



क्षेत्रीय आयुर्वेदीय औषधि विकास अनुसंधान संस्थान

(केन्द्रीय आयुर्वेदीय विज्ञान अनुसंधान परिषद, आयुष मंत्रालय, भारत सरकार)
आमखो, ग्वालियर – 474009 (म.प्र.)

Regional Ayurveda Research Institute for Drug Development
(Central Council for Research in Ayurvedic Sciences, Ministry of AYUSH, Govt. of India)
Aamkho, Gwalior - 474 009 (M.P.)

Advertisement. No. 23

Date: 22.01.2018

TENDER NOTICE

Equipments/Instruments for Up-gradation of Institute

Tenders in sealed cover are invited under **two-bid** system from manufacturers and their authorised dealers/distributors for providing Equipments/Instruments for Laboratories of Regional Ayurveda Research Institute for Drug Development (RARIDD), Aamkho, Gwalior. The tender document containing eligibility criteria, scope of work, terms & conditions and draft agreement can be purchased from RARIDD, Gwalior on any working day from **24-01-2018 to 23-02-2018** between 10.00 AM to 3.00 PM on payment of non refundable charges of Rs. 500/- (Rupees Five Hundred only) or can be downloaded from Head Quarter website www.ccras.nic.in. and www.eprocure.gov.in. The interested manufacturers and their authorised dealers/ distributors are required to submit the bids at the office of “**The Assistant Director (S-3) I/c, RARIDD, Aamkho, Gwalior – 474 009**”, by or before **2.00 PM** on **24-02-2018**. The Tender Documents are non- transferable. Any future clarification and/or corrigendum(s) shall be communicated through Assistant Director (S-3) I/c on the CCRAS website: www.ccras.nic.in.

-Sd-
Assistant Director (S-3) I/c
RARIDD, Gwalior

TENDER DOCUMENT
Equipments/Instruments for Upgradation of Institute

TECHNICAL BID

(In separate sealed Cover-I super scribed as “Technical Bid”)

1. Name & Address of the manufacturer and their authorised dealers/ distributors/Agency with phone number, email, name and telephone/mobile	
2. Specify your firm/company is a manufactures/ authorised dealer/distributor/ Agency	
3. Name, Address & designation of the authorized person (Sole proprietor/partner/Director)	
4. Please attach copy of Income Tax Return of last two years	Attached/Not attached
5. Please attach balance sheet (<i>duly certified by Chartered Accountant</i>) for last three (3) years (Annual minimum turnover should not be less than 10 lakhs)	Attached/Not attached
6. PAN No. (Please attach copy)	Attached/Not attached
7. GST Registration Number. (Please attach copy)	Attached/Not attached
8. Acceptance of terms & conditions attached (Yes/No). Please sign each page of terms and conditions in token of acceptance and submit as part of tender document with technical bid. Otherwise your tender will be rejected.	Yes/No
9. Power of Attorney/authorization for signing the bid	Attached/Not attached
10. Please submit an undertaking on Company's letterhead that there is no vigilance case or court case pending against the firm/supplier.	Attached/Not attached
11. Please submit an undertaking on Company's letterhead that they will provide complete warranty for all equipments for 3 (three) years & CMC for 5 (five) years after expiry of warranty of these equipments.	Attached/Not attached
12. Please furnish an undertaking on Company's letterhead that they will supply spare parts/ Consumables for next 10 years at reasonable price.	Attached/Not attached
13. Please furnish an undertaking on Company's letterhead indicating that they have not supplied the said equipment to any individual, Govt. or private institution at the rate lower than the quoted rate If Tenderer doesn't fulfil this criterion, tender will be out rightly rejected.	Attached/Not attached
14. Details of the bid security (EMD) Demand Draft No: _____ Date: _____ Payable at - _____	
15. Detail of cost of Tender form (if downloaded from website) Demand Draft No. _____ Date: _____ Payable at- _____	
16. Technical details of the quoted items with reference to tender specifications. Mentioning clearly make & model of the Equipment offered and attach a Catalogue/literature.	(Attach Technical details/ specification sheet)

Declaration by the Tenderer:

This is to certify that I/We before signing this tender have read and fully understood all the terms and conditions contained herein and undertake myself/ourselves to abide by them.

- Encls:** 1. Demand Draft (if tender form is downloaded from the website)
2. Demand Draft against EMD
3. Terms & Conditions (each page must be signed and sealed)
4. Financial Bid

(Signature of Tenderer with seal)

Name:

Address:

Equipments/Instruments for Upgradation of Institute

FINANCIAL BID

(In sealed Cover-II super scribed "Financial Bid")

To,
The Assistant Director (S-3) I/c
RARIDD, Gwalior

Dear Sir

Our quoted rate for supplying the Equipment/Instruments at RARIDD, Gwalior will be as follows.

Name of Equipment/ Instrument	Unit Price (In Rs.) With 3 years warranty		Unit Price (In Rs.) CMC for 5 years (In Rs.)	
	In figure	In words	In figure	In words
High Performance Thin Layer Chromatograph (HPTLC)				
High Performance Liquid Chromatograph (HPLC)				
Atomic Absorption Spectrophotometer (AAS)				
Gas Chromatograph (GC)				
Fourier Transform Infrared Spectrophotometer (FTIR)				
Water Purification System				
Lyophilizer (Freeze Drier)				
Automatic tissue Processor				
Tissue Embedding Station				
Semi-automated Rotary Microtome				
Automatic Slide Staining Machine				
Biological microscope with Camera				
Zoom Stereo- microscope				
Small Animal Anaesthesia System				

The unit cost should be mentioned as per Table-1. The above quote should include all applicable taxes and F.O.R. RARIDD, Gwalior. L1 will be decided on the basis of unit cost of individual equipment.

Declaration by the Bidder:

1. This is to certify that I/We before signing this tender have read and fully understood all the terms and conditions contained in Tender document regarding purchase of equipment for Laboratories of RARIDD. I/we agree to abide them.
2. No other charges would be payable by Client and there would be no increase in rates during the Contract period.

Place:.....

Date:.....

(Signature of Bidder with seal)

