

**TENDER FORM
FOR SUPPLY OF
SCIENTIFIC/LABORATORY INSTRUMENTS & ILLUMINA KITS-REAGENTS
AT DIFFERENT COLLEGES / UNITS / RESEARCH STATIONS /
DEPARTMENTS OF
ANAND AGRICULTURAL UNIVERSITY, ANAND**

Last date for online commercial bid submission
26-03-2018 before 4:00 pm

Last date for physical submission of technical bid
26-03-2018 before 4:00 pm

Date of Tender Opening (Technical Bid): **26-03-2018**



**DEPARTMENT OF AGRICULTURAL BIOTECHNOLOGY
ANAND AGRICULTURAL UNIVERSITY
ANAND – 388 110 (GUJARAT)F
PHONE: 02692 261134
E-MAIL: biotech.aau@gmail.com**

➤ **Name of vendor / supplier / firm:**

➤ **Complete Postal address :**

➤ **Telephone Number :**

➤ **Fax Number :**

➤ **E-mail address :**

➤ **Details of the Tender Fee :**

- DD number :
- Amount :
- Date :

➤ **Details of EMD:**

- DD number:
- Amount:
- Date:

➤ **Sales Tax No.:**

➤ **Registration No.:**

➤ **Any other details:**

We agree to abide by the terms and conditions of supply mentioned in this tender document.

**Signature of Tenderer
(with stamp, Name & Designation)**

On behalf of The Director of Research, Anand Agricultural University, Anand, The Unit Officer, Department of Agricultural Biotechnology, AAU, Anand invite tender from Manufacturer or Authorized Distributor/Dealer through e-procurement portal for the purchase of following Scientific/Laboratory Instruments-Equipment and Illumina Kits-Reagents with given specifications, terms and conditions.

