

## **TENDER NOTICE # 11& 12/2017**

National Institute for Biotechnology and Genetic Engineering (NIBGE), invites sealed tenders from Sales Tax Registered firms for the purchase of Chemicals, Kits, Glassware and Plastic wares etc. on FOR NIBGE, Faisalabad.

<b>Tender #</b>	<b>Item</b>	<b>Tender Fee</b>	<b>Mode of Purchase</b>	<b>Date &amp; Time of Tender Receipt</b>	<b>Date &amp; Time of Tender Opening</b>
11/2017	Chemicals, Kits, Glassware and Plastic ware etc.	Rs. 500/- ( In Shape of CDR)	FOR NIBGE basis	07-05-2018 at 1430 hours	07-05-2018 at 1500 hours
12/2017	Lab Equipment etc.	Rs. 500/- ( In Shape of CDR)	FOR NIBGE basis	07-05-2018 at 1430 hours	07-05-2018 at 1500 hours

Tender documents can be obtained on request from Administrative Officer (Procurement) on any working day (except Saturday & Sunday) through only CDR (Non-refundable) in favour of Head, LAO, NIBGE, Faisalabad. The text/specifications of the tenders can also be downloaded from NIBGE Website ([www.nibge.org](http://www.nibge.org)) and PPRA, Islamabad Website ([www.ppra.org.pk](http://www.ppra.org.pk)) and the Tender fee please be sent to undersigned. **The Separate envelope procedure for technical/financial bids must be adapted.**

**Sr. Admin Officer (Procurement)**  
**NIBGE, P.O.Box # 577, Jhang Road, Faisalabad.**  
**Ph: (041) 2651475-79/Ext. 201,206/(041) 2650818**

**NATIONAL INSTITUTE FOR BIOTECHNOLOGY AND GENETIC  
ENGINEERING JHANG ROAD, FAISALABAD**

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**Tender No. 11/2017**

**Date of Opening-  
07-05-2018 at 1500 hrs.**

Note:- **SINGLE STAGE -TWO ENVELOP PROCEDURE**

Sr. No.	Description	Qty.
1	ACETONE (Commercial)	100 L
2	ACETONE (Analytical Grade)	20 L
3	ACETONITRILE (HPLC Grade)	20 L
4	AGAROSE, molecular biology grade, High purity for preparative and analytical electrophoresis of nucleic acids >1000bp. Forms a solid gel at low concentration. Gel Strength: 1%:>1200g/cm <sup>2</sup> , Gel Strength: 1.5%:>2700g/cm <sup>2</sup> * Gelling Temp.: 35-37°C, Sulfate: <0.15%, roendosmosis:<0.09-0.13, Residue on Ignition: <0.5%, Loss on Drying: <10%, DNA Binding: None detected, DNase/RNase: None detected.	10 Kg
5	BROMOPHENOL BLUE, Analytical grade, for chromatography	500 g
6	CHLOROFORM (HPLC Grade)	25 L
7	DI SODIUM HYDROGEN PHOSPHATE, For molecular biology, ≥98.5% (titration), 500G, Sigma or equivalent.	5 Kg
8	DICHLOROMETHANE (HPLC Grade)	25 L
9	DIMETHYL SULFOXIDE, Purity ≥ 99.9 %.	5 L
10	EDTA, Molecular Biology Grade, ≥ 99%	5 Kg
11	ETHANOL (HPLC Grade)	25 L
12	ETHYL ACETATE (HPLC Grade)	50 L
13	GEL RITE	5 Kg
14	DNTP`S SET, 100 mM solution (1 mL), ThermoGeneAmpor equivalent. (Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company)	50 Nos
15	GENOMIC DNA PURIFICATION KIT (50 preps), ThermoGeneJet K0721 or equivalent, (Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company)	10 Nos
16	GLYCEROL, For molecular biology, ≥99%, Chem-Lab Belgium, or equivalent.	25 L
17	HEXANE (HPLC Grade)	50 L
18	ISO-PROPANOL – Purity >99.5%	50 L
19	LB BROTHLB broth (Merck or equivalent brand); pack size 500 g in plastic bottle, pH valve 6.8 - 7.2 (H <sub>2</sub> O 25 °C) (after autoclaving), appearance yellowish brown. The media should contain Yeast extract 5.0 g/L, peptone from casein 10.0g/L, sodium chloride 10.0 g/L. (Supplier should be sole agent of the manufacturing company)	2.5 Kg
20	MAGNESIUM SULFATE (Anhydrous)	5 Kg
21	MALT EXTRACTpowder For microbiology, Merck / sigma Aldrich or equivalent. (Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company)	1 Kg
22	MALTOSE, Microbiological Grade, Merck/Sigma Aldrich or equivalent (Supplier should be sole agent of the manufacturing company)	5 Kg
23	METHYL ALCOHOL99.9 % (HPLC Grade)	50 L
24	NUTRIENT AGAR, Merck or equivalent (Supplier should be sole agent of the manufacturing company)	10 Kg