Name

Seal

Address

TERMS AND CONDITIONS

(A) Information and Conditions relating to Submission of Bids

1. The tender document containing eligibility criteria, scope of work, terms & conditions and draft agreement can be purchased from RARIDD, Gwalior on any working day from **24-01-2018 to 23-02-2018** between 10.00 AM to 03.00 PM on payment of non refundable charges of Rs. 500/- (Rupees Five Hundred only) or can be downloaded from our Head Quarter website www.ccras.nic.in and www.eprocure.gov.in. Those who download the tender document from Website should enclose a Demand Draft/Pay Order for Rs. 500/- (Rupees five hundred only) in favour of “**RARIDD, Gwalior**”, payable at Gwalior, not later the date of **23-02-2018**, along with their bid in the Cover- I containing “Technical Bid”.
2. The interested firms/suppliers are required to submit the Technical and Financial Bids separately in the format enclosed. The bids in sealed Cover- I containing “**Technical Bid**” and sealed Cover- II containing “**Financial Bid**” should be placed in a third sealed cover super scribed “**Tender for Equipments/Instruments for upgradation of Institute**” should reach RARIDD, Gwalior by or before **02.00 PM** on **24-02-2018**. The Technical bids shall be opened on same day **i.e 24-02-2018 at 03.00 PM** at RARIDD, Gwalior in presence of the bidders or their authorized representatives who choose to remain present. The tenders received after due date & time will be rejected and no claim shall be entertained whatsoever may be the reason.
3. All the duly filled/completed pages of the tender should be given serial/ page number on each page and signed by the owner of the firm or his Authorized signatory. In case the tenders are signed by the Authorized signatory, a copy of the power of attorney/authorization may be enclosed along with tender. A copy of the terms & conditions shall be signed on each page and submitted with the technical bid as token of acceptance of terms & conditions.
4. Tender with unsigned pages/incomplete/partial/part of tender if submitted will be rejected out rightly.
5. All entries in the tender form should be legible and filled clearly. If the space for furnishing information is insufficient, a separate sheet duly signed by the authorized signatory may be attached. No overwriting or cutting is permitted in the Technical Bid as well as in Financial Bid unless authenticated by full signature of bidder. Any omission in filling the columns of Financial Bid form (Schedule of Rates) shall debar a tender from being considered. Rates should be filled up carefully by the Tenderer. All corrections in this schedule must be duly attested by full signature of the Tenderer. The corrections made by using fluid and overwriting will not be accepted and tender would be rejected.
6. The bidder shall pay the respective amount of Bid Security (EMD) as mentioned in Table-I along with the Technical Bid by Demand Draft in favour of “**RARIDD, Gwalior**” drawn on any Nationalized Bank/ Scheduled Bank and payable at Gwalior and must be valid for (3) three months. Bids received without Earnest Money deposit (EMD) shall stand rejected and thus shall not be considered for evaluation, etc at any stage. The original EMD will be put in cover- I containing Technical bid.

- a) The Public Sector Undertaking of the Central/State Govt. are exempted from furnishing Earnest Money along with tender.
- b) The firms Registered with DGS & D/SSI and any approved source of Centre/States Govt. are not exempted from furnishing Earnest Money in so far as this institute is concerned.
7. The bid security (EMD) without interest shall be returned to the unsuccessful bidders after finalization of contract.
 8. The successful bidders has to constitute a contract on Indian non judicial stamp paper of Rs.1000/- (Rupees one thousand only) and also required to furnish the performance security @ 10% of contract value in the form of Fixed Deposit or Bank Guarantee, for a period of 12 months, of any nationalised bank in favour of RARIDD, Gwalior & payable at Gwalior only. The EMD deposited by successful bidder may be adjusted towards Security Deposit as demanded above. If the successful bidder fails to furnish the full performance security or difference amount between performance security and EMD within 15 (fifteen) days after the issue of Letter of Award of Work, his bid security (EMD) shall be forfeited unless time extension has been granted by RARIDD, Gwalior.
 9. The EMD shall be forfeited if successful bidder fails to supply the goods/ equipment in stipulated time or fails to comply with any of the terms & conditions of the contract or fails to sign the contract.
 10. The bid shall be valid and open for acceptance of the competent authority for a period of 180 (one hundred eighty) days from the date of opening of the tenders and no request for any variation in quoted rates and /withdrawal of tender on any ground by bidders shall be entertained.
 11. To assist in the analysis, evaluation and computation of the bids, the Competent Authority, may ask bidders individually for clarification of their bids. The request for clarification and the response shall be in writing but no change in the price or substance of the bid offered shall be permitted.
 12. After evaluation, the work shall be awarded normally to the Agency fulfilling all the conditions and who has quoted the lowest rate as per financial bid after complying with the all the Acts / provisions stated /referred to for adherence in the tender.

(B) Other Terms and Conditions of the Tender

1. All the rates should be mentioned in Indian national currency (INR) only.
2. Rates quoted should be inclusive of all applicable taxes, levies, freight, packing, forwarding, postage insurance and installation at FOR RARIDD, Gwalior.
3. In case of imported items / equipments the rates should be quoted in the light of exemptions enjoyed by research institutions, otherwise BID will be considered as invalid. The Institute (Council) is registered with Department of scientific & Industrial Research (DSIR) for the purpose of availing custom duty exemption and the necessary certificates/forms can be issued by the Institute.
4. Rates should be mentioned both in figures and in words. The offer should be typed or written in Ink Pen/Ball Pen without any correction. Offers in pencil will be cancelled. Telegraphic/ Telex/ Fax offers will not be considered and cancelled straightway.

5. If the price of the contracted articles is/ are controlled by the Government, in no circumstances the payment will be higher than the controlled rate.
6. Tender will be regarded as constituting an offer open to acceptance in whole or in part at the discretion of the competent authority of the institute for a period of 180 days (6 months) valid from the date of opening of the tender by the committee.
7. The time for the date of delivery/ dispatch stipulated in supply order shall be deemed to be essence of the contract and if the supplier fails to deliver or dispatch any consignment within the period prescribed for such delivery or dispatch in the supply order, liquidated damages may be deducted from the bill @ 0.5% per week subject to maximum of 10% of the value of the delayed goods or services under the contract. The competent authority of the institute may also cancel the supply. In such a case, bid security of the supplier shall stand forfeited.
8. In case the quality of goods supplied are not in conformity with the standard given in tender and as per the samples supplied or the supplies are found defective at any stage these goods shall immediately will be taken back by the supplier and will be replaced with the tender quality goods, without any delay. The competent authority reserves all rights to reject the goods if the same are not found in accordance with the required description /specifications and liquidated damages shall be charged.
9. In case the Tenderer on whom the supply order has been placed, fails to make supplies within the delivery schedule and the purchaser has to resort risk purchase, the purchaser (RARIDD, Gwalior) may recover from the tender the difference between the cost calculated on the basis of risk purchase price and that calculated on the basis of rates quoted by Tenderer. In case of repeated failure in supplying the order goods, the supply order may be cancelled and bid security deposit will be forfeited.
10. The name and quantity of the item needed is mentioned in **Table I** but it is approximate detail and is subject to increase/decrease at the discretion of the competent authority of RARIDD, Gwalior. The payment would be made for actual supply taken and no claim in this regard should be entertained.
11. Where the specifications are as per Tenderer's range of product & Tenderer's offer should mention that the item meets all specifications as per the tender enquiry and if there are improvements/deviations the same should be brought out on separate Letter Head of the firm. It would be discretion of the competent authority of the institute to accept or reject such deviations which are not in accordance with our required specifications as per given in **Annexure - I**.
12. It must be mentioned clearly whether Tenderer is a manufacturer/sole distributor/sole agent for the items for which he is quoting Assemblers of Equipments are not eligible to participate in tender.
 - a. **Manufacturer** must add a certificate of original equipment manufacturer (OEM) and item(s) manufactured by them as per range of products.
 - b. **Sole Distributor** must add a certificate that they are the sole distributor of the Item for which they are quoting in this tender enquiry & item is /are their proprietary Item in India. The rate certificate is also required from the sole distributor that the rates quoted are the same as they quote to other State/Centre Govt./reputed Private Organisation and DGS&D rate for the similar item(s) and these are not higher than those quoted by them.

c. **Authorized agents** must add authority letter from their Manufacturer/ Principals on the letter head of the manufacturer/principals in proforma given in **Annexure- II** duly supported by an undertaking that they are quoting Rates on behalf of them. The authorization letter must give/mention the purpose for which it is allowed. The validity period of the authorization letter must be mentioned in the authority letter otherwise tender will be liable to rejection.

