	Antimony	
15	Internal Standard Solution of Rhodium	
Contaminants		
1	Melamine	
2	Saffrol	

3	Hydrocyanic acid
4	Agaric acid
Microbial Ref culture	
1	Yeast and mold
2	Salmonella spp.
3	E.coli
4	Staphylococcus aureus
5	Enterobacteriaceae
Molecular CRM	
1	Allergen
2	GMO

List of Pesticides to be tested:

S.No.	ISO-17034 Traceable CRMs-Mixed/individual Standards
1	Aldrin
2	4-bromo-2-chloro
3	Phenol
4	Abamectin
5	Acephate
6	Acetamiprid
7	Alachlor
8	Allethrin
9	bioallethrin
10	Ametoctradin
11	Atrazine
12	Azoxystrobin
13	Benalaxyl
14	Bendiocarb
15	Benomyl
16	Bifenazate
17	Bifenthrin
18	Bitertanol
19	Boscalid*
20	Buprofezin
21	Butalachlor
22	Captafol
23	Captan
24	Carbaryl
25	Carbendazim
26	Carbofuran
27	Carbosulfan
28	Benfuracarb
29	3 Hydroxy cabofuran
30	Carboxin
31	Cartap-hydrochloride
32	Chlorantraniliprole
33	cis-chlordane
34	trans-chlordane
35	Chlorfenapyr
36	Chlorfenvinphos
37	Chlorfluazuron
38	Chlorothalonil
39	Chlorpropham
40	Chlorpyriphos
41	Chlorpyriphos-methyl
42	Clothianidin
43	Cyazofamid
44	Cyflumetofen

45	Cyfluthrin 1
46	Cyfluthrin 2
47	Cyfluthrin 3
48	Cyfluthrin 4
49	Cymoxanil
50	Cyntraniliprole
51	Cypermethrin 1
52	Cypermethrin2
53	Cypermethrin3
54	Cypermethrin4
55	Dazomet
56	p,p'-DDT
57	o,p'-DDT
58	p,p'-DDE
59	p,p'-TDE (DDD)
60	Deltamethrin
61	Diafenthiuron
62	Diazinon
63	Dichlorvos
64	Dicofol
65	Dieldrin
66	Difenconazole
67	Diiflubenzuron
68	Dimethoate
69	Omethoate
70	Dimethomorph
71	Dinotefuron
72	Diuran
73	Dodine
74	Edifenphos
75	Emamectin Benzoate
76	alpha-Endosulphan
77	beta-Endosulphan
78	Endosulphan sulphate
79	Endrin
80	Epoxiconazole
81	Ethion
82	Ethiprole
83	Ethofenprox
84	Etoxazole
85	Etrimphos
86	Famoxadone
87	Fenamidone
88	Fenarimol
89	Fenazaquin
90	Fenhexamid (F)

91	Fenitrothion
92	Fenobucarb
93	Fenpropathrin
94	Fenpyroximate
95	Fenthion
96	Fenthion-sulfone
97	Fenthion-sulphoxide
98	Fenvalerate
99	Fipronil
100	Fipronilsulfone
101	Fluazifop-P
102	Flubendiamide
103	Flufenacet
104	Flufenoxuron
105	Flufenzine
106	Fluopicolide
107	Fluopyram
108	Flusilazole
109	Fluxapyroxad
110	Forchlorfenuron (CPPU)
111	Alpha-HCH
112	Beta-HCH
113	Delta-HCH
114	Heptachlor
115	Heptachlor epoxide
116	Hexaconazole
117	Hexythiazox
118	Imidacloprid
119	Indoxacarb
120	Iodosulfuron-methyl
121	Iprobenphos
122	Iprodione
123	Iprovalicarb
124	Isoprothiolane
125	Isoproturon
126	Kresoxim methyl
127	Lambda-cyhalothrin
128	Lindane(Gamma HCH)
129	Linuron
130	Lufenuron
131	Malathion
132	Malaoxon
133	Mandipropamid
134	Metalaxyl
135	metalxyl-M
136	Methamidophos

