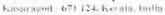


- कन्द्राय रापण फसल अनुसधान संस्थान कासरगोड़, केरल - 671 124 भारत

Contral Plantation Crops Research Institute







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Dated 22.3,2017

F.No.40(2)/36-2016 - Estate XVI |

The Reporter Karaval Kannada Daily, Kasaragod - 671 121.

The Reporter Uthradesam Malayalam Daily, Kasaragod - 671 121

The Advertisement Manager Mathrubhumi Printing & Publishing Co. Ltd. Post Thana Kannur 670012.

The Advertisement Manager Manipal Printers & Publishers Ltd Udayavani Building, Tile Factory Manipal 576 119.

The Reporter Vijaya Karnataka Daily Kasaragod.

Sub: Advertisement of Notice Inviting Tenders for various Farm/Lab. works at CPCRI, Kasaragod - regarding.

Sir.

Please find enclosed a copy of Advertisement inviting quotations for undertaking various farm works at this Institute on contract basis. Please publish this advertisement limiting it to the minimum space required in your daily immediately but not later than 24.3.2017. Your bill towards the advertisement charges (in duplicate) addressed to Director, CPCRI, Kasaragod may please be sent to this office along with two copies of the newspaper, for arranging payment.

It may also ensured that rates charges should be as per DAVP rates failing which no payment shall be made on this accounts.

Yours faithfully,

Asst. Administrative Officer (Estate)

Copy to:

- 1. The Scientist-in-charge (Farm), / T.O. (Farm), CPCRI, Kasaragod.
- 2. The FAO, CPCRI, Kasaragod.
- 3. Notice Board (Farm/Office).
- 4. Website
- 5. The Secretary, Mogral Puttur Grama Panchayat/Madhur Grama Panchayat/Chengala Grama Panchayat/District Panchayat. Kasaragod.
- 6. The Agricultural Officer. Madhur/Mogral Puttur/Chengala.



भाकअनप - कन्द्राय रापण फसल अनुसंधान संस्थान कासरगांड, करल - 671 124 भारत ICAR - Central Plantation Crops Research Institute

Kasaragad - 671 124, Kerala, India



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F.No.40(2)/36-2016 - Estate - XVI - I

Dated 22.3.2017

NOTICE INVITING TENDERS

Sealed tenders are invited, from the Registered/Licensed Agencies (Registered under Central Labour Act, EPF Acts. etc.) for undertaking various Farm works at this Institute commencing from 01.05.2017 to 31.03.2018. Details may be downloaded from the Institute website: www.cpcri.gov.in.

The sealed tenders alongwith 2.5% Bid Security in the form of DD in favour of ICAR Unit, CPCRI, Kasaragod for the work should reach this office on or before 12.4.2017 at 3.00 P.M

DIRECTOR



भाकुअन्प - केन्द्रीय रोपण फसल अनुसंधान संस्थान कासरगोड, केरल - 671 124 भारत

ICAR - Central Plantation Crops Research Institute

Kasaragud 671 (34, Kyralis, India







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F.No.40(2)/336-2016 - Estate XVI - I

Dated 22.3.2017

NOTICE INVITING TENDERS

Director, CENTRAL PLANTATION CROPS RESEARCH INSTITUTE, Kasaragod is inviting sealed tenders in the name of The Director, CPCRI, Kasaragod for 'Farm Operational work from reputed and registered contractors (those possessing approved labour license, shop establishment registration certificate, EPF number etc.). The tenderer has to pay minimum wages to the workers as per the norms and approved rates of the Central Government. The tenderer has to mention clearly the service charges, their commission/profit etc. in the tender document. The non transferable tender document containing schedule of farm works and terms & conditions can be obtained from the Director, CPCRI, Kasaragod on payment of non-refundable amount of Rs. 200/- (Rupees two hundred only) payable by DD drawn in favour of ICAR Unit, CPCRI payable at Kasaragod. The tender forms can also be down loaded from CPCRI website www.cpcri.gov.in and the cost (Rs. 200/-) of tender documents should be enclosed with their bids alongwith the D.D as above, failing which it will be rejected.

The duly completed sealed tenders will be received latest up to 15.00 hrs on 12.4.2017 and tenders (Technical bid) will be opened on the same day at 15.30 hrs in the presence of the tenderers or his authorized nominees. EMD 2.5% of the bid value should be deposited in the form of crossed Demand Draft drawn in favour of ICAR Unit, CPCRI payable at Kasaragod failing which the tender will be rejected. Tenders received after due date and time will not be accepted.

The Director, CPCRI, Kasaragod reserves the right to accept or reject any or all tenders without assigning any reason thereof. No correspondence shall be entertained in this regard.

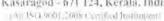
Asst. Administrative Officer (Estate)



भाकुअनुप - केन्द्रीय रोपण फसल अनुसंधान संस्थान कासरगोड़, केरल - 671 124 भारत

ICAR - Central Plantation Crops Research Institute

Kasaragod - 671 124, Kerala, India





Phone (Off) : 04994 - 232333 : 04994 - 232322 : 04994 - 232893 - 95 : 04994 - 232996 : 04994 - 232996





E-mail alirector.eperi@iear.gov.in directoreperio gmail.com chowdappa po icar govan Website http://www.eperl.gov.in

TENDER FOR FARM/LAB. OPER	ATIONALWORK-2017-18
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TENDER ISSUED TO:-				
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ASST.ADMINISTRATIVE OFFICER (Estate)



भाकृअनुप - केन्द्रीय रोपण फसल अनुसंधान संस्थान कासरगोड, केरल - 671 124 भारत

ICAR - Central Plantation Crops Research Institute

Kasaragod - 671 124, Kerala, India (A) BO total (total Casal) of fedication



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INVITATION TO TENDER AND INSTRUCTIONS CONTAINING TERMS AND CONDITIONS GOVERNING THE JOB WORK ON CONTRACT FOR FARM WORKS AT CENTRAL PLANTATION CROPS RESEACH INSTITUTE, KASARAGOD.

- A) Cost of Tender Form Rs. 200/- (Rupees two hundred only)
- B) Last date of receipt of Tenders in the office of CPCRI, Kasaragod is up to 15.00 hrs on 12.4.2017
- C) Tenders (Technical Bids) to be opened at 15.30 hrs. on 12.4.2017
- D) Tender needs to remain valid for acceptance up to 90 days from the date of opening
- E) The Tender document is also available at our web site www.cpcri.gov.in and the cost of tender documents should be enclosed with their bids in the form of Demand Draft/Pay Order in favour of 'ICAR Unit, CPCRI' payable at Kasaragod, failing which it will be rejected.

NOTE

- 1. The Director, Central Plantation Crops Research Institute may at his own discretion, extend this date by a fortnight and such extension shall be binding on Tenderers.
- 2. If the date up to which the Tender is open for acceptance is declared to be a holiday the Tender shall be deemed to be opened for acceptance on the next working day.



भाकुअनुष - केन्द्रीय रोषण फसल अनुसंधान संस्थान कासरगोड, केरल - 671 126 भारत ICAR - Central Plantation Crops Research Institute

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Phone PORTS Pric. P.NARN 

Note: All communications must be addressed to the Director, Central Plantation Cops Research Institute, Kasaragod 671 124

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Dear Sir(s),

Sealed tenders are hereby invited on behalf of the Director, Central Plantation Crops Research Institute, Kasaragod 671 124 for Farm works at Central Plantation Crops Research Institute, Kasaragod. The terms and conditions of the contract which will govern any contract made are those contained in the General conditions of contract applicable to the contracts and the special terms and conditions are detailed in the tender forms and its schedules. Please submit your rates in the tender form if you are in position to furnish the requisite services in accordance with the requirements stated in the attached schedules.