13. **Performance Certificate:** A Certificate about satisfactory performance & quality of after sales service of the equipment duly authenticated by the HOD/MS of the institution must be furnished as per **Annexure III**. Installation report/user list will not be considered as Performance Certificate.
14. The Tenderers should furnish a copy of **GST registration number of State / U.T.** and the date of such registration. Tenders not complying with this condition will be rejected.
15. The Tenderers should submit along with the tender, a photocopy of the Income Tax return of last two years otherwise tender may be ignored.
16. Full description & specifications, make/brand and name of the manufacturing firm must be clearly mentioned in the tender failing which the tender will not be considered. The Tenderer must also mention whether the goods are imported / indigenous. Descriptive literature / catalogues must be attached with the tender in original failing which tender may be ignored.
17. Any failure or omission to carryout of the provisions of this supply by the supplier shall not give rise to any claim by supplier and purchaser one against the other, if such failure or omission arise from an act of God which shall include all acts of natural calamities from civil strikes compliance with any status and or requisitions of the Government lockout and Strikes, riots, embargoes or from any political or other reasons beyond the suppliers control including war (whether declared or not) civil war or state of incarceration provided that notice of the occurrence of any event by either party to the other shall be within two weeks from the date of occurrence of such an event which could be attributed to *force majeure*.
18. Payment terms: No advance payment will be provided by the Institute.
 - i) 80% payment against certification of receipt of material in good condition, installation and due certification of the concerned authority and
 - ii) Balance 20% after test run, within a month.
19. The Courts at Gwalior alone and no other Court will have the jurisdiction to try the matter, dispute or reference between the parties arising out of this tender/ supply Order/contract.
20. Tenderer will have to provide complete warranty for all equipments for 3 (three) years & CMC for 5 (five) years of these equipments after expiry of warranty period. Financial bid should be quoted accordingly. In this regard, the Tenderer shall submit an undertaking on Company's letterhead that they will provide complete warranty for all equipments for 3 (three) years & CMC for next 5 (five) years of these equipments.
21. If at any time, any question, dispute or difference whatever shall arise between supplier and the institute (Purchaser) upon or in relation to or in connection with the agreement, either of the parties may give to the other notice in writing of the existence of such a question, dispute or difference and the same shall be referred to two arbitrators one to be nominated by the institute (Purchaser) and the other to be nominated by the supplier. Such a notice of the existence of any question dispute or

difference in connection with the agreement shall be served by either party within 60 days of the beginning of such dispute failing which all Rights and claims under this Agreement shall be deemed to have been forfeited and absolutely barred. Before proceeding with the reference the arbitrators shall appoint/nominate an umpire. In the event of the arbitrators not agreeing in their award the Umpire Appointed by them shall enter upon the reference and his award shall be binding on the Parties. The venue of the arbitration shall be at Gwalior, (Madhya Pradesh, India). The arbitrators/Umpire shall give reasoned award.

22. Tenderer should ensure and give an undertaking with technical bid that spare parts and consumables for these equipments/instruments will be available and rates will be reasonable for next 10 (ten) years.
23. **Demonstrations and post-contract training:** In case asked, Tenderer must personally give the demonstration of the **equipments/Instruments** to the competent authority of the institute and in that case all the expenses will be borne by the supplier.

After award of the work, training of equipments within the stipulated time should be done by the supplier at his cost. The time & place of training shall be stipulated by purchaser. Training should be of 2 Scientists and 2 technicians of user department.

I / We hereby accept the terms and Conditions given in the tender

(Signature & Stamp of the bidder)

Note- Please sign each page of document including terms & conditions & tender

Equipments/Instruments for Upgradation of Institute

Table 1

Details of items & their tentative quantity and EMD

S. No.	Name of Equipment/ Instrument	Quantity	EMD (INR) (2.5% of cost of equipment)
1.	High Performance Thin Layer Chromatograph (HPTLC)	01	87,500
2.	High Performance Liquid Chromatograph (HPLC)	01	50,000
3.	Atomic Absorption Spectrophotometer (AAS)	01	62,500
4.	Gas Chromatograph (GC)	01	87,500
5.	Fourier Transform Infrared Spectrophotometer (FTIR)	01	25,000
6.	Water Purification System	01	12,500
7.	Lyophilizer (Freeze Drier)	01	25,000
8.	Automatic tissue Processor	01	12,500
9.	Tissue Embedding Station	01	25,000
10.	Semi-automated Rotary Microtome	01	25,000
11.	Automatic Slide Staining Machine	01	37,500
12.	Biological microscope with Camera	01	6,250
13.	Zoom Stereo- microscope	01	12,500
14.	Small Animal Anaesthesia System	01	5,000

Equipments/Instruments for Upgradation of Institute

TECHNICAL SPECIFICATIONS

1. High Performance Thin Layer Chromatograph (HPTLC)

(A) **HPTLC System Manager** software to control, document and manage all the instrumental steps of HPTLC analysis incl. application, development, scanning and photodocumentation. Communicates in both directions with connected instruments. 32 bit per analysis. Upgradable. For creating and storing methods. Single report per analysis. GLP compliant. 3rd generation.

(B) **Semi Automatic Spot / Band Applicator**

Sample spot / band applicator :

Fifth generation spray on, 4 pattern Applicator ---Quantitative analysis, micro-preparative isolation, in-situ addition of internal std. or reagents, and superimpose. 10-method memory storage, stand-alone or System Manager controlled. Sample positioning on X & Y axis freely selectable, variable rate of delivery, 100 µl syringe for analytical work & 500 µl syringes for micro-prep active work. Self diagnostic + Link to System Manager built-in.

(C) **Chromatogram Development Chambers**

All glass, small internal volume chambers, bottom divided into two halves; maximum 5-15 ml mobile phase / run, S.S. leak - proof lid. Appropriate size chambers for 20 x 20, 20 x 10, 10 x 10 cm plates.

(D) **Chromatography Visualisation**

UV Cabinet, dual wavelength 254 nm + 366 nm with guaranteed minimum intensity, as follows : UV lamp UW/CM2 at 17 cm distance. Short wave UV (254 nm) 1600, long wave (366 nm) 1000. Visible light (<400nm) 0.4 100% protection to viewer's eyes and skin from UV light for safety. High tech 25 kHz power supply for flickerless, instant illumination. Portable darkroom. Auto switch off after 10 min.

(E) **20 X 10 CM Dip Tank With Lid for Derivatization**

(F) **Solvent Front Monitoring Device**

Notifies acoustically & visually that mobile phase has reached the preset developing distance during chromatogram development. Works with glass plates being developed in glass chambers of sizes 20 x 20 cm, 20 x 10 cm, 10 x 10 cm. Batteries included.

(G) **Professional TLC / HPTLC Photodocumentation System under GLP :**

Professional TLC / HPTLC Photodocumentation System, comprising :

Illumination Unit, Industrial Camera and HPTLC specific software.

Illumination unit – with 254 + 366 nm UV. Visible light (above & below object).