137	Methomyl
138	Metolachlor
139	S -Metolachlor
140	Metrafenone
141	Metribuzin
142	Milbemycin A3
143	Milbemycin A4
144	Monocrotophos
145	Myclobutanil
146	Nitenpyram
147	Novaluron
148	Oxadiazon
149	Oxycarboxin
150	Oxydemeton- methyl
151	Demeton-S-methylsulfone
152	Oxyfluorfen
153	Oxamyl
154	Paclobutrazol
155	Parathion ethyl
156	Parathion methyl
157	Paraoxon methyl
158	Penconazole
159	Pencycuron
160	Pendimethalin
161	cis-Permethrin
162	trans-Permethrin
163	Phenthoate
164	Phorate
165	Phorate-sulfone
166	Phorate-sulfoxide
167	Phosalone
168	Phosphamidon
169	Picoxystrobin*
170	Primiphos methyl
171	Profenophos
172	Propamocarb
173	Propanil
174	Propargite
175	Propetamphos
176	Propiconazole
177	Propoxur
178	Pymetrozine
179	Pyraclostrobin
180	Pyridaben
181	Pyriproxyfen
182	Quinalphos

183	Simazine
184	Spinetoram
185	Spinosyn A
186	Spinosyn D
187	Spirodiclofen
188	Spiromesifen
189	tau-Fluvalinate
190	Tebuconazole
191	Temephos
192	Tetraconazole
193	Thiabendazole
194	Thiacloprid
195	Thiamethoxam
196	Thiobencarb
197	Thiocyclam
198	Thiodicarb
199	Thiometon
200	Thiophanate-methyl
201	Tolfenpyrad
202	Transfluthrin
203	Triadimefon
204	Triadimenol
205	Triazophos
206	Trichlorfon
207	Tricyclazole
208	Tridemorph
209	Trifloxystrobin
210	Trifluralin
211	Uracil
212	1-NAA
213	1-Naphthyl Acetamide
214	2-4 -D
215	4 -CPA
216	Azadiractin A
217	Azadiractin B
218	Furathiocarb
219	Diquat
220	Dithianon
221	Dithiocarbamates
222	Ethephon
223	Flonicamide
224	TNFG
225	TNFA
226	Fosetyl -Al
227	Phosphonic Acid
228	Glufosinate

229	MPP
230	NAG
231	Glyphosate
232	Homobrassinolide
233	Hydrogen Cyanamide
234	Mepiquat
235	Dinocap
236	Nereistoxin
237	Paraquat
238	Spirotetramat
239	Spirotetramat- Enol
240	Spirotetramat-Ketohydroxy
241	Spirotetramat-Enol Glucoside
242	Spirotetramat-monohydroxy
243	Sulfoxaflor
244	Flupyradifurone
245	Clofentezine
246	Afidopyropen
247	4-Chloro 3- Methyl Phenol
248	Spinoteram
249	Epoxyconazole
250	Chlormequatchloride
251	6- Benzaldenine
252	Gibberalic Acid
253	Thiram

List of glassware, general apparatus and miscellaneous accessories

1. Beakers (Different capacities)
2. Bell Jar
3. Blue litmus paper
4. Burettes
5. Crucibles
6. Conical flasks with stoppers
7. Desiccators/ vacuum desiccators
8. Digestion Flasks (300 ml)
9. Erlenmeyer Flasks
10. Filter paper circles and sheets of different grades
11. Funnels
12. Glass Pipettes
13. Glass beads
14. Gooch crucibles
15. Kjeldhal Distillation flasks
16. Litmus Paper
17. Measuring cylinders
18. Pipette bulbs

19. Pumice fine powder
20. Litmus papers
21. Separating Funnels
22. Sieves
23. Silica dishes
24. SO₂ Distillation set
25. Soxhlet Extraction Unit
26. Test tubes all sizes (stoppered and un stoppered)
27. Thimbles 20/80
28. TLC Chamber rectangular (250 x 250 x 120 mm)
29. Tripod Stand
30. Volumetric flasks
31. Vacuum grease
32. Wash bottles (glass and plastic)
33. Wire gauze
34. Microbiology Laboratory:
 - a. Test tubes
 - b. Petri Dishes
 - c. Durham's tubes
 - d. Dilution and media storage bottles
 - e. Spreaders.
 - f. Slides and cover slips.
 - g. Disinfectant jars
 - h. Inoculation loops
 - i. Non - adsorbent cotton wool

