



Bid Number/बोली क्रमांक (बिड संख्या):
GEM/2024/B/4566869
Dated/दिनांक : 01-02-2024

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	22-02-2024 19:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	22-02-2024 19:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	180 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Agriculture And Farmers Welfare
Department Name/विभाग का नाम	Department Of Agricultural Research And Education (dare)
Organisation Name/संगठन का नाम	Indian Council Of Agricultural Research (icar)
Office Name/कार्यालय का नाम	Icar-nrc On Pig, Rani, Guwahati-781131, Assam
Item Category/मद केटेगरी	Custom Bid for Services - Total RNA Sequencing and Bioinformatics Analysis , Custom Bid for Services - miRNA Sequencing and Bioinformatics Analysis , Custom Bid for Services - Whole Genome Bisulphite Sequencing , Custom Bid for Services - Sanger Sequencing , Custom Bid for Services - Oligonucleotides PCR Primer
Contract Period/अनुबंध अवधि	1 Month(s) 15 Day(s)
Minimum Average Annual Turnover of the bidder (For 3 Years)/बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का)	3 Lakh (s)
MSE Exemption for Years Of Experience/अनुभव के वर्षों से एमएसई छूट/ and Turnover/टर्नओवर के लिए एमएसई को छूट प्राप्त है	Yes
Startup Exemption for Years Of Experience/अनुभव के वर्षों से स्टार्टअप छूट/ and Turnover/ टर्नओवर के लिए स्टार्टअप को छूट प्राप्त है	Yes
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria,Bidder Turnover,Certificate (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	No
Type of Bid/बिड का प्रकार	Two Packet Bid

Bid Details/बिड विवरण

Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days
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Evaluation Method/मूल्यांकन पद्धति	Item wise evaluation/
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EMD Detail/ईएमडी विवरण

Required/आवश्यकता	No
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ePBG Detail/ईपीबीजी विवरण

Required/आवश्यकता	No
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Splitting/विभाजन

Bid splitting not applied/बोली विभाजन लागू नहीं किया गया.

MII Compliance/एमआईआई अनुपालन

MII Compliance/एमआईआई अनुपालन	Yes
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MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
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1. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
2. If the bidder is a Startup, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to their meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
3. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
4. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned

Ministry. If the bidder wants to avail the Purchase preference for services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered service. If L-1 is not an MSE and MSE Service Provider (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, then 100% order quantity will be awarded to such MSE bidder subject to acceptance of L1 bid price.

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

5. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

Additional Qualification/Data Required/अतिरिक्त योग्यता /आवश्यक डेटा

Scope of Work:[1706791057.pdf](#)

Service Level Agreement (SLA):[1706791067.pdf](#)

Payment Terms:[1706791075.pdf](#)

GEM Availability Report (GAR):[1706791087.pdf](#)

Evaluation Method (Item Wise Evaluation Method)

Contract will be awarded schedulewise and the determination of L1 will be done separately for each schedule. The details of item-consignee combination covered under each schedule are as under:

Evaluation Schedules	Item/Category	Quantity
Schedule 1	Custom Bid For Services - Total Rna Sequencing And Bioinformatics Analysis	The quantity of procurement "1" indicates Project based or Lumpsum based hiring. : 1
Schedule 2	Custom Bid For Services - Mirna Sequencing And Bioinformatics Analysis	The quantity of procurement "1" indicates Project based or Lumpsum based hiring. : 1
Schedule 3	Custom Bid For Services - Whole Genome Bisulphite Sequencing	The quantity of procurement "1" indicates Project based or Lumpsum based hiring. : 1
Schedule 4	Custom Bid For Services - Sanger Sequencing	The quantity of procurement "1" indicates Project based or Lumpsum based hiring. : 1
Schedule 5	Custom Bid For Services - Oligonucleotides Pcr Primer	The quantity of procurement "1" indicates Project based or Lumpsum based hiring. : 1

Custom Bid For Services - Total RNA Sequencing And Bioinformatics Analysis (1)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification	Values
Core	
Description /Nomenclature of Service Proposed for procurement using custom bid functionality	Total RNA Sequencing and Bioinformatics Analysis
Regulatory/ Statutory Compliance of Service	YES
Compliance of Service to SOW, STC, SLA etc	YES

Specification	Values
Addon(s)/एडऑन	

Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	The quantity of procurement "1" indicates Project based or Lumpsum based hiring.	Additional Requirement/अतिरिक्त आवश्यकता
1	Pranab Jyoti Das	781131,ICAR- NATIONAL RESEARCH CENTRE ON PIG, RANI, GUWAHATI	1	N/A