Uniform illumination. 60 KHz supply for instant, flickerless illumination. Easy access for

changing tubes & filters and PCB. Auto switch off. Total darkness. Viewing window to see plate. Safety - UV switched off if door opened.

Camera 12 bit, high resolution industrial camera (4096 grey level resolution). Images of the highest quality. Fixed focus for total reproducibility. True colours capture. Very linear response. Individually calibrated.

HPTLC Specific Software – Automatic image optimization. Automatic exposure time to suit brightest zone within dynamic range of CCD. Full function annotation. R_f scale. Child image with or w/o ROI (Region of Interest) blow up. Auto image capture at 254nm and or 366nm and or white light. Raw data inaccessible to user. Spot application tool to detect faintest fractions. High speed data transfer 1 sec. / image. Link to System Manager

Options for Professional TLC / HPTLC Photodoc

Option A:- Optional Professional Image Enhancement software for IQ-OQ, performance check, clean plate correction, image averaging, white adjust and flat field corrections.

Option B:- Image comparison viewer software. Allows comparison of different tracks from different plates under GLP.

Accessories and Options :

(H) TLC Scanner with Data Evaluation :

Computer controlled Scanner / Densitometer for automatic spectrum scanning for identity check as well as purity check; Automatic quantitative measurement by absorbance & fluorescence; All TLC / HPTLC plate sizes acceptable; Scan speed 100 mm / sec @ 25 μ m resolution; Wavelength range 190-900 nm; Monochromator flushing by nitrogen; Data sampling rate – 4000 / sec; special Optics for HPTLC measurements; Spectrum scan speed 100 nm / sec; Max 999 spectra / plate; Visible pilot slit image / scan compartment illumination with UV to check sample alignment with scan beam; D2, Hg, W lamps + self diagnostic + Service dialog + Universal filter for fluorescence all built-in; scan slit size variable; bandwidth selectable 5 or 20nm; Plate can be easily placed inside scanner. Small footprint.

Data evaluation 32 bit software (latest version), Improved S/N ratio. Improved reproducibility; Controlled by System Manager, Automatic / Manual integration, Auto baseline correction. Spot check facility. 3D display with data storage. Calibration - single level, multilevel, linear / non-linear. Statistics CV / CI. Reproducibility check facility. Auto calculation of data from wts and dil. factors, Computer generated random no. for each report (GLP compliance). Lamp use tracking. 2 level digital user manual. Service Dialog + self Diagnostics + Tutorial all built – in. Meets GLP. Optional IQ-OQ and 21 CFR Rule 11 certification.

(I) General conditions: -

The high quality imported products must be matched by high quality local support. The Indian distributor must have a team of Service Engineers, trained by foreign manufacturer, detailed service manuals and a stock of commonly required spares, consumables and small accessories.

For application support a local lab should be available for periodic training, solving analysis problems, library of books and references. Periodic training is an essential requirement and local distributor must arrange training in their own lab and in our lab.

Training at the time of installation should be given by Application Chemist. Indian staff must be qualified for IQ-OQ certification and quote for local installation requirements such as N₂ cylinder with regulator, UPS / V. stabilizer, PC & printer etc.

Compliance with specifications must be established through principal's colour printed catalogue and thought there website.

2. High Performance Liquid Chromatograph (HPLC)

HPLC with quaternary gradient pump capable of pumping four solvents at a time with a wide range of flow rate and with minimum dead volume. The system should have reliable and stable solvent delivery over a wide range of flow rate. The HPLC system should comprise of following modules with desired specifications:

Quaternary Pump

- Dual piston in series pump with servo-controlled variable stroke drive, power transmission by gears and ball screws, floating pistons
- Settable flow range Set points 0.001 – 10 mL/min, in 0.001 mL/min increments
- Flow precision ≤ 0.07 % RSD or ≤ 0.02 mm SD whatever is greater based on retention time at constant room temperature
- Flow accuracy ± 1 % or 10 μ l/ ml whatever is greater
- Pressure operating range up to 60 MPa (600 bar, 8700 psi)
- pH range 1.0 - 12.5
- Delay volume 600 μ L
- Composition range 0 - 95 % user selectable
- Composition precision < 0.2 % RSD at 0.2 and 1 ml/min
- Integrated degassing unit
- Number of channels: 4

Manual Injector

- Includes 600-bar manual injection valve, 20 μ l sample loop and mounting stand

Column Compartment

- Temperature range 10 degrees below ambient to 80 °C
- Temperature stability ± 0.15 °C
- Temperature accuracy ± 0.8 °C with calibration ± 0.5 °C
- Column capacity Three 30 cm column
- Warm-up/cool-down time 5 min. from ambient to 40°C & 10 min from 40°C to 20°C

PDA Detector

- Detection type 1024-element photodiode array
- Light source Deuterium and tungsten lamps with wavelength range of 190 to 950 nm
- Data rate 80 Hz
- Wavelength range 190 – 950 nm
- Noise(ASTM) Single and Multi-Wavelength $< \pm 0.7 \cdot 10^{-5}$ AU at 254 and 750 nm
- Drift $< 0.9 \cdot 10^{-3}$ AU/h at 254 nm
- Linear absorbance range > 2 AU
- Wavelength accuracy ± 1 nm self calibration with deuterium lines, verification with holmium oxide filters
- Wavelength bunching 1 – 400 nm Programmable in steps of 1 nm
- Diode width < 1 nm

ELSD

- Light Source LED 480 nm (Class 1 LED product)
- Detector PMT
- Nebuliser OFF, 25 – 90 °C (1°C increments)
- Evaporator
 - Non-cooled OFF, 25 – 100 °C
 - Cooled OFF, 10 – 80 °C
- Gas Flow Range 0.9 – 3.0 SLM
- Noise for G4260B < 0.2 mV
- Drift < 1 mV/h
- Operating Pressure 60 – 100 psi (4 – 6.7 bar)
- Eluent Flow range 0.2 – 5.0 mL/min
- Digital Output 10, 40 or 80 Hz (24 bit)
- PC control (software) ELSD
- Remote operation Remote Start Input
- Safety features Gas shut off Valve, Leak Detection, Laser Interlock

- ELSD Air adapter kit

Chromatography Software

Original Software and license Workstation. Includes data analysis for 2D-LC licenses for instrument drivers or add-ons 3D UV (PDA) ELSD and communication hardware needed for all acquisition types (analog or digital). Spectral data analysis capabilities are required for LC enables spectra analysis for purity identification and comparison with self-created library data

- Intuitive generation of your custom reports with Drag & Drop report template generation
- Comprehensive custom calculation capabilities Allowing to generate final reports
- Offering 10 times faster access to result reports skipping the need for result reprocessing
- Reprocess arbitrary set of samples from multiple sequences with one batch

Column

C-8, C18, 4.6 x 50mm, 2.7um (standard supply) with suitable guard column.

Accessories:

1. Suitable Computer with latest configuration and laser printer. Preloaded Antivirus with latest version along with Licensed CD.
2. Nitrogen gas cylinder with SS regulator and Sonicator setup.
3. Set of manufacturer's standard accessories, Operation / Maintenance manual, service and Maintenance manual,
4. One set of tool kit and starter kits (for routine running and maintenance of HPLC system).
5. Spares and consumables required for two years trouble free operation.
6. Sufficient capacity UPS unit with four hour battery back-up and built-in isolation transformer shall be supplied.
7. Calibration Standards with a minimum expiry period of two years.
8. Suitable syringes.