Sr. No.	Name of the Instrument	Specifications	EMD (in Rs. Lakh)																																																																																							
PART-I: SCIENTIFIC/LABORATORY INSTRUMENTS - EQUIPMENT																																																																																										
A. Department of Gynecology, College of VS & AH, AAU, Anand. .																																																																																										
1.	Small Volume Spectrophotometer	<table><tr><th>Sr. No.</th><th colspan="2">Details of Technical Specifications</th></tr><tr><td>1</td><td>Sensitivity</td><td>2 ng/μL (dsDNA)</td></tr><tr><td>2</td><td>Uniformity</td><td>< 5% CV</td></tr><tr><td>3</td><td>16-well slide</td><td>Compatible with 8 or 16 channel pipettors</td></tr><tr><td>4</td><td>Detection modes</td><td>Absorbance</td></tr><tr><td>5</td><td>Applications</td><td>DNA, RNA, Protein, ELISA and other spectrophotometric applications</td></tr><tr><td>6</td><td>Read methods</td><td>Endpoint, kinetic spectral & kinetic spectrum</td></tr><tr><td>7</td><td>Microplate types</td><td>96 to 384 well plates</td></tr><tr><td>8</td><td>Minimum Volume capacity</td><td>2 micro liter (Must)</td></tr><tr><td>9</td><td>Cuvette</td><td>Capable of analysis using cuvette</td></tr><tr><td>10</td><td>Temperature control</td><td>Incubation to 40°C with Condensation Control + 0.2°C at 37°C</td></tr><tr><td>11</td><td>Software</td><td>Data Analysis Software</td></tr><tr><td></td><td>Absorbance</td><td></td></tr><tr><td>12</td><td>Light source</td><td>Xenon flash</td></tr><tr><td>13</td><td>Detector</td><td>Photodiode</td></tr><tr><td>14</td><td>Wavelength selection</td><td>Monochromator</td></tr><tr><td>15</td><td>Wavelength range</td><td>200 - 999 nm, selectable in 1 nm increments</td></tr><tr><td>16</td><td>Monochromator bandwidth</td><td>< 2.5 nm</td></tr><tr><td>17</td><td>Dynamic read out range</td><td>0 - 3.0 linear OD</td></tr><tr><td>18</td><td>Resolution</td><td>0.001 OD</td></tr><tr><td>19</td><td>Monochromator wavelength accuracy</td><td>± 2 nm (1%)</td></tr><tr><td>20</td><td>Monochromator wavelength repeatability</td><td>± 0.2 nm</td></tr><tr><td>21</td><td>OD accuracy</td><td>0 to 2.0 OD ± 1% ± 0.010 2.0 to 2.5 OD ± 3% ± 0.010</td></tr><tr><td>22</td><td>OD linearity</td><td>0 to 2.0 OD ± 1% ± 0.010 2.0 to 2.5 OD ± 3% ± 0.010</td></tr><tr><td>23</td><td>OD repeatability</td><td>0 to 2.0 OD ± 1% ± 0.005 2.0 to 2.5 OD ± 3% ± 0.005</td></tr><tr><td>24</td><td>Stray light</td><td>0.03% at 230 nm</td></tr><tr><td colspan="3">Physical properties</td></tr><tr><td>25</td><td>Power</td><td>220-240 Volts AC. 50/60 Hz</td></tr><tr><td>26</td><td>Shaking</td><td>Linear</td></tr></table>	Sr. No.	Details of Technical Specifications		1	Sensitivity	2 ng/μL (dsDNA)	2	Uniformity	< 5% CV	3	16-well slide	Compatible with 8 or 16 channel pipettors	4	Detection modes	Absorbance	5	Applications	DNA, RNA, Protein, ELISA and other spectrophotometric applications	6	Read methods	Endpoint, kinetic spectral & kinetic spectrum	7	Microplate types	96 to 384 well plates	8	Minimum Volume capacity	2 micro liter (Must)	9	Cuvette	Capable of analysis using cuvette	10	Temperature control	Incubation to 40°C with Condensation Control + 0.2°C at 37°C	11	Software	Data Analysis Software		Absorbance		12	Light source	Xenon flash	13	Detector	Photodiode	14	Wavelength selection	Monochromator	15	Wavelength range	200 - 999 nm, selectable in 1 nm increments	16	Monochromator bandwidth	< 2.5 nm	17	Dynamic read out range	0 - 3.0 linear OD	18	Resolution	0.001 OD	19	Monochromator wavelength accuracy	± 2 nm (1%)	20	Monochromator wavelength repeatability	± 0.2 nm	21	OD accuracy	0 to 2.0 OD ± 1% ± 0.010 2.0 to 2.5 OD ± 3% ± 0.010	22	OD linearity	0 to 2.0 OD ± 1% ± 0.010 2.0 to 2.5 OD ± 3% ± 0.010	23	OD repeatability	0 to 2.0 OD ± 1% ± 0.005 2.0 to 2.5 OD ± 3% ± 0.005	24	Stray light	0.03% at 230 nm	Physical properties			25	Power	220-240 Volts AC. 50/60 Hz	26	Shaking	Linear	0.28
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B. College of Food Processing Technology & Bio-Energy, AAU, Anand.			
2	Packaging system for filling, capping and labeling of fruit juices	<p>It should consist of following and quote a single rate for all A) to C) the set of equipment</p> <p>A) Four Head Volumetric Filling Machine- 01 No. Automatic volumetric liquid bottle filling machine suitable for filling of different fruit juices and beverages ranging from 100 ml to 1000 ml. It should work on volumetric principle with diving nozzles. The unit should be compact, versatile and enclosed in stainless steel elegantly matt finish body, with S.S. slat conveyor, reciprocating nozzle with self-centering devices and S.S. syringe. The capacity of the machine should be around 20 bottles per minute. The speed of the machine and conveyor can be synchronized with variable A/C frequency drive. The machine should have a filling accuracy of $\pm 1\%$ in single dose. There should be appropriate drain tray around the machine platform, pneumatic bottle stopping arrangement, and no bottle no filling system. A set of 500 bottles each for different sizes (200 ml, 500 ml and 1000 ml) along with caps should be provided for demonstration and testing of the machine.</p> <p>B) Single head Screw Capping Machine -01 No. Automatic screw capping machine, self-supported on stainless steel leg with adjustable height system. The machine should be precision built on sturdy welded MS frame completely enclose in stainless steel sheet and doors should be provided to facilitate the servicing of machine. It should be suitable for bottle diameter ranging from 25 to 90 mm. All moving parts should be guarded/enclosed and speed variation can be provided with suitable AC drive. It should have star wheel rotation Geneva system and vibratory cap feeder system. It should have capacity of 1000 to 1500 bottles per hour.</p> <p>C) Automatic sticker labelling machine--01 No. Automatic vertical sticker labeling machine should be able to full/partial wrap around labeling on different size of round containers. It should be equipped with roller spacing device resulting in a simple operation with "No change parts required". At the labeling point, an electronics product sensor should sense container & releases a label from self-adhesive label roll. The sensed round container should moves on conveyor and picks the released label and the labeled container should moves further through a rubber pressing belt & stationary rubber pad which ensures neat & perfect fixing of label. A roll of adhesive label should be provided for demonstration</p> <p>The system should be complete in all respect with all accessories, fittings and inclusive of installation, testing and commissioning with training.</p>	0.45
3	Skid Mounted Pasteurizer with Homogenizer	<p>The capacity for skid mounted pasteurizer with homogenizer (A plus B) must be 100-150 Litre per hour (LPH). Skid mounted unit must consist of following units</p> <p>Milk Pasteurizer: Plate pack (PHE) – The supporting frame for the plate heat exchanger must be self-supporting design made up with durable good quality materials. The frame, pressure and interconnecting plates may be made of S.S. clad with S.S. 304 sheet and will of multi bolt tightening design. The pasteurizer must have four sections i.e. heating, regeneration II, Regeneration I and chilling. P.H.E. plates of S.S. 304 quality with holding section as in S.S</p>	0.25