Custom Bid For Services - MiRNA Sequencing And Bioinformatics Analysis (1)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification	Values
Core	
Description /Nomenclature of Service Proposed for procurement using custom bid functionality	miRNA Sequencing and Bioinformatics Analysis
Regulatory/ Statutory Compliance of Service	YES
Compliance of Service to SOW, STC, SLA etc	YES
Addon(s)/एडऑन	

Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	The quantity of procurement "1" indicates Project based or Lumpsum based hiring.	Additional Requirement/अतिरिक्त आवश्यकता
1	Pranab Jyoti Das	781131,ICAR- NATIONAL RESEARCH CENTRE ON PIG, RANI, GUWAHATI	1	N/A

Custom Bid For Services - Whole Genome Bisulphite Sequencing (1)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification	Values
Core	
Description /Nomenclature of Service Proposed for procurement using custom bid functionality	Whole Genome Bisulphite Sequencing
Regulatory/ Statutory Compliance of Service	YES
Compliance of Service to SOW, STC, SLA etc	YES
Addon(s)/एडऑन	

Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	The quantity of procurement "1" indicates Project based or Lumpsum based hiring.	Additional Requirement/अतिरिक्त आवश्यकता
1	Pranab Jyoti Das	781131,ICAR- NATIONAL RESEARCH CENTRE ON PIG, RANI, GUWAHATI	1	N/A

Custom Bid For Services - Sanger Sequencing (1)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification	Values
Core	

Specification	Values
Description /Nomenclature of Service Proposed for procurement using custom bid functionality	Sanger Sequencing
Regulatory/ Statutory Compliance of Service	YES
Compliance of Service to SOW, STC, SLA etc	YES
Addon(s)/एडऑन	

Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	The quantity of procurement "1" indicates Project based or Lumpsum based hiring.	Additional Requirement/अतिरिक्त आवश्यकता
1	Pranab Jyoti Das	781131,ICAR- NATIONAL RESEARCH CENTRE ON PIG, RANI, GUWAHATI	1	N/A

Custom Bid For Services - Oligonucleotides PCR Primer (1)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification	Values
Core	
Description /Nomenclature of Service Proposed for procurement using custom bid functionality	Oligonucleotides PCR Primer
Regulatory/ Statutory Compliance of Service	YES
Compliance of Service to SOW, STC, SLA etc	YES
Addon(s)/एडऑन	

Additional Specification Documents/अतिरिक्त विशिष्टि दस्तावेज़

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	The quantity of procurement "1" indicates Project based or Lumpsum based hiring.	Additional Requirement/अतिरिक्त आवश्यकता
1	Pranab Jyoti Das	781131,ICAR- NATIONAL RESEARCH CENTRE ON PIG, RANI, GUWAHATI	1	N/A

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

1. Generic

OPTION CLAUSE: The buyer can increase or decrease the contract quantity or contract duration up to 25 percent at the time of issue of the contract. However, once the contract is issued, contract quantity or contract duration can only be increased up to 25 percent. Bidders are bound to accept the revised quantity or duration

2. Buyer Added Bid Specific Scope Of Work(SOW)

Text Clause(s)

