CoEM

CENTRE OF EXCELLENCE IN MICROBIOME

An initiative of the Govt. of Kerala under KSCSTE

KINFRA Film and Video Park, Chanthavila, Kazhakoottam, Thiruvananthapuram, Kerala 695585, India.

NOTICE INVITING TENDERS

Centre of Excellence in Microbiome, an institution under Kerala State Council for Science, Technology and Environment (KSCSTE), Govt. of Kerala, Thiruvananthapuram invites item rate tenders on tender basis:

NIT No & date	CoEM/Purchase/Misc/Con/2025/05-TEN dated 16/06/2025
Description of NIT	Supply of molecular biology consumables (Listed Below)
Date of tender publication	16/06/2025
Tender Fee	Rs. 618/-
Earnest Money Deposit (EMD)	Rs. 3088/-
Date of pre-bid meeting	NA
Manufacturer's authorization or Authorised reseller certification required or not	Required: A copy of the certificate must be enclosed without fail.
Last date & time of submission of tender	30/06/2025; 10:30 AM
Date & Time of opening of technical and financial bid	30/06/2025; 12:00 PM
Mode of bidding	Two bid system

The detailed requirements, specifications of procurement and Bid document will be published on website **www.kscste.kerala.gov.in** under Tender section. If any future updates/corrigendum regarding Bid will be there, it will be only published in website **www.kscste.kerala.gov.in** during Bid period. Bidder may visit **www.kscste.kerala.gov.in** regularly during Bid period.

Cost of tender document (tender fee), **Rs. 618/-** and EMD, **Rs. 3088/-** as applicable to be submitted along with the tender as demand draft (preferably Canara Bank / any nationalized bank) favouring "***The Director, Centre of Excellence in Microbiome, payable at Thiruvananthapuram***" failing which the tender will be summarily rejected. EMD of unsuccessful bidders will be returned without any interest, upon finalization of contract or on expiry of validity of offer. EMD of the successful tenderer will be accounted and will be released only after the satisfactory completion of the work/service.

Completed Tender in sealed cover shall reach the "***The Director, Centre of Excellence in Microbiome, First floor - RGCB Bio Innovation Center, KINFRA Film & Video Park, Kazhakkoottam, Thiruvananthapuram- 695585***" on or before 30-06-2025; 10:30 AM. Tenders received will be opened on 30-06-2025; 12:00 PM. During tender opening, authorization by bidder is not permitted and one bidder can represent only one firm/bidder. The Bidders who have already submitted the tender fee for **Tender No. CoEM/Purchase/Misc/Con/2025/02-TEN dated 15/05/2025** are not required to pay the tender fee again for this tender. **However, the EMD (Earnest Money Deposit) must still be submitted**. Additionally, as per applicable government guidelines, only the **manufacturers** with MSME (Micro, Small and Medium Enterprises) license and located within the State of Kerala are exempted from the payment of both the tender fee and EMD. Tenders received after the last date & time mentioned will summarily be rejected.

DIRECTOR, CoEM

Signed by Sabu Thomas
Date: 16-06-2025 12:52:48

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TENDER FORM

Tender No. & Date	**CoEM/Purchase/Misc/Con/2025/05-TEN dated 16/06/2025**
Last date & time of submission of tender	**30/06/2025; 10:30 AM**
Date & Time of opening of technical and financial bid	**30/06/2025; 12:00 PM**

BIDDER DETAILS

1	**Name & Address of the Vendor/ Bidder**	
2	**Phone**	
4	**E-mail**	
5	**Contact Person Name**	
6	**Mobile Number**	
7	**Total no. of pages in the document** (to be filled mandatorily)	
8	**PAN** (Copy to be enclosed mandatorily)	Yes / No
9	**GST Number** (Copy to be enclosed mandatorily)	Yes / No
10	**Tender Fee** paid	Yes / No
11	**Earnest Money Deposit (EMD)** paid	Yes / No
12	**Manufacturer from Kerala with MSME certification** (Other MSMEs are **not** exempted from paying the tender fee and EMD)	Yes / No
13	**Manufacturer's authorization / Authorised reseller certificate** (Copy to be enclosed mandatorily)	Yes / No
14	**Detailed Technical Specifications of the list of items**	Yes / No
15	**Annexure I**	Yes / No
16	**Technical bid** (Annexure II; in separate, sealed envelope)	Yes / No
17	**Financial bid** (Annexure III; in separate sealed envelope)	Yes / No
18	**Annexure IV**	Yes / No
19	**Is a license or permit required for the supply of items? If yes, mention the authority to apply to**	
20	**No. of days within which the items can be delivered to CoEM after issue of purchase order (Maximum: 30 days)**	

