

**DIRECTORATE OF EXTENSION SERVICES
RAJMATA VIJAYRAJE SCINDIA KRISHI VISHWA VIDYALAYA
GWALIOR – 474002 (M.P.)**

IPRO/DES/IBDC/2024-25/ 4448

Dated 27/03/2025


e-TENDER INVITING NOTICE

Online short tender(s) under two bid system (i) Technical bids (ii) Financial bids are invited by the Director Extension Services, RVSKVV, Gwalior from reputed Manufacturers/ Authorized Dealers/Distributors in the line for supply and installation of items/equipments of honey quality analysis and other under IBDC project Grant on or before 17.04.2025 up to 17:00 (05:00 PM) *via e tender*. For the list of items, tender forms, terms & conditions and other related information please visit RVSKVV website www.rvskvv.net and for purchase of tenders www.mptenders.gov.in from 28.03.2025

Any related corrigendum, if required, will be published on RVSKVV website (www.rvskvv.net) and www.mptenders.gov.in only.

Name of Item: Honey quality analysis and other related items/ equipments as Annexure-II

Date: 27.03.2025


Director Extension Services
RVSKVV, Gwalior
DIRECTOR EXTENSION SERVICES
DES-RVSKVV, Gwalior (M.P.)

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IPRO/DES/IBDC/2024-25/ 4447
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Sl. No.	Name of item	Divisions/ Units/ Reg. Stations	Amount of EMD (Rs)	Tender and portal fees (Rs)
1.	Atomic Absorption Spectro-photo meter with graphite furnace	Directorate of Extension Services, RVSKVV, Gwalior (M.P.)	1,25,000	12,500 + Portal Fees
2.	Kieldahl nitrogen analyzer/Protein analyzer with accessories		50,000	5,000 + Portal Fees
3.	Ultra Pure water Production System with accessories		20,000	3,000 + Portal Fees

CRITICAL DATES

S. No.	Item	Date	Time
1.	Publishing Date	27.03.2025	16:00
2.	Document Purchase Start Date	28.03.2025	10:00
3.	Last date for submission of technical e-Bid	17.04.2025	17:00
4.	Opening of the Technical Bid at Office of Directorate Extension Services, RVSKVV, Gwalior	21.04.2025	11:00
5.	Evaluation of Technical Bid at Office of Directorate Extension Services, RVSKVV, Gwalior	25.04.2025	13:00
6.	Opening of Financial/Price e-Bid at Office of Directorate Extension Services, RVSKVV, Gwalior	28.04.2025	16:00

Tender form can be downloaded from the website www.mptenders.gov.in and can also be seen on university website www.rvskvv.net. Tender documents with specifications can be purchased from this site by paying prescribed tender fees plus portal charges.

Note: Item wise separate tender should be submitted along with separate prescribed EMD.


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E-Tender Document

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DEPOSITING THE BIDS:

The bids will be submitted through on-line mode of www.mptenders.gov.in. Details are as follows:

On-line submission:

(i) **Cover-I**: Will contain the Technical Bids with the following documents:

- Detailed technical write-up highlighting the model Name/Number features offered and/ or technical literature/manuals.
- Duly signed certificate for acceptance of terms and conditions of tender enquiry on firms' letterhead.
- Original Equipment Manufacturer (OEM) certificate or authorized dealership/distributorship certificate as applicable.
- Manufacturing Registration No. (if available)
- Company Printed Price List (If available)
- Last 3(three) years Income Tax Return.
- Audited Balance Sheet for Last 3 (Three) years.
- TIN number/PAN Number/ Certificate/ GST number
- Business Registration Certificate.
- Scanned Copy of EMD as shown against each item.
- Compliance Certificate. Certificate of clause-by-clause compliance of specifications as mentioned in tender.