3. Atomic Absorption Spectrophotometer (AAS)

Computer Controlled Double Beam Spectrophotometer for element measurements. To be fitted with deuterium background correction with automated monochromator and slits.

Hardware:

- Optics: Double Beam , Optics should be fully sealed and mirrors quartz over coated.
- Wavelength range: 190-900 nm or higher sensitivity

- Monochromator: Czerny-Turner or equivalent monochromator with computer controlled wavelength selection and peaking.
- Slits: Automated slit selection. Settings: 0.2-2.0 nm plus one reduced height slit of 0.5 nm
- Grating : Holographic diffraction grating with line density of 1800 lines/mm or more .
- Photomultiplier Selected wide range Photomultiplier covering full wavelength range or Solid State Detector
- Background corrector High intensity titanium background corrector. Easily aligned and replaced by the user.
- Lamp System : 4 or more lamp positions and lamp selection using mirror. Automatic operation. Lamps should automatically switch off at the end of analysis.
- Gas control: Fully Programmable gas control system with automatic setting of gas flows. Automatic oxidant changeover. Should have fast response solenoid valve for rapid regulation and setting of selected gas flow.
- Safety system: There should be adequate safety measurement such as separate ignite/flame-off buttons, internal gas connections made automatically, flame shields and protection against heat and UV radiation. External adjustment of all burner and spray chamber controls. Violation of any safety interlock should prevent flame ignition or should extinguish existing flame.
- Spray chamber should be fluorinated high-density polyethylene for aqueous and organic solutions.
- Impact beads should be externally adjustable. Option for inert impact bead for samples with HF.
- Nebulizer: Adjustable nebulizer with inert platinum/iridium capillary and PEEK venturi for corrosion resistance.
- Burners should be Air/acetylene burner with Teflon corrosion shield. Should provides external burner rotation. Nitrous Oxide to be quoted also and imported pre heated N₂O regulator also to be quoted.
- Typical performance >0.9 absorbance with precision of <0.5% RSD from ten 5 sec. integrations for 5 mg/L Cu solution.

Computer Controlled Hydride Generation Accessory: It should be continuous flow Vapor Generation Accessory for determination of Hg, As, Se, Sb, Te, Bi and Sn at µg/L concentrations. Typical precision should be 1-2% RSD with sample throughput of 60-70 samples/hour determined in triplicate.

Software:

Windows 7 based 'worksheet' layout running on external PC with mouse or keyboard control.

- Measurement modes: Absorption or flame emission using PROMT, Pre-read delay variable from 0-999 secs. Up to 20 replicates with read time from 0.1-30 secs. Minimum Signal Facility skips to the next sample if the first measurement is less than the specified minimum reading. Different number of replicates can be selected for samples and standards.
- On-line cookbook: Analytical methods 'cookbook' information should display for each method in the Method window. Should include typical calibration graph and list of alternative wavelengths with comparative sensitivities and any other analytical recommendations.
- Data handling: All raw data, signals (when selected), method and sequence parameters stored in the worksheet Database .Editing of results by masking replicate or solution results and post run modification of peak measurement mode with automatic recalculation of edited result. Calibration data can also be edited by masking standards. Post-run application of alternative algorithm.
- Data import/export: Facility to transfer current data can be transferred directly into third party software using Microsoft ActiveX technology. In addition, data can be exported during run or post-run in ASCII and PRN file formats.
- Help system: Context sensitive help with extensive index, graphics, videos and cross referencing should be available

Accessories:

- **Hollow cathode lamps:** Coded single /EDL/Ultra lamps for analysis of various elements. The lamps should have guaranteed 5000 mA hour of usage time. Coded Hollow cathode lamps of As, Hg, Pb, Cd, Fe, Cu, Zn, Au, etc
- **Computer & Printer and other accessories:** Pentium Core i5 Processor with 17" TFT Colour monitor and Colour Laser Jet printer. Should be quoted with exhaust hood, oil free compressor ,Gas Cylinder with Regulators one each of Acetylene and Argon and Gas Purification Panel. 7.5Kva Online UPS with 30 mins battery back up. Soft and hard copy of Operating Manual along with trouble shooting solutions to be provided.

4. Gas Chromatograph (GC)

The gas chromatograph (GC) system intended for the analysis of natural compounds is required. The Gas Chromatograph Instrument should be capable of handling three detectors (ECD, NPD & FID) and with not less than two injector ports. It shall have temperature programming with capillary column, electronic flow control, liquid cum head-

space auto sampler, direct sample injection. It shall also have the facility to connect Mass-spectrometer for future purposes. The other required specifications are as follows:

Column Oven- 01

- Accommodates up to two 0.530mm ID capillary column
- Temperature range: Ambient +4°C to 450°C
- 20 oven ramps with 21 plateaus
- Temperature ramp: 120°C
- Cool down time: 450°C to 50°C in 4 minutes
- Resolution: 0.1°C

S/SL Inlet-01

- Suitable for all Wide bore (0.53 mm) & narrow bore column (50µm to 530µm).
- Split ratio up to 7500:1
- Maximum temperature: 400°C
- EPC pressure 0-150 psi
- Gas saver mode to reduce gas consumption

PTV Inlet- 01

- Support hot/cold S/SL mode with large volume injection
- 3 ramps at 720°C/min
- Maximum temperature: 450°C
- Split ratio up to 7500:1
- EPC pressure range 100psi

FID - 01

- Minimum detection limit: <1.4pgC/s
- Linear dynamic range: 10^7
- Peaks to be quantified over entire 10^7 concentration range in a single run
- Data rates: 500Hz
- Maximum operating temperature: 450°C

ECD- 01

- Electron capture detector very sensitive to electrophilic compounds
- Minimum detectable limit <4.4fg/ml lindane
- Maximum temperature: 400°C
- Linear dynamic range > 5×10^4 Lindane
- Data Acquisition: 50Hz

NPD- 01

- Minimum detection limit: 0.08pgN/s

- Dynamic range >10⁵ N, >10⁵ P
- Selectivity: 200000:1 gP/gC
- Data rate: 200Hz
- Maximum temperature: 400°C

Head Space Sampler - 01

- 12 position sample capacity with single position aluminum vial oven permanently fixed onto the GC without blocking the S/SL inlet for manual injection
- Unrestricted GC column selection from 50 to 530 µm regardless of sampling conditions
- Chemically inert sample flow path
- Fully automated purging of sample and vent paths between each analysis
- Adaptor-free compatibility with headspace vials of 10 mL, 20 mL, and 22 mL
- Standalone Control and monitoring by full function chemical resistant key Pad
- Multiple Headspace Extraction (MHE) mode with up to 100 extractions per vial.
- Control software interfaced via LAN connection and available for integrated control via GC
- Pressure set points may be adjusted by increments of 0.001 psi, with typical control ± 0.001 for the range 0.000 to 75.000 psi.
- Flow set points may be adjusted by increments of 0.01 mL/min, with typical control ± 0.01 for the range 0.0 to 200 mL/min
- Pressure sensors:
 - Accuracy: < ± 2% full scale
 - Repeatability: < ± 0.05 psi
 - Temperature coefficient: < ± 0.01 psi/°C
 - Drift: < ± 0.1 psi/6 months
- Flow sensors: Accuracy: < ± 5% depending on gas
 - Repeatability: < ± 0.35% of set point
- Compatible gas types: nitrogen, helium, and hydrogen, and argon/ methane (95%/5% mix)
- Supports a maximum of 10 GC oven ramps and 5 pneumatic ramps