(Authorized Signature with Date and Seal)

To,

The Director
Centre of Excellence in Microbiome

Detailed product list- Technical specifications

SL. No.	Description of the items	Specification	Quantity
1	100 bp DNA Ladder	❖ Comprises 10 double- stranded DNA fragments ranging from 100 bp to 1 kb in 100-bp units, and an additional 1.5 kb fragment ❖ 5 µl of this product contains ~50 ng of each band, except the 500 bp fragment which contains ~150 ng. ❖ 500-bp band serves as visible reference indicator ❖ 6X Loading Buffer must be supplied	500 µl x 5
2	1 kb DNA Ladder	❖ Size: 50 µg ❖ Comprises ten double- stranded DNA fragments ranging from 1 kb to 10 kb in multiples of 1 kb. ❖ The 5-kb fragment serves as a visible reference indicator ❖ 6X Loading Buffer must be supplied	250 µl x 6
3	100 bp DNA Ladder	❖ Size: 100 reactions ❖ Comprises 11 double-stranded DNA fragments ranging from 100 to 1,000 bp in multiples of 100 bp, plus an additional 1,500 bp fragment ❖ Premixed with loading dyes and glycerol ❖ Can be used directly in agarose gel electrophoresis	500 µl x 2
4	1 kb DNA Ladder	❖ Size: 100 reactions ❖ Comprises 10 double- stranded DNA fragments ranging from 1 to 10 kb in multiples of 1 kb ❖ Premixed with loading dyes and glycerol ❖ Can be used directly in agarose gel electrophoresis	500 µl x 2
5	Protein Molecular Weight Marker	❖ Size: 200 lanes ❖ For use in SDS Polyacrylamide gel electrophoresis ❖ Broad Molecular weight range: 6.5–200 kDa ❖ 5X loading buffer and 1M DTT must be supplied	1
6	dNTP Mixture	❖ For PCR, cDNA synthesis, DNA cloning, sequencing and labeling ❖ ≥98% pure ❖ Premixed and contains each dNTP at a concentration of 2.5 mM ❖ Size: 3.2 µmol Each/1.25 mL ❖ Convenient, reduces pipetting steps ❖ Can be used directly in amplification reactions	1.28 ml x 6
7	Taq DNA polymerase	❖ Recombinant version Taq polymerase from *Thermus aquaticus* YT-1 strain ❖ Number of reactions: 200 of 50 µl ❖ Number of units in one pack: 250	15

		❖ Suitable for routine PCR applications ❖ ISO 9001 certified	
8	E. coli JM109 Competent Cells	❖ Must comprise E. coli JM109 Competent Cells :100 µl x 10 ❖ pBR322 plasmid (0.1ng/µl): 10 µl SOC Medium:1ml x 10 ❖ Can be used as a host of M13 phage vector DNA as well as for preparation of DNA library or subcloning. ❖ Recombinants can be selected easily by adding X-Gal and IPTG to a media utilizing the α complimentarity to β- galactosidase of the competent cells	1
9	Agarose routine	❖ High-quality, Low EEO Agarose for routine DNA gel electrophoresis ❖ Gel strength of 1% gel: ≥1200 g/cm^2 ❖ Gelling temperature of 1.5 %: 34.5 - 37.5 °C. ❖ Electroendosmosis (EEO) (-Mr): 0.05 - 0.13 ❖ Sulfate content : ≤0.1%	500 g x 1
10	IPTG (Isopropyl-β-D-thiogalactopyranoside)	❖ Inducer of β- Galactosidase expression in bacteria. ❖ Used with X-Gal for blue/white colony screening to distinguish non-recombinant and recombinant colonies	5 g x 1
11	X-Gal (5-Bromo-4-Chloro- 3-Indolyl-β-D-Galactoside)	❖ A histochemical substrate for β-Galactosidase and that yields a blue precipitate upon hydrolysis. ❖ Purity more than 99% (by TLC)	1 g x 1
12	10X PCR Buffer	❖ For DNA amplification by Polymerase Chain Reaction (PCR) and for DNA sequencing ❖ Contains 100 mM Tris-HCl ❖ (pH8.3) 500 mM KCl 15 mM ❖ MgCl2	5 boxes of 1 ml x 10 tubes
13	96well plate	❖ 96well Hi-Plate for Real Time PCR ❖ High performance, frosted plate ❖ Must ensure optimal reaction conditions and reliable results ❖ Consistent amplification across all 96 wells ❖ Compatible with various real-time PCR chemistries: dye-based, probe-based and one-step	2 packs of 10 plates/pack
14	TA-cloning Kit	❖ For fast, easy cloning of PCR products ❖ Includes pMD20-T vector (50 ng/µl) : 1 µg (20 µl), Ligation Mighty Mix: 50 µl x 2 and Positive Control Insert: 10 µl	1 x 20 reactions
15	PCR Master Mix	❖ Master mix is ideal for PCR and high-throughput screening	1ml x 4