		<p>tube of SS 304 material. The milk pasteurizer must be supplied with flow diversion valve of rated capacity with the provision of pipeline to divert the unpasteurized milk to raw milk balance tank. Balance Tank – Should be of Capacity 200 Litres. The cylindrical designed tank may be fabricated from 2 mm thick S.S. 304 quality material. The tank may be of welded construction. All the welds must be ground smooth and shall be subject to DP test and all S.S. surfaces must be polished to sanitary standards. All the corners must be well radiused. The tank must be complete with following attachment–</p> <p>i) 3 Nos. legs fitted with S.S. ball feet capable of vertical adjustment.</p> <p>ii) 1 No. S.S. milk outlet.</p> <p>iii) 1 No. S.S. milk Inlet.</p> <p>S.S. pipes and fittings – One lot of SS pipes and fittings of 25 mm with 3-way valve, flow regulating valve to interconnect balance tank, pump and P.H.E, hot water flow, chilled water flow to PHE and which is necessary for operation of pasteurizer.</p> <p>Electrical Hot Water Generator – Hot water generator suitable for 100 Liters capacity Pasteurizer. With required hot water pump and pipes and fitting must be provided.</p> <p>Electrical Hot Water Generator 6 KW with Hot Water Tank Cap - 20 Litres and 1/2 HP Hot Water Pump.</p> <p>Cooling unit – Must be suitable to cool milk from 350 – 40C (with refrigeration unit having 1.5 T capacity plant) provided with suitable sealed compressor, air flow condensing unit and refrigeration controls and valves, expansion valve the suitable length of copper coil 5/8” is fitted in the tank which is insulated and covered from top with wooden covers. Chilled water pump of 1/2 HP along with M.S. piping and valve strainer must be provided with tank.</p> <p>Skid Mounted SS Control Panel for manual operation - The panel must consist of temperature indicator, temperature indicator cum controller, buzzer, push button starter etc. and other required indicators and controllers required to run complete plant.</p> <p>All the motors/pump necessary for skid mounted pasteurizer with homogenizer must be of three phase type with high energy efficient rating and standard company make.</p> <p>Homogenizer of capacity 100-150 LPH. The homogenizer must be of two stage type. With proper and necessary pressure applying valve with pressure gauge. The homogenizer is equipped with provision for inlet and outlet of SS material. The homogenizing valve piston may be equipped with necessary oiling mechanism necessary to run the homogenizer.</p>	
4	Pulper and Finisher (Multi fruit Juicing System)	<p>The compact juicer should be completely made up of stainless steel and work on whole fruit extraction principle, able to juice various type of citrus fruits (grape fruit, orange, lemon, lime, pomegranate etc.) in continuous manner and should have following features:</p> <p>Throughput: 20 fruits per minute</p> <p>Fruit hopper capacity: above 15 kg</p> <p>Processing speed: at least 75 litre/h</p> <p>Reservoir capacity: above 10 litre</p> <p>Power: 220 V/ 50 Hz</p> <p>Waste container: above 15 kg</p> <p>The juicing system should be completely enclosed with safety interlock switches etc. The system should be complete with different strainer tubes for various fruits to vary pulp level, mobile cart with dispenser shelf, standard hopper etc.</p>	0.05

5	Ultrasonic washer	<p>The quote rate should include total cost of A+B+C. It should consist of following three major systems</p> <p>A) Ultrasonic cleaner It should be able to clean fruits and vegetables and should have following features</p> <ul style="list-style-type: none"> • Capacity: upto 90 litre • Frequency: 33 K Hz \pm 3 KHz • Digital Timer: 0 – 90 minutes • Digital Temperature Controller: up to 60 °C • Material of construction S.S 304 <p>The micro controller base digital timer with MOSFET, automatic frequency tuning for maximum output and low transducer losses, modular generator for easier servicing and rugged and easy to clean stainless steel housing of SS 304.</p> <p>Float Switch protection: Ultrasonic Cleaner will start when tank solution will fill up to the marking level. This is for protection of crystals.</p> <p>IQ – OQ – PQ Document and Installation with Aluminium Test</p> <p>B) Circulating water bath It should have following features</p> <ul style="list-style-type: none"> • S immersion circulator bath with working temperature range of 5 °C to 150°C (should be provided with chilling system) • Digital display for temperature and pump speed in the form of rpm. • Double walled SS bath with 10 L and above. • Flat cover and built in cooling coil for temperature control beyond ambient temperature. • Device should have separate working PT 100 and safety PT 1000 • Pressure and suction vario pump with adjustable speed for flow rate control. • Flow rate should be 18 L/min or more. <p>C) Ozonation system The system should be able to generate ozone to treat fresh fruits and vegetables. Other specifications include: Feed Gas : Pure Dry Oxygen MOC of Ozone Cell : SS 316 Process: Corona discharge Ozone production rate: 20 g per hour It should be complete with all accessories including oxygen gas sensor, oxygen concentrators, polyurethane oxygen tubing, inbuilt flow meters, controllers, indicators etc.</p> <p>The individual systems mentioned as above should be complete in itself including all its accessories. A laptop official windows 10 system and core i3 processor, laser printer with scanner, should be provided with it.</p>	0.25
6	Dough rounder	<p>The conical rounder is designed for intermediate and final round moulding of dough & should have following specifications:</p> <ul style="list-style-type: none"> • Machine capacity (pcs/h) approximately 2800 • Moulding range (g) from 100g – 2500 g with different spirals. • Spiral length (mm) 3750 • Installed power with air blowing device (kW) 3.15 	0.05
7	Inkjet Printing Equipment	<p>It should be suitable for printing batch number / price / manufacturing date / expiry date etc. automatically on the bottle/caps</p> <ul style="list-style-type: none"> • Up to four lines printing with variety of print formats. • The machine PLC controlled and can be interfaced with a PC. • Reputed international brand 	0.05