Indicative list of media used in microbiology analysis

Sl. No	Name of media
1.	Acetate Agar
2.	Andrade peptone water
3.	Asparagine-Proline Broth
4.	Baird Parker Agar
5.	Bile Esculin Azide Agar
6.	Bile salts agar
7.	Bismuth Sulphite Agar
8.	Blood agar

9.	Brain Heart Infusion Broth
10.	Brilliant green agar
11.	Brilliant Green Lactose Bile Broth
12.	Bromocresol Purple Carbohydrate Broth
13.	Buffered Peptone Water
14.	Butterfield's Buffered Phosphate Diluent
15.	Carbohydrate Utilization Broth
16.	Cetrimide agar
17.	Chloramphenicol Yeast Glucose Agar
18.	Cooked Meat Salt Medium
19.	Czapek Yeast (Autolysate) CYA agar
20.	Decarboxylase Test Medium (Lysine, Ornithine, Arginine provide separately)
21.	Deoxycholate Citrate Agar Medium
22.	Dextrose Tryptone Agar
23.	EC Broth
24.	Egg Yolk Tellurite Supplement
25.	Frazer Broth
26.	Gelatin agar
27.	Gelatin Phosphate Salt Broth
28.	Glucose Salt Teepol Broth
29.	Gram Negative Broth (GN)
30.	Half Frazer Broth
31.	Hektoen Enteric Agar

32.	Hugh Leifson Medium
33.	Kauffman Mueller's Tetrathionate Broth Base
34.	Kligler Iron Agar
35.	Koser's Citrate Broth
36.	Lactobacillus MRS Agar
37.	Lactose Broth
38.	Lactose Gelatine Medium
39.	Lauryl Tryptose Broth
40.	Levine Eosin-Methylene Blue Agar (L- EMB Agar)
41.	Liver Broth
42.	Lysine decarboxylase broth
43.	Lysine Iron Agar
44.	Malonate Broth
45.	Malt Agar
46.	Mannitol Yolk Polymyxin (MYP) Agar
47.	McConkey broth/agar
48.	Methyl Red Voges Proskauer (MR-VP) (Glucose Phosphate Broth
49.	Milk agar with cetrimide
50.	Modified Oxford Agar
51.	Motility Test Medium
52.	MY-40 Agar
53.	Nitrate Broth
54.	Nutrient Agar

55.	Nutrient Broth
56.	Palcam Agar
57.	Peptone
58.	Peptone Water Diluent
59.	Phenol Red Carbohydrate Broth
60.	Phosphate Buffered peptone water
61.	Plate Count Agar
62.	Potato Dextrose Agar
63.	<i>Pseudomonas</i> Presumptive Test Broth
64.	<i>Pseudomonas</i> confirmation medium (Skim Milk Agar)
65.	Rappaport Vassiliadis Soya Broth
66.	Selenite Cystine Broth
67.	Selenite F broth
68.	Sheep Blood Agar
69.	Simmons Citrate agar
70.	Slanetz and Bartley Medium
71.	Sulphite Agar
72.	T1 N1 Agar
73.	Tergitol-7 Agar Base
74.	Tetrathionate Broth
75.	Thioglycollate Agar
76.	Thiosulfate-Citrate-Bile Salts-Sucrose Agar (TCBS)
77.	Triple Sugar Iron Agar
78.	Trypticase Soy Broth

79.	Tryptone Broth
80.	Tryptone Glucose Extract Agar
81.	Tryptone soya agar
82.	Tryptose-Sulfite Cycloserine (TSC) Agar
83.	Urea Broth
84.	Violet Red Bile Agar
85.	Xylose Lysine Deoxycholate Agar (XLD)

5.3 Projected Scope of Testing: Details of Matrices and parameters

List of tests undertaken (segregated as different categories according to fssai / APEDA/ EU requirements) and proposed for the future.