		❖ Suitable for 160 reactions ❖ 2X Premix comprising DNA polymerase, reaction buffer, dNTPS, and a density reagent ❖ Includes a green gel- loading dye that separates into blue and yellow dye fronts on agarose gel and a density reagent ❖ Reactions performed with this master mix can be loaded directly onto an agarose gel for electrophoresis.	
16	BamH I enzyme	❖ Supplied additional Reagents : 10X Buffer: 1.5 ml×2 , 10X Green Buffer:1.5 ml×2 ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 500 Reactions
17	EcoR I enzyme	❖ Supplied additional Reagents : 10X t Buffer: 1.5 ml×2, 10X Green Buffer:1.5 ml×2 ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 500 Reactions
18	Not I enzyme	❖ Supplied additional Reagents : 10X Buffer: 500 µl 10X Green Buffer :500 µl. ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 25 Reactions
19	Protein Stain	❖ Highly sensitive protein staining reagent based on Coomassie Brilliant Blue G- 250 ❖ Used to stain SDS-PAGE or native PAGE gels quickly ❖ Visualization of protein bands approximately 5 minutes after the staining process begins, and provides maximum sensitivity after 60 minutes of staining ❖ Can detect bands containing as little as 8 ng of protein ❖ Devoid of methanol or acetic acid	1 x 1 litre
20	Soil Genomic DNA Purification Kit	❖ For the isolation of DNA from soil, sludge, sediment ❖ Silica membrane technology ❖ Lysate clarification: Centrifugation, Inhibitor Removal Column ❖ Fragment size: 50 bp–approx. 50 kbp ❖ Must comprise Columns, bead tubes, Inhibitor Removal Columns, Collection Tubes and required buffers ❖ Process up to 500 mg (wet weight) of starting material ❖ Proposed binding capacity:50 µg ❖ Elution volume: 30–100 µL ❖ Preparation time: 90 min/10 preps ❖ Typical yields are in the range of 2 to 10 µg of DNA ❖ Typical downstream application: Microarrays, PCR, Real-time PCR, Southern blotting	2 packs of 50 preps/pack

21	RNase-free Water	❖ RNase-free Water to be used with RNA or miRNA kits ❖ Applicable for RNA isolation	1000 mL x 1
22	RNase-free Water	❖ For use with RNA samples. ❖ Avoids risk of inhibiting RT-PCR. ❖ Not prepared using hazardous diethylpyrocarbonate (DEPC)	1 ml x 10
23	Liquid Proteinase K	❖ Consists of recombinant Proteinase K enzyme in a ready-to-use format ❖ Concentration of 14–22 mg/ml with an activity ≥50 U/ml.	5 mL x 1