- 1. An EMD 2.5% must be deposited in the form of demand draft/pay order/Bank guarantee payable to "ICAR Unit, CPCRI payable at Kasaragod. The particulars of the earnest money deposited must also be super scribed on the top of the envelope by indicating the draft/pay order/number and date failing which the tenders will not be opened. The tenders will not be considered if earnest money is not deposited with the tenders.
- 2. The tenderer is being permitted to give tenders in consideration of the stipulations on his/her part that after submitting his tender, he will not responsible from his offer or modify the terms and condition thereof. If the tenderer fail to observe and comply with the foregoing stipulation the aforesaid amount of EMD will be forfeited by the Institute. In the event of the offer made by the tenderer not being accepted, the amount of earnest money deposited by the tenderer will be refunded to him after he has applied for the same, in the manner prescribed by the Institute.
- 3. The Schedules of the tenders form should be returned intact and pages should not be detached. In the event of the space provided on the schedule form being insufficient for the required purpose, additional pages may be added. Each additional page must be numbered consecutively and be signed in full by the tenderer. In such cases reference to the additional pages must be made in the Tender form. If any modification of the schedule is considered necessary, it should be communicated by means of a separate letter along with the tenders. Overwriting/erasing in rates to be quoted by the tenderer will not be allowed otherwise the tenders may be rejected.
 - 4. The tenders are liable to be ignored if complete information as required is not given therein or if the particulars asked for in the schedules to the tenders are not fully filled in. Individual signing the tenders or other documents connected with the contract may specify whether he signs it in the capacity of

- (i) a sole proprietor of the firm or constituted attorney of such sole proprietor, or
- (ii) a partner of the firm if it be partnership in which case he must have authority to refer to arbitration dispute concerning the business of the partnership whether by virtue of the partnership agreement or power of attorney or (iii) constituted attorney of the firm if it is a company.
- If tenderer does not accept the offer, after issue of letter of award by Institute within 15 days, the offer made shall be deemed to be withdrawn without any notice & earnest money forfeited.
 - 6. In case of partnership firms, where no authority has been given to any partner to execute the contract/agreement concerning the business of the partnership, the tenders and all other related documents must be signed by every partner of the firm. A person signing the tenders form or any other documents forming part of the contract on behalf of another shall be deemed to warranty that he has authority to bind such other and if, on enquiry it appears that the persons so signing had no authority to bind such other and if, on enquiry it appears that the persons so signing had no authority to do so, the Institute shall without prejudice to other civil and criminal remedies cancel the contract and hold the signatory liable for all costs and damages. Each page of the tenders and the schedules to be tenders and annexure, if any, should be signed by the tenderer.
 - 7. The original copy of the tenders is to be enclosed in double cover. The inner cover should be sealed. The outer cover should be super scribed. "THE CONTRACT FOR FARM OPERATIONAL WORKS at Central Plantation Cops Research Institute, Kasaragod with address of this office and the tenderer shall place two envelops clearly marked containing 'technical bid' and 'financial bid' separately in the main envelop. All tenders should be sent by Registered Post. Tenders on hand delivered should be put in the tender box. The last date for receipt of Tender is 12.4.2017 (15.00 Hrs)
 - 8. The rates quoted by each firm for job/service contract in tenders be given both in words and figures failing which the same is liable to be rejected. Tenderer is at liberty to be present or to authorize a representative to be present at the time of opening of the tenders. The name and address of the representative who would be attending the opening of the tenders on tenderer's behalf should be indicated in the tenders. Name and address of permanent representative of the tenderer if any may also be indicated.
 - 9. The Institute is not bound to accept the lowest or any other tenders and also reserves to itself the right of accepting the tenders in whole or in part. The Tenderers at liberty to Tender for the whole or any portion or to state in the tenders that the rates quoted shall apply only if the tenders are considered fully. Other conditional Tenders will not be accepted.
- 10. An amount of 5% of the tendered amount as a Security Deposit for the contract is to be deposited by the selected agency/successful tenderer only after receiving a communication from the Institute. In the event of non-deposition of the same, the earnest money will be forfeited and the award of work is cancelled. In such cases, no interest on security deposit and earnest money deposit shall be paid by the Institute to the tenderer.
- 11. Service tax or any other tax applicable or made applicable after awarding the contract in respect of this contract shall be payable by contractor and Institute will reimburse the claim whatsoever in this respect. However the service taxes or any other tax which is as per the rules of the Govt, shall be deducted at source from monthly bills of the successful tenderer, as per rules/instructions made applicable from time to time by GOI/ICAR.

- 12. Director, CPCRI reserves the right to reduce or terminate the period of contract or to extend its duration in the interest of the Institute, for any justifiable reasons, not mandatory to be communicated to the tenderer.
 - 13. Director, Central Plantation Crops Research Institute shall be final authority for any aspect of the contract and binding to all parties. Disputes arising, if any on the contract will be settled at his/her level by mutual consultation and in case of failure to settle the dispute, it shall be referred to the sole arbitrator to be appointed by the Director, CPCRI. The decision of the sole Arbitrator so appointed shall be final and binding on the parties. Arbitration proceedings shall be governed by the Arbitration & Constitution Act, 1996.
 - 14 Acceptance by the Institute will be communicated by FAX/ Speed post or any other form of communication. Formal letter of acceptance and work order of the Tenders will be forwarded as soon as possible, but the earlier instructions in the in the FAX/Speed post, etc. should be acted upon immediately.
- 15. The following documents/ vouchers are required to be enclosed with the tender forms which form part of terms and conditions of the tender document:
 - a) Registration certificate of the firm under the work contract of the Govt. of Kerala.
 - b) Minimum turnover of the firm not less that Rs. 2,00,000/- (Rupees two lakhs only) during the last financial year.
 - c) Last three years continuous experience of the firm in the field of providing such services.
 - d) Central Govt. establishment/Autonomous bodies of Govt. of India/Corporations of Govt. of India/reputed public or private organizations provides the details in enclosed tabular form.
 - e) Certified Balance Sheet of the firm for last year of the service contract by the chartered account.
 - f) Duly certified copies of the satisfactory services where the Tenderer is providing the services for the last three years.
 - g) Employees EPF registration certificate issued by the appropriate authority.
 - h) The contractor shall obtain the labour license under CLR Act 1970
 - Successful Tenderer will have to enter into a detailed contract agreement with Institute/(ICAR) on non-judicial stamp paper of 100/- (Rupees one hundred only) for each work.
 - j) Only those firms will be considered for opening their financial bid who will qualify in the technical bid.

Note: The technical bids and financial bids may be submitted in separate envelops to be sealed and put in a main cover.

ASST. ADMINISTRATIVE OFFICER (ESTATE)

TENDERS FOR THE CONTRACT FOR SERVICE CONTRACT FO PROVIDING SECURITY SEVICE CONTRACT

at Central Plantation Crops Research Institute, Kasaragod, Kerala

Full Name & Address of the T		
In addition to Post Box No., if a		
quoted in all communications to Telephone No:	this Office	
Telegraphic Address/FAX/Cell	No.	
E-Mail address		
rom		
* *********		
-		
To		
The Director		
C.P.C.R.I		
Kasaragod 670 124		
	culars regarding the General information and other to HE SERVICE CONTRACT FOR FARM OPERA	
	search Institute, Kasaragod and agree to provide the s	
	to such portion thereof as you may specify in the acc	
	s given in Schedule-I to this tender and I/We agree to	
내용에 가게 되었다. 하는 것이 없는 사람이 되는 것이 하는 것이 없는데 가장 사람	ted will be valid for a period of one year in the event	
	by a communication acceptance communicated within	n a stipulated
time.		
	erms and conditions for the contract and shall provide	e the best of
services strictly in accordance v	with these requirements.	
3. The following pages have bee	en added to and form a part of this Tender	The schedules-1
& II to accompany this Tender	are at pages	
4.Every page so attached with th	nis Tender bears my signature and the office seal.	
C. Dec. and an IDD No.	of Do (Dunes)	
5Pay order/DD No only)	of Rs(Rupees	
drawn in favour of ICAR Unit, (required.(EMD)	CPCRI, payable at Kasaragod is enclosed as earnest	money
6.Pay order/DD No	of Rs (Rupees	only
) drawn in favour of ICAR Unit,	, CPCRI, payable at Kasaragod is enclosed as cost o	f the Tender
document required.	And the control of th	
		Yours faithfully,
	ignature & se	eal of the Tenderer
Witness:	Tel. No. Of	
Address:	Residence	
Occupation:	Mobile	
Signature of witness of contract		

Address Name & Signature of witness Address

Part - 1

- 1. Name of the firm/Agency
- Full address with post box No. And Telephone No. if any
- Constitution of the firm. Agency (Attached copy)
 Indian companies Act, 1956
 Indian Partnership Act, 1932
 (Please give names of partners)
 Any other Act, if not, the owners
- 4. For partnership firms whether Registered Under the Indian Partnership Act, 1932, Please state further whether by the Partnership agreement to arbitration has Been conferred on the partner who has Signed the Tender
- if answer to the above is 'negative', whether there is any general power of attorney executed by all the partner who has signed the Tenders to refer dispute condemning business of the partnership to arbitration
- ii) if the answer to above is in point 'one' and 'two' is positive(Yes), please furnish a copy of either the partnership agreement or the general power of attorney as the case may be admitted by affidavit on a properly stamped paper by all partner/(s).
- 5. Name and full Address of your Banker's:
- 6. Your Permanent Income Tax No./Circle/Ward (PAN/TAN)
 Please support with the relevant documental proof)
- 7. Any other relevant information:

PART-II

8. Earnest Money Deposited

Yes/No.

