## कार्यालय, जिला कृषि पदाधिकारी, लोहरदगा

(ईमेल- daolohardaga@gmail.com)

uліф 679/

दिनांक 27/1/2020

प्रेषक,

जिला कृषि पदाधिकारी, लोहरदगा।

सेवा में,

जिला जन सम्पर्क पदाधिकारी. लोहरदगा।

अल्पकालीन निविदा संबंधी विज्ञापन प्रकाशन के संबंध में। महाषय,

उपर्युक्त विषय के संबंध में कहना है कि कृषि विज्ञान केन्द्र, किस्को के मिट्टी जॉच प्रयोगशाला में विभिन्न प्रकार के उपकरण, रसायन आदि की आपूर्ति से संबंधित निविदा आमंत्रित किये जाने हेतु विज्ञापन संबंधी आवश्यक सूचना का प्रकाशन हिन्दी एवं अंग्रेजी दैनिक राष्ट्रीय समाचार पत्रों में करने हेत् सामग्री अपलोड करने के निमित हार्ड एवं साफ्ट कॉपी (सी०डी०) इस पत्र के साथ संलग्न कर भेजी जा रही है।

अतः अनुरोध है कि तद्संबंधी विज्ञापन प्रकाशन हेत् सूचना एवं जन सर्म्पक विभाग के बेबसाईट पर राष्ट्रीदैनिक समाचार पत्रों में प्रकाशन हेतु अपलोड कराने की कृपा की जाए।

अनुलग्नक : सी०डी० एवं हार्ड कॉपी।

जिला कृषि पदाधिकारी.

ज्ञापांक 6.79

दिनांक अनगा विकास स्वापा प्रतिलिपि : जिला सूचना एवं विज्ञान पदाधिकारी, लोहरदगा को सूचनार्थ एवं आवश्यक कार्यार्थ प्रेषित। अनुरोध है कि संलग्न अल्पकालीन निविदा को NIC के बेबसाइट में अपलोड करने की कृपा की जाय।

### OFFICE OF DISTRICT AGRICULTURE OFFICER, LOHARDAGA Very Short Tender Notice for Invitation of Bids

Tender is being invited in two bid system- (1)Technical bid (2) Financial bid from manufacturers/authorized distributors/dealers/registered suppliers/ reputed firms / government undertakings separately for supply of laboratory Machinery/ Equipment's / Lab furniture's / Chemicals/General lab items etc. & CAMC/AMC of equipments for Soil Testing Lab, KVK, Kisko, Lohardaga, Jharkhand.

A Complete set of Tender Documents may be downloaded from website - http://lohardaga.nic.in/ atmalohardaga.co.in

#### Details are given below:-

1.	Tender Reference No.	Tender/DAO(STL)-1-2020-21
2.	Name of Work	Supply of laboratory Machinery/ Equipments / Chemicals / General lab items etc. / CAMC of equipments, for, Soil Testing Lab, KVK Kisko, Lohardaga, Jharkhand
3.	Tender Document Cost (Non- Refundable)	Rs.500/-
4.	Date of Publication of Tender Document on website	28.11.2020
5.	Document Download Period Starts	28.11.2020
6.	Pre-bid Meeting	NA
7.	Last date of submission of Tender	05.12.2020
8.	EMD Amount	Rs. 5000/-
9.	Technical Bid Opening Date	07.12.2020
10.	Opening of Place	Office of District Agriculture Officer, Lohardaga  District Agriculture Office,  Sadar Block,lohardagai  Pin. No 835302, (Jharkhand)
11.	Name & Address of the Inviting Tender	Shiv Kumar Ram, <u>District Agriculture Officer, Lohardaga</u> <i>District Agriculture Office, Sadar Blcok,lohardaga Pin. No 835302, (Jharkhand) Email- daolohardaga@gamil.com</i>
12.	Tender Fee and EMD made in Favour of	District Agriculture Officer, Lohardaga
13.	Tender Fee and EMD Payable At	Lohardga

Address for Communication, Place of Submission of Documents Office of District Agriculture Officer, Lohardaga

Distirict Agriculture Office, Sadar Block, Lohardaga

Pin. No. - 835302, (Jharkhand)

5/W27.11.2020 District Agriculture Officer, Lohardaga.

