



File No.4-110/21-22/ST

Dated: -24-08-2021

**NOTICE INVITING TENDER FOR ENTERING IN CONTRACT FOR “GENOTYPING,
SEQUENCING AND RELATED SERVICES WITH STAGGERED DELIVERY ”**

Online bids/tenders are invited from qualified firms/dealers/agencies for “Genotyping, Sequencing and related services with staggered delivery”. The method of submission of tender, amount of Earnest money / Security Deposit and General Terms and Conditions applicable to tender, the technical specifications have been given in the Tender document. The proforma for submission of tender has been given in Technical Bid and Financial Bid of this Notice Inviting Tender. **Manual bids/tenders shall not be entertained.** The tender documents may be downloaded from e-procurement website of CPPP <http://eprocure.gov.in/eprocure/app> as per schedule given in **CRITICAL DATE SHEET** as below.

DETAILS OF TENDER FEE AND E.M.D.

Sl No.	Particulars	Tender Fee and EMD (Rs.)
1.	Contract of Genotyping, Sequencing and related services with staggered delivery	Nil

CRITICAL DATE SHEET

Tender No.	F.No.4-110/21-22/ST
Date and Time for Issue/Publishing	24-08-2021 at 5.00 PM
Document Download Start Date and Time	25-08-2021 at 10.00 AM
Bid Submission Start Date and Time	25-08-2021 at 10.00 AM
Bid Submission End Date and Time	24-09-2021 at 10.00 AM
Date and Time for Opening of Bids	25-09-2021 at 10.00 AM
Address for Communication	Assistant Administrative Officer, ICAR-Indian Institute of Millets Research Rajendranagar, Hyderabad – 500 030 (T.S.)

The tender, complete in all respects must in all cases be received in this office before the date and time indicated in the Schedule of tender as above. The tenders received after the scheduled date and time will be rejected outright. ICAR-IIMR will not be responsible for any delay in receipt of tender for any reason, whatsoever.

Assistant Administrative Officer (Store)

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1. PREAMBLE OF TENDER

The ICAR-IIMR, Hyderabad a unit of Indian Council of Agricultural Research, an autonomous organization under the Department of Agricultural Research and Education (DARE), Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi issued this tender enquiry document inviting tenders from the reputed manufacturers/dealers/agencies and Laboratories for providing of Sequencing and related Services which also indicates *interalia*, the required delivery schedule, terms and place of delivery. The tenderer must quote the prices in **Indian Rupees only**.

2. DEFINITIONS AND ABBREVIATIONS

The following definitions and abbreviations, which have been used in these documents, shall have the meanings as indicated below:

Definitions

- a. "ICAR-IIMR" means the organization ICAR – Indian Institute of Millets Research an Institute under Indian Council of Agricultural Research, Krishi Bhawan, New Delhi with its office located in Rajendranagar, Hyderabad – 500030. Procuring Services incorporated in the Tender document.
- b. "Tender" means Bids / Quotation / Tender received from a Firm / Bidder / Manufacturer.
- c. "Bidder" means Bidder / the Individual or Firm submitting Bids / Quotation / Tender.
- d. "Service Provider" means the individual or the registered firm providing Sequencing and related Services as incorporated in the contract.
- e. "Genotyping, Sequencing and related Services" include isolation of DNA/RNAs from seed/plant samples, quality control (QC), DNA/RNA/genome/transcriptome sequencing/genotyping/physical mapping/quantification of gene expression/peptide mapping/metabolome characterization on all listed chemistries/platforms, generation of raw data, bioinformatics including complete data analysis and deposition of both raw and fully analyzed data with the indenter.
- f. "Contract" means the written agreement entered into between the ICAR-IIMR and/or consignee and the Service Provider, together with all the documents mentioned therein and including all attachments, annexure etc.
- g. "Performance Security" means monetary or financial guarantee to be furnished by the successful bidder for due performance of the contract placed on it.
- h. "Specification" means the document/standard that prescribes the requirement with which Services or service has to conform.
- i. "Day" means calendar day.

Abbreviations used in this tender

- a. "TE Document" means Tender Enquiry Document.
- b. "NIT" means Notice Inviting Tenders.
- c. "GIT" means General Instructions for Tenderer.
- d. "SIT" means Special Instructions for Tenderer.
- e. "GCC" means General Conditions of Contract.
- f. "BG" means Bank Guarantee.
- g. "MoU" means Memorandum of Understanding.
- h. "CPP" means Central Procurement Portal.
- i. "GFR" means General Financial Rules.

3. ELIGIBILITY CRITERIA and CHECKLIST

(On Bidder/Tenderer's Letter head)

Name of Bidder:

Name of Manufacturer:

S.No.	Activity/ Criteria	Minimum Eligibility	Yes/ No/ NA	Documents to be uploaded	File Type	Page Nos. in uploaded Tender Docs
1.	The Bidder/Tenderer shall be Indian registered firm/limited company/Private Limited Company register under the Indian Company Act, 1956			Duly signed & Scanned copy to be uploaded	.PDF	
2.	In case of agent - i) Valid License Certificate of the Principal ii) valid Agreement copy			Duly signed & Scanned copy to be uploaded	.PDF	
3.	In case of agent of a Foreigner bidder - i) Declaration by the Principal ii) Valid License letter iii) Authorization letter to quote on behalf of Principals			Duly signed & Scanned copy to be uploaded	.PDF	
4.	Compliance of Technical Specifications / Scope of work (as per Annexure I) along with self-			Duly signed & Scanned copy to be uploaded	.PDF	

	attested technical brochures/relevant documents (highlight the details)				
5.	Bidder/Tenderer profile – Annexure - II		Duly signed & Scanned copy to be uploaded	.PDF	
6.	Accepting all tender terms and conditions – (Annexure - III) – on letter head.		Duly signed & Scanned copy to be uploaded	.PDF	
7.	Furnishing non-blacklisting certificates (as per Annexure - IV)		Duly signed & Scanned copy to be uploaded	.PDF	
8.	Bid security Declaration on the letter head of the bidder (Annexure-V)		Scanned copy to be uploaded	.PDF	
9.	Annual Turnover – for Rs. 1 Core each in the three years (2017-18, 2018-19, 2019-20). Audited Balance sheet duly attested by CA for of last five years		Duly signed & Scanned copy to be uploaded	.PDF	
10.	Experience – Minimum three years performance/experience certificates issued by Central /State Government department in this area.		Duly signed & Scanned copy to be uploaded	.PDF	
11.	Income Tax returns – acknowledgement of IT returns duly attested/signed by CA		Duly signed & Scanned copy to be uploaded	.PDF	
12.	GST certificate – Self attested Copy of GST certificate.		Duly signed & Scanned copy to be uploaded	.PDF	
13.	Financial Bid (as per BOQ)		Excel format	Excel Format	

Note:

1. The Bidder may go through the checklist and ensure that all the documents/confirmations listed above are enclosed in the tender and no column is left blank. If any column is not applicable, it may be filled up as NA.

2. It is the responsibility of the tenderer to go through the Tender document to ensure furnishing of all information/required documents in addition to above, if any. The same should be indicated clearly by the bidder/tenderer on the letter head and duly signed.