Accessories

1. Suitable columns for the analysis of Natural Products, polycyclic aromatic hydrocarbons, pesticides, volatile organic compounds, polychlorinated bi-phenyls, etc. (1. DB 624; 30 mt long x 0.25 mm ID with suitable film thickness or equivalent –

- 1 number. 2. DB – 5; 30 mt long x 0.32 mm ID with suitable film thickness or equivalent – 1 number) .
2. Suitable Computer with latest configuration and laser printer.
 3. Licensed Application Software and Micro soft Workstation loaded in latest configured personal computer to control GC.
 4. Fully PC controlled Data Station
 5. Preloaded Antivirus with latest version along with Licensed CD.
 6. Set of manufacturer's standard accessories, Operation / Maintenance manual, service and Maintenance manual, Application Notes in (CD) for pesticides, PAHs, PCBs, VOCs, Dioxins, Furans etc., in environmental samples.
 7. Micro syringe – 10 µl capacity (2 nos.) and Gas syringe – 1 ml capacity (1 nos.)
 8. Nitrogen, hydrogen, zero air gas cylinders with Gas regulators BIS certified complete stainless steel two stage regulators and with necessary tubing, connectors, adaptors and filter panels (moisture traps, gas purifiers, molecular sieves, etc.).
 9. Tool kit (One set of required tools)
 10. Spares and consumables required for two years trouble free operation.
 11. Sufficient capacity UPS unit with four hour battery back up and built-in isolation transformer shall be supplied.
 12. Calibration Standards with a minimum expiry period of two years. Two sets each EPA standards for Volatile organic compounds, poly cyclic aromatic hydrocarbons. Individual standards for benzene and benzo (a) pyrene – two sets.

5. Fourier Transform Infrared Spectrophotometer (FTIR)

A Computer Controlled Ultra Compact size, robust MID Infrared FTIR Spectrometer is required for the analysis for Solids and Liquids Samples with Diamond ATR . The instrument must have large optical aperture and very short internal optical path in the interferometer for the excellent performance levels. Other specifications are as follows:

Wavelength Range: 5000-600 cm^{-1}

Interferometer: High Throughput Michelson Interferometer

Optics : Sealed and Desiccated

Source: Wire Wound Element or better

Detector: Electro Thermally Cooled DTGS Detector for better stability

Beam splitter: ZnSe for Hygroscopic Environment

Laser: Permanently aligned Low Powered Solid State

Resolution: < 2 cm^{-1} or better

S/N ratio: better than 30000:1 P-P for 1 min measurement time at 4 cm^{-1} resolution

Wave No. Accuracy: 0.05 cm^{-1} measured with NIST 1921

Wave No. Reproducibility:0.005 cm⁻¹ measured with NIST 1921

Spectrometer Interface: It must have USB -2 Interface

The system must come with 5 year warranty of Interferometer and Laser and Three year on Source.

The System must have sample interface recognition and can perform automatic diagnostic test. The systems must be equipped with a software user interface that is intuitive, simple to use and requires no specialized technical training. It should be able to provide with the touch of a button, the valuable information about the identity and amount of chemical substances present in a material. It should be able to perform the diagnostic test and if the results are out of specifications than the system will not be able to collect the spectra. The System Software should be able to cover the application from unknown material identification and characterization to detailed quantitative analysis. It must have Library Search facility and compare facility. The library of 10000 compounds to be offered along with the system. It should have facility to perform quantitative analysis using Peak Height, Area . The Software must be GLP/GMP Compliance. The System Software must be able to perform PASS FAIL Analysis for untrained users.

Other Special Accessory: Diamond ATR with Auto Recognition feature and inbuilt pressure clamp for optimum and reproducible pressure. It should be able to snap in and out with no alignment required.

6. Water Purification System

A water purification system with the following specifications is required:

- The system should convert tap water into ASTM type 1 & type 2 water.
- System should have dual wavelength UV 185/254nm
- The quoted system should be able to produce R.O. water with production rate of 10 to 15 liter per hour.
- System should be supplied with 30-40 liter tank with level sensor, vent filter with CO2 absorber and tap with sterile filter (0.2µm).
- System should have internal booster & recirculation pump for automatic control.
- Should have contrast LCD shows system status, including water quality and temperature. It should have RS 232 port . When water in the tank is not being used, water quality is enhanced by automatic recirculation.
- Should produce water with following specifications

	TYPE-1	TYPE-2
Inorganics	up to 18.2Mega ohm	1 – 15Megs ohm
Bacteria	<1cfu/ml	> 99% rejection
Organics –	TOC (ppb) <5	

Particles	< 1/ml
Flow Rate	1L / min

System should be supplied with Pre-Filtration unit consisting 10, 5 & 1 micron filter between tap and instrument. 3 nos of each 10, 5 and 1 micron filters should be provided for future replacement.

7. Lyophilizer (Freeze Dryer)

Compact, bench top, laboratory freeze dryer required which is capable of removing water as well as organic solvents such as acetone, acetonitrile, methanol, ethanol etc. The specifications are as follows:

- Upright stainless steel collector coil capable of removing 2.5 liters or more of water
- in 24 hours and holding 4 liters or more of ice before defrosting.
- Teflon-coated collector coil and chamber for processes involving corrosive compounds.
- Dual 1/3 hp HCFC/CFC-free refrigeration systems to cool, collector to -100° C or below (-148° F or below) with drain valve for disposal of defrosts material.
- 12 or more ports Drying Chamber with individually controlled rubber valve & 20 port manifold suitable for drying in flask, tube, vials and ampoules.
- The body should be made of corrosion resistant materials.
- LCD display for system operating parameters, set-up parameters and alarm messages.
- System should have adequate safety features such as:
 - a. Alarm for abnormal system events such as: power failure, improper line voltage supply, collector temperature rise above thresholds, service vacuum pump (after 1000 hours of vacuum use), and moisture in collector.
 - b. Moisture sensor that prevents refrigeration or vacuum start-up when moisture is detected in the collector chamber area.
 - c. Vacuum control valve that maintains set point vacuum level.
 - d. Vacuum break valve that bleeds air into the system when power to the freeze dryer or vacuum pump is shut off.
- Should have RS-232 interface option to connect with a computer.
- Operating voltage, 230 volts, 50 Hz.
- All electrical parts should have CE Conformity and certification.