SCOPE OF WORK

SI . NO	Name of the Service	Qty.	Proposed specifications	Remar
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1	Total RNA Sequencing and Bioinformatics Analysis	01 (Include 06 samples)	<ol style="list-style-type: none"> 1. Technology to be used: Sequencing by synthesis chemistry 2. Application: Total RNA Sequencing and Bioinformatics Analysis (LNCrRNA and mRNA) 3. Sample Type: Tissue 4. Sample Collection of samples to be done by the sequencing firm from the research institute. 5. Extraction of the high-quality RNA sample to be done using automated RNA extractor to avoid any possible scope of human error. 6. Library Type: Compatible Total RNA library preparation using suitable kit to ensure high quality libraries 7. Library QC using Tape station and report to be shared in real time to the end user 8. Read Length, coverage and Data: Sequencing chemistry to be used is 150 X 2 i.e. paired end chemistry to generate 18-20 GB Data or 120-140 Million total reads per sample 9. Extraction of total RNA, followed by Ribodepletion to ensure the best quality results will be preferable. 10. Bioinformatics analysis should include entire analysis as below 11. Bioinformatics Analysis for WGBS Sequencing: <ul style="list-style-type: none"> · Raw data, raw data QC and summary, assembly file & stats, · Quantification and differential expression analysis of · lncRNAs and mRNAs · lncRNA identification based on coding potential 12. 85% to 90% of Sequenced data should meet a quality Phred score of Q30 13. Samples (Tissue and RNA etc.) should not be sent out of India. 14. Establishment of firm: Firm should be established in India. 15. Data should be delivered through secured server or HDD only. To maintain data confidentiality, firm should not write data in CDs/DVDs. 16. Time lines to complete the project with complete analysis should be written clearly and should not exceed more than 4-6 weeks. 17. The details of progress of experiment will be intimated to the customer/scientist and further processing in case of any issues will be based on the instructions of the customer only. 18. Failure to submit quotation as per the technical specification may deprive the concerned firm from consideration. 19 The institute reserves the right to disqualify any bid without stating the reason. 	The rate should be quoted for samples
2	miRNA Sequencing and Bioinformatics Analysis	01 (Include 05 samples)	<ol style="list-style-type: none"> 1. Technology to be used: Sequencing by synthesis chemistry 2. Application: miRNA Sequencing and Bioinformatics Analysis 3. Sample Type: Tissue 4. Sample Collection of samples to be done by the se 	The rate should be quoted for samples

quencing firm from the research institute.

5. Extraction of the high-quality RNA sample to be done using automated RNA extractor to avoid any possible scope of human error.

6. Library Type: Compatible small library preparation using suitable kit to ensure high quality libraries

7. Library QC using Agilent Tape station and report to be shared in real time to the end user

8. Read Length, coverage and Data: Sequencing chemistry to be used is 50 X 1 i.e. single end chemistry to generate 20 to 30 Million total reads per sample

9. Bioinformatics analysis should include entire analysis as below

10. Bioinformatics Analysis

- Sample wise raw data QC and summary
- Unique tags and abundance file & stats
- Known small RNA analysis results
- Identification and quantization of known miRNAs
- Expression profiling and differential expression analysis of known miRNAs
- Target prediction of known miRNA and their correlation with the expressed transcripts
- Prediction of novel miRNAs and their target Prediction

11. 85% to 90% of Sequenced data should meet a quality Phred score of Q30

12. Samples (Tissue and RNA etc.) should not be sent out of India.

13. Establishment of firm: Firm should be established in India.

14. Data should be delivered through secured server or HDD only. To maintain data confidentiality, firm should not write data in CDs/DVDs.

15. Time lines to complete the project with complete analysis should be written clearly and should not exceed more than 4-6 weeks.

16. The details of progress of experiment will be intimated to the customer/scientist and further processing in case of any issues will be based on the instructions of the customer only.

17. Failure to submit quotation as per the technical specification may deprive the concerned firm from consideration.

18. The institute reserves the right to disqualify any bid without stating the reason.

3	Whole Genom e Bisulphite Sequencing	01 (Include 02 samples)	<p>1. The integrity & quantification of the genomic DNA should be checked by running agarose gel electrophoresis and gDNA need to be quantified.</p> <p>2. The sequencing libraries need to be prepared according to the manufacturer's instructions of NGS Standard Lib Kit</p> <p>3. Briefly, Fragmentation of 200ng of genomic DNA need to be performed using adaptive focused acoustic technology and the fragmented DNA is bisulfite-treated with Standard Kit.</p> <p>4. These bisulfite-converted DNA fragments have to be going through the addition of indexing adapters and the purification.</p> <p>5. The purified libraries need to be quantified using qPCR Quantification Protocol and latest NGS platform need for sequencing.</p> <p>6. Quality Assessment:-</p> <p>Tool:-Fastqc or other advance technology Description:- Base quality and errors stats reporting from the raw Sequence fastq files.</p> <p>7. Trimming & Filtering:-</p> <p>Tool:- TrimGalore or other advance informatics Description:- Trimming of adapters and poor quality sequences from raw fastq files resulting in trimmed fastq files.</p> <p>8. Reference Alignment</p> <p>Tool:-bwa-meth, Picard or other advance technology Description a) Create reference genome index from the genome fasta file. b) Trimmed sequence reads are aligned to reference with BS aware alignment tool bwa-meth. c) Remove exact duplicated reads from the BAM alignment file by using Picard.</p> <p>9.Methylation Extraction</p> <p>Tool:-MethylDackel or other advance technology Description CpG site methylation calling from the BAM alignment file. Output is in bedGraph f</p>	The rate should be noted for samples
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format or other advance and easily accessible format

10. Differential Analysis

Tool:- metilene, bsseq or other advance technology

Description

Differential methylation region detection from the sample specific methylation bedGraph files. Samples are grouped as Treated and Control for differential analysis.