4. INSTRUCTIONS FOR ONLINE BID SUBMISSION

- a. The bidder shall submit the bids electronically, through e-procurement system (<http://eprocure.gov.in/eprocure/app>). **Any document submitted through any other means will not be considered as part of Bid except for the Originals as asked in this tender.**
- b. The tendering process shall follow two-part bidding. Bid shall be submitted in two parts, Technical Bid and Price Bid.
- c. In the first stage, only Technical bid will be opened online and evaluated.
- d. The Bid shall be considered responsive provided it meets all the requirements under this tender including technical specifications and relevant documents as stipulated in tender document.
- e. In the second stage, Price Bids of only those bidders, whose bids are found qualified in Technical Bid, will be opened. Date of Opening of Price Bids would be notified separately.
- f. The bid shall be rejected if the documents are found false or fake. If at a later stage, the documents submitted are found false or fake, the Contract shall be terminated and bid performance security will be forfeited. Also, the Contractor shall be fined as deemed appropriate by the employer for breach of trust.
- g. The bidders are requested to submit soft copies of their bids electronically on the CPP Portal, using valid user ID and Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.
- h. The tender form/bidding documents may be downloaded from the website: <https://eprocure.gov.in/eprocure/app>. Online submission of Bids through Central Public Procurement Portal (<https://eprocure.gov.in/eprocure/app>) is mandatory. Manual/Offline bids **shall not be accepted** under any circumstances.
- i. Tenderers/bidders are requested to visit the website <https://eprocure.gov.in/eprocure/app> regularly for obtaining more information useful for submitting online bids on the CPP Portal. Any changes/modifications in tender enquiry will be intimated by corrigendum through this website only.
- j. In case, any holiday is declared by the Government on the day of opening, the tenders will be opened on the next working day at the same time. This Institute reserves the right to accept or reject any or all the tenders.

Registration

- a. Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL:<https://eprocure.gov.in/eprocure/app>) by clicking on the link "Online Bidder Enrolment" on the CPP Portal which is free of charge.
- b. As part of the enrolment process, the bidders will be required to choose a unique username and assign for their accounts.
- c. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

- d. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority Recognized by CCA, India (e.g. Sify/nCode/eMudhra etc) with their profile.
- e. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- f. Bidder then logs in to the site through the secured log -in by entering their user ID / password and the password of the DSC /e-Token.

Searching For Tender Documents

- a. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, other keywords etc, to search for a tender published on the CPP Portal.
- b. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders" folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- c. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

5. TERMS AND CONDITIONS FOR Contract of Genotyping, Sequencing and related services with staggered delivery

- a. The tender shall be valid for a period 180 days from the date of opening of the tender.
- b. **The rates invited for Genotyping, Sequencing and related Services with staggered delivery will be valid for one year from its approval and this can be extended for another one year based upon the institute requirement and satisfactory performance of the firms. No enhancement of the prices will be entertained at any time during period of contract and extension of rate contract.**
- c. ICAR-IIMR as well as the successful bidder/tenderer may withdraw the rate contract by serving suitable notice **not less than 30 days** to each other. The loss, if any, arising out of it will be recovered from the Performance Guarantee provided by the Vender.
- d. If the present performance of the bidder in a current contract for any major services is unsatisfactory as certified by any authority of the relevant services, the offer of the bidder will be summarily rejected without assigning any reasons thereof. The loss incurred, if any, will be recovered from the Performance Security Guarantee.
- e. The bidders shall quote the rates only for the items mentioned in the schedule of rates in excel format provided along with this tender.

- f. In case of any bid where **unit rate of any item appears unrealistic**, such bid shall be considered unbalanced and non-responsive. ICAR-IIMR may ask for providing satisfactory explanation for such unrealistic quoted rate. If bidder is unable to provide satisfactory reply with supporting analysis of rates, that particular item may not be awarded or complete bid shall be rejected.

Documents establishing goods Conformity to TE document (applicable for supply of Services)

- a. The bidder shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the Service being offered in the tender fully confirms to the Services and services specified by the ICAR-IIMR in the TE documents. For this purpose, the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the ICAR-IIMR in the TE documents to establish technical responsiveness of the Services and services offered in its tender duly indicating relevant page numbers in the product literature.
- b. Online supply orders, incorporating definite quantity of Genotyping, Sequencing and related Services to be provided to the successful bidder on **requirement basis**. The successful bidder should execute the work as per the terms and conditions agreed and within time frame as mentioned in **SCOPE OF WORK (Annexure I)**.

Sanger Sequencing Services

- a. Samples would be submitted either as purified/unpurified PCR product/plasmid.
- b. Company representative would collect the samples and primers meant for sequencing in dry ice every time on a pre-decided day from the indenter, at no extra charge.
- c. Quality check of the samples is to be carried out by the firm before proceeding for sequencing at no extra cost. If samples are found unsuitable for sequencing, the same has to be informed to the indenter before further processing.
- d. Sequencing should be done using (i) standard primers or (ii) client-specific primers, as mentioned in the order. Client-specific primer will be provided by the indenter.
- e. Results of sequencing must be supplied to the indenter in the form of Electropherogram files with Phred score for all the bases and compatible with all commonly used sequence visualization and processing softwares. Results of sequencing must be supplied in FASTA format also.
- f. The soft copies of the sequencing results should be handed over to the indenter only and confidentiality is to be maintained.
- g. About 90% of the bases in the DNA sequence (excluding the initial primer length of not more than 30-40 bases) should have a Phred score of not less than 20. If less than 90% of the bases have a Phred score of 20, then the sequencing reaction would be considered as failed. Company would repeat all failed reactions without any additional cost. On second failure of the reaction, no charges will be paid for the reaction.
- h. The final results should be submitted in 30 days from the period of contract awarded.

Genotyping, Next Generation Sequencing (NGS) and related Services

- a. Samples would be submitted as plant tissues or seeds.
- b. Company representative would collect the samples for sequencing in dry ice every time on a pre-decided day from the indenter, at no extra charge.
- c. The cost is inclusive of sample collection, DNA/RNA isolation, purification, library construction, data curation, quality control, SNP/gene/protein/differentially expressed genes calling, gene annotation, gene ontology, gene pathways, gene mapping depending upon the item.
- d. The quantity and quality of the genotyping and sequencing data should match with the indenter's need as mentioned in the order.
- e. The soft copies of the marker calling and sequencing results and data analysis should be handed over to the indenter in an external hard disk or via online web portals, the cost of which is borne by the firm/vendor.
- f. The final results should be submitted in 90 days from the period of contract awarded

6. GENERAL INSTRUCTIONS FOR TENDERERS (GIT)

- a. The Tender shall be submitted in accordance with these instructions and any tender not confirming the instructions as under is ***liable to be rejected***. These instructions shall form the part of the tender and contract.
- b. The Bidder should carefully read Requirements & Scope of work, General & Special conditions of contract and all other documents in connection with the Bid. The Bidder shall quote his rates, keeping all above points in mind.
- c. Those Bidders whose near relatives are posted as official/ officer(s) in any capacity at ICAR-IIMR are not be permitted to Bid. The prospective bidder shall also intimate the names of persons who are working with him in any capacity or subsequently employed by him, who are near relative to any officer/ official (s) in the ICAR-IIMR. Any breach of this condition by the bidder shall render him ineligible. By the term 'near relative', is meant wife, husband, parents & grand parents, children & grandchildren, brothers & sisters, uncles, aunts & corresponding in laws.
- d. The bidder shall disclose any payment made or proposed to be made to any intermediaries (agents etc.) in connection with the bid. **The bidder should clearly disclose the relevant documents to this effect.**
- e. Failure to provide and/or comply with the required information, instructions etc. incorporated in these TE documents may result **in rejection of its tender**.
- f. The bidder should have sufficient Infrastructure, technical expertise and financial strength to undertake the contract.
- g. Any items left blank, will be treated as incomplete bid and liable to be rejected.