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TERMS & CONDITIONS

1. Tender Documents shall be available only on KSCSTE Website and not for sales elsewhere.
2. The bids will be opened on the date as mentioned in the NIT. Bidders or their representatives may be present during the opening of bids, if they wish to be present. CoEM will evaluate the bids as per the terms of the tender. Those bids, which fulfil the technical requirements and are responsive to the tender requirements will only be considered. Those bids which are found to be either non-responsive, not satisfying the technical requirements or both will be rejected.
3. All pages of the bid must be **sealed, signed, sequentially numbered and legible**. The **Technical Bid** and **Financial Bid** shall be placed in **separate sealed envelopes**, clearly marked as such, and both these envelopes should be enclosed within a **single main sealed cover**. Each inner envelope must also be properly **sealed, signed, and labelled**.
4. During the bid evaluation, the CoEM may, at its discretion, ask the Bidder for clarifications of their bid in writing/e-mail and the bidder is also required to provide the clarification in writing/e-mail. No change in the price or substance of the bid shall be sought, offered or permitted.
5. CoEM will award the contract to the Bidder whose bid has been determined to be substantially responsive, technically qualified and the Overall Lowest Quoted Evaluated Bid.
6. Delivery at the destination provided by CoEM should strictly be completed within the stipulated period of delivery i.e. within 30 days from issue of the purchase order.
7. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 0.5 percent of the delivered price of the delayed Goods or unperformed Installation for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of 10 Percent.
8. Manufacturer's authorisation or authorised reseller certificate and detailed technical specifications of the list of items must be sent along with the bid.
9. The items must be of superior quality and must comply with the standards of leading manufacturers such as New England Biolabs (NEB), Thermo Fisher Scientific, Takara or its equivalents.
10. CoEM reserves the right to cancel the order in case the items are not supplied within the stipulated period or non - fulfilment of contractual obligations.
11. Payment will be made only after the satisfactory completion of service for which the supplier shall submit bills in duplicate. In case of any defects to the materials supplied by the bidder, it should be replaced prior to release of the payment.
12. The quoted rates shall be inclusive of all taxes and also the bidder shall include charges like GST, freight, handling, loading, unloading, insurance premiums and placement at the facility supply and deployment. No compensation will be paid in case of any upward revision in the statutory taxes and levies or introduction of new taxes and levies.
13. A firm should submit only one proposal. If a firm submits more than one proposal, all such proposals shall be disqualified. Also, must comply with the Technical Specification, General Conditions and Format/Requirements for Technical and Financial proposal.
14. Price quoted should be valid for 90 days from the due date of the tender.
15. The CoEM may, at its discretion, extend the deadline for submission of bids specified in the NIT, in which case all rights of the CoEM and all obligations of the Bidders will thereafter be subject to the deadline as extended.
16. CoEM reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected

Bidder or Bidders. The CoEM reserves the right to negotiate with the Bidder having the Lowest Evaluated Bid.

17. The courts at Thiruvananthapuram shall have jurisdiction over any dispute regarding this tender.
18. Interested bidders are to submit their duly signed and sealed quotation along with all requisite documents as per prequalification in separate sealed envelope superscribing "Tender No. CoEM/Purchase/Misc/Con/2025/05-TEN dated16/06/2025" on or before due date 30.06.2025, 10.30 AM.
19. Late bids will not be considered.

Bid should be addressed to:

The Director
Centre of Excellence in Microbiome
First floor- RGCB Bio Innovation Center
KINFRA Film and Video Park, Chanthavila, Kazhakkoottam
Thiruvananthapuram, Kerala - 695 585.

DOCUMENTS COMPRISING THE BID

All pages must be sequentially numbered, signed, and sealed.

1. Tender Form
2. The bidders must submit an undertaking in the prescribed format as per Annexure I.
3. The bidder must submit a brief description of the list of items, make, catalogue number, quantity and specifications as per Annexure II in a separate sealed envelope and labelled as Technical Bid.
4. Bidders must also submit a financial bid as per Annexure III in a separate sealed envelope and labelled as Financial Bid.
5. Bidders must also submit a declaration sheet as per Annexure IV.
6. Tender Fee and EMD (Exceptional cases as per the NIT)
7. PAN Copy
8. GST Number Copy
9. Manufacturer from Kerala with MSME certification (Other MSMEs are not exempted from paying the tender fee and EMD)
10. Manufacturer's authorization / Authorised reseller certificate Copy
11. Detailed Technical Specifications of the list of items

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ANNEXURE I

[To be submitted on letter head of the supplier]

To,

The Director
Centre of Excellence in Microbiome

UNDERTAKING BY THE TENDERER

I/WE _____ have carefully gone through the various terms and conditions mentioned in the tender document CoEM/Purchase/Misc/Con/2025/05-TEN dated 16/06/2025.