11 Samples (Tissue and RNA etc.) should not be sent out of India.

12. Establishment of firm: Firm should be established in India.

13. Data should be delivered through secured server or HDD only. To maintain data confidentiality, firm should not write data in CDs/DVDs.

14. Time lines to complete the project with complete analysis should be written clearly and should not exceed more than 6-7 weeks.

15. The details of progress of experiment will be intimated to the customer/scientist and further processing in case of any issues will be based on the instructions of the customer only.

16. Failure to submit quotation as per the technical specification may deprive the concerned firm from consideration.

17. The institute reserves the right to disqualify any bid without stating the reason.

4	Sanger Sequencing	01 (Include 160 samples)	<ol style="list-style-type: none"> 1. Purification of PCR product 2. Sanger sequencing of purified PCR product 3. sample to be collected from the institute by the service provider 4. complete sequencing report to send through email. 5. All the analysis has to be done in consultation with intender and step by step progress of the sequencing work should be intimated. 6. No data generated shall be transferred to any third party without explicit consent from the institute. Any deviation will be treated as serious breach of contract, legal and other measures will be taken against the contracting firm including blacklisting. 7. Service provider must have in-house facility for quoted service and bioinformatics team for analysis of data. Institute reserves the right to verify the facility and if required may visit to bidders facility. 8. All samples have to be picked-up from ICAR-NRC on Pig, Rani, Guwahati, Assam and the cost shall be included in the total quoted amount. 9. Payment will be made only after satisfactory completion of work, receipt of data and reports 10. The work has to be completed within 15 days of pickup of samples from ICAR - NRC on Pig, Rani on the cost of service provider. 	The rates should be quoted for 1 sample
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6. Annual Turnover Certificate for the last 3 financial years signed by the C.A with UDIN No. indicating a turnover of at-least 50% of the Bid Value. **(Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption for submission of Annual Turnover. Traders are excluded from the purview of this Policy.)**
7. Submit/Upload at least 03 Number (three number) of work order awarded for similar work from any Govt./PSU/University/Autonomous bodies/Reputed Companies. The experience criteria is exempted to MSME/Startup firms as per the rules. **Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from past experience criteria. Traders are excluded from the purview of this Policy.**
8. Proof of in house facility with photographs to be provided or if the services are to be outsourced, consent letter from the concerned lab/institute to be attached.
9. The lab/firm should be NABL/ISO certified and valid certificate copy to be attached.
10. The bidder should submit the compliance statement in the prescribed format as per

Annexure-III.

11. Work plan for the service to be attached.
12. Authorization Certificate from the OEM if the bidder is quoting on behalf of OEM.

PREPARATION OF FINANCIAL BID

Firm shall quote rates which shall be inclusive of all sample pick up cost from ICAR- NRC on Pig, cost of service, transportation & conveyance charges, administrative charges, GST/Taxes etc.

Sd/-

Asstt. Administrative Officer

ANNEXURE-I

Performance Statement of Having Experience of Undertaking Similar Nature of Work

(Shall be submitted by the bidder in their letter head)

Name & Address of the Organization	Order No. & Date	Value of Order	Details of Work	Date of effect and completion of contract	Remarks, if any

Signature and Seal of the Bidder
Business Address:

ANNEXURE-II

Information Schedule

(Shall be submitted by the bidder in their letter head)

1.	Name of the Firm/Agency.	
2.	Address with Tel. No./Fax/E-mail.	
3.	Contract Person Name and Mobile No.	
4.	Bank Account No. Branch Code Bank Name	
5.	Whether all 12 Nos of documents as required/mentioned in Preparation of Technical Bids are uploaded/submitted.	Yes/No
6.	Whether the firm has any legal suit/criminal case pending against it or contemplated against them. If Yes, details thereof	Yes/No
7.	Whether the Agency had been blacklisted by any organization. If Yes, details thereof.	Yes/No

I/ we hereby certify that the information furnished above is correct and true to the best of our knowledge. We understand that in the event of information being found false at any stage, the agency will be blacklisted and will have no dealing with ICAR, Institutes

Signature and Seal of the Bidder
Business Address:

ANNEXURE III

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Compliance statement in the prescribed form
at

Sl.No	Name of the service and Required scope of work	Qty.	Quoted/Not Quoted (Please mention the Make and Model No. of the Product)	Complied to the required Specifications (Yes/No)	Whether the Bidder is OEM/If Not OEM dealer ship certificate from the OEM is provided (Yes/No)	Whether the scope of work the offered service is provided (Yes/No)
1	<p>Name of the Service: Total RNA Sequencing and Bioinformatics Analysis</p> <ol style="list-style-type: none"> 1. Technology to be used: Sequencing by synthesis chemistry 2. Application: Total RNA Sequencing and Bioinformatics Analysis (LNCRNA and mRNA) 3. Sample Type: Tissue 4. Sample Collection of samples to be done by the sequencing firm from the research institute. 5. Extraction of the high-quality RNA sample to be done using automated RNA extractor to avoid any possible scope of human error. 6. Library Type: Compatible Total RNA library preparation using suitable kit to ensure high quality libraries 7. Library QC using Tape station and report to be shared in real time to the end user 8. Read Length, coverage and Data: Sequencing chemistry to be used is 150 X 2 i.e. paired end chemistry to generate 18-20 GB Data or 120-140 Million total reads per sample 9. Extraction of total RNA, followed by Ribodepletion to ensure the best quality results will be preferable. 10. Bioinformatics analysis should include entire analysis as below 11. Bioinformatics Analysis for WGBS Sequencing: <ul style="list-style-type: none"> · Raw data, raw data QC and summary, assembly file & stats, · Quantification and differential expression analysis of · lncRNAs and mRNAs · lncRNA identification based on coding potential 	01 (Include 06 samples)				

	<p>12. 85% to 90% of Sequenced data should meet a quality Phred score of Q30</p> <p>13. Samples (Tissue and RNA etc.) should not be sent out of India.</p> <p>14. Establishment of firm: Firm should be established in India.</p> <p>15. Data should be delivered through secured server or HDD only. To maintain data confidentiality, firm should not write data in CDs/DVDs.</p> <p>16. Time lines to complete the project with complete analysis should be written clearly and should not exceed more than 4-6 weeks.</p> <p>17. The details of progress of experiment will be intimated to the customer/scientist and further processing in case of any issues will be based on the instructions of the customer only.</p> <p>18. Failure to submit quotation as per the technical specification may deprive the concerned firm from consideration.</p> <p>19. The institute reserves the right to disqualify any bid without stating the reason.</p>					
2	<p>Name of the Service:</p> <p>miRNA Sequencing and Bioinformatics Analysis</p> <p>1. Technology to be used: Sequencing by synthesis chemistry</p> <p>2. Application: miRNA Sequencing and Bioinformatics Analysis</p> <p>3. Sample Type: Tissue</p> <p>4. Sample Collection of samples to be done by the sequencing firm from the research institute</p> <p>5. .Extraction of the high-quality RNA sample to be done us</p>	01 (Include 05 samples)				

ing automated RNA extractor to avoid any possible scope of human error.

- 6.** Library Type: Compatible small library preparation using suitable kit to ensure high quality libraries
- 7.** Library QC using Agilent Tape station and report to be shared in real time to the end user
- 8.** Read Length, coverage and Data: Sequencing chemistry to be used is 50 X 1 i.e. single end chemistry to generate 20 to 30 Million total reads per sample
- 9.** Bioinformatics analysis should include entire analysis as below
- 10.** Bioinformatics Analysis
 - Sample wise raw data QC and summary
 - Unique tags and abundance file & stats
 - Known small RNA analysis results
 - Identification and quantization of known miRNAs
 - Expression profiling and differential expression analysis of known miRNAs
 - Target prediction of known miRNA and their correlation with the expressed transcripts
 - Prediction of novel miRNAs and their target Prediction
- 11.** 85% to 90% of Sequenced data should meet a quality Phred score of Q30
- 12.** Samples (Tissue and RNA etc.) should not be sent out of India.
- 13.** Establishment of firm: Firm should be established in India.
- 14.** Data should be delivered through secured server or HD

	<p>D only. To maintain data confidentiality, firm should not write data in CDs/DVDs.</p> <p>15. Time lines to complete the project with complete analysis should be written clearly and should not exceed more than 4-6 weeks.</p> <p>16. The details of progress of experiment will be intimated to the customer/scientist and further processing in case of any issues will be based on the instructions of the customer only.</p> <p>17. Failure to submit quotation as per the technical specification may deprive the concerned firm from consideration.</p> <p>18. The institute reserves the right to disqualify any bid without stating the reason.</p>					
3	<p>Name of the Service:</p> <p>Whole Genome Bisulphite Sequencing</p> <p>1. The integrity & quantification of the genomic DNA should be checked by running agarose gel electrophoresis and gDNA need to be quantified.</p> <p>2. The sequencing libraries need to be prepared according to the manufacturer's instructions of NGS Standard Lib Kit</p> <p>3. Briefly, Fragmentation of 200ng of genomic DNA need to be performed using adaptive focused acoustic technology and the fragmented DNA is bisulfite-treated with Standard Kit.</p> <p>4. These bisulfite-converted DNA fragments have to be going through the addition of</p>	01 (Include 02 samples)				

indexing adapters and the purification.