8	Food printer (3 D)	<p>The printer should be able to process different food ingredient at different temperatures. It can have following specifications: Position accuracy: XY Axis 0.1/100 mm Z axis 0.01/100 mm E axis 1/100 mm Nozzle size 0.4 mm -1.55 mm Printing speed 20-30 mm/s Magnification of Nozzle movement speed: 50-160% The system should be complete with all accessories and part and should work at 220 V AC current. Onsite warranty: Comprehensive 3 years Complete documentation (DQ/IQ/PQ etc.) and all cables/ chords, and minor accessories for a working configuration should be provided.</p>	0.10
9	Ultrasonic juice processing system	<p>The system should be able to process fruit juice in continuous manner. It should be made up of stainless steel with vessel temperature sensor, convertor, sonotrode for generation of ultrasonic vibration with various ranges and power, with process inlet and outlet valve with agitation system controlled with VFD ranging from 40 to 400 rpm. The system should be able to with stand a maximum pressure of 5 bar. The system should be available with suitable flow control devices to maintain the flow within the system. The system should have a processing capacity of 100 litre per hour and a vessel size of at least 10 litres.</p>	0.30
10	Nitrogen Evaporation System	<p>The evaporation system with an automated high speed, low volume sample concentrator should have following features: Up to 50 samples can be evaporated Should be able to evaporate acidic samples It should consume minimum gas Separate controlling of each manifold Proven compliance with EPA methods No of racks: Twelve Sample volume from 1.0 ml to 30 ml Controlled water bath adjustable from ambient to 90 °C with temperature accuracy ± 1 °C. Built-in nitrogen regulator Hood space and tube balancing should be included Swap rack facility to change between different tube sizes Timer range: 1 to 99 minutes It should provide even temperature of throughout water bath and gas flow over a set time period The system should include all other required accessories. The unit should be complete in all respect. Onsite warranty: Comprehensive 3 years</p>	0.30
11	FFS Machine	<p>Form Fill Seal (FFS) packaging machine Microprocessor controller based two head linear weigher vertical form, fill & seal to pack machine for various food products like namkeens, extruded snacks, and other granular materials. The system should be suitable for all types of packaging films. It should have following specifications: No of Heads: Two Range of package: 100 g to 1000 g Range of production capacity: 12 to 20 packages per minute (depending upon fill weight of product, it's flow properties & bulk density of product) Type of sealing: central Type of pouches/sachets: pillow type</p>	0.25

		<p>Pouch size: Width (100 mm to 180 mm) and length (100 mm to 275 mm) Accuracy: $\pm 1\%$- 2% Material contact parts: SS304</p> <p>A laptop official windows 10 system and core i3 processor, laser printer with scanner, should be provided with it. The system should be complete with all set of spares or change parts like collar, pneumatic coding device, cutting blades, at least 3 chutes for different size packaging etc. with packaging roll of about 200 kg of packaging rolls (having thickness “12 micron PET + 40 micron LD laminates” of different pouch size, with eye mark at appropriate repeat length as per requirement for testing of various size package sizes 100 g, 250 g, 500g and 1000 g) in all respect and inclusive of installation, testing and commissioning with training.</p>	
12	Spectrophotometer	<p>The UV visible spectrophotometer should have following specifications: - Source: Tungsten-Halogen lamp Deuterium lamp Built in light source auto position adjustment Monochromator: Czerny-Turner Detectors: 2 silicon photodiodes Optical design: Double beam Czerny-Turner monochromator UV-Vis Wavelength resolution: 0.1 nm (190-1100 nm) Wavelength Range: 190–1100 nm Wavelength Display: 0.1 nm increment Wavelength setting: 0.2 nm increment (1 nm increments when setting scanning range) Wavelength Accuracy: ± 0.05 nm Spectral Bandwidth: < 3 nm Wavelength Repeatability: ± 0.1 nm Photometric Accuracy: ± 0.005 Abs at 1.0 Abs Photometric Range: Absorbance: -4 to 4 Abs Transmission: 0 to 400% Photometric Repeatability: ± 0.002 Abs at 1.0 Abs Baseline flatness: 200 to 1100 nm Baseline corrected: ± 0.003 Abs Spectral bandwidth: 1 nm (190-100 nm) Display: Touch Screen User Interface Sample holder: 1 cm Single Cell Holder as well 50 μL microcells holder. The cell holders as well as the modules can be interchanged quickly and securely Measuring modes: Equipped with a variety of measurement modes and numerous functions as standard in a stand-alone instrument such as: Photometric Mode, Spectrum Mode, Quantitation Mode, Kinetics Mode, Time-Scan Mode, Multi-Component Quantitation Mode, Biomethod Mode (provided as standard) Accessories: USB cable, and power cord, USB memory, Softwares, Work Station PC, 19“ TFT-LED Monitor with laser Printer, 1 KVA Online UPS, PC Compatibility-External Control possible via USB, Set of quartz cuvette for sample analysis – compatible with the holders,; Power Requirement: 100 to 120 V; 200 to 240 V; 50/60 Hz; automatic changeover ports.</p>	0.15

		Onsite warranty: Comprehensive 3 years Complete documentation (DQ/IQ/PQ etc.) and all cables/ chords, accessories for a working configuration Single price quotation for UV visible spectrophotometer along with above mentioned accessories is invited	
13	Microencapsulator	<p>The instrument should be capable of encapsulating different food bioactive compounds under open working conditions. It should be capable of providing vibrational frequency in capsule/bead formation. Parts in touch with external medium should be autoclavable.</p> <p>The instrument should have following specification.</p> <p>Control unit Capable of regulation of vibration frequency, electrostatic dispersion, heating, air pressure, liquid flow rate etc.</p> <p>Vibration Frequency It should be capable of providing vibrational frequency in capsule/bead formation. Vibration frequency upto 5000Hz shall be provided.</p> <p>Set of single nozzles for bead formation Stainless steel nozzles with diameter ranging from 0.1 to 1.0 mm (approx. 8-10 nos.) shall be provided.</p> <p>Set of concentric nozzles for capsule formation Stainless steel nozzles with diameter ranging from 0.1 to 1.0 mm (approx. 5-7 nos.) shall be provided</p> <p>Nozzle heating Integrated heating of the bead production unit up to 70 °C shall be possible</p> <p>Syringe pump System should be supplied with syringe pump</p> <p>Pressure bottle 500 ml glass volume bottles with maximum working pressure up to 1.5 bar. The flow rate from 70 ml/h to about 2000 ml/h shall be maintained.</p> <p>Reproducibility in bead formation In the range of 0.15 mm to 2.0 mm the bead size uniformity (approximately 5 % relative standard deviation of bead size using pure alginate)</p> <p>Process control Visual monitoring in the light of a stroboscope lamp shall be possible to control operational parameters.</p> <p>Cell viability Bead formation should be at low shear for high cell survival.</p> <p>Batch size The batch size of 5 ml to 1000 ml shall be provided.</p> <p>Droplet size Should be capable to form size from 0.15 to 2.0 mm To maintain the above mentioned droplet size, electro static dispersion/other effective alternative technique should be used.</p> <p>Electrode Tension The variable electrode tension upto 2000 V shall be available.</p> <p>High bead production The instrument should be capable of formation of minimum 6000 beads per second depending on encapsulation conditions and polymer mixture.</p> <p>Parts in contact with medium Shall be of stainless steel, glass, silicone, PTFE, FEP etc. Parts in touch medium should be autoclavable. The parts should be safe for production pharmaceutical and</p>	0.75