PART-III

- Name and Address of the firm's representative And whether the firms would be representative At the opening of the Tenders
- Name of the Permanent Representative to be Visiting CPCRI, Kasaragod regarding the contract

Date:	
Place:	

AUTHOTISED SIGNATORY

Please add supplementary pages to be numbered wherever needed by the Tenderer

TERMS & CONDITIONS:

- The supporting/allied services staff should follow strict attendance and alternative arrangements
 are to be made by the agency whenever any of the staff/supervisor goes on leave under intimation
 to this office.
 - 2. Changing of Staff/Supervisor should be intimated to Officer in-charge, CPCRI, Kasaragod
- 3. The Director, CPCRI, Kasaragod reserves the right to reject any or all quotations in whole or in part without assigning any reason thereof. The decision of Director, CPCRI shall be final and binding on the Contractor/Agency in respect of any clause covered under the contract.
- 4. The staff provided should also maintain secrecy and discipline in the premises of Institute.
- The Staff provided should be capable of reading and writing with a minimum qualification of Middle Standard.
- The contractor shall keep a complaint register with his supervisor, and it shall be open to verification by the authorized officers of Institute for the purpose. All complaints should be immediately attended to by the Agency.
- 7. The agreement can be terminated with one month notice on either side.
- 8. The contractor shall not subcontract the work without prior written permission of the Institute
- 9. The selected agency shall provide the necessary personnel at this Institute as per labour acts prevalent in Kerala State. The agency shall employ good and reliable persons with robust health in the age group of 21 to 45 years. In case any of the personnel so provided is not found suitable by the Institute, the Institute shall have the right to ask for his/her replacement without giving any reason thereof and the agency shall, on receipt of a written communication will have to replace such persons immediately.
- 10. The persons so provided by the agency under this contract will not be the employee of the Institute and there will be no employer-employee relationship between the Institute and the person so engaged by the contractor in the aforesaid services.
- 11. Payment for service contract will be made monthly upon submission of pre-receipted bill and L.D., statutory levies are duly paid with relevant proof to office
- 12. After physical inspection of the site, detailed assessment/requirements of personnel for providing workers at the Institute shall have to be furnished along with the Tender. However, the Tenders should indicate only the lump-sum amount in respect of all the services covered under this contract and that rates should not be proposed on the basis of manpower to be deployed under the contract. No request for alteration in the rates once quoted will be permitted within one year.
- 13. The rates to be quoted should include cost of each and every item including transportation cost, manpower cost and taxes etc. The Institute shall not bear any extra charge on any account whatsoever i.e. EPF contribution.
- 14. The contractor will discharge all his legal/statutory obligations in respect of the workers/supervisors to be employed/deployed by him for the execution of the work in respect of their wages and service conditions and shall also comply with all the rules and regulations and provisions of law in force that may be applicable to them from time to time. The contractor shall indemnify and keep indemnified the Institute from any claims, loss or damages that may be caused to it on account of any failure to comply with the obligations under various laws, In case of any dispute, the decision of Director, CPCRI, Kasaragod shall be final and binding on the contractor.
- 15. Income tax will be deducted from the payments due for the work done as per rules.
- The contractor must employ adult labour only. Employment of child labour may lead to the termination of the contract.
- 17. The contract is subject to the condition that the conditions in the tender will comply with all the law and acts of Central/State Govt. relating to this contract applicable from time to time
- 18. Risk Clause: Institute reserves the right to discontinue the service at any time, if the services are found unsatisfactory by giving a show-cause notice to be replied within a week and also has the right to award the contract to any other agency at the risk and cost of present agency

and excess expenditure incurred on account of this can be adjusted from Security Deposit or pending bills or by raising a separate claim.

LIQUIDATED DAMAGES CLAUSE:

- An amount equivalent to two days of contract amount, subject to a minimum of 0.5% per month will be levied as liquidated damage. Whenever and wherever it is found that the work is not up to the mark in any section, it will be brought to the notice of the supervisory staff of the firm by the Institute and if no action is taken within One Hour liquidated damages clause will be invoked.
- 2. Any misconduct/misbehavior on the part of the manpower deployed by the agency will not be tolerated and such person(s) will have to be replaced immediately.

The Director, CPCRI, Kasaragod reserves the right to reject any or all Tenders in whole or in part without assigning any reasons thereof. The decision of Director shall be final and binding on the contractor/agency in respect of any clause covered under the contract.

-10-

Details of the Minimum 3 years experience/work done:

Sl.No.	Name of the Deptt./Organization & Name of contract Person with Ph.No.		Period	No. of staff deployed	Remarks
		From	To		
				1	1
			_		

Authorized Signature

FINANCIAL BID

(This financial bid to be enclosed in a separate envelop with seal)

Last date for receipt of Tender : 12.4.2017 up to 15.00 hrs

Date of opening of Financial Bid

To
The Director
Central Plantation Cops Research Institute
Kasaragod 671 124

Sir,

I/We wish to submit our Tenders for THE SERVICE CONTRACT FOR FARM OPERATIONAL WORK at Central Plantation Cops Research Institute, Kasaragod 671 124, Kerala

No.	Particulars/Details	Amount per month(will breakup) (Rs. In figures and words

Sec. 1		
D	ace:	
1	acc.	

Date:

Signature of the contactor

Tender for Farm Contract

Name of the participating	Firm/Agency	
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Check List

YES/NO

1	Tender Document duly filled and signed	
2	Covering letter (as per the enclosed format)of the tender document	
3	Crossed Demand Draft for earnest Money Deposit as prescribed against each item	
4	Registration certificates of the firm under the work contract of the Govt. or the contractor/agency must have a registration with The Contractor shall obtain the labour license under the Contract Labour (Regulation and Abolition) Act, 1970.	
5	Certificate by Chartered Accountant certifying that the minimum turnover of the firm not less than Rs.10.00 lakh during the last financial year.	
6	Certified Balance Sheet of the firm for last year of the service contract by the chartered accountant	
7	Last three years continuous experience certificate of the firm in the filed of providing such services in Central 'govt. establishment/Autonomous bodies of Govt. of India/Corporations of Govt. of India/reputed public or private organization's provide the details in enclosed tabular form	
8	Duly certified copies of the satisfactory performance from where the Tenderer is providing services during for the last three years.	
9	PAN/TAN Number and copy of latest Income T ax Return	
10	Employees EPF registration certificate issued by Central Govt., etc.	
11	Service Tax Number/Proof may also be enclosed those who have applied for obtaining Service Tax Number.	

Quotation for contract works of all the Divisions 2017-2018

Farm works

SI. No	Description of work	Approximate Quantity	Rate	Amount (12)	Period
1.	Harvesting of matured coconuts once in 60 days, removing dried leaves and spathes from the crown, providing man power for taking harvest notes (counting bunches, nuts in each bunch, female flowers, and discarding barren nuts - sufficient time should be given for taking data entry, loading and transporting harvested nuts to the godown premises, counting the nuts and putting the same in to the godown in the same day of harvest from all the plots (5or 6 rounds)/year. N.B. The harvesting will be started only as per instruction from Farm in charge, SIC (Farm) or in presence of concerned Technical staffs (maximum of 200 palms/ day)	Rate may be quoted in 2 way as mentioned below: A. 6,000 palms/round (6 rounds) and B. 6,00,000 Nos. Nuts. (By 6 rounds)	palm.		
2.	Prophylactic spraying, pouring of chemicals on the crown of young coconut palms, Placing fungicide and pesticide sachets (3g) and filling sand each in the leaf axils of coconut palms, hooking out of beetles from the infested palms during May to December 2017 including packing (Once in two months) – 3 rounds (chemicals and packing materials will provide by Institute) Young palms Seedlings	3500 1500 (3 rounds)	/palm /seedling		
3.	Removal of garbage once in a month from all the residential quarters at Hill block, Single Room Apartments and Chummary accommodations at main campus, all guest houses and hostel, waste pit and residential quarters at main campus, and central school premises (12 rounds).	106 Nos. of residential quarters, 20 Nos. SRA and 3Nos. Guest house, Hostel and KV No.1 waste pit.	Per round		·
4.	Harvesting Pepper from experimental and bulk plots, threshing, weighing and handing over to farm section.(Farm/Agronomy/Mixed Farming). One time work.	500 vines (1,500 Kg. Green pepper)	Per Kg	/	