GENERAL TERMS AND CONDITIONS:

1. ***Only the manufactures and/or their authorized dealer/ distributors/ sole agents/ need to submit their tender.**
2. **No person or firm shall submit more than one Tender for the same item. No offer should have more than one model quoted; in case of more than one alternate offer only the first option will be considered.**
3. **It is mandatory to provide all the relevant information in *Annexure-I*.**
4. **Broad-based specifications of equipment/ items/ systems/ works *etc.* are given in *Annexure-II* of purchased tender. The tenderer should also take note of the remarks, if any, given their in.**
5. a. **Last date for submission of e-Tender is **17.04.2025** upto 17:00 (05:00 PM) on www.mptenders.gov.in.**
b. **Belated tender due to postal or any other delay will be rejected.**
c. **If offers for more than one item are clubbed together, tender will be rejected.**
d. **The tender offers should have a validity of 180 days or more from the due date. The tenders will be valid for 6 months from the date of opening and may be asked for extension by taking written concern of the firms if needed.**
e. **Price bid will be opened online at www.mptenders.gov.in on **28.04.2025** from 16:00 (04:00 PM). If date of opening of price bid will be changed due to any circumstances. That will be informed to bidders.**
f. **R.V.S. Krishi Vishwa Vidyalaya (RVSKVV) reserves the right to extend the opening due date and or the date of opening the tenders.**
g. **All the leaflets in the offer should be marked with signature and seal of authorized person.**
6. a. **The rates quoted should in Indian Rupees (₹) for a **single complete unit** with F.O.R. delivery at RVSKV, Gwalior. The rates quoted should be inclusive of packing and forwarding charges/ loading/ unloading/ handling charges/ freight/ full risk coverage/ insurance, *etc.* In case of imported goods all the expenses towards custom duty, clearing charges and transportation with insurance will be borne by the firm/ tenderer and they must quote the rates inclusive of all FOR, RVSKV, Gwalior in INR.**
b. **Excise duty/ Sales Tax/ GST/ Custom duty (with and without concession certificate) and other levies, if any should be shown separately and the **total price** of each item should be worked out incorporating the all.**

- c. Any other charges, such as technical service charges, cost of training, installation charges, TA/DA of tenderer's staff *etc.* if any, should be shown separately for each item and each sub-item and the total price of each item should be worked out incorporating the same in final quoted price.
7. All losses during transit will have to be made good by the tenderers at his cost within a period of 15 days.
 8. The tenderers must provide guarantee/ warranty on **manufacturers' letterhead** of satisfactory functioning of the equipment/ system and free service including free replacement of parts for a period of at least 3 years from the date of successful and satisfactory installation of the equipment/ system. Original to be deposited by the successful bidder at the time of supply.
 9. **Performance Guarantee:** The Successful bidder/ supplier will be required to furnish a Performance Guarantee in the form of FDR from a public sector bank or a private sector bank authorized to conduct government business for a sum equal to 10% of the Supply Order value within 30 days of signing of the Supply Order. Performance Bank Guarantee will be valid up to the date of guarantee/warranty.
 10. Offer must be accompanied by **Earnest Money** as stated against each item must be submitted on-line. Without the deposition of earnest money, the offers will be rejected.
 11. The standard terms and conditions of payment is in full only after the Supply/ installation is affected to the satisfaction of RVSKVV authorities in INR only.
 12. Please quote maximum discounted price, as no further negotiations will be made.
 13. Complimentary items/ gifts offered will not be given any preference and will not be considered for calculating the cost of the item.
 14. ***The offers must mention make, model all the specifications of the item clearly. The company must enclose printed literature/ catalogue/ manufacturer's web-site showing detailed technical specifications required.**
A folder showing many equipment without detailed technical specification, or tailor-made literature mentioning "yes" or "as per your specifications" for the specifications asked for, will not be considered. Specifications given in the offer must match to the website and/or printed technical literature otherwise the offers shall be rejected.
 15. Technical specifications of the equipment / items have been very clearly formulated by the users/experts of the field as per the requirement of the work to be conducted. It will be sole discretion of the bidder whether to quote or not for equipment with particular specifications.

16. ***Firm must provide a compliance statement vis-à-vis specifications in a following "tabular form" clearly stating the compliance, supported by technical literature with clear reference. This statement must be signed, with the company seal, by the Tenderer for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification of the offer.**