		<p>nutraceutical products.</p> <p>Compact in Design The instrument should be sleek in design with low weight.</p> <p>Working Conditions Should capable to operate from 5 to 40 °C</p> <p>Essential Accessories All essential accessories required to fulfil above specification shall specifically mentioned and cost of them shall be included. The system should be supplied with a latest configuration of note book at least with a processor of Intel Core i7 and 8 GB RAM.</p> <p>Optional Accessories: 1000 ml reaction vessel and magnetic stirrer</p> <p>The system to be supported with on-site operational training and in-house application training; It should have onsite comprehensive warranty of 3 years.</p> <p>Single price quote in Indian rupees for above with accessories as specified is invited.</p>	
14	Automated Microbial Identification System	<p>Automated Identification System for rapid automated incubation and identification of aerobic bacteria plus the rapid identification of anaerobes, yeast, and filamentous fungi with following accessories:</p> <ul style="list-style-type: none"> • The System shall include an Identification System, MicroStation and computer configured with all necessary Software with database. • System shall carry out Data Collection, Retrospect Data Management. • It shall encompass the electronic User Guide, incubator, reader, softwares, computer system, printer, pipettor, turbidimeter. • System should be based on utilization pattern of different carbon sources • System should have a large database covering at least 2900 species • Data Management Software should be provided for an unprecedented ability for the trending and tracking of microbial identification. It should have features for Cluster analysis (Dendrogram study) and creation of user database for additional microbial species. • System should also be supplied with microplates and related consumables for identification of aerobic gram negative and gram positive bacteria <p>The system to be supported with on-site operational training and in-house application training; It should have onsite comprehensive warranty of 3 years.</p> <p>Single price quote in Indian rupees for above with accessories as specified is invited.</p>	0.50
15	Semi-Automated Microbial Identification System	<p>For rapid identification of bacteria, yeast, and filamentous fungi. The Semi-Automated Identification Systems has the capacity to read all types of MicroPlate configurations along with Data Analysis Softwares having reader control and data analysis software for MicroStation Reader and database softwares with following accessories:</p> <ul style="list-style-type: none"> • The database software includes appropriate Turbidity Standards for identification of aerobic and anaerobes bacteria, yeast, and filamentous fungi. • It shall encompass the electronic User Guide, incubator, reader, softwares, computer system, printer, pipettor, 	0.30

		<p>turbidimeter.</p> <ul style="list-style-type: none"> • System should be based on utilization pattern of different carbon sources • System should have a large database covering at least 2900 species • Data Management Software should be provided for an unprecedented ability for the trending and tracking of microbial identification. It should have features for Cluster analysis (Dendrogram study) and creation of user database for additional microbial species. • System should also be supplied with microplates and related consumables for identification of aerobic gram negative and gram-positive bacteria <p>The system to be supported with on-site operational training and in-house application training; It should have onsite comprehensive warranty of 3 years.</p>	
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C. Department of Animal Genetics and Breeding, College of VS & AH, AAU, Anand.