5.	Maintenance of garden in the CPCRI premises (Main campus, Sagar, Kalpaka and Chandragiri guest house premises which includes 1. Day to day maintenance and keep up of the garden at the CPCRI premises including lawn in the campus (removing the weeds, watering and applying the	500 sqm 750 nos.	
	fertilizers, pesticides etc. to the plants) 2. Periodical moving the lawn with lawn mover 3. Cleaning watering and applying the fertilizer /pesticide etc in flower pots 4. De potting of flower pots and planting of flower plants as per the instructions 5. Arranging and display of ornamental plants at office premises/ conference hall as and when required.	(Approx.) 500 nos	Entire work for one year
	 Trimming of border plants periodically cutting, leveling, watering, applying fertilizers/ pesticides etc. Trimming of hedge plants like phyllanthus, Durenta, Acalypha Maintenance of garden type VI quarter (Director of CPCRI), including weeding, cleaning, watering etc. NB: The work should be undertaken by gardener possessing at least two year's experience in the field of garden works 	500 nos 600 nos	
6.	Spraying Herbicide (<i>Glyophosate</i>) on the field bunds, road side, along the fence and other area where tractor cannot be used during June to December 2017 (Herbicide will be supplied by department.)	50 acre	/acre
7.	Hand Weeding coconut nurseries, cleaning the beds and the weeded materials to be transported and deposited in the pits	4 acre X 3 , Rounds	/acre
8.	Executing different type of farm operation works like digging pits, opening trenches, cleaning the plot by removing fallen leaves, spathes, debris, transporting and powdering using Bio-shredder machines, mulching the shredder materials on the coconut basins, collecting shed nuts, counting and transporting to godown, Taking preparatory measures for ploughing plots, and other farm related work whenever required as per the directions of Farm in charge/Technical staffs. Part payment will be made once in 4 months	900 man days	per man day
9.	Cleaning of all office which includes cleaning all the bath rooms and toilets of office building, sweeping, moping rooms and verandas, cleaning of guest houses hostel (as and when required), cleaning cob webs, sweeping cleaning office premises and any other works assigned by the farm in charge. The cleaning of the office rooms should be completed before 9.30 am every working days. Note: Before quoting the rates the contractor may be contact the farm officials.	7,000 sqm For entire works (25 working days/ month) For one year.	per month

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10.	Laying of drip irrigation pipes for the coconuts, providing irrigation (checking water flow, flushing the filter/pumps/micro tubes. Basin cl weeding and mulching with fallen coconut leaves/ cleaning the plots tentatively from November 2017 to May 2018. The irrigation pipes are to be tied immediately after the completion of the irrigation season	eaning by for 7 months nd accessories	15 acre	acre/month	
11.	Plumbing work: Repairs to the drinking water supply lines of all residential quarters (Internal and external), Repairs/replacement to the supply lines inside field and within the campus, accessories in connect pumps, Assisting repair/ replacement/ renewal and reinstating of pipe connection with bore well repair and submersible pumps, removing repairing accessories like water taps, Angle cock, stop cock, shower, health faucets, connector pipes, jail, waste coupling etc. Replacement of damaged closet, (Indian western type), Wash basin in with institute mason, Repairs to the overhead water tank gauges, float valve, bibcock, PVC of washers, tightening gland rope of water pump, checking/testing was Removing and rectifying in the blockage of kitchen/ lab sinks wash be gully trap/ nearest inspection chamber. Any other works as instructed by SIC/TO (FARM) In connection with water supply/plumbing. N.B: The material required for the attending the complaints shall be a institute. One log book has to be maintained on day basis, which shall be verificably basis as proof attending the complaints (One job will be defined execution of all above items for the working days in a month. Working days for attend the daily complaints /24 days/job in a month. Working hours 9.30 am to 5.0 pm (including lunch break). 129 residential quarters, all non residential quarters and irrigation are sheetares.	irrigation water stion with water staccessories in efitting and gate valve, co-ordination tanks, changing ter supply lines asins, up to rranged by the ed by OIC on / consist	129residential quarters, all non residential buildings and irrigation area within 77.9hectares. Working days for attending the daily complaints=24 Days/Job in a month (The work is to be undertaken between 8.30 am to 5.00pm) but may extend to any time in emergency situations. (12 months)	- per month	
12.	Providing man power for operation of motor pump for drinking water residential quarters at Hill block. The work includes switch on and switch off motor pumps and filling twice, cleaning the filters, assisting for repair damaged pipe lines, irriplants inside and out side of Director's quarter, irrigating plants on the surrounding school ground, assisting plumbing works if required at H campus and any other works instructed by SIC/ Farm in charge (working hours 9.30 am to 5pm) all week days including Sunday and	the tank daily gating garden e road side ill block	Monthly basis (12 months)	per month	
13.	Maintenance and attending all day to day compliant of carpentry works	The material	required for complaints shall		

be arranged by the Institute. Repairs to the door frames of residential and non residential buildings. Repairs to the window & ventilator frames, of residential One log book has to be /month and non residential buildings. Repairs to the door, window & maintained on day to basis, which shall be verified by ventilator shutters, of residential and non residential buildings. Repairs and replacing of glass panes, wooden beedings of window & ventilator TO(CE) on daily basis as proof , cupboard shutters, of residential and non residential buildings. of attending the Removing and refitting of accessories like hinges, tower bolt, screws, complaints.(One job will be handles , Aldrop, Inner latch, peg stay, mortise door lock, automatic defined /consist execution of all door closure of residential and non residential buildings. Repairs to the above items for the working cupboard shutters, replacing veneer sheets, laminated top coverings of days in a months Laboratory working tables, showcases and door shutters. Repair, Working days for attending the daily complaints. = 24 resetting and replacing door locks and automatic door closures of Days/Job in a month residential and non residential buildings. Removing, resetting and refixing of door and window shutters with minor modifications to the Working hours 9.30 am to residential and non residential buildings. Removing, resetting and 5.00pm (including lunch break) refixing the Mangalore tile roofing and AC Shed roofing with minor . The institute shall not be modifications of residential and non residential buildings. Repairs to responsible for the the wooden portions and roof of Godowns, pump houses, and vehicle loss or damage /causality, if shed. Chiseling and minor modifications to the door, window and any while executing the work, ventilator shutter of residential and non residential buildings. and shall be insured Removing and refixing of wall plate, rafters, reapers and Mangalore pattern tiles of godowns and tile roof buildings. Assembling resetting and making new field boards, curtain rods, door/window pelmet and ornamental design work of Guest houses, kitchens etc. Assisting the committees in the preparation of frame work for banners, stage settings, fixing name plates, covering AC Duct with plywood etc. Assisting the maintenance section in the selection and purchase of wood accessories and preparation of list of wood sections for repairs. Maintenance and attending all day to day compliant of The material required for attending the complaints Masonry works shall be arranged by the /month Repairs to the soffit of slabs /ceilings RCC Columns, Beams, sunshades Institute. One log book has of residential and non residential buildings. Repairs /patch plaster to the to be maintained on day to sides of door, window & ventilator shutters, of residential and non basis, which shall be residential buildings. Repairs/patch plaster to the floors, of residential verified by TO (CE) on and non residential buildings including godown and pump houses.

	concrete to experimental plots. Repairs /providing cemvalley gutter /ridge/replacing tiles/pointing to the Mang of residential and non residential buildings including go houses. Removing, resetting and refixing the Mangalora AC Shed roofing with minor modifications of residential buildings. Repair, /relaying of ceramic /glatand dadoing to the bath rooms / toilet/kitchen of residential buildings. Reconstruction of masonry direpairs /renovation at residential and non residential building pot holes, road patch work with cement concrete Renovation/repairing the inspection chamber/ gully trap with plumber at residential and non residential building fencing parapet wall, boundary wall, grouting, brick ling of fencing post in cement concrete at Institute bound carpenter r and plumber in the repair and maintenance of and non residential buildings. Painting, white washing, walls of residential and non residential buildings include pump houses. Soil protection works like laterite stone stone /slab pitching / masonry bund construction in the purchase of building and any other work related to the residential and non residential buildings as directed.	alore tile roofing de odown and pump e tile roofing and of idential and non zed tiles flooring bidential and non rainage /redoing lidings. Filling of e as directed. Or in coordination gs. Repairing the ling and erection daries. Assisting of at residential distempering the ling godown and pitching, grtanite consultation with the selection and maintenance of	efined /co f all above orking da /orking da le daily co ays/Job in /orking he 00pm (in- reak) . The ot be responses or damn my while eand shall be	c.(One job will be consist execution to items for the cays in a months complaints. = 24 on a month cours 9.30 am to cluding lunch to institute shall consible for the cage /causality, if executing the work to insured		
15.	Electrical work Assisting in routine operation and maintenance and repair works of electrical installations of the Institute including residential and non residential buildings, street and garden lights, pump houses, substation and generators.	The material required for attending the complaints shall be provided by the Institute. One log book has to be maintained on day to day basis which shall be verified by STA (Jr. Engineer, Electrical) on daily basis. Working hours: 9.30 am to 5.00 pm (including lunch break) on all working days. Institute shall not be responsible for the loss or damage/casualty, if any while executing the work.		/month		
16.	Providing an experienced Tractor/Kubota operator w equipments and ploughing works in coconut gardens tractor/ Kubota connecting to trailor, Powdering coco	, transporting works	with	400 man days	/day/man	

	using biodegrading machines, coconut base opening using Kubota/ Tiller or any other related works instructed by SIC/ Farm in Charge/ Technical staffs of Farm Time 8.30 am to 5.0 pm in all working days. (Operator should have a valid tractor driving license)			
17.	Providing climber for pest/ disease surveillance and recording observations in different blocks of the institute farm at Kasaragod. Treating diseased and pest infested palms in different blocks of the institute farm at Kasaragod (Entomology/ Farm section)	300 man days	/day	
18.	Providing man power for operating weed cutting machine, power sprayer, fodder grass cutter etc in the farm (Daily basis)	500 /man days/ year	per day	