Vacuum Pump:

Suitable hybrid vacuum pump that is capable of delivering the maximum performance of the above specified Freeze dryer. The vacuum pump should have the following features:

1. Designed for use with acids and other harsh chemicals present in samples.
2. Hybrid pump system consists of a two-stage rotary vane pump and two-stage, chemically-resistant diaphragm pump or better

8. Anaesthesia System

- It should be safe, compact, user friendly and economical gas anaesthesia system
- It should be suitable for anesthetizing mouse, rat & rabbit
- Table top assembly with oxygen flowmeter with oxygen flush valve, a oxygen hose assembly with threaded DISS connections (Min 10 ft).
- The system should be supplied with O₂ cylinder along with regular and tubings.
- Non-refurbished Isoflurane Precision vaporizer to provide accurate delivery of anesthetic agent. Isoflurane 500ml should be supplied with the vaporiser
- The system should be suitable for Dual-procedure circuit
- Multichannel system
- The system should be supplied with standard induction chamber
- Rat-size & mouse-size nose cones/mask
- Activated charcoal filled canisters for waste gas removal
- The assembly should be easily mountable small and compact for easy movement within laboratory/animal facility. Movable unit with castor wheel also be considerable
- Should be CE certified/BIS approved product
- Installation and demonstration should be done after delivery.
- Safety precautions should be specifically mentioned and explained at the time of installation.
- Any additional accessories required for working of the equipment has to be supplied by the vendor

9. Tissue Embedding Station

It should be a compact bench-top ergonomic unit have following specifications -

- Microprocessor controlled
- Instrument should have two separate systems for cold plate and heated paraffin embedding module.
- Temperature range of cold plate: at least 0 to 15 °C.
- Capacity: >60 cassette moulds
- Heated embedding module should have adjustable paraffin dispenser control with paraffin flow rate adjustment.

- Paraffin reservoir capacity of at least 3 litres.
- Working temperature 45° to 70 °C
- Precisely metered and adjustable gravity feed paraffin dispenser to deliver the right amount of paraffin.
- Paraffin flow controlled via foot pedal switch or via the mold
- Large heated workspace and specimen holding area.
- Sufficient working surface of cold plate for at least 50 blocks.
- The work space should be sufficiently illuminated.
- Facility of heated waste paraffin wax collection/disposal.
- Sufficient number of heated forceps holder with approximately 70°C temperature
- Magnifying lens or magnifier assembly
- All functions of the system controlled through electronic system with digital programmable on and off timer
- The system should work on 220-240 V, 50 Hz.
- It should be provided with appropriate Power back up (UPS)

10. Semi Automated Rotary Microtome

It should be compact ergonomic system having following specifications -

- Manual type with specimen clamps, user selectable coarse feed wheel turn direction, retraction on/off function and blade holder for disposable blades.
- Easy orientation of specimen holder in two axes.
- The vertical stroke of at least 59 mm and horizontal specimen travel range of at least 25 mm with section specimen size of at least 40 mm x 40 mm.
- Ergonomically designed hand wheel grip.
- Instrument should be able to cut serial sections with setting from 0.5 to 60 µm
- Coarse feed: manual via coarse feed wheel.
- Trimming thickness selections: 10 and 50 µm.
- Provide 1 packet of low disposable blades (50/packet)

11. Automatic Tissue Processor

It should be a basic instrument having following specifications -

- Fully automatic carousel type with 12 stations with 10 reagent stations and 2 wax baths.
- Inbuilt vacuum function for efficient and rapid wax infiltration
- Fume control facility to reduce release of vapours.

- Metal tissue basket and capacity of up to 100 cassettes.
- Audible alarms, error message and warning codes.
- Ergonomic control panel with touch keypad/keyboard and digital display.
- Easy editing and changing of programs, even during a processing run.
- Delayed start function up to 7 days.
- Separately programmable Infiltration time for each station.
- Drain time 60 seconds between stations.
- Option of interrupting an automatic process for reloading or removing cassettes if needed before the end of a run.
- Baskets should be automatically immersed in a station during the power failure.
- Indication of date, time, remaining time in process step, step number and reagent description.
- Mains voltage: 100-240 V/50-60 Hz;
- Should be supplied with sufficient Power back up (UPS)

12. Automatic Slide Staining Machine

- Should be suitable for the purpose of Cytology, Histology & Hematology i.e. Papanicolau and Jener Giemsa Methods.
- Should consist of two tiers. The upper tier having 11 Stations, plus a blank station, and the lower tier having 12 Stations.
- Should have a simple operating system that facilitates the machine to function in different configurations as below.
 - Single unit with 23-staining station series grouping
 - 2 Different units operating on two separate chronological cycles independently, simultaneously.
 - 2 Different units operating on single chronological cycle parallel grouping.
- Should have a switch - selectable shaking mechanism continuously shakes the slides for thorough staining.

The unit should be supplied

- complete with 23 staining troughs (2 nos. with inlet and outlet for running water).
- Timing discs for chronological programming 5 each for 30 minutes and 60 minutes duration 2 Slide carriers.
- 1 notch cutting plier for programming the discs.
- Suitable to work on 220 V, single phase, 50 Hz, AC supply

Spare Accessories

- Timing Disc Calibrated for 1/2 hour
- Timing Disc Calibrated for 1 hour
- Slide carrier (for 16 slides)
- Staining Trough
- Staining Trough with Inlet & Outlet

13. Biological Microscope with Camera

Microscope

- Trinocular System
- **Stand** – Automated for transmitted light LED [Light Emitting Diode] with 6-fold automated nosepiece, automatic adjustment of light intensity, with height adjustability of focus knobs, Mains 90-250V, commutable 50/60 Hz.
- Toggling Facility – between any two selected objectives.
- **Focus drive** – 3 Step coarse, medium and fine focussing
- **Stage** – Ergo stage with vernier reading, travel range 76x25 mm, with exchangeable X-Y drive
- **Stage plate** - for ergostages with ultra hard ceramic surface
- **Observation tube** - Binocular Ergo Phototube with fixed photo tube, with tubelens oo/1x, with 0- 30° viewing angle, with interpupillary adjustment 55-75 mm, with constant focus and beamsplitter positions vis/phot: 50/50%, fixed.
- **Condenser** - Automated condenser with automated switchable condenser top, with color coding, for BF, DF, PH & Pol.
- **EYEPIECE** - PLAN 10X adjustable with graticule
- Objectives – Brightness synchronized objectives
 - Obj. PLAN 5x/0.12
 - Obj. PLAN CY 10x/0.25
 - Obj. PLAN 20x/0.45
 - Obj. PLAN 40x/0.65
 - Obj. PLAN 100x/1.25 Oil
 - Immers.-Oil 518 C ISO 8036/1; 20ml
- Dust cover with fluorescence or photography / TV

Digital Camera

- Digital Microscope Camera with Software
 - High Definition [HD] Scientific grade camera
 - Digital Color Camera with CMOS sensor (1/2")

- Max. Resolution 7Mega pixel 3072x2304
- Fast live image XGA 1024x768 with 22 fps
- Live image with Flat Panel TV and PC monitor
- Pixel size 3.2µm x 3.2µm
- Dynamic range >55dB / 600:1
- Gain 1x - 4x
- Single Firewire - B connector for data and power

Supported Operating systems WinXP/Win7/MacOSX

Recommended c-mount adapter 0.5x (- 0.5x c-mount adapter)

- Image Analysis Software – For Automatic calibration, point to point measurement, annotation.
- Microscope camera and software must be from one manufacturer only
- Should be supplied with suitable branded PC I5 or better with appropriate Ram, 18.5” TFT and HD monitor original windows 8 or 10 software