7.	Illumina Kits – Reagents	Sr. No.	Cat. No.	Name of Kits	0.50
		1	FC-140-1003	Nextera Rapid Capture Exome (8 rxn x 12 plex)	
		2	FC-140-1083	Nextera Rapid Capture Exome (8 rxn x 3 plex)	
		3	FC-140-1086	Nextera Rapid Capture Exome (8 rxn x 6 plex)	
		4	FC-140-1089	Nextera Rapid Capture Exome (8 rxn x 9 plex)	
		5	FC-140-1004	Nextera Rapid Capture Expanded Exome (2 rxn x 12 plex)	
		6	FC-140-1005	Nextera Rapid Capture Expanded Exome (4 rxn x 12 plex)	
		7	FC-140-1006	Nextera Rapid Capture Expanded Exome (8 rxn x 12 plex)	
		8	FC-150-1001	TruSeq Exome Library Prep Kit (24 samples)	
		9	FC-150-1002	TruSeq Exome Library Prep Kit (48 samples)	
		10	FC-150-1003	TruSeq Exome Library Prep Kit (72 samples)	
		11	FC-150-1004	TruSeq Exome Library Prep Kit (96 samples)	
		12	FC-144-1000	TruSeq Rapid Exome Library Prep Kit (8 samples)	
		13	FC-144-1001	TruSeq Rapid Exome Library Prep Kit (24 samples)	
		14	FC-144-1002	TruSeq Rapid Exome Library Prep Kit (48 samples)	
		15	FC-144-1003	TruSeq Rapid Exome Library Prep Kit (72 samples)	
		16	FC-144-1004	TruSeq Rapid Exome Library Prep Kit (96 samples)	
		17	FC-140-1007	Nextera Rapid Capture Custom Enrichment Kit (48 samples)	
		18	FC-140-1008	Nextera Rapid Capture Custom Enrichment Kit (96 samples)	
		19	FC-140-1009	Nextera Rapid Capture Custom Enrichment Kit (288 samples)	
		20	FC-130-1006	TruSeq Custom Amplicon Filter Plate (1 plate)	
		21	FC-130-1007	TruSeq Index Plate Fixture and Collar Kit (2 each)	
		22	FC-121-9999	TruSeq FFPE DNA Library Prep QC Kit (24 samples)	
		23	FC-134-2001	TruSeq Custom Amplicon Low Input Kit (96 samples)	
		24	FC-134-2002	TruSeq Custom Amplicon Low Input Kit (16 samples)	
		25	IP-202-1012	TruSeq ChIP Library Preparation Kit - Set A (12 indexes, 48 rxns)	
		26	IP-202-1024	TruSeq ChIP Sample Preparation Kit - Set B (12 indexes, 48 rxns)	
		27	EGMK81312	TruSeq DNA Methylation Kit (12 reactions)	
		28	EGMK91324	TruSeq DNA Methylation Kit (24 reactions)	
		29	EGMK91396	TruSeq DNA Methylation Kit (96 reactions)	
		30	EGIDX81312	TruSeq DNA Methylation Index PCR Primers (10 reactions, 12 indexes)	
		31	RS-122-2201	TruSeq Stranded Total RNA Library Prep Kit with Ribo-Zero Human/Mouse/Rat Set A (48 samples, 12 indexes)	
32	RS-122-2202	TruSeq Stranded Total RNA Library Prep Kit with Ribo-Zero Human/Mouse/Rat Set B (48 samples, 12 indexes)			

		33	RS-122-2203	TruSeq Stranded Total RNA Library Prep Kit High Throughput (96 samples, 96 indexes)
		34	RS-122-2301	TruSeq Stranded Total RNA Library Prep Kit with Ribo-Zero Gold Set A (48 samples, 12 indexes)
		35	RS-122-2302	TruSeq Stranded Total RNA Library Prep Kit with Ribo-Zero Gold Set B (48 samples, 12 indexes)
		36	RS-122-2303	TruSeq Stranded Total RNA Library Prep Kit with Ribo-Zero Gold High Throughput (96 samples, 96 indexes)
		37	RS-122-2501	TruSeq Stranded Total RNA Library Prep Kit with Ribo-Zero Globin Set A (48 samples, 12 indexes)
		38	RS-122-2502	TruSeq Stranded Total RNA Library Prep Kit with Ribo-Zero Globin Set B (48 samples, 12 indexes)
		39	RS-122-2503	TruSeq Stranded Total RNA Library Prep Kit with Ribo-Zero Globin High Throughput (96 samples, 96 indexes)
		40	RS-122-2401	TruSeq Stranded Total RNA Kit with Ribo-Zero Plant, Set A (48 samples, 12 indexes)
		41	RS-122-2402	TruSeq Stranded Total RNA Kit with Ribo-Zero Plant, Set B (48 samples, 12 indexes)
		42	RS-122-2403	TruSeq Stranded Total RNA Kit with Ribo-Zero Plant, High Throughput (96 samples, 96 indexes)
		43	RPHMR12126	TruSeq Ribo Profile for Mammalian (12 reactions, 12 indexes)
		44	MS-103-1002	MiSeq Reagent Micro Kit v2 (300-cycles)
		45	MS-103-1001	MiSeq Reagent Nano Kit v2 (300-cycles)
		46	MS-103-1003	MiSeq Reagent Nano Kit v2 (500-cycles)

: Terms & Conditions:

- i. E-tendering procedure of two bid system i.e. financial and technical should be followed for quoting the rates / bidding for items.
- ii. This tender document / form may be procured / downloaded from (n)Code Solutions website www.nprocure.com as well as from university 's website www.aau.in/tenders from **06-03-2018 upto 26-03-2018, 03:00 P.M.**
- iii. The financial bid / quotation rates / bidding rates for these instruments / equipment consumable item(s) has/have to be uploaded / submitted electronically through [<www.nprocure.com>](http://www.nprocure.com) only **on or before 26-03-2018 4:00 P.M.** Vendors should not mention quoted price anywhere in technical bid.
- iv. **The price quoted should be inclusive of all kinds of taxes, transportation, installation and commissioning at respective locations of the university and should be valid upto 31st December, 2018.**
- v. **It mandatory to mention HSN (Harmonized System of Nomenclature) code of respective item in technical bid.**
- vi. In case of foreign manufactured equipment / goods the **CIP, Anand** rates be quoted in foreign currency which will be paid by Demand Draft of respective foreign currency. The rate quoted should be inclusive of other local charges like agency commission, clearing charges, transportation from port, insurance etc.
- vii. If the rates are quoted in foreign currency, for conversion in INR exchange rate available on RBI's website on the date of opening of commercial bid of the tender shall be considered for comparison.
- viii. No change, addition, alteration in the tender rates on omission / misunderstanding / mistake or any other reasons would be permitted.
- ix. The University is authorized for exemption in Custom Duty / Excise Duty and accordingly the custom duty exemption certificate, if applicable, will be provided by the University to successful bidder.
- x. The total cost must be inclusive of all intended accessories.
- xi. **The hard copy of the technical bid should be addressed to "The Unit Officer, Dept. of Agricultural Biotechnology, Anand Agricultural University, Anand – 388 110".**
- xii. **Technical bids for each item should be dispatched in separate envelopes alongwith all necessary documents and DD for Tender Fee and separate EMD for each item.**
- xiii. **The hard copy of the technical bid should reach this office latest by 26-03-2018 upto 04:00 P.M. in sealed cover superscripted "Technical Bid for _____" by Registered Post / Speed post only. The technical bid/documents sent through courier or any other mode will not be accepted.**
- xiv. **Tender Fee (Non-Refundable):** Tender fee is Rs. 1,500/- for all items except for item mentioned at sr. no. 15 i.e. Rheometer for which Tender fee is Rs. 2,500.00. Vendor quoting for multiple items of the tender may submit single DD of cumulative amount, but not exceeding Rs. 15,000/- and should be paid in the form of Demand Draft (DD) only, in the favour of "Anand Agricultural University Fund Account" payable at Anand.
- xv. **Earnest Money Deposit (EMD):** EMD amount should be paid item-wise separately as mentioned in the tender document. It may be paid in form of either DD or Pay Order or Bank Guarantee issued from any Nationalized Bank or banks mentioned in GR of Finance Department, GR No.: EMD/10/2016/328/DMO, Dated 01-05-2017 in the favour of "Anand Agricultural University Fund Account".