Crop Improvement Genetics and Plant Breeding

SI. No	Description of work	Approximat e Quantity	Rate	Amount(2)	Period
19.	Maintenance of germplasms, hybrid evaluation trials. The work includes plot cleaning, by removing fallen leaves, barren nuts, bunch waste, uprooting satteria grass clumps from the plots, pest and disease surveillance, treating the insect/ disease affected palms as directed. Weeding the field bunds, corners of the plots where the tractor cannot be used. Maintenance of Drip irrigation system in A, B, C, D, E, F, and H Blocks palms under Genetics section. laying of lateral pipes and putting micro tubes 30cm depth and 1M away from the bole, laterals should be buried 20cm depth. Checking the motor, flushing the filter/pumps/micro tubes. Collection of coconut leaves mulching the basins of coconut palms, basin cleaning, providing fertilizers 6 times through fertigation method as directed. The total duration of irrigation period is seven months tentatively from November 2017 to May 2018. However exact date for start and completion of irrigation will be decided based on the monsoon pattern, which will be intimated to the contractor by the concerned staff. Removing and tying drip irrigation pipes during onset of monsoon	28 acre (entire works)	per acre		July 2017 to June 2018

20.	a. Seedling characterisation Morphological characters measurement in the nursery under Genetics section. b.Morphological observation field trials in genetics section juvenile palm characterisation c. Morphological characterisation of adult palms in field trials. d. Morphometric measurements of fruits in hybrids/germplasm 7000 s the nursery under Genetics (Appro Appro 1800 c) Round Appro 1800 palm (8-12 of 150 parobserv) 2000 f		eximately seedlings in arsery (4-8 vation). roximately 3 ds) eximately juvenile in the field. observations) alms (10-20 vations) fruits (12-20 vations)	Rate may be Quoted per seedlings/Round . (Approximately Three Rounds) Rate May be quoted per adult palm Rate May be quoted per Fruit	July2017 to June2018
21-	Weeding and irrigation for 10000 poly bag nursery seedlings and maintenance of area. Regular observation on seed nut sprouting characteristic in polybag nursery, monitoring and controlling pest and disease incidence and observation as			Per bag	July2017 to June2018
22.	Field operation and maintenance of newly planted hybrid and germplasm trails under Genetic Section in Blocks –B,C, G,H and F Base cleaning and bund making for individual seedlings during August-October, removal of weed clump as directed. Gap filling of the seedlings and their maintenance. Shading for gap filled seedlings. Monitoring the pest and diseases in the newly planted trials and prophylactic treatments during June and crown cleaning as directed. Maintenance of Drip irrigation which includes laying of lateral pipes and putting micro tubes 30cm depth and 1M away from the bole, laterals should be buried 20cm depth. Checking the motor, flushing the filter/pumps/micro tubes. Collection of coconut leaves, mulching the basins, basin cleaning by weeding, providing fertilizers 6 times through fertigation/soil method as directed. The total duration of irrigation period is seven month tentatively from November 2017 to May 2018. However exact date for start and completion of irrigation will be decided based on the monsoon pattern, which will be intimated to the contractor by the concerned staff. Removing and tying drip		Approximat ely 17 acre (entire works)	(For one year) Rate may be quoted for entire work	July 2017 to June2018
23.	irrigation pipes during onset of monsoon. Pit opening and planting			Rate may be	May 2017 to

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	a) Digging of pit size 1M X 1M X 1M b) Removing seedlings from bed /polybag and transportation. c) Filling pit with soil and planting seedlings d) providing mulching, shading and support.	Approximat ely 100 seedlings	quoted per seedlings		April 2018
24.		Total Area = 1.5 acre 320 Seedlings(e ntire work)	for one year Rate may be quoted for entire work	7	June 2017 to May 2018
25.	Sowing of coconut seed nuts in poly bags. Preparation of potting mixture including transportation of sand, soil etc. Leveling the poly bag nursery area, bag filling and sowing seed nuts in poly bags and numbering the poly bags.	Approximat ely 8000	Rate may be quoted per nut		May, 2017 to March 2018
26.	Maintenance of Dwarf palms and WCT in pachakkad plot. The following works to be undertaken. 1. Timely machine weeding atleast two rounds as directed. 2. Uprooting sataria grass with clump and disposing away from the plot as directed 3. Incorporation of organic manure/ chemical fertilizer etc., during August/September (Manures and fertilizers will be provided departmentally) 4. Weeding in the trench/half moon bund and strengthening of the bund with pineapple gap filling, including fertilizer application for pineapple suckers. 5. Herbicide spraying during August and October If required & as directed. 6. Collection of shed nuts if any &. Scrapping weeds in basin and mulching of basins with the fallen leaves/husk/leaf shreds 7. Maintenance of Drip irrigation system in Pachakkad, laying of lateral pipes and putting micro pipes 30cm depth and 1M away from the bole, laterals should be buried 20cm depth. Regular checking the motor, flushing the filter/pumps/micro tubes. Providing fertilizer through drip system once in a month. Removing and	4.0 acre area	Rate may be quoted for entire work		July 2017 to June 2018

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	tying drip irrigation pipes during onset of monsoon, 8. Removal of dead seedlings/palms as and when required and replanting/gap filling including shading. 9. Hose irrigation to Pineapple suckers as and when required and directed. 10. Crown cleaning and Prophylactic treatment with leaf axil filling of insecticide/fungicide(two or three rounds as directed) and required need based protection measures (spraying/axil filling) as directed.			
27.	Uprooting and cutting of palms. Uprooting and removal of coconut palms from under planted plots/dead Palms under genetics plots. Palm should be removed along with bole and uprooted pit should be covered with soil; the trunk of the uprooted palms should be cut into suitable pieces and along with bole as well as crown waste should be transported away from the site and buried in trenches as directed.(trenches to be opened by the contractor). The mature/tender nuts should be handed over to Farm.	200 palms in different plots(Appro ximately)	Rate may be quoted per palm	May, 2017 to March 2018
28.	Characterization of palms and experimental seed production on coconut: Measuring morphological data on palms, fruit development of mature and tender fruits, experimental seed production. Pollination work in related palms to be undertaken from November /December 2017 to May 2018 including monitoring mother palm and recording data, Labeling processing of pollen, counting nut set. Pollen processing from selected palms for storage of pollen for studies. Fruit samples for analysis including the observation on the crown of selected palms. Harvesting of experimental nuts, marking and transporting to godown as directed. Climbers and skilled workers to keep day wise records of pollination and other observations.	Approxima tely 100 Palms	Rate may be quoted for entire work for one year.	June 2017 to May 2018
29.	PRODUCTION OF PLANTING MATERIALS – (Commercial) Nursery Handling - Coconut Sowing of coconut seed nuts in the nursery which includes transporting of seed nuts from the godown to the field, preparing seed bed, application of treatments in trench as directed sowing seed nut and covering the trench with top soil and mulching with dried coconut leaves as directed.	80,000 Nuts Approximat ely	Rate may be quoted per nut	May 2017 to March 2018
30.	Pollination Work The pollination work includes: PART A 1. Noting dates of bunch opening, emasculation, bagging, pollination and removal of bag; recording number of female flowers pollinated. 2. Emasculation (removal of male flowers from bunch)	Approximat ely 7000 bunches	per bunch	May 2017 to March 2018