Name of Equipment:		
Technical Specification	Compliance(Y/N)	Deviation, If any

17. ***Offer must be accompanied with a comprehensive list of users on manufacturers' letter head, wherever possible bidders may also provide certificates for satisfactory working of the equipment from users of universities and institutions of repute.**
18. a. If so desired by RVSKVV, the bidders shall have to enter in to an agreement.
- b. Any wrong information about item, any forged document and any deviation, variation of non-compliance of the terms and conditions by the tenderers shall be considered as a breach of contract and RVSKVV reserves the right to forfeit the amount of earnest money and/or security deposit in full and take action as per legal arrangement.
19. **Should there arise any dispute, the Hon'ble Vice Chancellor, RVSKVV, Gwalior shall be the sole Arbitrator whose decision in the matter shall be final and binding. Each and every judiciary transaction shall be subjected to Gwalior only.**
20. ***Tender will not be considered if the firm does not supply a copy of the TIN/ GST & PAN/Registration of the firm allotted to it for relevant items. PAN of the owner or any other persons will not be accepted.**
21. This tender is being issued with no financial commitment and the Buyer reserves the right to change or vary any part thereof at any stage. Buyer also reserves the right to withdraw the tender, should it become necessary at any stage.
22. RVSKVV reserves the right to accept or reject any or all offers in full or in part without assigning any reason(s) thereof. It also reserves the right to place and order wholly or in part with one or more than one firm as it may be convenient to RVSKVV, Gwalior.

23. The tenderer shall have to give an undertaking that the terms and conditions as mentioned above of this tender are acceptable to the tenderers in form of downloaded Tender documents duly stamped and signed.
24. If firm wishes, they can send their representatives, duly authorized in writing, to attend the Technical Evaluation and clarification regarding bids which is scheduled at 13:00 (01:00 PM) on 25.04.2025.
25. In case, if single manufacturer of the any item and having propriety rights. Items may be purchased with the permission of concerned higher authority.
Bidder should be submitted EMD (Provide EMD Details) in the form of DD/ MSME firms are exempted from EMD Submission.
26. The annual turnover of the agency should not be less than Rs. 5.00 crore for items value above Rs. 50.00 lakhs, Rs. 1.00 crore for item value Rs. 10.00 lakhs and Rs. 25.00 lakhs for items value above Rs. 50.00 thousand during last five financial years. For the annual turnover audited balance sheet along with annual report and IT return of the agency should be submitted as supporting documents.
27. Firm should have 3 minimum years' experience of running minimum four similar project in any Govt. Dept./Semi Govt/ Autonomous Institution. (Attached documentary proof of work order and completion certificate)
28. Firms applying for the proposed order should have experience of supplying at least five similar order.
29. Bidder should have experience of supply and installation items/ equipments against order , issued from Govt. or Non-Govt. Organization should be attached with tender documents in support of experience which clearly indicates firms name and work executed along with price list and payment proof (Attached documentary proof).
30. Valid Authorization certificate from the manufacturer/company/distributor/dealer applicable in the current year/valid for published tender for items.
31. Joint Venture is not allowed for participate this tender.
32. An undertaking on rupees 100/- non judicial stamp paper should be given by the Bidder that his firm is not blacklisted by any government department or private organization in last 5 years.
33. Toll free number for servicing and after sale service will be provided by bidder.
34. Supply and installation at RVSKVV, Headquarter, Gwalior.

35. CA audited balance sheet of last three financial year should be uploaded online by the Bidder.
36. An undertaking on rupees 100/-non judicial stamp paper should be given by Bidder, that all the Information provided are true and all the documents uploaded online all true.
37. Each and every page of all the documents uploaded online should be duly sealed and signed by the Bidder.
38. The financial bids of only qualified firm in technical bid will be opened. The financial bid will be evaluated on the basis of total cost of the project quoted by the firm.
39. The equipments should have ISO Certifications for Quality, Environment, Security management and Health & Safety Management system for manufacturing of all types of items/equipment.
40. Service center at least 1 preferred in M. P. or nearby Gwalior.

Date: 27.03.2025


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SUPPLEMENT/ CHECK-LIST TO BE PROVIDED WITH TECHNICAL BID

ITEM No. _____ NAME _____

S.No.	Information required	Proposed
1.	Make of main item	
2.	Model of main item	
3.	Name of manufacturer of Main Item	
4.	Country of origin of main item	
5.	Name, Make and model of sub item I (if any)	
6.	Name, Make and model of sub-item-II (if any)	
7.	Name, Make and model of sub-item-III (if any)	
8.	Delivery within(days)	
9.	Rate of Excise duty (%)with surcharge, if applicable (item-wise if different ED is applicable)	
10.	Rate of GST (%) livable. If no, state basis and terms of the exemption.	
11.	Is Service Tax extra? If yes, rate of Service Tax livable(%)	
12.	Any other Taxes/ Duties /Octroi /Entry taxes <i>etc.</i> in %	
13.	Order to be placed on	
14.	Guarantee/ Warrantee (5 years)	
15.	Validity (at least 180 days)	
16.	FOR: RVSKVV Gwalior	
17.	List of current users (Attach, if any)	
18.	Certification of satisfactory working of the equipment (Attach, if any)	
19.	Compliance of equipment with current directives of ISI/CE/EEC/US /EU or equivalent standards	
20.	Whether manufacturer/ authorized distributor/ sole agent? (Attach original certificate)	
21.	Technical literature (Attach, if any)	
22.	Earnest money (EMD) deposited online and proof has been enclosed	
23.	Situations of Authorized service centers/ service personals <i>etc.</i> (Provide	

S.No.	Information required	Proposed
	complete address)	
24.	Relevant documents such as ITCC, ST registration shop Act. establishment certificate, factory registration <i>etc.</i> (enlist and attach)	
25.	TIN and PAN allotted (Attach a copy)	
26.	GST number	
27.	Any other relevant information	

DECLARATION

The terms and conditions as mentioned in the tender are acceptable to us.

**Authorized Signatory
(Seal of the Firm)**

ANNEXURE - II

SPECIFICATION OF ITEM/EQUIPMENTS TO BE PURCHASED UNDER IBDC PROJECT		
S. No.	Name of Items/ Instruments	Specifications
I.	ATOMIC ABSORPTION SPECTRO PHOTO METER WITH GRAPHITE FURNACE	<p>SYSTEM SPECIFICATION TECHNICAL SPECIFICATION FOR INTEGRATED FLAME & GRAPHITE FURNACE ATOMIC ABSORPTION SPECTROMETER</p> <p>The system should be fully automated spectrometer for fast, multi-element graphite furnace atomic absorption determinations using the Zeeman background correction technique. The GF-AAS system should have the capability for determination of elements at ppb level.</p> <p>(a.) System configuration : Integrated Flame with Graphite Furnace with Hydride vapor generation assembly Atomic Absorption Spectrophotometer</p> <p>(b.) Turret : 8 lamp turret</p> <p>(c.) Wavelength Range : 185 to 900 nm or better</p> <p>(d.) Detector : Broad range PMT or solid state or better</p> <p>(e.) Optical System: True / Real time double beam. Czerny-turner /Littrow of focal length 250mm or more. Diffraction grating with 1800 lines/mm or more.</p> <p>(f.) Atomizer: Double Atomizer concept with software control for switch over from flame to furnace and vice versa</p> <p>(g.) Background correction: Deuterium background correction for Flame & Magnetic field control Zeeman effect background correction for furnace with steps from 0.05 to 0.8 Tesla or better.</p> <p>(h.) Atomizer for Graphite Furnace: Atomizer used for graphite furnace should be transversely heated for constant temperature profile over entire length for reduction of matrix interferences.</p> <p>(i.) Slit / spectral band Width: Automated slit selection in few steps starting from 0.2 nm to 1.0 nm or better</p> <p>(j.) Burner: 5cm and 10cm all titanium burner with facility for auto optimization of height and lateral movement through software</p> <p>(k.) Nebulizer: Pt-Rh or Pt-Lr capillary corrosion resistant nebulizer with built in Impact bead.</p> <p>(l.) Spray Chamber: Inert mixing chamber.</p> <p>(m.) Gas box: Computer controlled programmable gas controls both for C₂H₂ and N₂O for monitoring and control of fuel / oxidant ratio</p> <p>(n.) Furnace temperature: Programmable up to 2600 °C or higher</p> <p>(o.) Water circulator/Chiller: Software controlled thermo-stated chiller with adjustable temp facility to be offered</p> <p>(p.) Auto sampler: 100 positions or more positions Auto sampler for graphite furnace</p> <p>(q.) Hydride Attachment: Computer controlled hydride generator should be quoted for measurement of hydride elements (manual hydride generation assembly will not be acceptable)</p> <p>(r.) Software: Advanced operating software for system operation and control.</p> <p>(s.) Lamps: Coded automatic recognition hollow cathode lamp /EDL Lamps for Hg, Zn, Fe, Mo, B, Ni, Cd, Ca, Mn, Cu , elements should be provided.</p> <p>(t.) Safety interlocks: Safety interlocks to prevent ignition and flow of gases for Burner Head, Nebulizer and Drain</p> <p>(u.) Data Station: PC compatible to work with equipment software with following specifications: - minimum Intel i5/i7, min 8 GB RAM - HDD 40 GB, interfaces: RS 232 serial external, USB - 48x CD-ROM - keyboard, mouse, 17" monitor - OS Windows 10 Professional with Service pack 2 or higher</p> <p>(v.) Printer: laser printer (B/W)</p> <p>(w.) Exhaust System : Fume Exhaust system of suitable capacity should be provided</p> <p>(x.) Gas Cylinders and Regulators: Gas cylinders of suitable purity for AAS with double stage regulator for Acetylene, Argon & N₂O to be supplied</p> <p>(y.) Gas Purification Station: Suitable purification panel for Air, Acetylene, Argon and N₂O to be supplied along with system</p> <p>(z.) Reference Standards: NIST traceable single element reference standard for above all elements from reputed manufacturer to be provided</p> <p>(al) Tubing's, Fittings: Required set of Tubing's, Fittings with nuts and ferrules to be provided by supplier</p> <p>(bl) Air compressor: Oil-free air compressor</p> <p>(cl) Warranty: Two year warranty from the date of installation to cover all instrument parts to be provided.</p> <p>(dl) Installation & Training: Installation and training to our personnel at our site is responsibility of supplier. The same should be included in the offer</p> <p>(el) Power Requirements: 230 V (± 10%), 50/60 Hz, Slow fuse with 35 A, 2100 VA single phase alternate current. 5KVA UPS with 30 minutes battery backup should be supply with Instruments.</p> <p>(fl) Quality Standards: Tested and designed to be compliant and legal requirements for laboratory instrumentation in compliance with ISO 9001. Should also be provided with CE for device safety.</p>

2.	Kjeldahl nitrogen analyzer/Protein analyzer with accessories	<p>Automatic Nitrogen/Protein Estimation System</p> <p>(A) Compatible Digestion System Automatic Macro (250 ml) Block PC</p> <ul style="list-style-type: none"> • Twenty Place 250 ml capacity PC Compatible Block Digestion System with all essential accessories • TFT Graphic Touch Screen Display with unique wireless mouse to operate at a distance of 1-2 mtrs without connecting to PC. • Should have 3 Ports in the motherboard one for PC connectivity 2nd port for direct connection to wireless Remote Mouse & 3rd port to connect external wireless keyboard • Integrated auto sequencing time/temperature domain of 100 programs and 12 sequencing steps • Live Graph representation with Time • temp curve in touch screen display • Temperature Controller should be isolated separately in a control tower to protect electronics from digestion heat zone and acid reaction zone, with separate access door for electronics control tower unit. • Inbuilt add-on safety standby PID Controller for Heater & block protection apart from main microprocessor controller. • Inbuilt Machine management Software enables multi user login feature with superior admin password with multi user password for minimum 5-10 users • Unique driver software to link Touch screen controller to Data processing system. All parameters of the touch screen can be read in the PC / Laptop • Temperature Control Range Room Temperature to 500° C with safety cut off at 470°C (As per Kjeldhal chemistry effective digestion takes place 380°C - 420°C), Temperature Accuracy : $\pm 0.5^{\circ}$ C • Power failure mode: In event of power resumption, holds previous programmed setting in memory & on power resumption starts from last set value. • Additional KEL FLOW suction assembly with giant suction water aspirator filter suction pumps (2 nos.) for safe removal of acid fumes with online tap water supply in the event of scrubber out of usage or repair. • All essential accessories like Digestion Tubes, SS Insert Rack, Exhaust Manifold, • Suction Assembly wall mounted on rear side of unit for safe removal of acid fumes & easy access to drain area <p>(B). Scrubber System</p> <ul style="list-style-type: none"> • Four stage acid neutralization scrubber. • First stage: Condensation with water condenser, Second Stage: Neutralization in Alkali, Third Stage: Neutralization in Water, Fourth Stage: Dissolution of air free of acid fumes in raw tank water. • Recirculation Pump: Non corrosive centrifugal inbuilt magnetic suction pump for water recirculation in 8 litres tank avoids requirement of running water during digestion. • Non Corrosive submersible pump for condenser water recirculation. • Motor Capacity: 60 litres / hour • Fibre Reinforced plastic of capacity 8 litres • Automatic water level indicator to view water level in FRP tank externally <p>(C). Automatic Dual Distillation System</p> <ul style="list-style-type: none"> • Auto sequencing Programmable Microprocessor based Dual Distillation with inbuilt software, Colour Touch Screen high resolution 7" TFT LCD Display • No. of Samples: Two at a time, Both sample run parallelly with single power socket • The large color touch screen panel display incorporates two columns of Dual Distillation parameters in single display panel with 2 split screen for unit 1 & 2 parallelly. • Inbuilt individual expansion vessel, water condenser, Stainless steel non corrosive steam generator with safety sensors for each column of Dual Distillation • The equipment incorporates wireless remote mouse to control & set all parameters in the touch screen, without any intermediate PC • Equipment's incorporate facility to copy data in a pen drive / memory stick of all run programs of analysis. • Equipment's Includes Machine Management software with provision for External Wireless Keyboard, Wi-Fi Compatibility, Android Mobile Compatibility. • IP address of user & device name (Mobile, Laptop or PC) displayed in the login page Automatically on connectivity • Remote Control Module for data monitoring, control and transfer to PC at a distance of 5-10 feet from equipment • The user can view all the programme that is set & the current status of programme in process from
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		<p>his work table on his laptop or PC at a distance of 5-10 feet and can also control or alter settings. The entire display screen appears in the user's PC.</p> <ul style="list-style-type: none"> • Auto Intelligent run of programmable steps, Addition of Boric Acid, Dilution, KMnO4 Addition for Available Nitrogen, Alkali Addition, Steam Processing, Automatic Residue Delay time, Automatic Residue Removal (Optional), Process over indication with alarm with inbuilt delay time features, Auto Titration connectivity feature for future up gradation (Optional). Instantaneous results on input of titre value with inbuilt formula for Nitrogen, Ammonical Nitrogen etc. without connecting to PC. Complete Automatic safety features. • KMnO4 addition is inbuilt & integral part with auto sequence addition without any external module or external pump • The suction module of waste residue should be door mounted for easy serviceability • Enables automatic monitoring and measuring of high temperature in distillate of each sample of Dual Distillation with sensor for auto warning signal and safety alarm to alert user to control distillate temperature. Temperature displayed digitally. • Auto reagent Level Sensor with Alarm for Reagents, Reagents tanks to be wall mounted for easy handling and user's visibility. • Stainless steel non corrosive steam Generator • The control panel unit along with inbuilt temperature controller, timer, mother board and SMPS is isolated in separate control tower (not rack mounted internally) and housing to protect electronics from wet chemistry & acid/ alkali process area for longevity and safety of all electronic components, with separate access door for main unit & electronics control tower unit. • Equipment incorporates transparent view window to watch the distillation process & splash head. • Facility to program and control distillate volume for determination of available nitrogen, with digital display of set volume • Facility to record and store statistical data of Total running time of individual pumps like alkali pump, boric acid pump, KMnO4 pump & refilling pump, No. of operation of each pump. • Auto monitoring of valves in operation includes Automatic running count of individual valves in operation like Dilution valve, vent valves, condenser valve, refilling valve, steam valve and residue valve with real time digital display in the touch screen panel • Auto calculation of results on feeding of titre value with built in formula includes Preprogrammed data of all parameters including program numbers, report reference sample id & with results of Total Nitrogen by direct titration method, Total Nitrogen by back titration method, Protein percentage by direct titration method, Protein percentage by back titration method, further formulas customizable. All above parameters can be viewed directly in touch screen and can be exported to excel • Four USB ports. One for wireless mouse connectivity, 2nd port for wireless keyboard connectivity, 3rd port for USB pen drive to copy stored data's & 4th port for Ethernet connectivity. • Multi User password protection for administrative service personal & extended user login up to 10 users • Inbuilt Safety features: Auto sensing of "NO WATER" condition in condenser & steam generator with alarm & signal to alert user. Auto door open warning indication, Auto tube insert error indication. Auto deactivation of System on error diagnosis, Adjustable steam power, Auto online water saving mechanism, Auto reagent Level Sensor with Alarm for Reagents tank. • Non corrosive robust metallic condenser. • Nitrogen level : 0.1 to 200 mg Nitrogen (Min / Max Detection Limit) • Nitrogen Reproducibility: $\pm 0.1\%$ RSD , Nitrogen Recovery : $> 99.5\%$ • Electrical Requirement: 220-230V single phase 50Hz A.C <p>(D). Automatic Test Tube and Glass Dryer</p> <ul style="list-style-type: none"> • The OEM should be reputed with at least 100 users in Madhya Pradesh state. • The company should have at least 50 - 75 installation of Dual Distillation System in India • The instrument shall strictly confirm to the specifications with relevant brochure & Photograph with images. • The company should have proof of at least 25 installations of long term users using equipment's for more than a period of 10 -15 years showing longevity of operations • The bidders must show online demonstration of the quoted system during technical evaluation of the bids. This is an essential requirement. • The instrument should be approved registered brand, Certificates issued by Trade Mark Registry under Trade Marks Act 1999 (Govt. of India) • The OEM should have at least Rs.5 Corer average Turnover in last three financial years
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3.	Ultra Pure water Production System with accessories	<p align="center">Ultra Pure water Production System with accessories with high quality</p> <p>Product quality Water quality should comply as described by ASTM standards/European/US Pharmacopoeia/BS EN ISO 3696 for type 1 water Type 1 water quality Resistivity (@ 25o C) 18.2 M Ω.cm TOC <= 5 ppb Bacteria <0.01 cfu/ml RNase< 0.003 ng/ml DNase< 0.4 pg/ul Endotoxin < 0.001 ng/ml Type 2 water quality Resistivity clearly 10-15 M Ω.cm</p> <p>System System should dispense ultra pure water at flow rate at least 3 liter per hour System should be containing : 1) Prefiltration /Pretreatment system as per installation site, feed water quality might be checked before quoting 2) Reverse osmosis 3) Ultrapure water system 4) Inbuilt storage tank of 6 ltr should be there with complete recirculation</p> <p>Display System should have a user friendly digital display that can display output water quality parameters, level indications, real time operating modes, routine maintenance reminders/ alarms.</p> <p>Feed water to water purification system Reverse osmosis system should be provided for purification of feed water to the water purification system. Supply and integration of RO system should be under scope of party supplying the water purification system</p> <p>RO specifications RO should reduce the TDS of water and provide output water with TDS required to water purification system. RO should followed by multistage filtration i. e. Deionization and Dual UV(185/254) Should have inbuilt high capacity Ultra filter with at least 3 years life. Should be able to use Ultra filter and 0.22 micron final filter together. RO should provide output flow rate of 6 liter per hour or higher RO power requirement : single phase 220-240 V System should have only 2replaceable consumables i.e. Pretreatment and DI cartridge. Total replaceable consumable/components including Pretreatment, RO, DI, UV, UF should not be more than 4 in one single unit to avoid high recurring cost and maintenance.</p> <table><tr><td>• Resistivity at 25°C</td><td>18.2Ω cm</td></tr><tr><td>• TOC²</td><td>≤ 5ppb</td></tr><tr><td>• Particulates (size. 0.22µm)³</td><td>>1 particulate/ml</td></tr><tr><td>• Bacteria^{3,4}</td><td><0.01 EU/ml</td></tr><tr><td>• Pyroxenes (endotoxins)⁴</td><td><0.01CFU/ml</td></tr><tr><td>• RNases⁴</td><td>< 0.001 EU/ml</td></tr><tr><td>• DNases⁴</td><td><1 pg/ml</td></tr><tr><td>• Flow Rate</td><td>< 5 pg/ml up to 1 L/min</td></tr></table>	• Resistivity at 25°C	18.2Ω cm	• TOC ²	≤ 5ppb	• Particulates (size. 0.22µm) ³	>1 particulate/ml	• Bacteria ^{3,4}	<0.01 EU/ml	• Pyroxenes (endotoxins) ⁴	<0.01CFU/ml	• RNases ⁴	< 0.001 EU/ml	• DNases ⁴	<1 pg/ml	• Flow Rate	< 5 pg/ml up to 1 L/min
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APL ✓

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