Note: The vendor/bidder quoting for multiple items of the tender ought to submit EMD amount separately for each item. Single DD/Pay Order/Bank Guarantee of cumulative amount will not be accepted.

- xvi. **DD of Tender Fee and DD/Pay Order/Bank Guarantee of EMD have to be scanned and uploaded online. The original documents of Tender Fee & EMD have to be submitted along-with the technical bid to "The Unit Officer, Dept. of Agricultural Biotechnology, Anand Agricultural University, Anand – 388 110".**
- xvii. Earnest Money Deposit (EMD) will be refunded to unsuccessful bidders after the deal is finalized. However, the same will be refunded to the successful bidder only after submitting required security deposit for respective items. If EMD is paid in form of Bank Guarantee, it will be refunded after six months only.
- xviii. **Bidder should give specification compliance statement point wise showing / highlighting items part no., serial no. as quoted in their quotation for comprehensive technical comparison. Proof of compliance should be mentioned point wise in the catalogue. Failing in compliance and proof of compliance may cause cancellation of the bid without any further notice.**
- xix. Valid Manufacturer's / Distributorship's / Dealership's certificate from the principle for the year 2017-18 must be submitted along with quotation.
- xx. Bidder should have a turnover of atleast 50% of the cost of the item for which vendor is bidding during any one of the last two years. The necessary documents related to turnover during last two years be submitted alongwith the technical bid.
- xxi. A copy of the supporting document like, Tin No., PAN No., etc. of the vendor should be enclosed with the quotation / tender.
- xxii. **Product quality certification issued by Quality Council of India (QCI), BIS or any other government approved body should be submitted alongwith the technical bid as preference for procurement may be given to such firm / company for respective items.**
- xxiii. For imported goods, product quality certificate issued by BIS under FMCS should be submitted. If certification is not provided by BIS then certification issued from internationally acclaimed agency shall be considered.
- xxiv. Those quotations will not be considered for financial bid opening which does not conform to given specifications for respective instrument / item and terms and conditions.
- xxv. The vendor should invariably sign the quotation, general terms and conditions and must be submitted in original.
- xxvi. Necessary items like UPS, Air Conditioner, Computer etc. of suitable capacity, if essentially required, for proper operation of the scientific instrument/equipment must be supplied by the vendor at no additional cost.
- xxvii. As far as possible the technical literature should be furnished along with the quotation.
- xxviii. If any query to the quotation is raised, a written reply must reach this department within specified period through letter / email or as suggested, else the quotation shall be treated as cancelled.
- xxix. All quotations and correspondences should be addressed by designation only and not by name.
- xxx. The supply should be made within the stipulated time as mentioned in the purchase order followed by installation.
- xxxi. The equipment should be installed by the service engineer of the vendor at our site free of cost and the working should be demonstrated including training.
- xxxii. No advance or part payment against the ordered goods will be made till the full order placed is satisfactorily executed.
- xxxiii. List of users of your product and their opinion may also be sent along with their phone number/(s).

- xxxiv. **Warranty:** The standard warranty should be provided for respective items. However, items where warranty period is mentioned in the specifications shall be considered as standard warranty period.
- xxxv. **Training:** Training shall be provided free of cost by the vendor for each instrument quoted, if so desired by the indenter.
- xxxvi. **Security Deposit:** The successful bidder has to deposit 5% of invoice value in the University fund account prior to issue of purchase order by the University/Concerned department/College. This money will remain deposited in University as security deposit till standard warranty period is over or till complete supply of goods in case of consumable items.
- xxxvii. The security deposit in favour of “Anand Agricultural University Fund Account” may be submitted in form of either DD or Pay Order or Bank Guarantee issued by Nationalized Bank or Banks mentioned in GR of Finance Department, GR No.: EMD/10/2016/328/DMO, Dated 01-05-2017
- xxxviii. Rights are reserved with the undersigned to vary number of units, accept the quotation fully or partially and shall not be bound to give reasons for rejecting the whole or part of the quotation.
- xxxix. Quotations/ tenders without Earnest Money Deposit (except from parties exempted for the purpose) for specific item will not be considered.
- xl. Losses/damage of the instrument in transits, if any, shall be at the risk of the vendor / supplier
- xli. If the demurrage charges occur due to delay in sending the document/air cargo receipt, the amount of the demurrage will be borne by the vendor / supplier.
- xl. All provisions as mentioned in the Gujarat State Purchase Policy – 2016, if admissible shall be made available to the vendors.
- xlii. The technical bid may be opened on **26-03-2018** (tentative) at 17:00 Hrs. for scrutiny followed by commercial bid opening either on the same date or any other next date of completion of technical scrutiny.
- xliii. In the event of the dispute regarding any matter related to acceptance or rejection of tender or consideration of tender for purchase order, decision of Director of Research or Dean Faculty of PG students of Anand Agricultural University, Anand – 388 110, Gujarat or person /persons authorized by him shall remain final.
- xliv. For all legal matter court jurisdiction shall be “Anand”, Gujarat.