I/We am making this offer after carefully reading the conditions and understanding the same. I/We have understood the quantity of items/technical specifications and other charges required to supply and install the items, before making this offer.

This tender document has _____ pages including the attachments and all the documents including blank pages are serially numbered.

I/We hereby sign this undertaking as token of our acceptance of various conditions mentioned in tender document.

Further certified that I/WE _____ has never been debarred/blacklisted by any government organisation.

(Authorised Name & Signatory of Agency/firm with stamp)

Place: _____

Date: _____

Annexure II

Technical Bid

[To be submitted on letter head of the supplier in a separate, sealed envelope]

SL. No.	Description of the items	Specification	Qty	Whether Specification is Satisfied (Yes/No)	Make of the Item	Catalogue Number of the Item
1	100 bp DNA Ladder	❖ Comprises 10 double-stranded DNA fragments ranging from 100 bp to 1 kb in 100-bp units, and an additional 1.5 kb fragment ❖ 5 µl of this product contains ~50 ng of each band, except the 500 bp fragment which contains ~150 ng. ❖ 500-bp band serves as visible reference indicator ❖ 6X Loading Buffer must be supplied	500 µl x 5			
2	1 kb DNA Ladder	❖ Size: 50 µg ❖ Comprises ten double-stranded DNA fragments ranging from 1 kb to 10 kb in multiples of 1 kb. ❖ The 5-kb fragment serves as a visible reference indicator ❖ 6X Loading Buffer must be supplied	250 µl x 6			
3	100 bp DNA Ladder	❖ Size: 100 reactions ❖ Comprises 11 double-stranded DNA fragments ranging from 100 to 1,000 bp in multiples of 100 bp, plus an additional 1,500 bp fragment ❖ Premixed with loading dyes and glycerol ❖ Can be used directly in agarose gel electrophoresis	500 µl x 2			
4	1 kb DNA Ladder	❖ Size: 100 reactions ❖ Comprises 10 double-stranded DNA fragments ranging from 1 to 10 kb in multiples of 1 kb	500 µl x 2			

Each page must bear the signature and official seal of the bidder.

		❖ Premixed with loading dyes and glycerol ❖ Can be used directly in agarose gel electrophoresis				
5	Protein Molecular Weight Marker	❖ Size: 200 lanes ❖ For use in SDS Polyacrylamide gel electrophoresis ❖ Broad Molecular weight range: 6.5–200 kDa ❖ 5X loading buffer and 1M DTT must be supplied	1			
6	dNTP Mixture	❖ For PCR, cDNA synthesis, DNA cloning, sequencing and labeling ❖ ≥98% pure ❖ Premixed and contains each dNTP at a concentration of 2.5 mM ❖ Size: 3.2 µmol Each/1.25 mL ❖ Convenient, reduces pipetting steps ❖ Can be used directly in amplification reactions	1.28 ml x 6			
7	Taq DNA polymerase	❖ Recombinant version Taq polymerase from *Thermus aquaticus* YT-1 strain ❖ Number of reactions: 200 of 50 µl ❖ Number of units in one pack: 250 ❖ Suitable for routine PCR applications ❖ ISO 9001 certified	15			
8	E. coli JM109 Competent Cells	❖ Must comprise E. coli JM109 Competent Cells :100 µl x 10 ❖ pBR322 plasmid (0.1ng/µl): 10 µl SOC Medium:1ml x 10 ❖ Can be used as a host of M13 phage vector DNA as well as for preparation of DNA library or subcloning. ❖ Recombinants can be selected easily by adding X-Gal and IPTG to a media utilizing the α	1			