- h. The bid that does not meet minimum acceptable standards of completeness, consistency and details will be rejected for non-responsive.
 - i. Conditional offers are liable for rejection.
 - j. Any effort by a bidder/tenderer to influence the ICAR-IIMR, Hyderabad in the process of examination, clarification, evaluation and comparison of tenders, and in decisions concerning award of contract, may result in rejection of the bidder's tender.
 - k. All responses to such requests for clarification shall be in writing. No change in the prices or substance of the bid shall be sought, offered or permitted.
 - l. Evaluation of bids shall be carried out by a Technical Evaluation committee as per evaluation criteria. The decision of the ICAR-IIMR, Hyderabad in deciding successful bidder shall be final and binding on the bidder.
 - m. The bidder/tenderer shall furnish all the required documents as mentioned that are required as per this tender document in technical bid and price bid. Failure of uploading any document, will be liable for rejection of bid.
 - n. The items/Services shall be in compliance to the specifications mentioned in Annexure – I of the tender and shall be of the latest technology, best quality and of high standards.
 - o. No extra payment shall be paid on account of any discrepancy in nomenclature of items. The rates accepted by ICAR-IIMR shall be final and binding.
 - p. While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected. If any Tenderer stipulates any condition of his own, such conditional tender is liable to be rejected.
 - q. Director, ICAR-IIMR, Hyderabad reserves the right to **reject any tender/bid wholly or partly without assigning any reason.**
 - r. The Technical Evaluation Committee constituted by the Director, ICAR-IIMR, Hyderabad shall have the right to verify the particulars furnished by the bidder independently.
 - s. In the event of any dispute the legal matter shall be subjected to the jurisdiction of Hyderabad Court only.
- i. All the rates and amount shall be quoted in whole denomination of the Indian Rupee (INR).
 - ii. The bidder/tenderer shall be deemed to have satisfied himself before Bidding as to the correctness and sufficiency of his bid for the Service and of the rates & amount quoted in the schedules of Service, which rates & amounts, shall, except as otherwise provided, cover all his obligations under the contract and all matters and thing necessary for the proper completion of the services as aforesaid in accordance with good practices and recognized principles.
 - iii. The bidder shall not be under a declaration of in-eligibility for corrupt & fraudulent practices in any Government Department or organization in India or abroad.
 - iv. The bidder/tenderer should follow the instructions for online submission of both Technical and Price bids.

- v. The Bidder/Tenderer must be a registered entity either a manufacturer/sole proprietor/individual company/partnership firm/Cooperative Society/Corporation. Consortium of Companies and entered business on MoU are not allowed.
- vi. The Bidder/Tenderer shall upload all the documents as indicated in their tender document.
- vii. The Bidder/Tenderer should have GST registration certificate and IT registration/PAN number on the firm.
- viii. The bidder/Tenderer should have an annual gross turn over not less than Rs. 1 core (Rupees one core only) for three years out of last three years (2017-18, 2018-19, 2019-20).
- ix. The bidder/Tenderer should have minimum 3 years' experience in the relevant area.
- x. The registered Manufacturer/firm/sole proprietor or their authorized dealer/agent can only participant in the tender. In case the bidder/tenderer is authorized dealer/agent, then valid authorization and valid license certificates should be enclosed. Each bidder shall submit only one bid for these services. A bidder who submits more than one bid for this work will attract disqualification and rejection of all of his bids. However, bids submitted by Principal and dealer/agent will be treated as single bid. Lowest rate between the two will be considered.
- xi. The bidder/tenderer should furnish an undertaking on their letter head 'accepting all the tender instructions and terms and conditions' as per annexure IV.
- xii. If any of the information furnished by the bidder is found to be incorrect at any stage, the bid/contract is liable to be rejected / terminated and the Performance Security will be forfeited.
- xiii. Director, ICAR-IIMR, Hyderabad reserves the right to cancel the tender without assigning any reason thereof.
- xiv. Notwithstanding the above, the ICAR-IIMR reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

7. BENEFITS TO MICRO AND SMALL ENTERPRISES (MSEs)

With reference to the Order of the Ministry of MSME, under the Public Procurement Policy March 2012, Micro and Small Enterprises shall be entitled for benefits, subject to terms and conditions, as under:

Qualifying Criteria for MSEs, SC/ST Vendors

- c. MSE bidders must submit registration certificates from any of the following (or any other body specified by the Ministry of MSME):
 - National Small Industries Corporation (NSIC)
 - District Industries Centres (DIC)
 - Coir Board

- Khadi and Village Industries Commission (KVIC)
 - Khadi and Village Industries Board (KVIB)
 - Project Directorate of Handicrafts and Handloom
- d. SC/ST owned enterprises (i.e. SC/ST proprietorship, or holding minimum 51% shares in case of Partnership/Private Limited Company) shall additionally submit relevant SC/ST certificates issued by any of the following:
- District/Additional District Magistrate/ Collector/ Deputy Commissioner/ Additional Deputy Commissioner/Deputy Collector/1st Class Stipendiary Magistrate/Sub-Divisional Magistrate/Taluka Magistrate/Executive Magistrate/ Extra Assistant Commissioner.
 - Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.
 - Revenue Officer not below the rank of Tahsildar.
 - Sub-Divisional Officer of the area where the individual and/or his family normally resides.
- e. The registration shall be valid as on date of placement of order. A self-attested photocopy of the relevant certificate shall be submitted as a support document.
- f. The registration must be for the items/category of items/services relevant to the tendered items/category of items/services.

Purchase Preference for MSE

- a. In tenders, where the L-1 (evaluated price) bidder is a non-MSE, up to 20% of the tendered quantity shall be allowed to be supplied by participating MSEs provided that the tendered quantity is divisible into two or more orders and adequate for the purpose; all qualifying bidders have agreed for acceptance of part-order quantity and participating MSE matches the L1 rate.
- b. A share of 4% out of this 20% shall be allowed to be supplied by participating MSEs owned by Scheduled Cast/Scheduled Tribe Entrepreneurs. In the case of an SC/ST owned MSE failing to participate in the tender or not meeting the tender requirements, this 4% sub-target shall be met by other participating MSEs. The above shall be subject to that the participating MSE (including SC/ST) bidders shall have quoted a price within +15% of the L1 bid price and further that they shall agree to match their quoted price with the L1 price.
- c. In case that two or more MSEs are within the L1 + 15% band, all such MSEs will be offered the opportunity to match the L1 rate and 20% of the order will be shared equally by them.
- d. Where the MSE is SC/ST owned, they shall be exclusively awarded a share of 4% of the above 20% in addition to equally sharing the balance 16% with other non-SC/ST MSEs. In case of more than one SC/ST MSE matching the L1 price, they shall equally share 4% of the order, and additionally share the balance 16% with other non-SC/ST MSE bidders.

8. CLARIFICATION TO TENDER

- a. A prospective tenderer requiring any clarification regarding the tender may address the 'Tender Inviting Authority' by letter or fax or mail. ICAR-IIMR will respond in writing to any request for clarification of the tender.
- b. The responses to the clarifications will also be notified **on ICAR-IIMR website and CPPP**.
- c. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24 × 7 CPP Portal Helpdesk.

9. AMEMDEMENTS TO TENDER

- a. ICAR-IIMR may amend the tender conditions up to 2 days prior to the time fixed for receipt of the tender.
- b. Amendment to the tender, in response to clarifications sought by prospective tenderers, is solely at the discretion of ICAR-IIMR. Such amendments, if any, will be noticed on ICAR-IIMR website and CPPP.
- c. ICAR-IIMR, at its discretion, may or may not extend the due date and time for submission of bids/tenders on account of amendments or for any reason. Extension of time will be notified on ICAR-IIMR website and CPPP.
- d. All the bidders/tenderers are advised to periodically browse ICAR-IIMR website and CPPP, till the closing date of this tender for any amendments or corrigenda issued in connection with this tender. ICAR-IIMR **will not be responsible** for any interpretation of the provisions of this tender document on account of the Tenderer/bidders' failure to update the bid documents based on changes announced thorough website.