	3. Bagging (covering bunch with a cloth bag three days before female flower receptivity) 4. Collection of male spikes from dwarf and tall varieties 5. Processing male flowers to extract pollen grains (sample of each batch of processed pollen to be provided to the lab for testing germination) 6. Dusting pollens on the female flowers (on the bunch covered with bags; should be done before 11AM) 7. Removal of bags (2-3 days after completing pollen dusting in a bunch) and tagging (tying bunches with tags showing bunch number and date of last pollination) 8. Counting number of nuts set on the pollinated bunch Rate may be quoted per Bunch			
31.	PART B 1. Bunch wise harvesting the matured nuts of previous year pollination. 2. Marking harvested nuts with palm, bunch & nut number, sorting and transporting to seed storage shed. 3. Rope harvest as and when required as directed. The rate per nut may be quoted per nut Work quantum indicators: 1. To complete pollination work in one bunch it may take 5-8 climbings 2. One climber can attend to 50 palms 3. Approximately 600 tall and 75 dwarf palms (6500 to 7000 bunches) Conditions: 1. The climbers should be available with the department from 8AM to 5 PM and attend pollination related work as described above and as directed. 2. All the day wise records of pollination should be maintained by individual climbers and provide as and when required. 3. Work should be done as per the instructions.	70,000 Nuts Approximat ely	Rate may be quoted per nut	May 2017 to March 2018
32.	Assisting in analysis of experimental samples: Lab equipments handling for analysis of the coconut experimental samples namely leaf/flower anatomical studies (apprx.100), oil estimation (apprx.100) tender nut water (Approx.100) as directed including preparation of reagents, standards collection and fixing tissue samples. Processing of tissues and preparation of blocks, preparation of samples and lab related work as directed.	Entire work for one year	Rate may be quoted for entire work	May 2017 to March 2018

SI. No	Description of work	Approximate Quantity	Rate	Amount (2)	Period
33.	Cleaning of glass wares Removal of media from culture tubes conical flasks, Petri dishes, culture bottles Socking of culture tubes, conical flasks, Petri dishes, culture bottles in detergent solution (overnight) followed by brushing and cleaning. Drying of glass wares in hot air oven	1000 test tubes 100 conical flasks 1000 Petri dishes 25 measuring cylinders 100 reagent bottle 100 small vials	Per month		May 2017 to March 2018
	Stacking of culture tubes, conical flasks, Petri dishes with or without tissue papers, culture bottles, pipette tips, filters, cryovials, v cryoplates, aluminium foils, in paper/polythene bags. Autoclaving of culture tubes, conical flasks, Petri dishes, culture bottles, pipette tips, filters, cryovials, v cryoplates, aluminium foils etc. Decontamination and cleaning of contaminated cultures its drying and autoclaving.	1000 test tubes 100 conical flasks 1000 Petri dishes 25 measuring cylinders 100 reagent bottle 100 small vials			
	Cleaning of lab Regular dusting and cleaning of lab tables, computer tables, culture trolleys/racks, media storage racks, storage shelves, laminar air flow chambers, side slabs in inoculation rooms, dark room etc	33 units			
	Preparation of cotton plugs	200			
	Preparation of potting mixture	10kg			
	Total				
34.	An average of 1000 coconuts are needed per month for embryo/plumule culture of coconut Activity Harvesting Dehusking & splitting of coconuts.	50 palms 1000 Nuts	Per palm/nut		
35.	Preparation of stock solutions of macro, micro elements, iron EDTA and vitamins for MS and Y3 and other media for coconut.	17 litre			
	Preparation of hormone stock solution for Ms and Y3 media for coconut		Per month		
	Preparation of different media formulations and pouring into culture tubes /petridishes/conical flasks for tissue culture	30			
	Preparation of inflorescence explants for culture initiation.	5			
	Scooping of endosperm plug with embryo from coconut	600			

	Surface sterilization of endosperm plug, embryo and inflorescence.	600		
	Excision and inoculation of plumule from coconut embryo into different media combinations	400		
	Inoculation of embryo or inflorescence into different media combinations	300		
	Subculturing of cultures initiated from plumule, embryo or inflorescence into fresh media at 20 to 30 days interval. Documentation of culture details initiated at different periods.	800		
	Cryopreservation studies of embryo and pollen	50		
	Preparation of buffer/reagent solutions for molecular studies, Grinding of samples and extraction of DNA/RNA for clonal fidelity studies Documentation of results and scoring of bands	100		
	Total			
36.	Preparation of stock solutions of macro, micro elements, iron EDTA and vitamins for MS, modified MS, Hoagland and Y3 and other media for Arecanut.	20 litre	Per month	
	Preparation of hormone stock solution for MS, Y3 and Hoagland media for Arecanut.	1		
	Preparation of different media formulations and pouring into culture tubes /petridishes/conical flasks for tissue culture	35		
	Surface sterilization of inflorescence collected from dwarf, hybrids and healthy arecanut palms from YLD hotpot area. (Season wise)	3		
	Fine chopping of inflorescence and inoculation into different media combinations.	3		
	Surface sterilization of embryo, excision of plumule from embryo or ovary from female flowers and inoculation into different media combinations	100		
	Surface sterilization of seedling shoot column, fine chopping of meristematic tissues and inoculation into different media combinations.	3		
	Subculturing of cultures into fresh media at 20 to 30 days interval. Documentation of culture details initiated at different periods.	600		
	Cryopreservation studies of embryogenic callus and pollen	50		
	Preparation of buffer/reagent solutions for molecular studies, Grinding of samples and extraction of DNA/RNA for clonal fidelity studies Documentation of results and scoring of bands	100		
	Total			

Crop Production Agronomy

l. lo	Description of work	Approximate Quantity	Rate	Amount (2)	Period
37.	Tender nut experiment		Variable -		
a.	Climber for Inflorescence tagging and harvesting of tender nut/mature nut	124 palms per month in a staggered manner	Per palm		
b.	Laying of drip lines and checking the lines for drip irrigation (* exact date of lying and meintainace is based on onset and cessation of monsoon) and fertigation	Tentatively* Nov- May	Per month		
C.	Every month harvested tender nut collection, counting, loading and transportation to farm		Lumpsum		
d.	Basin opening, mulching	Once in a year			
38.	HDMSCS		7 2 7		
a.	Planting of component crops which includes, bed preparation/pit opening and planting: planting of banana suckers as and when required	6000 m ²	Per month		
b.	Irrigation of the field with sprinkler	1.2 ha.,			
C,	Input/Fertilizer application as per the treatment requirement for each crop	2 rounds for coconut and others and 6 rounds for banana			
d.	Harvesting of cinnamon, nutmeg, banana and other annuals				
e.	*Pepper harvesting (150 vines), Pepper sampling *Nut studies	*sampling One round, 42 palms *1250 nuts in 6 rounds (42 palms)			
f.	Removing of fallen leaves, cutting of old banana leaves, vermicomposting (1.5 ton each in 4 times) and other related works				
g.	Machine weeding	0.7 ha with 4 rounds			
h.	Manual weeding in the component crops grown area	0.5 ha with 6			

		ı	rounds		
i.	Climber for taking observation viz., Plant height, girth, no. leaves and leaf sample collection	o. of 4	42 palms once in a year		
39.	Fruit trial, cocoa trial and nearby coconut monocrop			Lumpsum	
a.	Harvesting of cocoa as per schedule, pruning once in a year	100	292 no.,		
b.	harvesting of intercrops	cocoa, sapota, mango	d 480 palms, 292 20 lemon, 17 , 17 mango, 12 steen, 14 garcinia, un, 13 rambootan		
С	Irrigation with drip system(laying of drip line and maintenance)) -	-do- (6 ac)	Per month	
d	Machine weeding	(0.7 ha, 3 rounds	Per round	
e	Maintenance of clean of the plot, dry leaf collection			Lumpsum	
40.	Beach block- MSCS	10	1.6 ha	Entire work	
a.	Planting of component crops viz., vegetable, flower and fod crops etc. which includes, bed preparation/pit opening a planting, intercultural operation				
b.	Irrigation of the field with sprinkler				
c.	Input/Fertilizer and pesticide application as per the treatmerequirement for each crop	nent			
d.	Nut study and harvesting of intercrops				
41.	Hill block- organic Farming			Entire work	
a	Maintenance of plot, Planting of component crops which included bed preparation/pit opening and planting, input/fertiliapplication, nut study		1.4 ha		
b	Biometric observations	1	App. 45 palms		
С	Lying of drip line, maintenance for drip irrigation. (* exact date of lying and meintainace is based on onset a cessation of monsoon).		Fentatively* Nov- May		
42.	Mixed farming			Entire work	
a.	Maintenance if dairy unit (disposal of cow dung and urine, bathing, milking machine/manually and other related activities with da management)	by a	Approximately 12 animals		

b.	Maintenance of poultry unit (broiler, layer): Maintenance aquaculture	150 birds in each unit, per year 6 batches		
c.	Milking by machine	1		
d.	goat unit	approx. 20+1		
e.	Maintenance of coconut based cropping systems including fodder grass, banana, pepper and other component crops- fertilizer /input application, earthing up, weeding, replanting, spraying/application of chemicals, sprinkler irrigation and nut study.	5 acres		
f.	Harvesting of fodder grass, bundling and transportation of fodder grass in the experimental plots of CPCRI to mixed farming unit and chopping by using chop cutter/ manual on daily basis- 400 kg green fodder /day			
43.	Poor yielding management and Micronutrient studies		Entire work	
a.	Maintenance of plot, basin opening, input/fertilizer application as per the treatment, mulching and nut study	2.5 ha.		
b.	Lying of drip line, maintenance for drip irrigation. (* exact date of lying and maintenance is based on onset and cessation of monsoon).	Tentatively* Nov -May		