General Parameters	Nutritional parameters	Food additives & Contaminants	Microbiological analysis
<ul style="list-style-type: none"> ● Moisture ● Total ash ● Acid insoluble ash ● Water soluble/ insoluble ash ● Alkalinity of ash ● Acidity ● Total Soluble solids ● Drained weight 	<ul style="list-style-type: none"> ● Total fat ● Total protein ● Amino acids ● Crude/Dietary Fibre ● Fatty acid composition ● Trans fatty Acid ● Cholesterol ● Vitamins ● Trace elements ● Total sugar ● Energy value 	<ul style="list-style-type: none"> ● Colours ● Antioxidants ● Preservatives ● Artificial sweeteners ● Pesticide residues ● Heavy metals ● Mycotoxins ● Common food adulterants 	<ul style="list-style-type: none"> ● Total Plate Count ● Coliform count ● Aerobic plate count ● Anaerobic count ● Yeast and mold count ● Flat sour organisms ● <i>Staphylococcus aureus</i> ● <i>Salmonella</i> ● <i>Shigella</i> ● <i>Clostridium botulinum</i> ● <i>E. coli</i> ● <i>Vibrio cholera</i> ● <i>Listeria monocytogenes</i>

1) Overall testing capacity of the lab (HR and no of tests that can be handled on full capacity) and current operating capacity of the lab.

Current Operating capacity of the Laboratory:

- No. Of tests per day: 5
- No. Of tests per month: 120
- No. Of tests per Annum: 1200

5.4 Manpower:

S.No	Designation	Number of Staff
1	Quality Manager	1
2	Quality Executive	1
3	Lab Manager	1
4	Senior Analyst	6
5	Junior Analyst	8
6	Senior Microbiologist & Molecular Biologist	2
7	Junior Microbiologist & Molecular Biologist	2
8	Lab attendant	6
9	Sample booking	1
10	Sample coding	1
11	Reporting	1
12	Housekeeping	4

6. Eligibility Criteria

Interested Agencies/Firms should provide information demonstrating that they have the required qualifications and relevant experience to deliver the services. The eligibility criteria are listed below:

6.1 Pre-Qualification Criteria:

Sl. No.	PQ Criteria	Documents required
1	The Bidder should be a Company registered under the Companies Act, 1956/ Proprietary Firm / Partnership Firm/ any other Act in India and should be in operations in India for minimum of 5 years	(Certificate of incorporation/ certificate for commencement of business/ other relevant documentary proof should be submitted)
2	Attested copy of Company's PAN, GST and ITR details	Documentary proofs should be submitted
3	Average Annual Turnover of INR of 3 Crores in the last three years (FY 2021 - 2022; 2022 - 2023 and 2023 - 2024 to be enclosed)	Copies of the audited balance sheet of the company showing the same should be submitted

4	Experience in operating NABL/FSSAI/APEDA (or any other competent regulatory authority as applicable)	Certificates of Accreditations/ Recognitions and Achievements/ Awards to be furnished
5	The Proposal should be accompanied with a comprehensive modality of operation, (expected expenditure and return and profit-sharing arrangement) of the Laboratory.	Detailed proposal to be provided
6	The Bidder should not be blacklisted by any Government department/PSUs/Private sector	Self-declaration of the same

6.2 Evaluation of Technical Bid

Technical Proposal will be evaluated on the basis of parameters mentioned below. 70% of weightage shall be given to the technical proposal and 30% to financial proposal. Only those Applicants whose Technical Proposals score 70 marks or more out of 100 marks shall qualify for further consideration.

The selection of the firm shall be based on the following technical criteria

Sl. No.	Evaluation Parameter	Marks	Details
1	Technical Competency of the Bidder: Past experience in operating similar NABL/FSSAI (or any other competent regulatory authority as applicable)	25	Highest mark will be awarded to most experience Bidder. Marking for the remaining will be done on <i>pro rata</i> basis.
2	Proposal on modalities of operating the Laboratory	30	Highest mark will be awarded to Bidder offering the most comprehensive Plan. Marking for the remaining will be done on <i>pro rata</i> basis.
3	Availability of competent skilled manpower for performing the services	15	Highest mark will be awarded to Bidder with maximum skilled manpower and the remaining will be done on <i>pro rata</i> basis.
4	Financial competency of the Bidder: Financial data of the last three years in prescribed format. Audited Balance Sheet, Profit & loss, Income Tax Clearance Certificate and original Bankers Solvency Certificate.	30	Highest mark will be awarded to most experience Bidder. Marking for the remaining will be done on <i>pro rata</i> basis.
Total		100	

NOTE: There should be an INDEX page, where relevant sections should be highlighted with proper page numbering.