10. LANGUAGE OF THE BID/TENDER DOCUMENT

All documents related to bid should preferably be in English language. The language for communications shall be English. Any printed literature furnished by the bidder may be written in another language provided that this literature is accompanied by an English Translation. In such case, for purpose of interpretation of the Bid, the English translation shall prevail.

11. SUBMISSION OF BIDS

- a. Bidder should log on to the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission date & time. Bidder will be responsible for any delay due to any issues/ reason.
- b. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document (Annexure I).
- c. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it

and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. **If the BoQ file is found to be modified by the bidder, the bid will be rejected.**

- d. The server time (which is displayed on the bidder's dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- e. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers / bid openers public keys.
- f. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- g. Upon the successful and timely submission of bids (i.e., after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid number and date & time of submission of the bid with all other relevant details.
- h. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

12. VALIDITY OF TENDER

If not mentioned otherwise in the Special Instructions for Tenderer (SIT), the tenders shall remain valid for acceptance within period of **180 days** from the date of tender opening prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.

13. EVALUATION OF TENDER

Mode Of Submission Of Bid

Technical Bid

The technical bid shall be complete in all aspects and contain all information asked for in this document. Technical Bid shall comprise the following:

- a. Scanned copy of Registration certificate of the firm/company.
- b. Scanned copy of agent/dealer – Valid license certificate, agreement copy between the Principal and agent, in case agent/dealer is submitting the bid.

- c. Principal/Manufacturer giving consent to quote/submit the bid by his dealer/agent, valid license certificate and copy of agreement duly attested/signed by the Principal (all these documents should on the Principal/Manufacturer letter head and should be signed by the authorized signatory).
- d. Technical specifications (scope of work) – On Bidder/Tenderer letter head as per Annexure – I.
- e. Bidder/Tenderer profile – Annexure – II.
- f. Accepting the tender terms and conditions letter (on firm’s letter head) – Annexure – III.
- g. Affidavit declaration on Rs.100/- non-judicial stamp paper (Annexure – IV).
- h. Bid Security Declaration on the letter head of the bidder. (Annexure-V)
- i. Audited Balance sheet duly attested by CA for last three years (2017-18, 2018-19, 2019-20).
- j. Three years’ experience in the relevant area – relevant documents & cliental lists.
- k. Acknowledgement of I.T. returns duly attested by CA.
- l. Self-attested copy of GST registration certificate.
- m. Self-attested brochures/relevant documents (highlighted technical details).
- n. Certificate of Non-Black listing.

It may be noted that after uploading, following documents should be sent by post / courier/ in person submit to Sr. Admn. Officer, ICAR – Indian Institute of Millets Research, Rajendranagar, Hyderabad – 500 030 on or before bid opening date and time as mentioned in the Critical Date Sheet. If there is any variation/deficiencies between the soft copies and hard copies, the bid/tender is liable for rejection.

14. PRICE BID

- a. The Price bid shall be complete in all aspects and shall contain all information asked for in this document.
- b. The Price bid format is provided as BoQ_XXXX.xls along with this tender document at <http://eprocure.gov.in/eprocure/app.> Bidders are advised to download this BoQ_XXXX.xls as it is and quote their offer/rates in the permitted column and upload the same in the Price Bid. Bidder shall not tamper/modify the downloaded price bid template in any manner. In case the Price format is found to be tempered/modified in any manner, then Bid will be Summarily rejected, Bid Security (EMD) would be forfeited and Bidder is liable to be banned from doing business with the ICAR-IIMR.
- c. **The Prices quoted shall be in Indian Rupees (INR) and there will be item wise evaluation L1 will be arrived after taking all taxes into consideration up to IIMR.**

15. OPENING OF TECHNICAL BIDS

- a. The ICAR-IIMR will open the bids as per electronic bid opening procedures specified in CPPP at the specified date and time. Bidders can also view the bid opening by logging on to the e-procurement system. Specific bid opening procedures are laid down at

<http://eprocure.gov.in/eprocure/app> under the head “Bidders Manual Kit”. The Bidder will be at liberty to be present either in person or through an authorized representative at the time of opening of the Bid or they can view the bid opening event on online at their remote end.

- b. No representative will be allowed to attend the Bid Opening event at the ICAR-IIMR's location without **valid Bid acknowledgement** slip received after submission of Bids.
- c. In the event of the specified date of bid opening declared a holiday for purchase, the bids shall be opened at the specified time and place on the next working day.

16. EXAMINATION AND EVALUATION OF TECHNICAL BIDS

- a. The ICAR-IIMR will examine the bids to determine their completeness in all respect as per the requirement of this tender document.
- b. The ICAR-IIMR may waive any minor informality or non-conformity or irregularity in a bid, which does not constitute a material deviation, provided such waiver does not prejudice to affect the relative ranking of any Bidder.
- c. Evaluation of bids shall be carried out by a Technical Evaluation committee as per evaluation criteria and documents. The decision of the ICAR-IIMR, Hyderabad in deciding successful bidder shall be final and binding on the bidder.
- d. The Technical Evaluation Committee constituted by the Director, ICAR-IIMR, Hyderabad shall have the right to verify the particulars furnished by the bidder independently.
- e. The ICAR-IIMR reserves the right to reject the bid under any of the following circumstances:
- f. Bid is incomplete and/or not accompanied by all required documents.
- g. Bid is not in conformity with the terms and conditions of this document.
- h. Specifications stipulated in the relevant annexures pertaining to Technical Bid.

17. EVALUATION OF PRICE BIDS

- a. Price Bid of only technically qualified bidders shall be opened and evaluated.
- b. Evaluation shall be done on the basis of item-wise amount quoted (inclusive of all applicable taxes).
- c. The Evaluated Price shall be total price inclusive of taxes as mentioned in the Price Bid (Annexure-V).

18. LOWEST BIDDER

- a. On completion of Price Bids evaluation process, the Bidder whose Evaluated Price is found to be the lowest would be the L-1 Bidder.
- b. In case, competition ends in a tie, the work will be awarded to the firm based on their performance and experience. ICAR-IIMR decision is final.

19. AWARD OF CONTRACT

- a. ICAR-IIMR will award the contract to the lowest bidder for a given item.
- b. **The rates invited for Genotyping, Sequencing and related Services will be valid for one year from its approval and this can be extended for another one year based upon the institute requirement and satisfactory performance of the firms. No enhancement of the prices will be entertained at any time during period of rate contract and extension of contract.**
- c. ICAR-IIMR as well as the successful bidder/tenderer may withdraw the rate contract by serving suitable notice **not less than 30 days** to each other. The loss, if any, arising out of it will be recovered from the Performance Guarantee provided by the Vender.
- d. Genomics is a rapidly growing scientific field. Hence, depending upon the new developments in this field, new NGS services and corresponding pricing will be permissible within purview of this current contract.
- e. The notification of award will constitute the formation of the contract subject to the furnishing of a Performance Security, within 7 days of receipt, the successful bidder will furnish the Performance Security 10% of the ordered/contract value.
- f. The Successful bidder should execute an agreement on Rs.100/- non-judicial stamp paper incorporating all the tender terms and conditions. Thus, the rate contract begins from the date of signing of the agreement till end of the contract as mentioned in the agreement.

20. CONFIDENTIALITY

- a. Information relating to Sequencing and related Services, examination, evaluation, comparison, and post qualification of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until Award of the Contract (AOC) vice versa, the awardee should maintain the confidentiality sequencing results/data during the contract period and even after contract also.
- b. Any effort by a Bidder to influence the ICAR-IIMR in the examination, evaluation, comparison, and post qualification of the bids or contract award decisions may result in the rejection of its Bid, at the discretion of Director, ICAR-IIMR, Hyderabad.