		complimentarity to β-galactosidase of the competent cells				
9	Agarose routine	❖ High-quality, Low EEO Agarose for routine DNA gel electrophoresis ❖ Gel strength of 1% gel: ≥1200 g/cm^2 ❖ Gelling temperature of 1.5 %: 34.5 - 37.5 °C. ❖ Electroendosmosis (EEO) (-Mr): 0.05 - 0.13 ❖ Sulfate content : ≤0.1%	500 g x 1			
10	IPTG (Isopropyl-β- D-thiogalactopyranoside)	❖ Inducer of β-Galactosidase expression in bacteria. ❖ Used with X-Gal for blue/white colony screening to distinguish non-recombinant and recombinant colonies	5 g x 1			
11	X-Gal (5-Bromo-4-Chloro- 3-Indolyl-β-D-Galactoside)	❖ A histochemical substrate for β-Galactosidase and that yields a blue precipitate upon hydrolysis. ❖ Purity more than 99% (by TLC)	1 g x 1			
12	10X PCR Buffer	❖ For DNA amplification by Polymerase Chain Reaction (PCR) and for DNA sequencing ❖ Contains 100 mM Tris-HCl ❖ (pH8.3) 500 mM KCl 15 mM ❖ MgCl2	5 boxes of 1 ml x 10 tubes			
13	96well plate	❖ 96well Hi-Plate for Real Time PCR ❖ High performance, frosted plate ❖ Must ensure optimal reaction conditions and reliable results ❖ Consistent amplification across all 96 wells ❖ Compatible with various real-time PCR chemistries: dye-based, probe-based and one-step	2 packs of 10 plates/pack			

14	TA-cloning Kit	❖ For fast, easy cloning of PCR products ❖ Includes pMD20-T vector (50 ng/µl) : 1 µg (20 µl), Ligation Mighty Mix: 50 µl x 2 and Positive Control Insert: 10 µl	1 x 20 reactions			
15	PCRMaster Mix	❖ Master mix is ideal for PCR and high-throughput screening ❖ Suitable for 160 reactions ❖ 2X Premix comprising DNA polymerase, reaction buffer, dNTPS, and a density reagent ❖ Includes a green gel-loading dye that separates into blue and yellow dye fronts on agarose gel and a density reagent ❖ Reactions performed with this master mix can be loaded directly onto an agarose gel for electrophoresis.	1 ml x 4			
16	BamH I enzyme	❖ Supplied additional Reagents : 10X Buffer: 1.5 ml×2 , 10X Green Buffer:1.5 ml×2 ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 500 reactions			
17	EcoR I enzyme	❖ Supplied additional Reagents : 10X t Buffer: 1.5 ml×2, 10X Green Buffer:1.5 ml×2 ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 500 reactions			
18	Not I enzyme	❖ Supplied additional Reagents : 10X Buffer: 500 µl 10X Green Buffer :500 µl. ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 25 reactions			
19	Protein Stain	❖ Highly sensitive protein staining reagent based on Coomassie Brilliant Blue G- 250 ❖ Used to stain SDS-PAGE or native PAGE gels	1 x 1 litre			

		quickly ❖ Visualization of protein bands approximately 5 minutes after the staining process begins, and provides maximum sensitivity after 60 minutes of staining ❖ Can detect bands containing as little as 8 ng of protein ❖ Devoid of methanol or acetic acid				
20	Soil Genomic DNA Purification Kit	❖ For the isolation of DNA from soil, sludge, sediment ❖ Silica membrane technology ❖ Lysate clarification: Centrifugation, Inhibitor Removal Column ❖ Fragment size: 50 bp– approx. 50 kbp ❖ Must comprise Columns, bead tubes, Inhibitor Removal Columns, Collection Tubes and required buffers ❖ Process up to 500 mg (wet weight) of starting material ❖ Proposed binding capacity:50 µg ❖ Elution volume: 30–100 µL ❖ Preparation time: 90 min/10 preps ❖ Typical yields are in the range of 2 to 10 µg of DNA ❖ Typical downstream application: Microarrays, PCR, Real-time PCR, Southern blotting	2 packs of 50 preps/pack			
21	RNase-free Water	❖ RNase-free Water to be used with RNA or miRNA kits ❖ Applicable for RNA isolation	1000 ml x 1			
22	RNase-free Water	❖ For use with RNA samples. ❖ Avoids risk of inhibiting RT-PCR. ❖ Not prepared using hazardous diethylpyrocarbonate (DEPC)	1 ml x 10			
23	Liquid	❖ Consists of recombinant	5 ml x 1			

	Proteinase K	Proteinase K enzyme in a ready-to-use format ❖ Concentration of 14–22 mg/ml with an activity ≥50 U/ml.				

We hereby certify that the information and documents submitted in the Technical Bid are true and correct to the best of our knowledge. We understand that any misrepresentation may lead to disqualification. All pages of this bid have been duly signed and sealed as required.