5. The purified libraries need to be quantified using qPCR Quantification Protocol and latest NGS platform need for sequencing.

6. Quality Assessment:-

Tool:-Fastqc or other advance technology

Description:- Base quality and errors stats reporting from the raw

Sequence fastq files.

7. Trimming & Filtering:-

Tool:- TrimGalore or other advance informatics

Description:- Trimming of adapters and poor quality sequences from raw fastq files resulting in trimmed fastq files

8. Reference Alignment

Tool:-bwa-meth, Picard or other advance technology

Description

a) Create reference genome index from the genome fasta file.

b) Trimmed sequence reads are aligned to reference with BS aware alignment tool bwa-meth.

c) Remove exact duplicated reads from the BAM alignment file by using Picard.

9. Methylation Extraction

Tool:-MethylDackel or other advance technology

Description

CpG site methylation calling from the BAM alignment file.

Output is in bedGraph format or other advance and easily accessible format

10. Differential Analysis

Tool:- metilene, bsseq or other advance technology

Description

Differential methylation region detection from the sample specific methylation bedGraph files. Samples are grouped as Treated and Control for differential analysis.

11 Samples (Tissue and RNA et

c.) should not be sent out of India.

12. Establishment of firm: Firm should be established in India.

13. Data should be delivered through secured server or HDD only. To maintain data confidentiality, firm should not write data in CDs/DVDs.

14. Time lines to complete the project with complete analysis should be written clearly and should not exceed more than 6-7 weeks.

15. The details of progress of experiment will be intimated to the customer/scientist and further processing in case of any issues will be based on the instructions of the customer only.

16. Failure to submit quotation as per the technical specification may deprive the concerned firm from consideration.

17. The institute reserves the right to disqualify any bid without stating the reason.

4

**Name of the Service:
Sanger Sequencing**

1. Purification of PCR product
2. Sanger sequencing of purified PCR product
3. sample to be collected from the institute by the service provider
4. complete sequencing report to send through email.
5. All the analysis has to be done in consultation with tender and step by step progress of the sequencing work should be intimated.
6. No data generated shall be transferred to any third party without explicit consent from the institute. Any deviation will be treated as serious breach of contract, legal and other measures will be taken against the contracting firm including blacklisting.
7. Service provider must have in-house facility for quoted service and bioinformatics team for analysis of data. Institute reserves the right to verify the facility and if required may visit to bidders facility.
8. All samples have to be picked-up from ICAR-NRC on Pig, Rani, Guwahati, Assam and the cost shall be included in the total quoted amount.
9. Payment will be made only after satisfactory completion of work, receipt of data and reports
10. The work has to be completed within 15 days of pickup of samples from ICAR-NRC on Pig, Rani on the cost of service provider.

01 (Include 160 samples)

5	<p>Name of the Service: Oligonucleotides PCR Primer</p> <p>1.Oligos for PCR amplification</p> <p>2. Synthesis scale of 0.025 µmol</p> <p>3. Number of reactions: 1000</p> <p>Deliver in standard vials in lyophilized form</p> <p>Total No of bases : 1200</p>	01 (Include 1200 bases)				
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Signature and Seal of the Bidder
Business Address:

3. Buyer Added Bid Specific Scope Of Work(SOW)

File Attachment [Click here to view the file.](#)

4. Buyer Added Bid Specific ATC

Buyer uploaded ATC document [Click here to view the file.](#)

Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.

3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process.
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

This Bid is governed by the [General Terms and Conditions/सामान्य नियम और शर्तें](#), conditions stipulated in Bid and [Service Level Agreement](#) specific to this Service as provided in the Marketplace. However in case if any condition specified in General Terms and Conditions/सामान्य नियम और शर्तें is contradicted by the conditions stipulated in Service Level Agreement, then it will over ride the conditions in the General Terms and Conditions.

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।

---Thank You/धन्यवाद---