Sd/-
Unit Officer
Department of Agricultural Biotechnology
Anand Agricultural University
Anand 388 110

Note: To be returned with the quotation duly sealed and signed by the vendor as acknowledgement of acceptance of the terms and conditions otherwise the quotation will be considered as disqualified.

Signature of Vendor
(Rubber Stamp, Address & Phone No.)

Place:
Date:

C H E C K L I S T

(Documents to be submitted physically in Technical Bid)

Sr. No.	Check List Documents	Remarks
1	Tender Fee in form of Demand Draft as applicable (Non-Refundable)	Mandatory
2	EMD amount in form of either Demand Draft / Pay Order / Bank Guarantee Item-wise as applicable (Refundable)	Mandatory
3	Signed & Stamped Tender Document	Mandatory
4	Copy of GST Registration	Mandatory
5	Firm / Company Registration attested copy	Mandatory
6	Authorization Letter from OEM	Mandatory
7	Technical specification point-wise compliance statement	Mandatory
8	Copy Permanent Account Number of the bidder firm.	Mandatory
9	Copy of TAN of the bidder firm.	Mandatory
10	Last two (2) financial year's Income Tax returns of the bidder firm.	Mandatory
11	An affidavit / declaration on non-judicial stamp paper of Rs.100/- duly attested by Notary Public	Mandatory
12	Product quality certificate issued by QCI / BIS etc.	Preferable
13	User List / Opinion of users for respective items	Preferable
14	Product catalogue / literature etc.	Preferable

(TO BE SUBMITTED PHYSICALLY)

AFFIDAVIT

(To be submitted **IN ORIGINAL** on Non-Judicial Stamp Paper of Rs. 100/- duly attested by First Class Magistrate/ Notary public)

I/We, _____, age _____ years residing at _____ in capacity of _____ M/s _____ hereby solemnly affirm that

1. All General Instructions, General Terms and Conditions, as well as Special Terms & Conditions laid down on all the pages of the Tender Form, have been read carefully and understood properly by me which are completely acceptable to me and I agree to abide by the same.
2. I/We have submitted following Certificates / Documents for T.E. as requires as per General Terms & Conditions as well as Special Terms & Conditions of the tender.

Sr. No.	Name of the Document
1	
2	
onwards	

3. All the Certificates / Permissions / Documents / Permits / Affidavit are valid and current as on date and have not been withdrawn / cancelled by the issuing authority.
4. It is clearly and distinctly understood by me that the tender is liable to be rejected if on scrutiny at any time, any of the required Certificates / Permissions / Documents / Permits / Affidavits is / are found to be invalid / wrong/ incorrect / misleading / fabricated / expired or having any defect.
5. I/We further undertake to produce on demand the original Certificates / Permissions / Documents / Permits for verification at any stage during the processing of the tender as well as at any time asked to produce.
6. I/We also understand that failure to produce the documents in "Prescribed Performa" (wherever applicable) as well as failure to give requisite information in the prescribed Proforma may result in to rejection of the tender.
7. My/Our firm has not been banned / debarred / black listed at least for three years (excluding the current financial year) by any Government Department / State Government / Government of India / Board / Corporation / Government Financial Institution in context to purchase procedure through tender.
8. I/We confirm that I/We have meticulously filled in, checked and verified the enclosed documents / certificates / permissions / permits / affidavits / information etc. from every aspect and the same are enclosed in order (i.e. in chronology) in which they are supposed to be enclosed Page numbers are given on each submitted document. Important information in each document is "highlighted" with the help of "marker pen" as required.
9. The above certificates/ documents are enclosed separately and not on the Proforma printed from tender document.

10. I/We say and submit that the Permanent Account Number (PAN) given by the Income Tax Department is _____, which is issued on the name of _____ [Kindly mention here either name of the Proprietor (in case of Proprietor Firm) or name of the tendering firm, whichever is applicable]
11. I/We understand that giving wrong information on oath amounts to forgery and perjury, and I / We am/are aware of the consequences thereof. In case any information provided by us are found to be false or incorrect, you have right to reject our bid at any stage including forfeiture of our EMD/PBG/cancel the award of contract. In this event, this office reserves the right to take legal action on me/us.
12. I/We have physically signed & stamped all the above documents along with copy of tender documents (page no. _____ to _____)
13. I/We hereby confirm that all our quoted items meet or exceed the requirement and are absolutely compliant with specification mentioned in the bid document.
14. My/Our Company has not filed any Writ Petition, Court matter and there is no court matter filed by State Government and its Board Corporation, is pending against our company.
15. I/We hereby commit that we have paid all outstanding amounts of dues / taxes / cess / charges / fees with interest and penalty.
16. In case of breach of any tender terms and conditions or deviation from bid specification other than already specified as mentioned above, the decision of Tender Committee for disqualification will be accepted by us.

Whatever stated above is true and correct to the best of my knowledge and belief.

Date:

Stamp & Sign of the tenderer

Place:

(Signature and Seal of the Notary)