Name of the Bidder:

Signature:

Seal:

Annexure III

Financial Bid

[To be submitted on letter head of the supplier in a separate, sealed envelope]

SL. No.	Details of the item(s)	Specification	Qty	Price	GST	Total price
1	100 bp DNA Ladder	❖ Comprises 10 double-stranded DNA fragments ranging from 100 bp to 1 kb in 100-bp units, and an additional 1.5 kb fragment ❖ 5 µl of this product contains ~50 ng of each band, except the 500 bp fragment which contains ~150 ng. ❖ 500-bp band serves as visible reference indicator ❖ 6X Loading Buffer must be supplied	500 µl x 5			
2	1 kb DNA Ladder	❖ Size: 50 µg ❖ Comprises ten double- stranded DNA fragments ranging from 1 kb to 10 kb in multiples of 1 kb. ❖ The 5-kb fragment serves as a visible reference indicator ❖ 6X Loading Buffer must be supplied	250 µl x 6			
3	100 bp DNA Ladder	❖ Size: 100 reactions ❖ Comprises 11 double-stranded DNA fragments ranging from 100 to 1,000 bp in multiples of 100 bp, plus an additional 1,500 bp fragment ❖ Premixed with loading dyes and glycerol ❖ Can be used directly in agarose gel	500 µl x 2			

Each page must bear the signature and official seal of the bidder

		electrophoresis				
4	1 kb DNA Ladder	❖ Size: 100 reactions ❖ Comprises 10 double- stranded DNA fragments ranging from 1 to 10 kb in multiples of 1 kb ❖ Premixed with loading dyes and glycerol ❖ Can be used directly in agarose gel electrophoresis	500 µl x 2			
5	Protein Molecular Weight Marker	❖ Size: 200 lanes ❖ For use in SDS Polyacrylamide gel electrophoresis ❖ Broad Molecular weight range: 6.5–200 kDa ❖ 5X loading buffer and 1M DTT must be supplied	1			
6	dNTP Mixture	❖ For PCR, cDNA synthesis, DNA cloning, sequencing and labeling ❖ ≥98% pure ❖ Premixed and contains each dNTP at a concentration of 2.5 mM ❖ Size: 3.2 µmol Each/1.25 mL ❖ Convenient, reduces pipetting steps ❖ Can be used directly in amplification reactions	1.28 ml x 6			
7	Taq DNA polymerase	❖ Recombinant version Taq polymerase from *Thermus aquaticus* YT-1 strain ❖ Number of reactions: 200 of 50 µl ❖ Number of units in one pack: 250 ❖ Suitable for routine PCR applications ❖ ISO 9001 certified	15			
8	E. coli JM109 Competent	❖ Must comprise E. coli JM109 Competent Cells	1			

	Cells	:100 µl x 10 ❖ pBR322 plasmid (0.1ng/µl): 10 µl SOC Medium:1ml x 10 ❖ Can be used as a host of M13 phage vector DNA as well as for preparation of DNA library or subcloning. ❖ Recombinants can be selected easily by adding X-Gal and IPTG to a media utilizing the α complimentarity to β-galactosidase of the competent cells				
9	Agarose routine	❖ High-quality, Low EEO Agarose for routine DNA gel electrophoresis ❖ Gel strength of 1% gel: ≥1200 g/cm^2 ❖ Gelling temperature of 1.5 %: 34.5 - 37.5 °C. ❖ Electroendosmosis (EEO) (-Mr): 0.05 - 0.13 ❖ Sulfate content : ≤0.1%	500 g x 1			
10	IPTG (Isopropyl-β-D-thiogalactopyranoside)	❖ Inducer of β-Galactosidase expression in bacteria. ❖ Used with X-Gal for blue/white colony screening to distinguish non-recombinant and recombinant colonies	5 g x 1			
11	X-Gal (5-Bromo-4-Chloro- 3-Indolyl-β-D-Galactoside)	❖ A histochemical substrate for β-Galactosidase and that yields a blue precipitate upon hydrolysis. ❖ Purity more than 99% (by TLC)	1 g x 1			
12	10X PCR Buffer	❖ For DNA amplification by Polymerase Chain	5 boxes of 1 ml x			