7. Instruction to the Bidders

- a) Firms/Agencies who are selected in EoI process will only be allowed to participate in RFP/Tender process for Engagement of Service Provider to Operate, Maintain & Manage the Quality Control and Analytical Laboratory at the Bio-Resources Development Centre's Experimental Farm, Laitmynsaw Village, Upper Shillong, as per the scope of the Bid.
- b) The Bidders are required to bid strictly as per terms and conditions given in the Notice Inviting EOI documents and not to stipulate any deviations.
- c) The bidders are advised to submit complete details with their Proposals as Pre-qualification Bid Evaluation will be done on the basis of documents submitted by the bidders
- d) Proposals with Incomplete / Ambiguous information will be rejected
- e) The bidders are advised in their own interest to submit their proposal well in advance from last date/time of submission of proposals so as to avoid problems which the bidders may face in submission at last moment
- f) Bidder has to submit copies of all the documents. If the bidder is found ineligible after opening of bid, the bid shall become invalid
- g) Notwithstanding anything stated above, BRDC reserves the right to assess the capabilities and capacity of the bidders, in the overall interest of BRDC. In case, bidder's capabilities and capacities are not found satisfactory, BRDC reserves the right to reject the bid
- h) Submission of Queries: The bidders(s) if required, may submit queries, if any, through e-mail to brdcshillong@gmail.com before the date and time mention in the document. BRDC will reply only those queries which are essentially required for submission of proposals. Queries received after date specified will neither be entertained nor replied
- i) **Rejection of Proposals:** BRDC reserves the right to reject any or all proposals or cancel/withdraw the invitation of EOI without assigning any reasons whatsoever thereof. The applicants are cautioned that not giving complete information called for in the EoI or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the applicant being rejected. Applications made by telegram or telex, E-mail, and those received late will not be entertained. Overwriting should be avoided. Correction, if any, should be made by neatly crossing out, initialling, dating and rewriting. Pages of the pre-qualification documents should number. They should be submitted in a proper order as per the details mentioned in the index.
- j) References, information and certificates from the respective clients certifying suitability, technical knowhow or capability of the applicant should be signed by an officer not below the rank of Executive Engineer/Project Manager or equivalent for Govt./Semi Govt./ PSUs/ autonomous bodies Works and Director/Sole Proprietor/Partner of the Company or Firm as the case may be for private clients
- k) The applicant may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the works. The applicants are however, advised not to furnish superfluous information. No information shall be entertained after submission of pre-qualification documents unless it is called for by BRDC

- l) Canvassing in connection with the Notice Inviting EOI is strictly prohibited, and such canvassed Proposals submitted by the bidder will be liable to be rejected
- m) **Final Decision-Making Authority:** BRDC reserve the right to modify the eligibility criteria, to decide on cut-off date of implementation, to accept or reject any application, to annul the Pre-Qualification process, to reject all applications or accept new applications at any time, without assigning any reason or incurring any liability to the applicants. It also reserves the right to change the coverage and scope of the study by dividing the study across sectors and geographical regions and to allocate work to different agencies for different sectors and geographical regions.

8. General Information, Financial, Similar Work Experience & Expert Details

EoI For:

MANDATORY INFORMATION DOCUMENTS:

a) General Information of the Bidder:

1	Name of Applicant/Company	
2	Address for correspondence	
3	Official e-mail for communication	
4	Contact Person: Telephone Nos.Fax Nos. Mobile	
5	Type of Organization:	
6	Place and Year of Incorporation	
7	Name of Directors/Partners in the organization	
8	Name(s) and Designation of the persons, who is authorized to deal with BRDC (Attach copy of power of Attorney)	

b) Turn Over Details:

Financial Year 2021-22	Financial Year 2022-23	Financial Year 2023-24	Average Annual Turnover

c) **Relevant Expertise Available:**

Sl. No.	Name of Employee/ Expert available with the Firm	Educational Qualification	No. of Years of association with the firm	Years of experience in operating NABL/FSSAI /APEDA (or any other competent regulatory authority as applicable)	Relevant assignments taken up (Maximum 5)