14. Zoom stereomicroscope

Microscope

- Apochromate Stereozoom, zoom ratio 8:1, zoom range 10x-80x, with [Eyepiece 10x/23B], Greenough optics, with apochromatically corrected zoom optics, viewing angle 38°, 75 mm working distance (standard) with 1x objective, "ZeroStat" antistatic polymer microscope covers, adjustable zoom stops with video/photo tube (100% eyepieces or 100% camera)
- Resolution 300lp/mm [with Eyepiece 10x/23B]
- Additional objective – 2x to get 160x magnification with 10x eyepiece.
Eyepiece 10x/23B, adjustable diopters, s, for eyeglasses wearers and non-eyeglass wearers, field number 23, incl. symmetrical eye cup, built in reticle holders
- Transmitted Light and Reflected Light base with Illumination Light Emitting Diode
 - LED stand with incident and transmitted light, 25 000 hours LED service life time, 6500°K, 100 - 240V, adjustable focus torque

Optional Digital Camera

- Digital Microscope Camera with Software
 - High Definition [HD] Scientific grade camera
 - Digital Color Camera with CMOS sensor (1/2")
 - Max. Resolution 7Mega pixel 3072x2304
 - Fast live image XGA 1024x768 with 22 fps

- Live image with Flat Panel TV and PC monitor
- Pixel size 3.2 μ m x 3.2 μ m
- Dynamic range >55dB / 600:1
- Gain 1x - 4x
- Single Firewire-B connector for data and power
- Supported Operating systems WinXP/Win7/MacOSX
- Recommended c-mount adapter 0.5x
- 0.5x c-mount adapter
- Image Analysis Software – For Automatic calibration, point to point measurement, annotation.
- Microscope camera and software must be from one manufacturer only
- Should be supplied with suitable branded PC I5 or better with appropriate Ram, 18.5" TFT and HD monitor original windows 8 or 10 software

Equipments/Instruments for Upgradation of Institute

Authorization certificate

To,

The Assistant Director (S-3) I/c
RARIDD,
Gwalior

Respected Sir,

Authority letter against Tender No. _____
due on _____ item quoted _____

We, M/s _____, who are established &
reputed manufacturers of _____ having factory at
_____ & hereby authorize M/s _____
_____ (Name & address of agent) to bid, negotiate & conclude
the contract with your institution against above tender for the above goods
manufactured by us.

We hereby extend our full guarantee/warranty as per Clause at S. No. 20 of the
Other Terms & Conditions of tender for the goods offered for supply against this
invitation of bid from the above firm. We also confirm that the spares & any other
consumable items (As applicable) of the equipment quoted will be made available for
at least five years after expiry of Warranty/guarantee period at reasonable price.

Our other responsibilities include:

1. Information regarding the name of new agent, in case of change of agent
2. ----- (Here specify in detail manufacturer's responsibilities)

The services to be rendered by M/s----- are as under

1. -----
2. -----

(Here specify the services to be rendered by the agent)

Yours faithfully,

(Signature & Name of manufacturer with address & seal)

Note: This letter of authorization should be on the letter head of the manufacturing concern & should be signed by a person competent & having the authorization to issue the said certificate on behalf of the manufacturing firm. The said certificate should also bear the signature of participating bidder as a witness.

Equipments/Instruments for Upgradation of Institute

SATISFACTORY PERFORMANCE CERTIFICATE

Certified that M/S _____ has supplied the equipment _____ which has been functioning satisfactorily at _____ department of this Hospital/Institution since _____.

It is also certified that after sales service provided by the manufacturer M/S _____ has been satisfactory.

(Note: This certificate should be on the letter head of the Hospital/Institution & should be signed by HOD/MS/CEO of the Hospital/Institution. The said certificate should also bear the signature of participating bidder as a witness.)

Yours faithfully,

(Signature & Name of manufacturer/Principal with address & seal)

CONTRACT AGREEMENT FORM (Specimen)

(Tender No. _____)

THIS CONTRACT AGREEMENT made theday of 2018 between Rate Contracting Authority [Assistant Director (S-3) I/c, Regional Ayurveda Research Institute for Drug Development, Gwalior] (Name of Rate Contracting Authority) of India (country of Rate Contracting Authority) (hereinafter called “the Rate Contracting Authority”) of one part and M/s (name of supplier) of (city and country of supplier) (hereinafter called “the supplier”) of the other part :

WHEREAS the Rate Contracting Authority invited bids for certain goods and ancillary services viz. EQUIPMENTS (Brief description of goods” and services) and has accepted a bid by the supplier for the supply of those goods and services.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this agreement words and expression shall have the same meaning as are respectively assigned to them in the conditions of contract referred to :
2. The following documents shall constitute the contract between the Rate Contracting Authority and the supplier, and each shall be read and construed as an integral part of the contract :
 - a. This contract agreement:
 - b. All the terms and conditions of contract:
 - c. Technical Specifications:
 - d. The supplier’s financial bid
 - f. The Rate Contracting Authority’s notification of rate contract (Letter of award).
3. This contract shall prevail all other contract documents. In the event of any discrepancy or inconsistency with the contract documents, then documents shall prevail in the order listed above.
4. In consideration of the payments to be made by the Purchaser to the supplier as hereinafter mentioned, the supplier hereby covenants with the Purchaser to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the contract.
5. The Purchaser hereby covenants to pay the supplier in consideration of the provision of the goods and services and the remedying of defects therein, the contract price or such as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

Brief particulars of the goods and services which shall be supplied / provided by the supplier are as under:-

Sl. No.	Name of the Item with make, model and catalogue no.	Quantity	F.O.R. Rate per unit (Rs.)*

*The above rates are inclusive of excise duty, transportation, insurance, inspection & testing charges and any incidental charges, but exclusive of GST.

6. The prices shall be valid for one year from the date of agreement, unless revoked and thereafter for a further period as agreed upon mutually.

7. The supplier shall agree to deposit 10% performance security, along with as mentioned at Sr. No. 8 of "A. information and conditions relating to submission of bids", in advance by FDR / Bank Guarantee, for a period of 12 months.

8. The suppliers are not authorized to supply material directly to any state Govt. / Semi Govt. / any other organization on the rate lower than the rate contract.

9. The supplier shall supply the goods directly to the indenter / purchaser at the address given in the supply order.

10. The supplier shall raise bills directly in the name of indenting officer / purchaser against the supplies made directly by them to the indenter's satisfaction in compliance with the conditions contained in the supply order.

11. The supplier shall receive payment against its bill after all the necessary verifications and installation of equipments. No advance payments will be made in any circumstance.

12. The supplier shall carefully read all the conditions of tender for supply of equipment and accept all terms and conditions in the tender document. Signing this contract means that the supplier has read all the terms and conditions and abide by it.

IN WITNESS whereof the parties hereto have caused this agreement to be executed in accordance with their respective laws the day and year first above written. That, in token of this agreement, both parties have today affixed their signature at Gwalior. Signed, Sealed and delivered by the Said (For the RATE CONTRACTING AUTHORITY) In the presence of: Signed, Sealed and Delivered by the Said (For the supplier) In the presence of: