eTENDER ENQUIRY DOCUMENT

For Purchase Of

Pathology Medical Equipments
Sub: Invitation of e-Tender for the supply of Pathology Equipments.

**e-TENDER NOTICE No.47/2020-21**

RE e-Tenders in Double bid system are invited from manufacturers / authorized dealers / distributors for the supply of medical Equipments for the department of Pathology for ESIC Medical College & Hospital, Sanathnagar, Hyderabad – 38.

Detailed information regarding the items, application / tender forms, EMD details, specifications, terms and conditions can be downloaded from the following websites: [www.esic.nic.in](http://www.esic.nic.in)

The interested bidders shall submit their tender(s) through online mode at the e-procurement portal [https://etenders.gov.in/eprocure/app](https://etenders.gov.in/eprocure/app)

All the bidders are requested to participate the tenders online through the website [https://esictenders.eproc.in/EMD](https://esictenders.eproc.in/EMD) should be submitted by the bidder in the form of Online payments and the same should reach this office before the closing time of the tender.

No need of submitting the hard copy of the bid.

Any corrigendum to this tender will be notified through the aforesaid websites only. The undersigned reserves the right to accept or reject any or all the bids without assigning any reason at any stage.

<table>
<thead>
<tr>
<th>SNo.</th>
<th>Item Name</th>
<th>Qty</th>
<th>EMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Slide Scanner</td>
<td>01</td>
<td>60,000/-</td>
</tr>
<tr>
<td>2.</td>
<td>Automated Tissue Embedder</td>
<td>01</td>
<td>60,000/-</td>
</tr>
<tr>
<td>3.</td>
<td>Two Dimensional Gel Electrophoresis(2-D Gel) System with Image Scanner and 2-D Gel Analysis Software</td>
<td>01</td>
<td>1,00,000/-</td>
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<tr>
<td>4.</td>
<td>Automated Coverslipping Work Station</td>
<td>01</td>
<td>70,000/-</td>
</tr>
<tr>
<td>5.</td>
<td>Cytospin For Monolayer Cell Preparation</td>
<td>01</td>
<td>8,000/-</td>
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<tr>
<td>6.</td>
<td>Fully Automated Semen Analyser</td>
<td>01</td>
<td>10,000/-</td>
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<tr>
<td>7.</td>
<td>Autostainer For IHC (Immuno Histo Chemistry)</td>
<td>01</td>
<td>60,000/-</td>
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<tr>
<td></td>
<td>Procedure</td>
<td>Code</td>
<td>Cost</td>
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<td>---</td>
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<tr>
<td>8</td>
<td>Automated Urine Analyser</td>
<td>01</td>
<td>16,000/-</td>
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<tr>
<td>9</td>
<td>Flow Cytometry</td>
<td>01</td>
<td>1,10,000/-</td>
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<tr>
<td>10</td>
<td>Fluorescent In situ Hybridization</td>
<td>01</td>
<td>1,10,000/-</td>
</tr>
<tr>
<td>11</td>
<td>Tissue Based PCR</td>
<td>01</td>
<td>3,60,000/-</td>
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</table>
The Schedule for different activities is as below:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description /Name of the Dept.</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>E-Tender document available at ESIC website / e- procurement portal <a href="https://esictenders.eproc.in">https://esictenders.eproc.in</a></td>
<td>12:00 PM, 24.07.2020 onwards</td>
</tr>
<tr>
<td>II</td>
<td>Last date and time for submission of completed Tender forms through on-line &amp; for the receipt of EMD</td>
<td>12:30 PM on 14.08.2020</td>
</tr>
<tr>
<td>III</td>
<td>Date of pre bid conference(Offline)</td>
<td>At 2.30 PM on 31.07.2020</td>
</tr>
<tr>
<td>IV</td>
<td>Date and Time for Opening of Technical Bids</td>
<td>After 12:30 PM on 17.08.2020</td>
</tr>
<tr>
<td>V</td>
<td>Estimated contract value(Rs)</td>
<td>Rs.4,82,00,000/-</td>
</tr>
<tr>
<td>VI</td>
<td>EMD</td>
<td>2% on estimated value of item</td>
</tr>
<tr>
<td>VII</td>
<td>Performance Security</td>
<td>10% of contract value</td>
</tr>
<tr>
<td>VIII</td>
<td>Validity of the bid</td>
<td>180 Days from the opening of the bid</td>
</tr>
</tbody>
</table>

For any clarifications contact through mail id: medicalstores-mcsnr@esic.nic.in

If the date of opening of tender happens to be a holiday, the tender will be opened on the next working day.

For Dean
TENDER DOCUMENT

The Dean, ESIC Medical College, Hospital, Sanathnagar, Hyderabad, invites e-tenders from eligible and qualified Bidders for the supply of Medical equipments proposed to use for ESIC Medical College & Hospital, Sanathnagar, Hyderabad.

EMD

- Bidder has to submit the Earnest Money Deposit (EMD) in the form of demand draft drawn in favor of “ESI saving Fund Account No. 1” payable at Hyderabad, along with the Undertaking letter on 100 Rs non judicial stamp paper(Annexure-II)
- Separate EMD and Undertaking letter has to be submitted for each quoted item.
- It is not mandatory for the bidder to quote all the items in the tender.
- The EMD should reach this office through register post/courier/Speed post before the closing time of the tender
- Please mention the tender enquiry number on the envelope and equipment name on the back side of the Demand draft.
- All tenders must be accompanied by EMD as 2% of quoted value. Bids without EMD and Undertaking letter shall be rejected.

For Dean
# ANNEXURE –I

## COMPULSORY DOCUMENTS (OR) CHECK LIST

### A. Compulsory documents for Technical Bid:

<table>
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<tr>
<th>S.No.</th>
<th>Title</th>
<th>Yes/ No</th>
<th>Page No.</th>
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<tbody>
<tr>
<td>1</td>
<td>EMD along with Undertaking letter. (Annexure-II)</td>
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<td>3</td>
<td>Certificate stating the name of the equipment, make and model that you have quoted.</td>
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<td>4</td>
<td>Equipment Specific manufacturer’s authorization &amp; Authorization of the name of the person (Firm) on which the tender is participated in E-Procurement portal.</td>
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<td>5</td>
<td>Certificate of incorporation/Firm Registration/Valid trade license.</td>
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<td>6</td>
<td>PAN Card of the Company/firm/Proprietor.</td>
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<tr>
<td>7</td>
<td>GST Registration certificate.</td>
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<tr>
<td>8</td>
<td>IT Return, Balance Sheet and Profit &amp; Loss Account for last three years i.e. Financial Years 2018-19, 2017-18, 2016-17.</td>
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<td>9</td>
<td>Purchase Order copies in the bidder’s name for having supplied the quoted equipment to Government Hospitals/reputed institutions for last three years (2018-19, 2017-18, 2016-17.)</td>
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<td>10</td>
<td>Satisfactory Performance Certificate from the users for the quoted equipment for last three years (2018-19, 2017-18, 2016-17.)</td>
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<td>11</td>
<td>Certificate for at least 2 years warranty (Annexure-VI)</td>
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<td></td>
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<tr>
<td>12</td>
<td>Certificate for at least 5 years CMC after warranty (Annexure-VII)</td>
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<tr>
<td>13</td>
<td>Certificate giving the address of the authorized service centre in Hyderabad</td>
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</tbody>
</table>

### B. Compulsory documents for Price Bid:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Title</th>
<th>Yes/ No</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Price for the quoting equipment along with CMC (Annexure-VIII)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Price Catalogue for all spares/consumables/reagents of the equipment (if any) for five years after warranty period (Annexure-IX)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEXURE – II

Instructions for Online Bid Submission (Department User may attach this Document as an Annexure in their Tender Document which provides complete Instructions for online Bid submission for Bidders)

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: https://etenders.gov.in/eprocure/app.

REGISTRATION

1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://etenders.gov.in/eprocure/app) by clicking on the link “Online bidder Enrollment” on the CPP Portal which is free of charge.
2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / e Mudhra etc.), with their profile.
5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC’s to others which may lead to misuse.
6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.
ANNEXURE – III

Undertaking

(To be submitted on Rs. 100/- non judicial stamp paper)

1. I the undersigned certify that I have gone through the Terms & conditions mentioned in the tender document and undertake to comply with them. The rates quoted by me/us are valid and binding on me/us for acceptance for the period of 6 months from date of opening of tender.

2. It is certified that rate quoted by me are the lowest quoted for any institution/Hospital in India.

3. Earnest money deposited by me/us viz Rs. _______________ in the form of Demand Draft in favour of ESI Saving Fund Account No.1 payable at Hyderabad is attached herewith and shall remain in custody of the Dean, ESIC Medical college Hospital Sanathnagar, Hyderabad. I/We give the rights to Dean, ESIC Medical college Hospital Sanathnagar, Hyderabad to forfeit the EMD deposited by me/us if any delay occurs on my/agent’s part or on account of failure to supply the equipment at the appointed place and time and of the desired specifications.

4. I/we undertake that I/we will be in position to provide CMC, Spare Parts, and consumables for 05 years after completion of guarantee/ warranty period. I/we also undertake to keep the equipment in running order throughout the year under warranty / guarantee /CMC and in case of equipment going out of order; the fault will be attended within 24 hours of lodging the complaint. The firm shall ensure the machine is set right within 7 days of intimation otherwise the penalty clause mentioned in the terms and condition is acceptable to us. However I /We will arrange similar equipment as a standby at my/our own cost and risk in case of repair of the machine is going to take time beyond one week.

5. There is no vigilance/ CBI case or criminal court case pending against our firm.

6. On Inspection if any article is found not as per supply order and specifications, it shall be replaced by me/us in time as asked for, at my /our own expenses.

7. I/we hereby undertake to supply the items as per specifications and directions given in supply order within the stipulated period.

8. I/we undertake to provide guarantee/warranty as mentioned in specifications from the date of satisfactory installation and inspection. I also undertake that I will maintain the equipment during this period and replace the defected parts free of cost, if necessary.

9. I abide by the condition that DEAN, ESIC Medical college Hospital Sanathnagar, reserves the right to accept or reject any or all the tenders without assigning any reasons (s) there of.

Name, Signature & Address Of the Tenderer with Stamp
ANNEXURE – IV

TENDER TERMS AND CONDITIONS

Tenders will be opened in the M.S Office at ESIC Medical College & Hospital, Sanathnagar, Hyderabad-38, on the stipulated date and time in the presence of the Bidders / representatives who choose to be present.

1. The two parts of the bids i.e. Techno-commercial (Un price(Bid)) and Price bid prepared by the Bidder shall comprise of the following:
   a. Technical Bid
      i. Bidders should submit the documents as per the checklist A mentioned in Annexure-I
   b. Price Bid
      i. Bidders should submit the documents as per the checklist B mentioned in Annexure-I

2. The quoted price should be all inclusive lump sum price offered for each item including cost of the equipment, freight, Insurance, transit insurance, packing forwarding etc., and including charges for installation and commissioning with all men and material required for the same and including charges for the quoted warranty period. Rates and GST must be quoted separately.

3. The rates quoted should be FOR ESIC Medical college Hospital, Sanath Nagar, Hyderabad. No other charges in addition will be payable on any account over and above the lump sum price quoted in the price bid. The rates quoted in ambiguous terms such as "Freight on actual basis" or "Taxes as applicable extra" or "Packing forwarding extra" will render the bid liable for rejection.

4. Only Techno–commercial bid (un-priced bid) will be opened first on the date mentioned in the presence of bidders who chose to be present. The price bid of the firm whose equipment is technically viable fulfilling the specifications and all other conditions alone, will be considered for evaluation.

5. For imported goods, the price quoted shall not be higher than the lowest price charges by the Bidder for the goods of the same nature, class or description to a purchaser, domestic or foreign or to any organization or department of Govt. of India.

6. If it is found at any stage that the goods as stated have been supplied at a lower price, then that price, with due allowance for elapsed time will be applicable to the present case and the difference in cost would be refunded by the supplier to the purchaser, if the contract has already been concluded.

7. Tender currencies: The Bidder supplying indigenous goods shall quote only in Indian Rupees.

8. Bid Security(EMD): Each tender must be send the EMD as mentioned against the equipment in the form of Demand Draft only drawn in favor of “ESI Saving Fund Account No.I” payable at Hyderabad. The tenders not accompanied by EMD are liable for rejection. The EMD of unsuccessful Bidders shall be refunded after the award of tender to the successful tenderer.

9. Only the manufacturers or their authorized distributor/stockist would be considered for the tender.

10. The contract should not be sublet without the prior written permission of the Dean.
11. Either the authorized Indian agent on behalf of the principal/OEM or principal/OEM himself can bid but both cannot bid simultaneously for the same item/product in the same tender.
12. If an agent submits bid on behalf of the principal/OEM, the same agent shall not submit a bid on behalf of another principal/OEM in the same tender for same item/product.
13. Successful bidder shall not been titled to any rate revision of price for any reason except that allowed by Government of India.

1. The rates quoted should be valid for one year from the date of approval of the Tender and the quantity mentioned is on the basis of present requirement which are to be supplied within the period mentioned in the tender. During the currency of Tender, orders are to be Executed by the successful Bidder at the tender rate as per future requirements, therefore the quantity in the tender is indicative only and likely to increase or decrease at the time of placing the order.

2. For the equipment where reagents, cartridge, other consumables, etc. are required the price bid must include:

A) The rate list indicating the prices of the consumables prevalent on the date of tendering
B) List should indicate the cost and life of consumables
C) The rate for reagents, consumables etc. should remain constant for five years.

3. The equipments should be Guaranteed/Warranted (Comprehensive) for a minimum period of two years from the date of satisfactory installation and inspection.

4. No need of submitting the quotation of AMC/CMC for the items costing below Rs 20,000/-

5. Firm should undertake to enter into Comprehensive Maintenance Contract (CMC) for equipment (mandatory for all equipments in double bid system) for a minimum period of five years after completion of warranty period and accordingly quote the rates of CMC for five years. The rates for CAMC(Comprehensive) should not exceed 10% per annum, of the unit cost of the equipment on the date of purchase. Firm should undertake to keep the equipment in running order throughout the year and in case of equipment going out of order during warranty CAMC the fault should be attended within 24 hours and rectified within 7 days of lodging the complaint.

6. If the equipment needs calibration, the firm shall be responsible for calibration as part of CMC.

7. Bidder should be able to demonstrate (dry Demo and wet Demo) the product quoted by them, to the Technical Evaluation Committee in Hyderabad or nearby within the due date after the check list evaluation of the Bidder.

8. The company will get only one chance for demonstration. In case, the company fails to arrange the demonstration; the tender shall be liable for cancellation.

9. The date for demonstration shall be fixed with mutual consent on telephone/e-mail and the same shall be confirmed in writing or by fax. In any case, not more than two weeks time shall be given to arrange for demonstration.

10. The successful bidder should furnish Performance Security Deposit @10% of the value of the contract.

11. The Dean ESIC Medical College & Hospital, Sanathnagar, Hyderabad will be at liberty to terminate the tender proceedings without assigning any reasons thereof. The bidder will not be entitled for any compensation whatsoever in respect of such termination.

12. No articles shall be supplied to the hospital except on requisition in writing signed by the
13. The successful bidder should strictly adhere to the mentioned delivery schedule. Supply, installation and commissioning should be done within the prescribed period on the supply order that is 45 days for Indian make items and 60 days for foreign make items. If the successful bidder fails to execute the supply with in prescribed period. Penalty of 0.5% of the value of the order calculated at the contacted rate per week or a part of the week will be recovered subject to maximum of 10%. The Medical Superintendent has right to recover the damages for breach of contract/order to forfeit the Earnest Money.

14. Performance security: In case of Equipments the successful bidder has to deposit the 10% of total amount of the total cost as the performance security with Medical Superintendent in the form of Banker’s Cheque/Demand Draft, in favour of “E.S.I Saving Fund Account No.1 payable at Hyderabad” which will be released after completion of warranty period and on receiving the satisfactory performance certificate from the user department.

15. Penalty clause. In the event of equipment going out of order the fault shall have to be attended within 24 hours of lodging the complaint. During the Warranty/Guarantee period in the event of equipment remaining out of order beyond a period of 7 days of lodging the complaint a penalty to extent of 0.25% of purchase value of the equipment shall be levied for each day of the equipment remaining nonfunctional.

16. During AMC/CMC period In case the equipment is not restored in functional order within a week, a penalty of 0.5% of total cost of AMC/CMC of the equipment per day for the period of equipment remaining out of order will be levied. The contract includes ………………. No’s preventive maintenance visits, “n”number of break down calls. Breakdown calls have to be attended within 24hrs. All the repairs/calibrations have to be taken up within the hospital as far as possible. The equipments will be allowed to be taken out with the permission of competent authority only.

17. The quoted price of CMC should be inclusive of calibrations after warranty.

18. If the equipment needs calibration, the firm shall be responsible for calibration as a part of CMC. All other terms and conditions will be followed as per the tender document.

19. DEAN reserves the right to reject/accept any or all points/modifications in the terms and conditions without assigning any reason thereof. No Correspondence will be entertained in this regard.

20. Tender selection will be made on the basis of total cost (Technically qualified bids) mentioned in the price bid column L of the Annexure –VIII

21. If no tender with purchase order in the name of bidder is received, then those tenders with purchase orders in the name of manufacturer or for same product (Make & Model) to the GOVT Hospitals/Institutions or reputed institutions will be considered in respect of S.No.09 of the checklist. The same clause will be applicable with respect to S.No.10 of the check list.
ANNEXURE – V

COMPANY PROFILE

1. Name of the firm

2. Full Address:

3. Telegraphic Address/E-mail Id:

4. Telephone No.

5. Telex/Fax No.

6. Name & address of your Bankers.
   Stating the name in which the Account stands

7. (Please give Account details):

8. Any other information which you consider necessary to furnish

DATE:

SIGNATURE:
ANNEXURE – VI

DECLARATION FORM (Terms & Conditions)

We ..........having our office at.........do declare that we have carefully read all the conditions of Tender for the supply of and abide by all the conditions set forth therein by the Dean,

ESIC Medical College & Hospital, Sanathnagar, Hyderabad-38.

DATE: ___________________________ SIGNATURE: ___________________________

SEAL: ___________________________ NAME & ADDRESS: ___________________________
ANNEXURE – VII

DECLARATION FORM (Vigilance)

We declare that no central vigilance case is pending or existing on our firm name.

DATE:          SIGNATURE:

SEAL:          NAME & ADDRESS:
WARRANTY CERTIFICATE FOR THE SUPPLY OF MEDICAL EQUIPMENT

I / we do hereby undertake to provide warranty for the equipment for a period of two years from the date of satisfactory installation of the said equipment in your Hospital premises.

Signature of Bidder with date and seal
ANNEXURE -IX

CMC CERTIFICATE FOR THE SUPPLY OF MEDICAL EQUIPMENT

I / we ___________ do here by undertake to provide CMC for the equipment __ for a period of five years after the completion of the warranty period of the equipment.

Signature of Bidder with date and seal
# ANNEXURE - X

## PRICE BID SCHEDULE

<table>
<thead>
<tr>
<th>S.N o</th>
<th>Item name</th>
<th>Qty</th>
<th>Unit cost(Rs) A</th>
<th>GST in %</th>
<th>GST Cost(Rs) B</th>
<th>Total Cost C=(A+B)</th>
<th>CMC Charges(Rs) per unit 1st Year - D</th>
<th>CMC Charges(Rs) per unit 2nd Year - E</th>
<th>CMC Charges(Rs) per unit 3rd Year - F</th>
<th>CMC Charges(Rs) per unit 4th Year - G</th>
<th>CMC Charges(Rs) per unit 5th Year - H</th>
<th>Total CMC charges per unit for 5 years- I (D+E+F+G+H)</th>
<th>Total Cost inclu. CMC for 5 years J=C+I</th>
<th>Grand total (Rs) L= J x Qty</th>
</tr>
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</table>

Name: ____________________________
Business Address: ____________________________
Place: ____________________________
Date: ____________________________
Signature of Bidder: ____________________________
Seal of the Bidder: ____________________________
ANNEXURE – XI

PRICE LIST FOR SPARES / CONSUMABLES / REAGENTS

The following is the list of spares/ consumables / reagents and their rates for use of the equipment ________

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the Spare/Consumable/Reagent.</th>
<th>Unit</th>
<th>Rate per unit (in Rs.)</th>
<th>Tax (if Any)</th>
<th>Total (in Rs.)</th>
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Signature of Bidder with date and seal

*The bidder need to upload the scanned copy of above particulars at the time of submission of tender along with the price bid proforma*
Technical Specifications

1. SLIDE SCANNER

1) Fully automated high performance whole side walk away scanner for histopathology glass slides.

2) Sample throughput with loading capacity of 300 slides or more

3) Should handle glass slides having dimensions of 25x75 mm with a thickness of 0.9-1.2 mm including the coverslip

4) Should have an inbuilt automatic slide loader.

5) Scanner should have capability to load slides while some of the sliders are being scanned without interrupting the ongoing scanning run - Random Access.

6) Should be a high speed scanner with minimum throughput of 50 slides per hour for 15x15 mm tissue sample at 20X objective.

7) Ability to prioritize slide scan to support Stat workflow is needed

8) Should read 1D and 2D barcode labels (Datamatrix/QR code or both)

9) Should allow scanning of multiple planes.

10) Image management software should facilitate image acquisition, annotations, FOV capture, cell counts, customized reporting and synchronized viewing.

11) Should provide with a strong database support for image acquisition, archival and retrieval and slide sharing for Telepathology.

12) LED light source should be provided with due consideration to its longevity, less power consumption with preference to “automatic switch on” while scanning.

13) Slide storage format should be BIF, TIFF or JPEG 2000.

14) Should be compact with minimal additional parts so as to reduce the occurrence of breakdowns of different units.

15) Should allow complete case management right from patient history acquisition to customized reporting of the case.

16) Should have tuneable/customizable algorithms.

17) Image analysis solutions for nuclear markers like ER (SP1), PR (1E2), Ki-67 (30-9), p53 (DO-7) and membrane markers like Her2 (4B5).
18) Well trained service and support team should be provided. Company should be well established and have a track record of expertise in the field.

19) Password protected, role based security with limited access in accordance with the user hierarchy.

20) Image management (anytime, anywhere thin client image viewing) for case accessioning through reporting.

21) Updated as and when new additions come without any recurrent cost.

22) Latest upgradable windows operating system and server with 50 TB of usable internal storagewith RAID 6 configuration

2. Automated Tissue Embedder

Fully Automatic Tissue Embedding Station
Should be a fully programmable, automatic on/ off control, two console unit, one heated paraffin dispensing unit and another cryo console with cooling plate

Paraffin dispensing unit
1) Capacity of paraffin tank: min 5 litres
2) Capacity of thermal chambers for storage of molds: min 1.5 – 2.0 litres
3) Temp. Range of paraffin tank: 50- 70 deg c
4) Temp. Range of thermal chamber: 50- 70 deg c with auto timer
5) Temp. Range of hot plates & forceps wells: 50-70 deg c
6) Connection for electrically heated forceps
7) Six heated wells for normal forceps, 3 on either side of the wax dispensing line.
8) Precisely metered and adjustable gravity feed paraffin dispenser to deliver the right amount of paraffin.
9) Finger touch plate and foot switch for control of paraffin flow.
10) Large warm working surface on either side for min 10 cassettes on each side.
11) Control panel must have 2 line LCD display and easy navigation through the menu with help of simple touch key operation.
12) Should have a magnifying lens adjustable in any position and a large cold spot & cold white light illumination for specimen orientation.

Cold console
1) Capacity of freezing up to 60 blocks at a time.
2) Temp. Range of cold plate: 0 to minus 15 (-15) deg c, adjustable in steps of 1OC.
3) Compressor to be extra quite to reduce noise fatigue.

The system should work on 220-240V, 50 Hz. Should use CFC free gas and must have ISO 9000/01/02/CE/FDA certification.
3. TWO-DIMENSIONAL GEL ELECTROPHORESIS SYSTEM WITH IMAGE SCANER AND 2-D GEL ANALYSIS SOFTWARE

IEF cell (Qty 1)

1. The IEF cell should be capable of running 12 IPG strips simultaneously of different sizes such as 7, 11, 17, 24 cm. The system capable to run each strip at different current is preferable.

2. ‘IEF focusing trays’ of different sizes, 7 cm, 11 cm, 18 cm and 24 cm and ‘cuploading tray’ along with cup holders should be provided with the system

3. IEF focusing trays should be made up of polycarbonate with gold/platinum coated electrodes

4. The Platform of the IEF cell should have peltier cooling to maintain temperature (10-25 degrees) and secured for light protection for CyDye labeled samples

5. The system should have integrated power supply

6. Voltage per lane should be 50-10,000 V and Current range should be 0–100 μA per lane at 1 μA interval

7. Accessories: Rehydration trays for all the above mentioned sizes; strip holder; mineral oil; electrode wicks etc should be provided along with the instrument USB port to export IEF focusing data to excel

SDS-PAGE (Total Qty 4)

A) For Small gels (Qty 2)

1. Vertical Mini Gel electrophoresis apparatus with a capacity to run at least 2 gels (1-D, 2-D and native gels with Gel size of approx 8.5 cm × 7.5 cm)

2. Gel Casting: The system should be compatible for hand-cast gels and precast gels in the same assembly.

3. Run time: Not more than 1 hr (at 200V constant)

4. The same buffer tank should be able to run electrophoresis and western blot for at least 2 gels.

5. Plates: At least 5 glass plate set should be provided with each unit along with spacers, glass plates with integrated spacers are preferred.

6. Casting accessories: Casting frames and casting stands with leak-free hand-casting should be provided.

7. Plastic Combs: Ten well combs (1.0 mm thickness) should be provided
8. Other accessories: Electrode assembly, tank, lid with power cables, blotting module for transfer of proteins from 2 gels

B) For Medium size gels (Qty 1)

1. Vertical gel electrophoresis system to run at least 2 gels (1-D, 2-D and native gels) of gel size around 13 cm × 8.5 cm gels so as to accommodate 11 cm IPG Strip

2. Gel Casting: To run handcast gels with casting units, preferable if compatible for precast gels of medium size

3. Max buffer volume should be 1 L or less (for 2 gels)

4. Run time should not be more than 2 hr at 200V constant

5. a) Glass plates (12 sets),
   b) Spacers (1.0 mm) (12 No) and (1.5 mm) (4 No)
   *Glass plates with integrated spacers are preferred
   c) 10-well combs 1.0 mm (4 No.),
   d) 10-well combs 1.5 mm (4 No.),
   e) 15-well combs 1.5 mm (4 No.) and
   f) 1-well comb to run IPG strips (4 No.)

6. Relevant accessories such as electrode assembly, gel casting assembly including tank, lid with power cables should be provided.

C) For Large size gels (Qty 1)

1. SDS-PAGE apparatus to run 18-28 cm gels that can accommodate up to 6 gels, capable of running IPG strips and 1-D gels of different thickness 1.5 mm and 1.0 mm

2. Refrigerated circulating bath along with pump operational at -10 degrees to 80 degrees, Temperature stability ± 0.1 °C, Maximum Flow Rate 15 L/min; Maximum Pressure 300 mbar; Internal tank volume 2.5 L with barbed fittings for tubing should be provided. Safety features should include water and shock-proof main switch, Over temperature protection and with International Regulatory Certification: DIN 12876-1.

3. Compatible gel casting module should be provided

4. Glass plates should be provided to run SDS-PAGE that can accommodate 17 cm and 24 cm IPG strips (6 sets of both sizes) Glass plates with integrated spacers OR glass plates and spacers
separately to run at least 6 gels of above mentioned sizes. Other Accessories required to run hand cast and pre-cast gels of 18-24 cm sizes should be provided

**Transfer apparatus for small and medium sized gels (Qty 1)**

1. A Semi-dry transfer apparatus suitable for transferring proteins from two midifomat gels (13 cm × 8.5 cm)
2. Plate Electrodes (platinum-coated titanium anode and stainless steel cathode) for efficient transfer, efficient transfer of low and high MW proteins
3. Transfer time: not more than 60 min
4. Integrated power supply
   Notify the power failure during run.

**Power Supply (Qty 1)**

1. A power supply with programmable output range: 10 – 500V, 400 mA; Stores up to 3 methods, compatible with electrophoresis system to run 6 gels, Compatible with large size gel electrophoresis unit
2. Output Type: Contant V and Contant C
3. Built-in timer: 0 – 99 h; Volt hour control 99000 V-hr
4. Output Terminal: At least two (02) pair jacks in parallel.
5. Digital Display
6. Operating Conditions: 0 – 40 deg C; 0 – 95% humidity
7. Safety Features: No-load detection; Sudden load change detection; Over-load / short-circuit detection; Overload protection. Automatic recovery after power failure.
8. Regulatory Certification: IEC 1010 for all the electrophoresis units, transfer apparatus and power supply.

**Gel imaging system** - System to support wide range of applications such as imaging of gels and western blots

1. Should be able to capture image of 2-D gels with gel size of 24 cm × 20 cm coomassie or silver stained gels with high resolution
2. 16-bit pixel depth for accurate quantitation and supported by a software that can provide image display, optimization and quantitation
   Should be able to capture image of Western blots from medium-sized gels (13 cm × 8.5 cm) developed using visible and chemiluminescence probes detection system and gel with ethidium bromide containing samples. System that can
detect stain free protein gels will be preferable. Upgradable for imaging gels with proteins labeled with fluorescent dyes.

3. System with true 16 bit CCD, with more than 3.0 Megapixel image resolution. Cooled CCD with cooling range of \(-30^\circ C\) absolute temperature using peltier cooling system (Not air cooled).

4. Sensitive detection of less than 40 pg of protein on a Western blot.

5. Low noise for longer exposure times and lower background, important for precise quantitation of very weak signals.

6. Distortion, dark frame, and flat frame corrections are applied to each imaging mode for optimal precision and uniform quantitation.

7. Chemiluminescent and colorimetric signals can be captured in the same image without changing the lens. With UV transillumination for documenting EtBr-stained gels.

8. Focusing, illuminators, and exposure time are remotely controlled by a computer. With autofocusing technology.

9. For image analysis, advanced license software should be provided separately and for analysis applications to provide high levels of automation and accuracy in analysis of gels and blots.

10. Instrument should have auto focus technology that is system should automatically take the best focus depending on any zoom level without the movement of sample platform. The sample platform should be fixed at one position to ensure minimal mechanical movement.

11. Pixel size should be 6.0 µm or bigger.

12. Instrument should have a minimum 5 position filter wheel for capturing images of various dyes effectively. The filter wheel should be motorized and automatic without the requirement of manually changing or moving the filter wheel.

13. Dynamic range should be \(\geq 4\) orders of magnitude for good quantification.

14. Software for Image acquisition and 1-Dimensional Analysis: Image optimization for gel or blot application with applications including Chemiluminescent, colorimetric western blots, nucleic acid and protein detection via colorimetric dyes.

  Automatic generation of customizable reports; Snapshot tool to copy images, lane profiles, and graphs; Complete flexibility with automatic and manual detection of lanes and bands, using several

  Algorithms Easy copy/paste functionality, crop, zoom, and colors. 16-bit and 8-bit tiff images with Publishing resolution (dpi) and export option. The Software should automatically select the appropriate filters, light sources, and camera settings for all applications.
Software should produce customizable reports with data organized as desired, including, Lane and band identification, molecular weight or base pair evaluation. Window PC compatible software

15. Computer of latest compatible configuration available at the time of purchase of the equipment with suitable colour printer and compatible online UPS with at least 30 min backup

**2-D Gel Image analysis Software (Qty 1)**

1. Software to analyze 2-D gels with license

2. Sophisticated algorithms for Automatic Spot Detection & Quantification.

3. Spot detection summary matching summary, replicate group consensus tool to optimize spot detection and matching parameter

4. Removal of background speckles.

5. Simultaneous analysis of unlimited number of gels

6. Batch processing of experiments

7. Statistical analysis using wilcoxon paired sample algorithm for providing accurate statistical comparison.

8. Can able to compare experiments and warp matching


10. Gel land marking and automatic spot matching

11. Can be integrated with data from IMAGING SYSTEM, SPOTCUTTER etc

12. Can Export XML data and JPEG file format

13. Single-user license with an option of network license support for 10 computers or more

14. Computer of latest compatible configuration available at the time of purchase of the equipment

**Others**

Comprehensive warranty of 3 years, non-comprehensive warranty of 2 years and 5 year AMC after the warranty period. Spare parts to be available for 10 years after installation
4. Automated coverslipping work station

Instrument type: Automated Glass Coverslipper

Sample types: Histology sections, Cytology smears, Monolayer preparations

Throughput: approx. 400 slides/hour (approx. 9 sec./slide)

Coverslip sizes: 22-24 x 40-60 mm Coverslip magazine capacity: 120-160 coverslips (depending on size)

Mounting media: Commercially available types accepted

Mounting media volume: Individual setting based on volume, type and coverslip size

Mounting media bottle volume: 250 ml

Input racks: Most commercially available types accepted (up to 60 slides)

Output racks: 20 or 30 slide capacity (up to 60 slides).

Fume handling: Activated carbon filter and fume extraction hose system

Supply voltage: 100-250 VAC / 50-60 Hz

Dimensions (L x D x H) (mm): 420 x 600 x 550 (in.): 16.5 x 24 x 22

Dry weight: approx. 57 kg (approx. 125 lbs)

Others

Comprehensive warranty of 3 years, non-comprehensive warranty of 2 years and 5 year AMC after the warranty period. Spare parts to be available for 10 years after installation.

5. Cytospin For Monolayer Cell Preparation:

- Bench top centrifuge for cytology specimens

- The equipment should be capable of thin-layer cell preparation for retrieving cells from various body fluids especially paucicellular fluids and preserving their morphology with a diameter of 6mm/22x15mm
Should be capable of processing up to 12 specimens at one time

Should be equipped with Biological safety cabinet for safety of the operator

Auto lid lock during rotation with special lid release mechanism

Should be designed for easy disinfection and also have a wipe clean control panel

Must have a pullout programme card for up to nine programmes to be logged for fast and convenient retrieval, standard rotor, removable with precentrifugation along with quick change adaptor.

Should be resistant to fluid spillage on the electronic components with capped disposable sample compartments/ chamber for elimination of aerosol

Safety alarm during all stages of operation

Speed 200-6000rpm

Noise levels < 50 Db

The unit must have a minimum of three acceleration control buttons, fast, medium, slow

Must contain a digital display showing the programme and remaining run time

Must have a protected programme memory that stores up to 23 routines for instant recall and protects from power loss.

Should be FDA/ CE approved, meet IEC 61010 standards for safety

Accessories: filter cards, cytoclip, stain less steel slide clip, mega funnel for large sample cytoslide single circle coated 100 / box should be coated with instrument

Demonstration of equipment is required during technical evaluation

The supplier should have excellent service backup

AMC/CMC required

6. Technical Specifications for Fully Automated Semen analyser:

1. Fully automated numerical data output including the integrated WHO parameters of semen analysis (5th edition)
2. All results should be calculated and displayed in less than 2 minutes time
3. Should not require sample dilution
4. Auto testing and auto calibrating facility should be provided
5. Easy to operate by technical staff, user friendly with stepwise onscreen Instructions
6. Built in printer with adequate data storage, and preferably software to store large volume of archive in attached computer System
7. Should provide high degree of sensitivity and accuracy to report sperm concentration of less than 10 million / ml and very low progressive motility
8. Company should quote for the rates of all necessary consumable eg reagents, capillaries, cleaning solutions, brushes, etc for five years supply.

9. Should be certified by FDA

7. TECHNICAL SPECIFICATIONS OF AUTOSTAINER FOR IHC (IMMUNOHISTOCHEMISTRY):

1) The System Should be fully automated Immunostaining system for ImmunoHistochemistry and In-situ hybridization.

2) It should perform all the process automatically from baking to counterstain.

3) Totally hands free day or night with option of delayed start.

4) Compatible with paraffin wax and frozen section and cytology smears.

5) Antibody menu of more than 20 primary antibodies at one time.

6) Minimum antibody dispersion of 100 µl to maximum of 600 µl.

7) Capable of operating at temperature of 20-32 degrees C.

8) FDA/CE approved.

9) Should have adequate loading capacity. 3 independent horizontal platforms with a capacity of 10 slides per platform is optional.

10) The Immuno Stainer should have the capacity of staining a minimum of 30 Slides at a time.

11) The Stainer should be flexible to permit simultaneous processing of slide racks using different staining protocols.

12) The Staining System should have inbuilt antigen Retrieval system for Heat treatment required for antibodies. A separate instrument is also acceptable.

13) The Immunostainer system should have the Convertile/Equivalent technology with latest software which should be upgradable.

14) The Stainer should have the facility for minimum usage as 100 µl/test and the reagent container capacity may be 5 ml to 7 ml.

15) The Stainer should have Liquid Level Sensing (LLS). It should also alert when reagents are low or waste is full.

16) The Stainer should have Robotic ID Imager or equivalent technology to identify the slides and reagents loaded in the Processing Module.
17) The Stainer should have Optical Character Recognition (OCR) / bar code technology.

18) The Immuno Staining system should have the facility of LIS connectivity (optional).

19) Reagent Dispensing Method should be Rinsed Probe Method / similar technology.

20) The equipment should be LAN/HIS compatible.

21) 220-440 VAC, 50 Hz with Indian Plug and Online UPS and at least 1 hour backup.

22) Pricing specifications of secondary kit are required.

23) Should perform planned preventive maintenance as per schedule.

24) Prompt and quick response for installation and breakdown is expected.

25) Training needs to be provided for staff.

**8. Automated urine analyser:**

The analyser should be compact benchtop, fully automated integrated urine analyzer, integrating urine chemistry and urine sediment analysis.

2. Chemistry parameters required to be provided should be glucose, protein, blood, bilirubin, urobilinogen, pH, ketones, nitrate, leukocyte, creatinine, albumin, alb/cre ratio, pro/cre ratio.

3. Additional instrument parameters should have specific gravity, turbidity & colour.

4. The analyser should be based on fluorescence flow cytometry for accurate measurement of urine parameters such as rbc, wbc, epithelial cells, cast and bacteria.

5. The instrument should provide scattergrams and histograms for easy interpretation.

6. The analyser should provide additional rbc information, uti information and conductivity.

7. The analyser should have user friendly software with cross check function.

8. The analyser should have a throughput 100 samples / hour (chemistry) & 50 samples / hour (sediment analysis).

9. The equipment should have a storage of 200 test strips at a time with continuous loading for true walkaway analysis.

10. The equipment should have the capability to load two different types of strips for better flexibility in analysis.

11. The equipment should be capable of analysis in both manual and sampler mode.
12. Sampler should have the capacity of 60 sample tubes and internal barcode for sample identification

13. Controls should be available for both chemistry and sediment analysis

14. Data storage of 10000 samples including graphics & 24 qc files with 300 data points each should be available.

15. The equipment should have interface for output to printer or transmitted to LIS / HIS and it would be the responsibility of the supplier to do the interfacing.

**9. Technical specifications for flow cytometry:**

1. Required is a bench top flow cytometric analyzer with at least 3 lasers – Blue (488nm), Red (630-642nm), Violet (405nm).

2. The equipment must have the ability to detect at least 12 parameters (at least 10 true non-overlapping fluorescence channels along with one forward and one side scatter) simultaneously and upgradeable to more colors. Alignment of all the lasers and optics must be fixed.

3. Height, Area and Width information must be available for all parameters simultaneously.

4. The equipment should have dedicated beams-pots for each lasers. All the fluorescence detector channels and side scatter channel must be designed with photo multiplier tube (PMT) for achieving best resolution even for dimly stained population.

5. Equipment should have the capability of acquiring should be at least 10,000 events/sec or higher with all active parameters.

6. Manual loading of standard 5 ml/2ml/1.5 ml tubes should be acceptable. Both basic and advanced customizable applications should be feasible on the equipment.

7. The quoted system must have future upgradeability option at site with High throughput automated sample loader for sample analysis from a minimum of 25 tube rack or 96 well microplate.

8. Digital signal processing should allow threshold to be set on all available channels or parameters during sample acquisition.

9. Latest branded workstations (with hard disk hard disk 1TB, RAM 8GB) compatible with the supplied flow cytometer along with monitor should be provided.

10. Offline advanced analysis software in an offline branded computer with at least 12gb RAM and 1 tb HDD, 23” monitor, along with all system softwares must be provided along with atleast
6TB external hard drive (branded) along with a DVD writer Software should be able to installed in as many computers as the user wants and not confined to specific computer.

11. An offline 3rdparty advanced analysis software (multi user) should be provided with the machine.

12. Compatible UPS for at least 30 min standby time of the supplied flow cytometer must be provided.

13. A colour laser printer should be provided compatible with offline analysis computer.

14. Starter kits and reagents, including sheath fluids, tubes, calibration beads, cleaning kit and compensation kit, should be provided.

15. At least two onsite training workshops for the users to be arranged after equipment installation.

16. User list along with performance or installation certificates should be provided from at least 5 academic users and at least 10 users globally of the same quoted configuration. Performance demonstration of quoted system must be done with 3 laser configuration to be done within Hyderabad if requested by the technical committee.

17. The quoted system should be a CE-IVD/ US IVD certified for In Vitro Diagnostic use and relevant certificates need to be attached.

18. Comprehensive warranty for three years that include replacement assurance on all hardware and software components of the equipment should be included in the quoted price. Post-warranty CMC/AMC should also be quoted.

10. Fluorescence In-situ Hybridization Work Station:

1. A brand new unit is required; no used equipment or accessories, listed below, are acceptable.
2. Has the capability to meet the demands of fluorescent in-situ hybridization analysis.
3. User control of selecting area of interest in tissue.
4. User control of scanned results.
5. User control of report generation.
6. Software that provides a standardized mode of analysis and result reporting.
7. Automate FISH analysis for all probes hybridized from paraffin sections.
8. Software tissue matching (scan and match a specific area from one slide to another).
9. Automated FISH analysis of all probes from bone marrow and peripheral blood samples.
10. Automated FISH analysis for urine specimens.
11. Software application with FDA clearance for ALK.
12. Review and analysis platform.
13. Software that integrates simultaneous operations of all components and performs cell and signal detection with a user friendly interface as well as an expanding platform for future applications.
14. Open system that allows the user to add future applications without cost.
15. Viewing monitor.

11. **Automated DNA RNA extraction system and Real Time PCR system with CE, USFDA & IVD certification** :

(A) **Automated DNA RNA Extraction System**
1. Configuration – Bench top instrument with built in control unit and touch screen.
2. Samples number 1 to 24 Isolations per run
3. Mixed Sample Batching ranging Volumes 200 uL to 4000 uL
4. Elution Volume 50 to 200uL
5. Run time Dependent on protocol. 70 minutes for 24 samples, <30 minutes for 8 samples —fast protocols
6. Start-up time <5 minutes
7. Regulatory Label For in vitro diagnostic use. CE, USFDA and IVD certified
8. Compliant with IVD directive 98/79/EC
9. Isolation principle Magnetic glass particle technology
10. Features One transfer head with 8 pipetting channels, Three parallel processing stations, Cooling station for elutes, On-board barcode scanning for inventory & sample tracking, UV light, Primary sample tube handling, Post elution handling.
11. Audit trail, Process monitoring, User guidance
12. Data export *.xml, sample input file in csv format (*.txt)
13. Interfaces USB, LAN 10/100/1000 Base T, LAN 10/100 Base
14. Should be compatible with Connectivity LIS
15. Bidirectional data sharing, remote
17. Reagent Design Pre-filled, ready-to-use
18. Unopened kit storage +15 to +25°C (ambient)
19. Nucleic acids Total nucleic acids including DNA, viral NA, total RNA
20. Supported sample types - Whole blood, plasma, serum, fresh-frozen tissue, cultured cells, urine, swabs, sputum, CSF, BAL, stool
21. Protocols Preloaded and pre-optimized for specific sample types
22. Traceability 21CFR part 11 (subsection B)

B) **Real Time PCR System**
1. The system should be USFDA and CE-IVD approved for screening and detection of HPV 16 and HPV 18 genotype along with detection of 14 high-risk human papillomavirus types (31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68) in a single analysis.

2. The system should be fully automated for sample preparation/extraction combined with automated amplification and detection by Real time PCR technology.

3. The system should be able to screen at least 180 samples per day (8 working hour).

4. The system should be peltier based 96 well real-time PCR designed for both in-vitro diagnostic (CE-IVD) and open applications.

5. System should offer at least 5 excitation and 5 emission filters with fast amplification and fixed optics for detection of SYBR, FAM, HEX, VIC, JOE, TAMRA, etc.

6. Licensed and authorized Real-time PCR platform should be supplied along with the licensed software for HRM, Simple probes, Taqman Chemistry, Hybridization probes

7. The system should offer clinically validated HPV assay which can be used as a primary screening test without PAP cytology for Cervical Cancer screening.

8. The system should have multiple inbuilt features to prevent/minimize contamination like U.V light, UNG enzyme, CORE tip technology etc. The system shall have effective enzymatic contamination control (i.e. uracil-N-glycosylase) to allow the flexibility for the sample processing instrument and the real-time PCR analyzer to be operated either in one room or separate rooms

9. The instrument shall perform automated sample extraction and PCR reagent setup without any user intervention.

10. The instrument shall incorporate the total aspirate and dispense monitoring mechanism to monitor every liquid handling step to detect clogs and ensure liquid volume is accurately pipetted every time.

11. The system should offer Human Papillomavirus (HPV) detection and simultaneous genotyping assay. The assay should also incorporate an internal control to monitor the entire process from fully automated extraction to result interpretation.

12. The system should be capable of processing multiple specimen types directly from liquid-based cytology (LBC) vials.

13. System should accommodate the addition of laboratory-developed protocols to the existing test menu. The system should have a well-defined pre-analytical workflow and automate result interpretation

14. The system should offer US-FDA approved common assays like KRAS, BRAF and EGFR mutation tests along with HPV.

15. The system should offer approved microbiology assays for CT/NG, MRSA/SA, HSV1/HSV2 and C.difficle.

16. The company should be able to supply the reagents for the essential experiment in open channel.
17. Should come with the latest version of compatible Desktop/Laptop and compatible UPS with 1 Hr Backup.

**Accessories required:**
- Biosafety cabinet
- -20degree deep freezer
- -80 degree deep freezer
- Refrigerator
- Refrigerated microcentrifuge
- Micropipettes
- Vortexer
- Micro centrifuge
- Dry heating block
- Laminar air flow
- Nano drop