25	PEPTONE, Merck / sigma Aldrich (Supplier should be sole agent of the manufacturing company)	3 Kg
26	PETROLEUM ETHER Lab Scan, RDH or equivalent	25 L
27	PHENOL 98-99% pure HPLC	5 L
28	POTASSIUM CHLORIDE, powder, BioReagent, suitable for cell culture, suitable for insect cell culture, $\geq 99.0\%$ , Cat# P5405-250G, sigma or equivalent	4 Kg
29	POTASSIUM DICHROMATE, Merck, RDH, Daejung, Bio Basic, Bio world or equivalent	6 Kg
30	SODIUM CHLORIDE, $\geq 99\%$ , (Merck, Roth or equivalent brand); grade value ACS.	5 Kg
31	SODIUM DODECYL SULPHATE (SDS) - (Merck or equivalent brand); empirical formula $\text{CH}_3(\text{CH}_2)_{11}\text{SO}_4\text{Na}$ , form fine white to offwhite powder, DNase none detected, RNase none detected, Protease none detected, Phosphatase none detected.	4 Kg
32	SODIUM HYDROXIDE, pellets (Merck or equivalent brand); Grade ISO, g/l, pack size 1kg. Supplier should be sole agent of the manufacturing company	10 Kg
33	SUCROSE, (Merck or equivalent brand) for microbiology; pH value 7 (100 g/l, H <sub>2</sub> O 20 °C), pack size 2 Kg in plastic bottle, Hill formula C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	25 Kg
34	T4 DNA LIGASE, Unit activity 5 U/ $\mu\text{L}$ , Invitrogen, Fermentas-Thermo or equivalent. (Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company)	20 x 1000 units
35	TAQ DNA POLYMERASE, Thermoscientific or equivalent. (Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company)	10 Kg
36	TRYPTONE, pancreatic digest of casein (Qxide, Merck / sigma Aldrich or equivalent brand); Should consist of total Nitrogen 13.3% w/w, Amino Nitrogen 3.7 % w/w, Sodium chloride 0.4% w/w, pH (2% solution) $7.3 \pm 0.2$ . The moisture content should be $< 5\%$ , ash 7.6, amino % 7.6.	5 Kg
37	UREA, $\geq 99.5\%$ , p.a., BioScience-Grade, Cat# 2317.1, Roth or equivalent. (Origin should be Europe or USA)	5 Kg
38	YEAST EXTRACT, For use in microbial growth medium, Bio Basic Cat# G0961, Oxide or equivalent. (Supplier should be sole agent of the manufacturing company)	50 Nos
39	Erlenmeyer flasks (1000 ml) It should have thick-walled body and long, tapered outside counter. Its top should be reinforced and tooled for maximum mechanical strength. It must have durable white ceramic enamel scales. It should be fully autoclavable to 121°C.	50 Nos
40	Erlenmeyer flasks (500 ml) It should have thick-walled body and long, tapered outside counter. Its top should be reinforced and tooled for maximum mechanical strength. It must have durable white ceramic enamel scales. It should be fully autoclavable to 121°C.	100 Nos
41	Erlenmeyer flasks (250 ml) It should have thick-walled body and long, tapered outside counter. Its top should be reinforced and tooled for maximum mechanical strength. It must have durable white ceramic enamel scales. It should be fully autoclavable to 121°C.	100 Nos
42	Erlenmeyer flasks (100ml) It should have thick-walled body and long, tapered outside counter. Its top should be reinforced and tooled for maximum mechanical strength. It must have durable white ceramic enamel scales. It should be fully autoclavable to 121°C.	100 Nos
43	Glass Beaker (pyrex or equivalent, 1000 mL) low form, borosilicate glass, thick, uniform walls, a beaded top with a spout, durable matte finish marking area and white graduated scale. Autoclavable to 121 °C.	100 Nos
44	Glass Beaker (pyrex or equivalent, 500 mL) low form, borosilicate glass, thick, uniform walls, a beaded top with a spout, durable matte finish marking area and white graduated scale. Autoclavable to 121 °C.	100 Nos