#### Demand for strengthening of Soil Testing Laboratory

l.No.	Item	Quantity
1	Distillation Unit	
2	Beaker 500ml	30 pcs
3	Measuring cylinder 25ml	2pcs
4	Measuring cylinder 50ml	2pcs
5	Measuring cylinder 100ml	2pcs
6	Measuring cylinder 250ml	2pcs
7	Measuring cylinder 500ml	2pcs
8	Measuring cylinder 1000ml	2pcs
9	Pipette graduated 0.5ml	2pcs
10	Pipette graduated 1ml	2pcs
11	Pipette graduated 5ml	2pcs
12	Pipette graduated 10ml	2pcs
13	Pipette graduated 25ml	2pcs
14	Round bottom flask with condenser	5pcs
15	Rubber tube 10 mtr coil	1coil
16	Test tube 18 150mm	20pcs
17	Tripod stand 8"	8pcs
18	Aspirator bottle 10Ltr	2 nos
19	Burette stand with double clamp	5 nos
20	Conical flask 100ml	10 nos
21	Volumetric flask 250ml	5pcs
22	Volumetric flask 100ml	8pcs
23	Volumetric flask 50ml	10pcs
24	Volumetric flask 25ml	30pcs
25	Beaker 50ml	30pcs
26	Beaker 1000ml	2pcs
27	Beaker 250ml	10pcs
28	Conical flask 500ml	20pcs
29	Burette graduated 50ml	3pcs
30	Bottle top Dispenser	1pcs
31	Filter peper	100sheets
32	Wash bottle 500ml	5pcs
33	Apron for lab use	4pcs
34	Gloves for lab use	10 pairs
35	Funnel 75mm	20pcs
36	Test tube stand 20 holes of 20mm	5nos
37	Soil PH metre	1nos
38	Hand held pH meter	3nos
39	Digital soil testing kit (mini lab)	3nos
40	Refill for Minikit	3nos
41	Shaker (32)	1nos



#### Chemical

1	Acetic Acid	8x500ml
2	Ammonium acetate	15x500gm
3	Ammonium fluoride	1x500gm
4	Ammonium molybdate	2x100gm
5	Antimony potassium tartarate	1x250gm
6	Ascorbic acid	1x100gm
7	Azomithane H mono sodium salt	5x5gm
8	Barium Cholride	4x500gm
9	Barium sulphate	1x500gm
10	Boric acid powder	5x500gm
11	Buffer capsule PH 4,7,9,2	3xpkt
12	Calcium chloride	3x500gm
13	Diphenylamine	1x250gm
14	DTPA	2x100gm
15	Ferrous ammonium sulphate	10x500gm
16	Hydrochloric acid	1x2.5ltr
17	Orthophosphoric acid 85%	1x2.5ltr
18	Potassium chloride	1x500mg
19	Potassium dihydrogen phosphate	1x500gm
20	Potassium sulphate	1x500gm
21	Potassium dichromate	4x500gm
22	Sodium fluoride	4x500gm
23	Sodium hydroxide pellets	8x500gm
24	Sulphuric acid	20x2.5ltr
25	Triethanolamine	2x500ml
26	P NitrophenolHimedia	2x25gm

## Miscellaneous items for laboratory

1	Horizontal autoclave	1,000
2	Steel Rack 5"x3"	1nos
3	Lab working table	4nos
4	Godrej Almirah	2nos
5	Computer, printer with Accessories	2nos
	demputer, printer with Accessories	1nos
6	Recurring expenditure for Electrification, plumbing, & other miscellaneous items	



### WATER DISTILLATION UNIT (ALL QUARTZ)

To be filled by Tenderer

Name of the Model

S.NO.	DESCRIPTION	SPECIFICATION	REMARKS
1.	Boiler, Condenser & Heater	All quartz double Stage	Specifications of the
2.	Distilled Water Output	2.5 ltr/hr	items to be supplied
3.	Maximum Water requirement for cooling		by the tenderer (whether same or
4.	Distillate	High purity,Low conductivity Pyrogen Free	higher than given specifications, if
5.	E.C.:- S/cm	<1x10 6	higher, details to be
6.	Total organic carbon	<500μg/l	furnished)
7.	Organic matter mg/lit	Nil	
8.	Total solid mg/lit	<0.1	
9.	KmnO4 Color retention	1 hr	
10.	UV absorbance at 254 nm	0.007	
11.	Electrical Requirement:	- 230 volt	
12.	Electronic relay unit buzzer, When water supply interrupted.		
	Constant level device	Yes	-
	Safety control Unit	Yes	
	Easy Cleaning of the boiler	Yes	
	Compact &easy to install	Yes	-
13.	Product should be certified-ISO standards		

Manufacturer of t	he Model	Year of relea	ase of the equipment
Signature -		 Name	Seal



# BOT E TOP DISPENSER (PINNACLE MODEL) WITH RECIRCULATIONVALVE

S.NO.	DESCRIPTION	SDECIFICATION	
1.	VOLUME RANGE	SPECIFICATION	REMARKS
= 10		MAXIMUM: 60ML/MIN.&10 ML	SPECIFICATIONS
2.	DISPENSING STEPS	MINIMUM: 5ML/MIN.& 1 ML	OFTHE
3.	IMPRECISION	± 0.1%	
4.	INACCURACY		ITEMSTOBESUPPLI
5.	SHOULD BE AUTOCLAVE ABLE.	± 0.5%	ED BY THE
6.	INTERNAL VALVE/S	YES	TENDERER
	MOC OF WETTED PARTS	INTERNAL VALVE/S SHOULD BE SPRING LESS	() 5 () 1 =
11.5		MOC OF WETTED PARTS SHOULD BE NON-INTERFERING - ONLY PTFE/ FEP/BOROSILICATE GLASS MAY BE USED.	OR HIGHER THAN GIVEN
7.	DELIVERY NOZZLE	SHOULD BE ABLE TO ADJUST THE DELIVERY NOZZLE ANGLE TO DESIRED DISPENSING ANGLE.	SPECIFICATIONS, IF
3.	VOLUME ADJUSTING KNOB	VOLUME ADJUSTING KNOB SHOULD BE LOCKABLE.	HIGHER, DETAILSTO
).	GLASS BARREL	SHOULD BE PROTECTED BY SLEEVE TO REDUCE ACCIDENTAL BREAKAGE OF BARREL.	BE FURNISHED)
10.	DISPENSER	SHOULD BE ADAPTABLE TO 28, 30, 32, 36, 40, 45MM.	FREE -
1.	DISPENSER PISTON	SHOULD BE PTFE.	INSTALLATION,
2.	INLET TUBE	SHOULD BE TELESCOPIC TO ADJUST TO VARYING BOTTLE DEPTHS	
3.	DISPENSER NOZZLE	DEPTHS	DEMONSTRATION &
4.	INSTRUCTIONS	SHOULD HAVE INSTRUCTIONS/ PROTOCOLS FOR EASY IN-HOUSE	TRAINING AT SITE WITH OPERATING
5.	DISPENSER NOZZLE MUST BE EQUIPPED WITH A CAP.	RE- CALIBRATION.  MUST BE EQUIPPED WITH A CAP.	MANUAL.
6.	ACCURACY & COEFFICIENT OF VARIATION		WARRANTY
7.	PRODUCT SHOULD BE CERTIFIED-1 ISO 8655	SO/ISI/EC/US/EU. OR EQUIVALENT STANDARDS	DATE
		× ×	DATE OF INSTALLATION.

TENDERER NAME OF THE	
MODEL	
MANUFACTURER OFTHEMODEL	VEAD OF DELETION

TO BE FILLED BY

YEAR OF RELEASE OF THEEQUIPMENT

SIGNATURES	EAL
------------	-----



Technical Specifications: Waterproof handheld digital pH meter for measuring of pH value in different fluids. • Automatic temperature compensation (0-50°C) • Accuracy +/- 0,01 • Power Supply: 4x1,5V (AG-13 Button Battery) • Calibration: 1 point through calibration screw. • Dimensions: 188 x 35 x 35 mm •



## BOTT E TOP DISPENSER (PINNACLE MODEL) WITH RECIRCULATIONVALVE

S.NO.	DESCRIPTION	SPECIFICATION	DEMARKS
1.	VOLUME RANGE	MAXIMUM: 60ML/MIN.&10 ML MINIMUM: 5ML/MIN.&1 ML	REMARKS SPECIFICATIONS
2.	DISPENSING STEPS	1.00 ML	OFTHE
3.	IMPRECISION	± 0.1%	ITEMSTOBESUPPLI
4.	INACCURACY	± 0.5%	
5.	SHOULD BE AUTOCLAVE ABLE.	YES	
6.	INTERNAL VALVE/S	INTERNAL VALVE/S SHOULD BE SPRING LESS	TENDERER
	MOC OF WETTED PARTS	MOC OF WETTED PARTS SHOULD BE NON-INTERFERING - ONLY PTFE/ FEP/BOROSILICATE GLASS MAY BE USED.	(WHETHER SAME OR HIGHER THAN GIVEN
7.	DELIVERY NOZZLE	SHOULD BE ABLE TO ADJUST THE DELIVERY NOZZLE ANGLE TO	SPECIFICATIONS, IF
8.	VOLUME ADJUSTING KNOB	DESIRED DISPENSING ANGLE.  VOLUME ADJUSTING KNOB SHOULD BE LOCKABLE.	HIGHER, DETAILSTO
9.	GLASS BARREL	SHOULD BE PROTECTED BY SLEEVE TO REDUCE ACCIDENTAL BREAKAGE OF BARREL.	BE FURNISHED)
10.	DISPENSER	SHOULD BE ADAPTABLE TO 28, 30, 32, 36, 40, 45MM.	FREE -
11.	DISPENSER PISTON	SHOULD BE PTFE.	INSTALLATION,
12.	INLET TUBE	SHOULD BE TELESCOPIC TO ADJUST TO VARYING BOTTLE DEPTHS	DEMONSTRATION &
13.	DISPENSER NOZZLE	TO VAKTING BOTTLE DEPTHS	
14.	INSTRUCTIONS	SHOULD HAVE INSTRUCTIONS/ PROTOCOLS FOR EASY IN-HOUSE RE- CALIBRATION.	TRAINING AT SITE WITH OPERATING
15.	DISPENSER NOZZLE MUST BE EQUIPPED WITH A CAP.	MUST BE EQUIPPED WITH A CAP.	MANUAL.
16.	ACCURACY & COEFFICIENT OF VARIATION		WARRANTY -
17.	PRODUCT SHOULD BE CERTIFIED-1 ISO 8655	  ISO/ISI/EC/US/EU. OR EQUIVALENT STANDARDS	MINIMUM TWOYEARS FROM DATE OF INSTALLATION.

TO BE FILLED BY	
TENDERER NAME OF THE	
MODEL	
MANUFACTURER OFTHEMODEL	

YEAR OF RELEASE OF THEEQUIPMENT

SIGNATURENA	NAME	SEAI
-------------	------	------



pH Range : 0 to 14.00 pH Millivolt Range : 0 to ±1999 mV

Slope Correction : 85% to 115%

Resolution : 0.01 pH, 1 mV in mV mode Repeatability : ±0.01 pH ±1 digit for pH

±1 mV ±1 digit for mV

Standardization Range . ±1 pH (Approx) Temp. Compensation

0 to 100° C Dig. Display (Manual) Display : 3½-Digit Red LED Seven Segment

with automatic polarity & decimal p

Polarization Current Recorder Output

Power  $230V \pm 10\% 50 Hz$ 

Dimension 235 (W) X 185 (D) X 85 (H) mm

Weight : 1.25 Kg (Approx) Accessories : Combined Electrode

Stand & Clamp

HORIZONTAL SHAKER (RECIPROCATING KAHN'S TYPE)