21. LATE BID

A tender which is received after the specified date and time for receipt of tenders will be treated as "late" tender and will be ignored.

22. LIQUIDATED DAMAGES

- a. The work of services is required to be completed within stipulated days as mentioned in **Scope of Work (Annexure I)**, penalty at the rate of 2% of value of that contract order, per week of delay subject to maximum of 10% of the order value will be levied.

- b. The successful Tenderer shall, within 7 days from the date of receipt of communication of acceptance of quotes from ICAR-IIMR, Hyderabad shall intimate his acceptance of the order. The successful Tenderer shall complete the work of provide services strictly as per the accepted delivery period.

23. DELIVERY

- a. The results of Sequencing and related services (final data) should be sent through hard disk/on-line as indicated by ICAR-IIMR, Hyderabad. The incidental costs should be borne by awardee/contractor. The successful tenderer shall complete supplies strictly within the accepted delivery period. For Sanger sequencing services, the final results should be submitted in 30 days from the period of contract awarded and for the genotyping, NGS and related services, the final results should be submitted in 90 days from the period of contract awarded.
- b. The soft copies of the marker calling and sequencing results and data analysis should be handed over to the indenter in an external hard disk or via online web portals, the cost of which is borne by the firm/vendor.

24. PAYMENT

- a. After successful delivery of the data/service rendered the payment will be made by ICAR-IIMR, Hyderabad by NEFT Transfer to the bank accounts provided the tender in normal course.
- b. The tenderer shall submit the invoice after duly certified by the end user to Stores, ICAR-IIMR for further processing and arranging payment.
- c. 100% payment shall be made only after providing of data services in good condition along with successful delivery of genotyping and sequencing data and satisfactory quality of Services rendered report received by competent authority. No advance payment will be made.

25. PERFORMANCE GUARANTEE

The successful bidder shall be required to submit a Performance Guarantee amounting to 3% of the contract value in the form of BG/Demand Draft in favour of **ICAR-UNIT -IIMR** and should remain valid for 60 days beyond the date of the completion of ARC.

26. CORRUPT AND FRAUDULENT PRACTICES

It is required by all concerned namely the Consignee / Bidders / Service Providers etc to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the ICAR-IIMR:-

- (a) Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "Corrupt Practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and

- ii. "Fraudulent Practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the ICAR-IIMR, and includes collusive practice among Bidders (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the ICAR-IIMR of the benefits of free and open competition;
- (b) ICAR-IIMR, Hyderabad will reject a proposal for award, if it determines that, the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- (c) ICAR-IIMR, Hyderabad will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the ICAR-IIMR if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

27. TERMINATION FOR DEFAULT ACTIVITY

ICAR-IIMR may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Service Provider, terminate the Contract in whole or part:

- If the Service Provider fails to deliver any or all of the Services within the period(s) specified in the order, or
- within any extension thereof granted by the ICAR-IIMR; or
- If the Service Provider fails to perform any other obligation(s) under the Contract.
- If the Service Provider, in the judgment of the ICAR-IIMR has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

In the event the ICAR-IIMR terminates the Contract in whole or in part, the ICAR-IIMR may procure, upon such terms and in such manner, as it deems appropriate, Services or Services similar to those undelivered, and the Service Provider shall be liable to the ICAR-IIMR for any excess costs for such Services or Services. However, the Service Provider shall continue the performance of the contract to the extent not terminated. Performance security will not be returned.

28. PRESERVATION OF DATA

The vendor is requested to keep the data backup in their systems till the rate contract is in force/end of the period of contract.

TENDERER'S NAME & SIGNATURE WITH SEAL

29. SCOPE OF WORK (Annexure - I)

Item No	Item name	Sample Qty	Unit	Time for Delivery of results
1	Sanger Sequencing of purified PCR product with specific primer, single pass (at least 600 bases read at Q20) including sample collection, QC and data (primers will be provided by the client/indenter)	1	Number	30
2	Sanger Sequencing of purified plasmid DNA with universal primers, single pass (at least 600bases read at Q20) including sample collection, QC and data	1	Number	30
3	Illumina NGS platform (2x150 bp), 30 million reads, Q30 data including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90
4	Illumina NGS platform (2x150 bp), 24 GB Q30 data, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90
5	Illumina NGS platform (2x150 bp), 50 GB Q30 data, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90
6	Genotyping by Sequencing using NGS platform - 200,000 Raw tags per sample, including sample collection, nucleic acids isolation, purification, library construction, QC, assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90
7	Genotyping by Sequencing using NGS platform - 400,000 Raw tags per sample, including sample collection, nucleic acids isolation, purification, library construction, QC, assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90
8	Whole Genome Bisulphite Sequencing - 50X coverage, up to 3 Gb genome, including sample collection, nucleic acids isolation, purification, library construction, QC, DMGs, location of DMGs, gene ontology, pathways, functional classifications	1	Number	90
9	Whole Genome Bisulphite Sequencing - 100X coverage, up to 3 Gb genome, including sample collection, nucleic acids isolation, purification, library construction, QC, DMGs, location of DMGs, gene ontology, pathways, functional classifications	1	Number	90
10	One SMRT cell of Pac Bio Sequel II, up to 20 GB data, >10 Kb read length, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90
11	Optical Mapping using SAPHYR system, data output upto 800 GB data, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, map comparisons	1	Number	90
12	HiC Library Preparation of 10 MB cross linked reads, data output 250 GB data, including sample collection,	1	Number	90

	nucleic acids isolation, purification, library construction QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways			
13	HiC Library Preparation of 30 MB cross linked reads, data output 300 GB data, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90
14	10X Genomics Library of 35 KB or more and Sequencing on NovaSeq 6000 with 150 GB data output including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90
15	Small RNA sequencing, 1×50bp, at least 25 million reads, Q30 values, including sample collection, nucleic acids isolation, purification, library construction, QC, DEGs, gene prediction, gene locations, annotations, pathway predictions, variant calling	1	Number	90
16	Transcriptome sequencing, 2×150 bp, at least 30 million reads, including sample collection, nucleic acids isolation, purification, library construction, QC, DEGs, gene prediction, gene locations, annotations, pathway predictions, variant calling	1	Number	90
17	Transcriptome sequencing, 2×150 bp, at least 60 million reads, including sample collection, nucleic acids isolation, purification, library construction, QC, DEGs, gene prediction, gene locations, annotations, pathway predictions, variant calling	1	Number	90
18	Genotyping of 8-24 SNPs using capillary electrophoresis including sample collection, nucleic acids isolation, purification, QC and clearcut SNP calls	1	Number	90
19	Genotyping of 48-96 SNPs using capillary electrophoresis including sample collection, nucleic acids isolation, purification, QC and clearcut SNP calls	1	Number	90
20	Genotyping of 8-24 SNPs using KASP assay including sample collection, DNA isolation, purification, primer designing, QC and discrimination of SNP alleles, allelic data (DNA sequences containing SNPs with flanking regions will be provided by the client)	1	Number	90
21	Genotyping of 48-96 SNPs using KASP assay including sample collection, DNA isolation, purification, primer designing, QC and discrimination of SNP alleles, allelic data (DNA sequences containing SNPs with flanking regions will be provided by the client)	1	Number	90
22	HiFi Sequencing for large tetraploid genome: One SMRT cell of Pac Bio Sequel II, up to 20 GB CCS HiFi, >10 Kb read length with including sample collection, nucleic acids isolation, purification, shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, genome assembly, genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways, comparative genomics, Gene gain gene loss, evolutionary genomics and custom analysis	1	Number	90
23	HiFi Sequencing for autoployploid genome: Multiple SMRT cells of Pac Bio Sequel II, up to 40 GB CCS HiFi, >10 Kb read length with including sample collection, nucleic acids isolation, purification, Shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, genome assembly, Genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, functional classifications,	1	Number	90

	pathways, comparative genomics, Gene gain gene loss, evolutionary genomics and custom analysis			
24	HiFi Sequencing for large allopolyploid genome: Multiple SMRT cells of Pac Bio Sequel II, up to 60 GB CCS HiFi, >10 Kb read length with including sample collection, nucleic acids isolation, purification, Shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, genome assembly, Genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways, comparative genomics, Gene gain gene loss, evolutionary genomics and custom analysis	1	Number	90
25	ISO Seq for genome annotation polyploid genome: Total RNA Isolation and QC with RIN more than 8, cDNA conversion, SMRTbell ISO Seq, Two libraries per tissue, Library Insert Size less than 3 Kb and more than 3Kb per tissue to capture small and large genes and transcripts, sequencing on Sequel II platform, data per library 60Gb per 1Gb genome, raw data QC, Filtration of CCS reads, ISO-Seq Full Length Read Identification, Novel Gene Identification, Tissue & Gene Specific Isoforms identification, tissue Specific Identification of Low Abundance Transcripts, Structural Annotation, Gene set validation, Functional annotation, lncRNA Identification and custom analysis to generate reference transcriptome for downstream RNA-seq studies,	1	Number	90
26	Total RNA Isolation and QC with RIN more than 8, cDNA conversion, SMRTbell ISO Seq library preparation,, Library Insert Size of ~3Kb per tissue to capture small and large genes and transcripts, sequencing on Sequel II platform, data per library 20 to 30 Gb, raw data QC, Filtration of CCS reads, ISO-Seq Full Length Read Identification, Novel Gene Identification, Tissue & Gene Specific Isoforms identification, tissue Specific Identification of Low Abundance Transcripts, splice junctions variants and custom analysis like gene fusions, SNVs, allele-specific expression	1	Number	90
27	Hybrid Transcriptome for full length transcriptome sequencing and gene expression: Total RNA Isolation and QC with RIN more than 8, cDNA conversion, two library per tissue, SMRTbell ISO Seq library preparation for Sequel II run, Library Insert Size of ~3Kb per tissue to capture small and large genes and transcripts, sequencing on Sequel II platform, data per library 20 to 30 Gb, Second RNA Seq library to generate 12Gb data on NovaSeq 6000 machine to discover gene expression ,raw data QC, Filtration of CCS and Illumina reads, ISO-Seq Full Length Read Identification, Novel Gene Identification, Tissue & Gene Specific Isoforms identification, tissue Specific Identification of Low Abundance Transcripts, Mapping of RNA Seq reads to reference ISO Seq based transcriptome, differential gene expression profiling, pathway analysis splice junctions variants and all custom RNA Seq analysis like gene fusions, SNVs, allele-specific expression etc	1	Number	90
28	<i>De-novo</i> Genome sequencing of genomes: One SMRT cell of Pac Bio Sequel II, up to ≥60 -fold Unique Molecular Coverage (UMC) per microbial genome to generate upto 10Gb data per sample, >10 Kb read length with including sample collection, nucleic acids isolation, purification, Shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, genome assembly, Genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, comparative genomics and custom analysis	1	Number	90
29	Full length 16s microbiome sequencing: One SMRT cell of Pac Bio Sequel II, up to 8,000 HiFi reads / 16S sample, 1 to 2 Kb read length with including sample collection, nucleic acids isolation, purification,	24	Number	90

	Shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, Amplification of Full-Length 16S Gene with Barcoded Primers for Multiplexed 24 SMRTbell Library Preparation and Sequencing on one SMRTcell with complete data analysis including microbiome functional profiling studies and providing information even from species with low coverage. minimum samples 4 per run,			
30	Shotgun Metagenome sequencing and assembly: gDNA QC, Preparing 10 kb Library Using SMRTbell Express Template Prep Kit 2.0 for Metagenomics Shotgun Sequencing on CCS mode of PacBio Sequel II, 4 samples per SMRT cell, Complete data analysis to Generate near-complete assemblies of high-complexity samples. minimum samples 4 per run,	1	Number	90
31	Targeted Amplicon Sequencing: Sequence 1000+ barcoded amplicons Target size can be from 500 bp - 15 kb, SMRTbell Libraries using PacBio Barcoded M13 Primers for Multiplex SMRT Sequencing on Sequel II to generate ≥ 30 -fold HiFi read coverage per target locus for variant detection of 1,000-fold HiFi read coverage per target locus for minor variant detection (1% sensitivity), with data analysis on PacBio amplicon data analysis suite (PBAA). minimum samples 1000 per run,	1000	Number	90
32	NoAMP Targeted Amplicon Sequencing to capture specific regions in the genome: ≥ 100 -fold HiFi read coverage per target locus of 10 Kb or larger size, No-Amp-Targeted-Sequencing- Utilizing-the-CRISPR-Cas9-System, minimum samples 24 per run, Sequencing on CCS mode on Sequel II, Demultiplex Barcodes followed by CCS with Mapping analysis	24	Number	90
33	<i>De-novo</i> genome sequencing and assembly of low input DNA Protocol for insect and diploid genomes: Produce reference quality assemblies for genomes up to 1 Gb, Produce reference quality assemblies for genomes up to 1 Gb using HiFi Libraries from Low DNA Input Using SMRTbell Express Template Prep Kit 2.0, sequencing on Sequel II platform to generate 150Gb Sequel II data. genome assembly, Genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways, comparative genomics, Gene gain gene loss, evolutionary genomics and custom analysis	1	Number	90
34	Custom DNA sequence Analysis as per the requirement for 10Gb SMRTcell data	1	Number	90
35	Custom RNA sequence Analysis as per the requirement for 10Gb SMRTcell data	1	Number	90
36	SNP discovery, SNP filtration, SNP assay development, SNP Chip Design of 1 to 5K SNPs and genotyping on 480 samples on GeneTitan platform (minimum samples 480per run)	480	Number	90
37	SNP discovery, SNP filtration, SNP assay development, SNP Chip Design of 50K SNPs and genotyping on 480 samples on GeneTitan platform . (minimum samples 480per run)	480	Number	90
38	TILL Seq for linked read based genome sequencing: Up to 1Gb genome linked read sequencing, library preparation using TELL Seq protocol. Sequencing on NovaSeq platform and data generation of 100x coverage with genome assembly	1	Number	90

30. PRICE BID (Reference for BOQ) To be quoted in format provided on CPP Portal)

Item No	Item name	Sample Qty	Unit	Time for Delivery of results	Price (Rs.)
1	Sanger Sequencing of purified PCR product with specific primer, single pass (at least 600 bases read at Q20) including sample collection, QC and data (primers will be provided by the client/indentor)	1	Number	30	xxxx
2	Sanger Sequencing of purified plasmid DNA with universal primers, single pass (at least 600bases read at Q20) including sample collection, QC and data	1	Number	30	Xxxx
3	Illumina NGS platform (2x150 bp), 30 million reads, Q30 data including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
4	Illumina NGS platform (2x150 bp), 24 GB Q30 data, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
5	Illumina NGS platform (2x150 bp), 50 GB Q30 data, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
6	Genotyping by Sequencing using NGS platform - 200,000 Raw tags per sample, including sample collection, nucleic acids isolation, purification, library construction, QC, assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
7	Genotyping by Sequencing using NGS platform - 400,000 Raw tags per sample, including sample collection, nucleic acids isolation, purification, library construction, QC, assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
8	Whole Genome Bisulphite Sequencing - 50X coverage, up to 3 Gb genome, including	1	Number	90	Xxxx

	sample collection, nucleic acids isolation, purification, library construction, QC, DMGs, location of DMGs, gene ontology, pathways, functional classifications				
9	Whole Genome Bisulphite Sequencing - 100X coverage, up to 3 Gb genome, including sample collection, nucleic acids isolation, purification, library construction, QC, DMGs, location of DMGs, gene ontology, pathways, functional classifications	1	Number	90	xxxx
10	One SMRT cell of Pac Bio Sequel II, up to 20 GB data, >10 Kb read length, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
11	Optical Mapping using SAPHYR system, data output upto 800 GB data, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, map comparisons	1	Number	90	Xxxx
12	HiC Library Preparation of 10 MB cross linked reads, data output 250 GB data, including sample collection, nucleic acids isolation, purification, library construction QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
13	HiC Library Preparation of 30 MB cross linked reads, data output 300 GB data, including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
14	10X Genomics Library of 35 KB or more and Sequencing on NovaSeq 6000 with 150 GB data output including sample collection, nucleic acids isolation, purification, library construction, QC, genome assembly, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways	1	Number	90	Xxxx
15	Small RNA sequencing, 1×50bp, at least 25 million reads, Q30 values, including sample collection, nucleic acids isolation, purification, library construction, QC, DEGs, gene prediction, gene locations, annotations, pathway predictions, variant calling	1	Number	90	Xxxx
16	Transcriptome sequencing, 2×150 bp, at least 30 million reads, including sample collection, nucleic acids isolation, purification, library construction, QC, DEGs, gene prediction, gene locations, annotations, pathway predictions, variant calling	1	Number	90	Xxxx
17	Transcriptome sequencing, 2×150 bp, at least 60 million reads, including sample collection, nucleic acids isolation, purification, library construction, QC, DEGs, gene prediction, gene locations, annotations, pathway predictions, variant calling	1	Number	90	Xxxx
18	Genotyping of 8-24 SNPs using capillary electrophoresis including sample	1	Number	90	Xxxx

	collection, nucleic acids isolation, purification, QC and clearcut SNP calls				
19	Genotyping of 48-96 SNPs using capillary electrophoresis including sample collection, nucleic acids isolation, purification, QC and clearcut SNP calls	1	Number	90	Xxxx
20	Genotyping of 8-24 SNPs using KASP assay including sample collection, DNA isolation, purification, primer designing, QC and discrimination of SNP alleles, allelic data (DNA sequences containing SNPs with flanking regions will be provided by the client)	1	Number	90	xxxx
21	Genotyping of 48-96 SNPs using KASP assay including sample collection, DNA isolation, purification, primer designing, QC and discrimination of SNP alleles, allelic data (DNA sequences containing SNPs with flanking regions will be provided by the client)	1	Number	90	Xxxx
22	HiFi Sequencing for large tetraploid genome: One SMRT cell of Pac Bio Sequel II, up to 20 GB CCS HiFi, >10 Kb read length with including sample collection, nucleic acids isolation, purification, shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, genome assembly, genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways, comparative genomics, Gene gain gene loss, evolutionary genomics and custom analysis	1	Number	90	Xxxx
23	HiFi Sequencing for autopolyploid genome: Multiple SMRT cells of Pac Bio Sequel II, up to 40 GB CCS HiFi, >10 Kb read length with including sample collection, nucleic acids isolation, purification, Shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, genome assembly, Genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways, comparative genomics, Gene gain gene loss, evolutionary genomics and custom analysis	1	Number	90	Xxxx
24	HiFi Sequencing for large allopolyploid genome: Multiple SMRT cells of Pac Bio Sequel II, up to 60 GB CCS HiFi, >10 Kb read length with including sample collection, nucleic acids isolation, purification, Shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, genome assembly, Genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways, comparative genomics, Gene gain gene loss, evolutionary genomics and custom analysis	1	Number	90	Xxxx
25	ISO Seq for genome annotation polyploid genome: Total RNA Isolation and QC with RIN more than 8, cDNA conversion, SMRTbell ISO Seq, Two libraries per tissue, Library Insert Size less than 3 Kb and more than 3Kb per tissue to capture small and large genes and transcripts, sequencing on Sequel II platform, data per library 60Gb per 1Gb genome, raw data QC, Filtration of CCS reads, ISO-Seq Full Length Read Identification, Novel Gene Identification, Tissue & Gene Specific Isoforms identification, tissue Specific Identification of Low Abundance Transcripts,	1	Number	90	Xxxx

	Structural Annotation, Gene set validation, Functional annotation, lncRNA Identification and custom analysis to generate reference transcriptome for downstream RNA-seq studies,				
26	Total RNA Isolation and QC with RIN more than 8, cDNA conversion, SMRTbell ISO Seq library preparation,, Library Insert Size of ~3Kb per tissue to capture small and large genes and transcripts, sequencing on Sequel II platform, data per library 20 to 30 Gb, raw data QC, Filtration of CCS reads, ISO-Seq Full Length Read Identification, Novel Gene Identification, Tissue & Gene Specific Isoforms identification, tissue Specific Identification of Low Abundance Transcripts, splice junctions variants and custom analysis lime gene fusions, SNVs, allele-specific expression	1	Number	90	Xxxx
27	Hybrid Transcriptome for full length transcriptome sequencing and gene expression: Total RNA Isolation and QC with RIN more than 8, cDNA conversion, two library per tissue, SMRTbell ISO Seq library preparation for Sequel II run, Library Insert Size of ~3Kb per tissue to capture small and large genes and transcripts, sequencing on Sequel II platform, data per library 20 to 30 Gb, Second RNA Seq library to generate 12Gb data on NovaSeq 6000 machine to discover gene expression ,raw data QC, Filtration of CCS and Illumina reads, ISO-Seq Full Length Read Identification, Novel Gene Identification, Tissue & Gene Specific Isoforms identification, tissue Specific Identification of Low Abundance Transcripts, Mapping of RNA Seq reads to reference ISO Seq based transcriptome, differential gene expression profiling, pathway analysis splice junctions variants and all custom RNA Seq analysis like gene fusions, SNVs, allele-specific expression etc	1	Number	90	Xxxx
28	<i>De-novo</i> Genome sequencing of genomes: One SMRT cell of Pac Bio Sequel II, up to ≥60-fold Unique Molecular Coverage (UMC) per microbial genome to generate upto 10Gb data per sample, >10 Kb read length with including sample collection, nucleic acids isolation, purification, Shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, genome assembly, Genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, comparative genomics and custom analysis	1	Number	90	Xxxx
29	Full length 16s microbiome sequencing: One SMRT cell of Pac Bio Sequel II, up to 8,000 HiFi reads / 16S sample, 1 to 2 Kb read length with including sample collection, nucleic acids isolation, purification, Shearing on Megaruptor 3, SMRT Bell library construction, Femtopulse QC, Amplification of Full-Length 16S Gene with Barcoded Primers for Multiplexed 24 SMRTbell Library Preparation and Sequencing on one SMRTcell with complete data analysis including microbiome	24	Number	90	Xxxx

	functional profiling studies and providing information even from species with low coverage.				
30	Shotgun Metagenome sequencing and assembly: gDNA QC, Preparing 10 kb Library Using SMRTbell Express Template Prep Kit 2.0 for Metagenomics Shotgun Sequencing on CCS mode of PacBio Sequel II, 4 samples per SMRT cell, Complete data analysis to Generate near-complete assemblies of high-complexity samples	4	Number	90	Xxxx
31	Targeted Amplicon Sequencing: Sequence 1000+ barcoded amplicons Target size can be from 500 bp - 15 kb, SMRTbell Libraries using PacBio Barcoded M13 Primers for Multiplex SMRT Sequencing on Sequel II to generate ≥30 -fold HiFi read coverage per target locus for variant detection of 1,000-fold HiFi read coverage per target locus for minor variant detection (1% sensitivity), with data analysis on PacBio amplicon data analysis suite (PBAA).	1000	Number	90	Xxxx
32	NoAMP Targeted Amplicon Sequencing to capture specific regions in the genome: ≥100-fold HiFi read coverage per target locus of 10 Kb or larger size, No-Amp-Targeted-Sequencing- Utilizing-the-CRISPR-Cas9- System, minimum samples 24 per run, Sequencing on CCS mode on Sequel II, Demultiplex Barcodes followed by CCS with Mapping analysis	24	Number	90	Xxxx
33	<i>De-novo</i> genome sequencing and assembly of low input DNA Protocol for insect and diploid genomes: Produce reference quality assemblies for genomes up to 1 Gb, Produce reference quality assemblies for genomes up to 1 Gb using HiFi Libraries from Low DNA Input Using SMRTbell Express Template Prep Kit 2.0, sequencing on Sequel II platform to generate 150Gb Sequel II data. genome assembly, Genome assembly quality assessments, gene prediction, gene locations, variant calling, annotations, functional classifications, pathways, comparative genomics, Gene gain gene loss, evolutionary genomics and custom analysis	1	Number	90	Xxxx
34	Custom DNA sequence Analysis as per the requirement for 10Gb SMRTcell data	1	Number	90	Xxxx
35	Custom RNA sequence Analysis as per the requirement for 10Gb SMRTcell data	1	Number	90	Xxxx
36	SNP discovery, SNP filtration, SNP assay development, SNP Chip Design of 1 to 5K SNPs and genotyping on 480 samples on GeneTitan platform	480	Number	90	Xxxx
37	SNP discovery, SNP filtration, SNP assay development, SNP Chip Design of 50K SNPs and genotyping on 480 samples on GeneTitan platform	480	Number	90	Xxxx
38	TILL Seq for linked read based genome sequencing: Up to 1Gb genome linked read sequencing, library preparation using TELL Seq protocol. Sequencing on NovaSeq platform and data generation of 100x coverage with genome assembly	1	Number	90	Xxxx

1. above mentioned Price Bid format is provided as BoQ_XXXX.xls along with this tender document at <http://eprocure.gov.in/eprocure/app>. Bidders are advised to download this BoQ_XXXX.xls as it is and quote their offer/rates in their offer/rates in the permitted column (coloured) and upload the same as Price Bid. **Bidder shall not tamper/modify the downloaded price bid template in any manner.** In case the price bid template is found to be tampered/modified in any manner, the corresponding bid will summarily be rejected and Bid Security would be forfeited and the Bidder is liable to be banned.
2. The rate shall be quoted in Indian Rupee only. In case, the bidder quoted price in foreign currency, prevailing exchange rate on the bid opening will be taken into account for price comparison.
3. The quoted price shall be inclusive of all taxes and duties. **The quoted price shall not be affected by any subsequent revision in the statutory taxes, duties etc.** In case, the bidder quoted price in foreign currency, approximate freight, insurance, local transport and other incidental expenses etc., will be added to arrive L1.
4. In case of any discrepancy in calculation of total amount, the total evaluated price in word will be considered for evaluation.
5. The quoted rates shall remain firm throughout the validity period of the bid/contract and no revision is permissible whatsoever may be the reason.
6. **Bidders are advised to quote taxes only in complete Indian rupees and not in percentage.**
7. Price bid should not be quoted along with technical specification, otherwise bid will be rejected.

Signature of authorized signatory
Name & Designation
Seal

31. BIDDER'S PROFILE (Annexure - II)

(On the Letterhead of the Vendor/Contractor/Service Provider Details)

Date:

To
The Senior Administrative Officer,
ICAR - Indian Institute of Millets Research
Rajendranagar,
Hyderabad - 500030,
Telangana, India

Dear Sir,

We hereby give our consent to accept the related payments of our claims/bills on ICAR-IIMR, Hyderabad through Cheques or Internet based online E-Payments/PFMS system at the sole discretion of ICAR-IIMR. Our Bank account and other details for the said purpose are as under:

A. Vender Details.	
1. Name (As per the Bank Records)	
2. Address:	
3. PAN No.:	
4. TIN No.:	
5. GST No.:	
6. LST No. :	
7. CIN No.:	
8. E-Mail ID:	
9. Mobile Number/Landline Number:	
B. Particulars of Banks Account:	
1. State the firm is: (a) Proprietary firm (b) Partnership (c) Company under the company act.	
2. Bank Name:	
3. Branch Name/Branch Code:	
4. Branch Address	
5. 9 Digit MICR No. of Bank and Branch (As per appearing on the cheque)	
6. Account Type (Savings/Cash credit/Current)	
7. Account Number (As appearing on the cheque book)	
8. IFSC Code of the Branch (For RTGS)	
9. IFSC Code of the Branch (For NEFT)	

Date:

Authorized Signature/Seal of Firm
Phone No:

Certified that the particulars furnished above are correct as per our records.

Date :

32. ACCEPTANCE OF TERMS AND CONDITIONS (Annexure - III)

**Acceptance Letter
(This should be on firm's Letter head)**

To

The Senior Administrative Officer,
ICAR - Indian Institute of Millets Research
Rajendranagar,
Hyderabad - 500030,
Telangana, India.

Sir,

Sub : Sequencing and related Services as mentioned at Annexure-I at ICAR-IIMR, Hyderabad -30
Ref :: ICAR-IIMR Tender No._____dt.

This is to certify that I/We carefully read, understood and accept all the tender terms and conditions cited under reference above and submitted all the relevant documents as required.

TENDERER'S NAME & SIGNATURE WITH SEAL

33. AFFIDAVIT FOR NON-BLACKLISTING (ANNEXURE - IV)

(To be executed on Rs.100/- Stamp paper & attested by Public Notary/Executive Magistrate by the bidder)

I / We Proprietor/ Partner(s)/ Project Director(s) of M/S. _____ hereby declare that the firm/company namely M/S. _____ has not been blacklisted or debarred in the past by ICAR-IIMR, Hyderabad or any other Government organization from taking part in Government tenders.

Or

I / We Proprietor/ Partner(s)/ Director(s) of M/S. _____ hereby declare that the firm/company namely M/S. _____ was blacklisted or debarred by ICAR-IIMR, Hyderabad, or any other Government Department from taking part in Government tenders for a period of _____ years w.e.f. _____.

The period is over on _____ and now the firm/company is entitled to take part in Government tenders. In case the above information found false I/We are fully aware that the tender/ contract will be rejected/cancelled by ICAR-IIMR, Hyderabad, and EMD/SD shall be forfeited. In addition to the above, ICAR-IIMR, Hyderabad, will not be responsible to pay the bills for any completed/ partially completed work.

Signature _____

Name _____

Capacity in which assigned: _____

Name & address of the firm: _____

Date:

Signature of Bidder with Seal.

(Signature with Date)

(Full name, designation & address of the person duly authorized sign on behalf of the Bidder)

**For and on behalf of
(Name, address and Stamp of the tendering firm)**

Bid Securing Declaration Form

To

(insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am/We are in a breach of any obligation under the bid conditions, because I/We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)
in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)