45	Glass Beaker (pyrex or equivalent, 250 mL) low form, borosilicate glass, thick, uniform walls, a beaded top with a spout, durable matte finish marking area and white graduated scale. Autoclavable to 121 °C.	100 Nos
46	Glass Beaker (pyrex or equivalent, 100 mL) low form, borosilicate glass, thick, uniform walls, a beaded top with a spout, durable matte finish marking area and white graduated scale. Autoclavable to 121 °C.	100 Nos
47	Glass covers slips (Square), pure white borosilicate glass with excellent chemical resistance and flatness. Free from bubbles and scratches. Free from emitting disturbing self-fluorescence under UV light.	100 boxes (100/box)
48	Glass cylinders (Measuring 1000 ml) made of borosilicate glass, with a reinforced top bead, pour spout and a hexagonal base. A durable white ceramic enamel metric scale externally. Must be certifiably calibrated to deliver. Must have removable plastic LDPE neck collar.	25 Nos
49	Glass cylinders (Measuring 500 ml) made of borosilicate glass, with a reinforced top bead, pour spout and a hexagonal base. A durable white ceramic enamel metric scale externally. Must be certifiably calibrated to deliver.	25 Nos
50	Glass cylinders (Measuring 250 ml) made of borosilicate glass, with a reinforced top bead, pour spout and a hexagonal base. A durable white ceramic enamel metric scale externally. Must be certifiably calibrated to deliver.	25 Nos
51	Glass cylinders (Measuring 100 ml) made of borosilicate glass, with a reinforced top bead, pour spout and a hexagonal base. A durable white ceramic enamel metric scale externally. Must be certifiably calibrated to deliver.	25 Nos
52	Glass Petri Plates & lid (150×25 mm)- Reinforced beaded edges to resist mechanical breakage and to aid in centering the bottom inside of the cover. Optically clear with no color tinge and should remain clear after repeated sterilization cycles at 122°C. The lid should feature a fused-on white ceramic enamel marking spot and bottom piece should be marked with a vertical arrow on the side. It must have dimension of 100×15 mm. It should be KIMAX brand or equivalent.	1000 Plates
53	Glass Petri Plates & lid (100×15 mm)- Reinforced beaded edges to resist mechanical breakage and to aid in centering the bottom inside of the cover. Optically clear with no color tinge and should remain clear after repeated sterilization cycles at 122°C. The lid should feature a fused-on white ceramic enamel marking spot and bottom piece should be marked with a vertical arrow on the side. KIMAX brand or equivalent.	1000 Plates
54	Glass slides (25×75x1 mm)- made up of plain white glass with low iron content. Without any green tint and feature ground and polished edges for safe handling. corrosion resistant. (Origin should be Europe or USA)	100 pks (72 pcs/pK)
55	Glass test tubes (18 x150 mm length) borosilicate/pyrex glass with round bottom. Its rims should be fire polished. It should be well annealed, resistant to heat and chemical. It must be autoclavable to 121°C. (Origin should be Europe or USA)	1000 tubes
56	Glass test tubes (13x100mm length) borosilicate/pyrex glass with round bottom. Its rims should be fire polished. It should be well annealed, resistant to heat and chemical. It must be autoclavable to 121°C. (Origin should be Europe or USA)	1000 tubes
57	Glass tubes (screw capped, 10 ml) made up of borosilicate/pyrex glass with round bottom. It must have durable matte finish white marking area. It should be screw capped. Cap should be made of phenolic compound and must have glued-in white rubber liner. Screw cap should be resistant to temperature and steam. Autoclavable to 121°C	500 tubes
58	Glass tubes (screw capped, 30 ml), borosilicate/pyrex glass with round bottom. It must have durable matte finish white marking area. It should be screw capped. Cap should be made of phenolic compound and must have glued-in white rubber liner. Screw cap should be resistant to temperature and steam. It must be autoclavable to 121°C.	500 tubes
59	Glass vials PTFE Lined Cap Clear 20 ml, 100/pk, Clear 33 expansion borosilicate clear glass (Type 1, Class A)	10 pK( 100 Nos/Pk)