S.NO.	DESCRIPTION	SPECIFIC	CATION	- V V V V V V V V.
1.	SHAKING RACK	KAHN RACKS,	BOTTLES OR CONICAL ELASKS DE DIEEEDENTS JASS SALVES	REMARKS
		ADJUSTING TH	HECOMPARTMENTS PROVIDED ON THE SHAKING RACK.	FREE - INSTALLATION, DEMONSTRATION &
2.	SPEED RANGE	140 RPM TO 2	250 RPM	TRAINING AT SITE WITH
3.	MOTOR	The second second	DUTY GEARED MOTOR FOR CONTINUOUS RATING	OPERATING MANUAL.
4.	VOLTAGE	TO WORK ON	220/230VOLTS AC SUPPLY	WARRANTY - MINIMUM
5.	PLATFORM SIZE	31" X 17" X 4		TWO YEARS FROM DATE
6.	MATERIAL OF CONSTRUCTION	0.000	LY POWDER COATED	OF INSTALLATION SPECIFICATIONS OF THE
7.	TOP PLAT FORM	M.S. SHEET DU	LY POWDER COATED AND TOP SURFACE COVERED WITH NON SLIP MAT	ITEMS TO BE SUPPLIED BY
8.	SHAKING	VARIABLE	A. DIGITAL RPM/SPEED METER WITH PROXIMITY SWITCH.  B. AUTOMATIC DIGITAL ON/OFF TIMER FOR SHAKING TIME CONTROL	THE TENDERER (WHETHER SAME OR HIGHER THAN GIVEN
9.	SHAKING SPEED RANGE	140 RPM TO 250 RPM  SHOULD HOLD MORE THAN 50 NO.S OF 100 ML CONICAL FLASK AT ATIME		SPECIFICATIONS, IF HIGHER, DETAILS TO BE FURNISHED)
10.	CAPACITY			
11.	PRODUCT SHOULI	D BE CERTIFI	ED-ISO/ISI/EC/US/EU. OR EQUIVALENT STANDARDS	SHOULD BE QUOTED WITH ALL NECESSARY ACCESSORIES

	TO BE	FILL	ED	BY	TEN	DERER
--	-------	------	----	----	-----	-------

NAME	OF	THE	MC	DEL

MANUFACTUREROFTHEMODEL EQUIPMENT

YEAR OF RELEASE OF THE

SIGNATURE ------ SEA



# SPECIFICATION OF MINI SOIL TESTING LAB

S. No.	Particulars	Remarks
1	Availability of license from ICAR,	Mandatory
2	License number	Mandatory
3	Date of Granting the license	Mandatory
4	Validity of the license	Mandatory
5	Facility to evaluate available organic carbon (OC)	Mandatory
6	Facility to evaluate available Nitrogen (N)	Mandatory
7	Facility to evaluate available phosphorous (P)	Mandatory
8	Facility to evaluate available boron (B	Mandatory
9	Facility to evaluate available sulphur (S)	Mandatory
10	Facility to evaluate available potassium (K)	Mandatory
11	Facility to evaluate electrical conductivity	Mandatory
12	Facility to evaluate available zinc (Zn)	Mandatory
13	Facility to evaluate pH	Mandatory
14	Lime Requirement Test For Acidic Soil	Mandatory
15	Gypsum Requirement Test For Alkaline Soil	Mandatory
16	Facility to evaluate available iron (Fe)	Mandatory
17	Facility to evaluate available manganese (Mn)	Mandatory
18	Facility to evaluate available Copper (Cu)	Mandatory
19	Facility to evaluate available Calcium (Ca)	Optional
20	Shaker with LCD display with timer and also with battery operated power backup	Mandatory



S. No.	Particulars	Remarks
21	Voltage on which the motor of the shaker is running (Volt) 12V	Mandatory
22	Power Adapter/battery charger for shaker 14.2V 1Amp	Mandatory
23	Shaker Oscillation speed (per minute) 235	Mandatory
24	Dimensions of the shaker (LxWxH) (mm x mm x mm) 270x220x175. Shaker should run by battery in case of power failure.	Mandatory
25	Provision of extra battery	Optional
26	Capacity of the Battery (Vah) 6x2 Volt 4.5Ah	Mandatory
27	Continuous duty cycle of the shaker, Battery Backup Time 5 - 8 hours	Mandatory
28	Protection against Deep discharge of Battery	Mandatory
29	Protection against Over charge	Mandatory
30	AC voltage Range(Volt) 230Volt	Mandatory
31	Load of Mini Soil Testing Lab meter (VA) 14 VA, should run on battery in case of power failure	Mandatory
32	Memory Card Reader/ pen drive for Computer connectivity	Mandatory
33	Hot Plate with thermostat AC voltage Range(Volt) 230 Power Consumption (Watt) 500 or any other heating arrangement recommended by ICAR Institution	Mandatory
34	Thermometer is provided to measure lab temperature in different climatic situations for measuring parameters like pH and EC correctly.	Mandatory
35	Charging from Solar Panel Solar Pv Module Solar Pv Module Wattage (Wp) 10 watt.	Mandatory
36	Thermal printer	Optional