Soil Science

SI. No	Description of work	Approximate Quantity	Rate	Amount (2)	Period
44.	Soil sample collection	2500 samples	Per palm		
45.	Leaf sample collection	800 palms	Per /palm		
46.	 Processing soil samples (grinding, sieving) Preparation of required reagents for analysis Extraction and analysis of soil samples for pH, EC, organic carbon, Total N and Av.P, K &S, analysis of Ca, Mg, Fe, Mn, Cu, Zn and B using AAS. Data tabulation of analysed samples in the computer Processing of leaf samples (cutting, grinding) and wet digestion of leaf samples 	4000 samples	Per sample		

	 Analysis of leaf samples for N, P, K, & S, analy Mg, Fe,Mn,Cu, Zn and B using AAS. Data tabulation of analysed samples in the compute Note: Persons involved in this work should have exp the chemical laboratory work and basic computer wo 	er erience in			
47.	Washing of laboratory glasswares, drying and stocking in the respective place, and cleaning the laboratories	laboratory and stock place -300 tables-6nd	glass wares, drying ing in the respective onos, cleaning work		

Microbiology

Sl. No	Description of work	Approximate Quantity	Rate	Amount (2)	Period
48.	a) Vermicomposting in tanks: Sorting & collection of earthworm from vermicompost tanks & removing compost from tanks. Collection of dry coconut leaves and other waste from the field and transporting to vermicomposting tank site. Filling tanks with leaves (after cutting them) mixing with 10-20% cow dung slurry and covering this with dry grass for moisture retention. Transporting Vermicompost to Agrostology and in return transport fresh cow dung to vermicomposting site. b) Earthworm multiplication: Chopping coconut leaves, bunch wastes, etc., transporting cow dung, watering vermicomposting tanks and multiplication beds, cow dung supplementation to the multiplication beds, worm sorting and supply, shade drying and sieving of vermicompost, packing of	a) 14 tanks of size 7.5 m X 3.0 m X 0.7 m b) 4 tanks of size	Per round		May 2017 to March, 2018
49.	Assisting in collection and processing of soil samples, vermicompost and coir pith compost, etc., their	More than 200 soil and other samples for	Rate to be quoted for		May 2017 to March, 2018

reagents, different chemical media, their sterilization, pouring of sterilized media in tubes and plates, transfer of microbial cultures to slants for their sub culturing, decontamination and disposal of inoculated media, treatment of decontaminated glass wares, their washing with water and drying and stacking, sterilization and packing of carrier material for bioinoculant formulation, preparation and sterilization of liquid medium for bioinoculant massmultiplication, sealing of formulation packets and	microbial analysis, 20-30 l media/reagents weekly. Two sterilization runs daily in autoclave for sterilization and de- sterilization, Decontamination of 500 nos. of glass wares monthly, More than 50 kg of talc/carrier material for bioinoculant formulation.	entire work	
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Crop Protection

Cammania.

SI. No	Description of work	Approximate Quantity	Rate	Amount (2)	Period
50.	Production of <i>Trichoderma</i> formulations (Pathology) Maintenance of <i>Trichoderma</i> nucleus cultures in the lab and sub-culturing regularly (once in 15 days). Mass culturing of <i>Trichoderma</i> spp. for preparation of Trichoderma formulations viz. <i>Trichoderma</i> talc and <i>Trichoderma</i> coir pith cake. Packing the talc powder in 2 kg capacity heat resistant polythene bags and sealing the bags. Sterilization of the talc powder in autoclave. Mixing the <i>Trichoderma</i> culture with talc powder. Shade drying the formulation for 3-5 days. Packing in polythene bags of required quantity and sealing the bags. Packing good quality coir pith in heat resistant polythene bags and sealing the bags. Sterilization of coir pith Mixing the <i>Trichoderma</i> culture with coir pith. Preparing the <i>Trichoderma</i> cake. Drying the cake in hot air oven, packing and sealing.	Per year	Per month		May 2017 to March 2018

	Powdering and sterilization of Neem Cake. Mass production <i>Trichoderma</i> using sterilized neem cake substrate.			
51.	Maintenance & Multiplication of insect cultures including parasitoids (Barcon brevicornis and Goneozus nephantidis) (Entomology) Rearing of Corcyra larvae on broken wheat grains and transferring the larvae in to small test tubes for inoculation Transferring emerged parasitoids in to bigger test tubes in asceptic condition and monitor the growth stage of the parasitoids includes; preparation of cotton plug and wax paper strips and fed the insects with honey Autoclaving used culture tubes, cleaning with soap solution drying and sterilizing in the oven Field collection of leaf eating caterpillar as and when incidence is reported and laboratory maintenance Field collection and maintenance of white grub cultures in the lab, cleaning and sterilizing of containers and filling with sterilized soil. Field collection of red palm weevil and rhinoceros beetles. Laboratory rearing of beetles by frequently providing coconut petioles. Collection of rhinoceros grubs and maintenance in laboratorySterilization of laboratory equipments, preparation of fungal/ bacterial culture media for the multiplication of microbial biocontrol agents.	1000-1200 parasitoids daily 200 small tubes 20 big tubes (weekly twice)	Per month	May 2017 to March 2018
52.	Mass rearing of Greater wax moth, Galleria mellonella and mass production of entomopathogenic nematodes (Nematology) Collection of honey combs and separation of Galleria larvae from bee hives maintaining by farmers at different places of Kasaragod. Preparation of ingredients (maize, wheat, bran etc.,) requirement of artificial diet its cleaning, drying and grinding process of desirable required standard and proper ratio for the multiplication of Galleria larvae.	per year	Per month	May 2017 to March 2018

	Preparation of artificial diet of 6 kg regularly at 20 days interval of 20 boxes for rearing different instar <i>Galleria</i> larvae for large scale production of EPN. This process will continue for throughout year. Collection of pupa and separation of adult moth of Galleria and placing in separate cages regularly at 15 days interval for hatching of eggs it is regular work to maintain required number larvae. Collection of eggs and keeping for larval hatching it is continuous process to avoid loss of culture. Assisting in selection and counting of fully grown Galleria larvae for EPN inoculation, collection EPN infested Galleria cadavers and its drying for 2 days, preparation of white trap chamber for placing cadavers to harvest the infective juveniles at 24 hours interval for regularly. Assisting in maintenance of hygiene in proper washing of all the devises using in multiplication of EPN at regular interval to avoid contamination Preparation of EPN storage process and assisting in packing, storing and transportation of stored EPN vials/pouches to experiments filed on root grub management in YLD affected and non YLD plots at Karnataka and Kerala. Assisting in routine work of collection of soil samples and EPNs infected insect cadavers from trial plots and during survey work in different agro-climatic conditions of India for geomapping of EPN diversity.			
53.	Autoclaving disease samples and disposing them Autoclaving used culture tubes (with micro-organism culture), cleaning with soap solution, drying and sterilizing in oven Autoclaving used Petri dishes (with micro-organism culture), cleaning with soap solution, drying and sterilizing in oven Autoclaving used culture flasks (with micro-organism	3000 samples 7500 samples 15000 petri plates 7500 flasks	per month	May2017 to March 2018

1	sterilizing in oven (Entire work of all Sections of Crop Protection Division i.e., Pathology, Entomology & Nematology)		
	One climber for assisting in pests and diseases surveillance and taking up of regular check up of the seedlings and young palms for pest and disease incidence. Imposing prophylactic treatments in seedlings and young palms and curative treatments in affected palms after every surveillance activity in CPCRI farm	Per month	

PB & PHT

SI. No		Approximate Quantity	Rate	Amount (2)	Period
55.	Regular operation of SCADA in Open Top Chambers Assisting in measurement of water potential, photosynthetic parameters, chlorophyll fluorescence of coconut & cocoa seedlings.	5 Man days/Month 3 Man Days/Month	Per man day		May 2017 to March 2018
	Daily measurement of soil moisture using soil moisture probe to maintain plants at defined stress level.	3 Man days/Month			
	 Assisting in estimation of shoot, root and total biomass in coconut seedlings under different moisture regime. 	2 Man days/Month			
	5) Cleaning & maintenance of Open Top Chambers (six numbers)	3 Man days/Month			
	6) Measured quantity watering of seedlings in OTC and shade net (60 Nos.) daily, removal of weeds, cleaning the premises of OTCs etc.				
	 Assisting in sample collection for analysis, data recording, etc. 	3 Man days/Month			
	 Replacement of CO₂ gas cylinder at regular intervals. 				
56.	Assisting in biochemical analysis coconut leaf samples of different treatments at regular intervals		Per man day		May 2017 to March 2018

(A)	pprox. 100 samples each time). 1) Total phenol estimation, Total and Reducing Sugars, MDA content, Leaf chlorophyll content, Epicuticular wax content	6 man days/Month	
2)	Total soluble proteins along with protein profile under Poly-acrylamide gel electrophoresis (SDS-PAGE) and 2 D gel electrophoresis	8 man days/Month	
3)	Antioxidant enzymes assay (SOD, Peroxidase, polyphenol oxidase, ascorbate peroxidase, carbonic anhydrase).	6 man days/Month	
4)	Isozyme profile for SOD, peroxidase enzymes with Native PAGE	5 man days/Month	
5)	Total DNA/RNA extraction from coconut leafs, cDNA preparation, qRT-PCR analysis. Assisting biochemical analysis of coconut	5 man days/Month	
6)	endosperm, testa, neera, etc.		
7)	Proximate analysis of the raw and unit operation based processed products of		
	coconut like coconut milk, VCO, and other value added products.	12 man days/Month	

57.	Assisting in APC activities	A R WILLIAM I	1.4 1.1	May 2017 to
	Helping in Technology transfer of VCO, Chips, coconut sugar etc.	5 man days/Month	Per man day	March 2018
	Helping in demonstrating coconut de-husking operations .	3 man days/ Month		
		3 man days/ Month		1
		3 man days/ Month	1	
		3 man days/ Month		
		3 man days/ Month		
	7. Helping in sample preparations during coconut based product development studies	2 man days /Month		
	Facilitating visitors and guests	3 man days/ Month		
58.	 Cleaning of glass wares, buckets and other utensils Drying in oven and staking in proper place (approx. 250 nos./day) in Biochemistry lab Grinding samples, for biochemical analysis Irrigation of pots and cleaning of machineries in APC. 	10 man days/ Month 5 man days/Month 5 man days/Month 5 man days	Per man day	
59.	 Helping in the fabrication, repair and maintenance of farm implements and tools. Helping in fabrication, repair and maintenance of pre and post-harvest technology equipments, machineries, etc. Helping in the testing and evaluation of developed machineries in the Technology Wing. Looking after the technology wing 	5 man days 5 man days 5 man days 10 man days	Per man day	
60,	 Tapping of 30 coconut trees of not more than 10 m height twice a day. Tapping involves preparation of the inflorescence as per the instruction of the officers of the Institute Collecting neera in the ice box prescribed by the Institute. 		Per man day	

	 The ice bags needs to be cooled and replaced before each tapping. The collected neera to be brought to APC for sugar preparation. Sugar preparation as per the instruction of the Officer Packaging the prepared sugar. 	days		
61.	I. Maintenance of Cyberoam Cr200i and ZyXEL-ZyWALL 35 UTMs, CISCO Router, Keymile Modem, DIGISOL Ethernet Switches, OFC Converter, Server etc. in the AKMU. Cross-over crimping and Straight-through crimping of Cat05/Cat06 UTP cable as per requirement. Operating System and Application programmes reinstallation. Memory problem, which requires cleaning or replacement of memory. Motherboard problem, which normally requires resetting /replacement of the board and CMOS Cell replacement. SMPS replacement. Antivirus installation. Network connectivity problem which requires connectivity checking, crimping or LAN card replacement.	5 Man Days	Per man day	
62.	 Repair and maintenance of offline and online UPSs. (about 130 Nos.), repair and maintenance of battery ba attached to the above UPSs and shifting and reinstallation of UPSs with battery banks. Repair and maintenance of all instruments in the institt Repair and maintenance of all equipments like ovens, incubators, shakers etc. Repair and maintenance of analog telephones. (about 1 	ste. 5 man days 3 man days	Per man day	

	 Nos.) Repair and maintenance of public announcement system and speaker connectivity. General Maintenance of Lift. Operation of Public Address Systems in PJ Hall and DJ Halls. 	1 man day 1 man day 3 man days		
63.	Library Updation / maintenance of institute digital repository, i.e, adding new records - 350 records approx Entering key words identified for 5744 records - 18000approx. Data entry of all articles with abstract appearing in "Indian coconut journal" and "Journal of plantation crops" into webAgris - 200 records Downloading articles from subscribed online only journal issues, Advances in agronomy etc. and subsequent uploading to institute website - 2000 records	6 man days 5 man days 8 man days 6 man days	Per man day	

Social Sciences

Sl. No			Approximate Quantity	Rate	Amount (2)	Period
64.	Works in Social Sciences Division		Y			
a	Irrigating and maintaining the coconut palms(14 palms), Cocoa trees & areca nut palms(24 palms in the surround of the ATIC building	ing the coconut palms(14 palms), it palms(24 palms in the surroundings useum (Dusting and cleaning inside		Per day		May 2017 to Onset of monsoon
b	Cleaning of coconut museum (Dusting and cleaning insi- the museum) and cleaning the surrounding of the buildin approx. 0.5 ha			Per day		Twice in a week through out the year
С	Distribution of coconut seedlings	1 & one extra person in the peak months (75 man days)		Per day		June 17 - Sept 17
d	For arranging and assisting to participate in the exhibition by the Institute at off campus and on campus	n	1 male (120 man days)	Per day		Monthly 10 days for every month.

e	Carry out service works & maintenance and of statistics lab and Videoconferencing facility and for assisting in field surveys and data entry	1 Male (300 man days)	Per day	May 17 to March 18
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KVK

SI. No	Description of work	Approximat e Quantity	Rate	Amount (2)	Period
65.	Maintenance of demonstration units. Attending different cultural operations like, land preparation, planting, sowing seeds, irrigation, weeding, manuring, plant protection and harvesting in demonstration units on inter cropping in coconut garden with banana, fodder grass, pineapple, tuber crops, fruit crops like, rambutan mangostene, suppota, passion fruit, dragon fruit, spice crops like pepper, ginger and turmeric, vegetables flowering plants, Home science garden, azolla unit and fish pond. Attending vermicomposting and coir pith composting unit and production of compost.	4.0 ac	Entire work		
66.	Production of seeds and planting materials- Preparing potting mixture, filling bags/pro trays, arranging in nursery, sowing seeds/planting cuttings, plant protection, irrigation and weeding. (Seedlings of papaya, drumstick, vegetables, arecanut, flowering plants, garden plants and fodder grass slips.) Production of rooted pepper cuttings by serpentine method and maintenance of production /nursery unit in tidy and presentable condition. Land preparation, sowing seeds/planting seedlings, mannuring, earthing up, providing pandal/support, plant protection, collecting seed, extracting, drying and packing.	1.2 Lakh nos. 50 kg seed	Entire work		
67.	Production of organic products Neem kernel products Pheromone blocks Marine fish extract	300 litrs 200 nos 50 litrs.	Entire work		
68.	Management of bee colonies (Indian bee colonies and stingless bee colonies)	35 colonies.	Entire work		
69.	Preparation of input materials, cleaning washing, chopping, preparation of food products and bottling, washing utensils and assisting in Home Sc. Training programmes	70 programmes	Entire Work		

70.	Operation of farm machinery like power tiller, weed cutter, thresher cum winnower, banana fiber extractor and its maintenance for farm work and training programmes.	30 programmes	Entire work		
71.	House Keeping. Cleaning of KVK building- office rooms, verandah, laboratory, toilets, seminar hall, MAP building and office premises by sweeping, moping and cleaning properly on alternate days basis during working days.	547 sqmt office area and 800 sqmt surrounding area.	Entire work		
72.	KVK SALES OUTLET Attending different works in the sales outlet of KVK like selling technological products, billing and maintaining stock and sales registers.	300 days	Per day		
	Departmental Canteen	Approximat e Quantity	Rate	Amount (2)	Period
73	Works at Canteen				
a	Sweeping and moping canteen building floor area (inclusive of toilet area) - Twice in a day (morning and evening on working days of the institute.)	320 sq. mtr.	Entire work		May, 2017 to March 2018
Ь	Cleaning of dish plates / glass etc. after breakfast and lunch	About 100 persons for breakfast and 150-200 for lunch			
С	Serving tea and snacks to staff members of the institute at their respective seats.				
d	Assisting in cooking, vegetable and fish cutting for preparing breakfast and lunch for	150 members			