		Reaction (PCR) and for DNA sequencing ❖ Contains 100 mM Tris-HCl ❖ (pH8.3) 500 mM KCl 15 mM ❖ MgCl2	10 tubes			
13	96well plate	❖ 96well Hi-Plate for Real Time PCR ❖ High performance, frosted plate ❖ Must ensure optimal reaction conditions and reliable results ❖ Consistent amplification across all 96 wells ❖ Compatible with various real-time PCR chemistries: dye-based, probe-based and one-step	2 packs of 10 plates/pack			
14	TA-cloning Kit	❖ For fast, easy cloning of PCR products ❖ Includes pMD20-T vector (50 ng/µl) : 1 µg (20 µl), Ligation Mighty Mix: 50 µl x 2 and Positive Control Insert: 10 µl	1 x 20 reactions			
15	PCR Master Mix	❖ Master mix is ideal for PCR and high-throughput screening ❖ Suitable for 160 reactions ❖ 2X Premix comprising DNA polymerase, reaction buffer, dNTPS, and a density reagent ❖ Includes a green gel- loading dye that separates into blue and yellow dye fronts on agarose gel and a density reagent ❖ Reactions	1ml x 4			

		performed with this master mix can be loaded directly onto an agarose gel for electrophoresis.				
16	BamHI enzyme	❖ Supplied additional Reagents : 10X Buffer: 1.5 ml×2 , 10X Green Buffer:1.5 ml×2 ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 500 Reactions			
17	EcoRI enzyme	❖ Supplied additional Reagents : 10X t Buffer: 1.5 ml×2, 10X Green Buffer:1.5 ml×2 ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 500 Reactions			
18	NotI enzyme	❖ Supplied additional Reagents : 10X Buffer: 500 µl 10X Green Buffer :500 µl. ❖ Enzyme must quickly digest substrate DNA in 5 to 30 min	1 x 25 Reactions			
19	Protein Stain	❖ Highly sensitive protein staining reagent based on Coomassie Brilliant Blue G- 250 ❖ Used to stain SDS-PAGE or native PAGE gels quickly ❖ Visualization of protein bands approximately 5 minutes after the staining process begins, and provides maximum sensitivity after 60 minutes of staining ❖ Can detect bands containing as little as 8 ng of protein ❖ Devoid of methanol or acetic acid	1 x 1 litre			
20	Soil Genomic	❖ For the isolation of	2 packs			

	DNA Purification Kit	DNA from soil, sludge, sediment ❖ Silica membrane technology ❖ Lysate clarification: Centrifugation, Inhibitor Removal Column ❖ Fragment size: 50 bp– approx. 50 kbp ❖ Must comprise Columns, bead tubes, Inhibitor Removal Columns, Collection Tubes and required buffers ❖ Process up to 500 mg (wet weight) of starting material ❖ Proposed binding capacity:50 µg ❖ Elution volume: 30–100 µL ❖ Preparation time: 90 min/10 preps ❖ Typical yields are in the range of 2 to 10 µg of DNA ❖ Typical downstream application: Microarrays, PCR, Real-time PCR, Southern blotting	of 50 preps/pack			
21	RNase-free Water	❖ RNase-free Water to be used with RNA or miRNA kits ❖ Applicable for RNA isolation	1000 mL x 1			
22	RNase-free Water	❖ For use with RNA samples. ❖ Avoids risk of inhibiting RT-PCR. ❖ Not prepared using hazardous diethylpyrocarbonate (DEPC)	1 ml x 10			
23	Liquid Proteinase K	❖ Consists of recombinant Proteinase K enzyme in a ready-to-use format	5 mL x 1			

		❖ Concentration of 14–22 mg/ml with an activity ≥50 U/ml.				
Total						
Total Amount in Words						

We hereby submit our Financial Bid for the above-mentioned tender. The prices quoted are firm and inclusive of all applicable taxes and charges. We understand that the rates quoted shall remain valid for the duration specified in the tender terms. All pages of the Financial Bid have been duly signed and sealed.

Name of the Bidder:

Signature: **[Seal]**

Annexure IV

[To be submitted on letter head of the supplier]

DECLARATION SHEET

I/WE, _____ hereby certify that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification. It is certified that our organization has been authorised by the original manufacturer or is an authorised reseller (Copy attached) to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document.

We, further specifically certify that our organization has not been Blacklisted/De Listed or put to any interruption by any Institutional Agency/ Govt. Department/Public Sector Undertaking in the last three years.

(Authorized Signature with Seal)