60	Reagent (media) bottles (50 ml), Borosilicate glass with wide opening (30mm I.D at least), repeatedly autoclavable up to 180°C, permanent external white enamel graduation in mL and a marking spot, cap should be screw threaded, made of linerless polypropylene, GL45 in size and autoclavable to 140°C. It must have a replaceable, dip-free, clear polypropylene pour ring incorporated into the bottle design. SIMAX brand or equivalent	50 Nos
61	Reagent (media) bottles (100 ml), Borosilicate glass with wide opening (30mm I.D at least), repeatedly autoclavable up to 180°C, permanent external white enamel graduation in mL and a marking spot, cap should be screw threaded, made of linerless polypropylene, GL45 in size and autoclavable to 140°C. It must have a replaceable, dip-free, clear polypropylene pour ring incorporated into the bottle design. SIMAX brand or equivalent	50 Nos
62	Reagent (media) bottles (250 ml), Borosilicate glass with wide opening (30mm I.D at least), repeatedly autoclavable up to 180°C, permanent external white enamel graduation in mL and a marking spot, cap should be screw threaded, made of linerless polypropylene, GL45 in size and autoclavable to 140°C. It must have a replaceable, dip-free, clear polypropylene pour ring incorporated into the bottle design. SIMAX brand or equivalent	50 Nos
63	Reagent (media) bottles (500 ml), Borosilicate glass with wide opening (30mm I.D at least), repeatedly autoclavable up to 180°C, permanent external white enamel graduation in mL and a marking spot, cap should be screw threaded, made of linerless polypropylene, GL45 in size and autoclavable to 140°C. It must have a replaceable, dip-free, clear polypropylene pour ring incorporated into the bottle design. SIMAX brand or equivalent	50
64	Reagent (media) bottles (1000 ml), Borosilicate glass with wide opening (30mm I.D at least), repeatedly autoclavable up to 180°C, permanent external white enamel graduation in mL and a marking spot, cap should be screw threaded, made of linerless polypropylene, GL45 in size and autoclavable to 140°C. It must have a replaceable, dip-free, clear polypropylene pour ring incorporated into the bottle design. SIMAX brand or equivalent	50
65	Reagent (media) bottles (2000ml), Borosilicate glass with wide opening (30mm I.D at least), repeatedly autoclavable up to 180°C, permanent external white enamel graduation in mL and a marking spot, cap should be screw threaded, made of linerless polypropylene, GL45 in size and autoclavable to 140°C. It must have a replaceable, dip-free, clear polypropylene pour ring incorporated into the bottle design. SIMAX brand or equivalent	50
66	Round bottom flask (capacity 100ml) Short neck (Pyrex OR Equivalent) Ground glass joint	20
67	Round bottom flask (capacity 50 ml) Short neck (Pyrex OR Equivalent) Ground glass joint	20
68	Round bottom flask (capacity 25 ml) Short neck (Pyrex OR Equivalent) Ground glass joint	20
69	Round bottom flask (capacity 10 ml) Short neck (Pyrex OR Equivalent) Ground glass joint	20
70	Screw cap microtubes with conical base (2mL)	5000
71	Blue Tips (1ml) Universal Pipette Tips, 100 – 1000ul, DNase and RNase Free, Non Pyrogenic, Fit wide variety of micro- pipettors and multi-channels micropipettors. Universal grip design, provided with calibration lines at specific volumes, acting as visual checks to minimize any risk of errors during sample aspiration. Made of high quality, low adhesion, polypropylene. Biologix or equivalent. (Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company) Centrifuge tube	1000 Nos
72	1.5 ml, Flat and rough cap	50,000 pcs
73	Cryoboxes, Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	100
74	Cryo vials (1.8 ml capacity blue cap) Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	3000
75	Extended filtered tips (10ul) Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	10,000
76	Falcon tubes (Flat top Cap, 15 ml) Cell centrifugation applications, Polypropylene, sterile, Biologix or equivalent Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	5,000 Nos
77	Falcon tubes (Flat top Cap, 50 ml) Cell centrifugation applications, Polypropylene, sterile, Biologix or equivalent Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	5,000 Nos
78	Filter paper sheets For solution filtration, 26’/16’, 80 grams.	500 pcs

79	Microcentrifuge tube with lid (Eppendorf) (2mL) Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	10000
80	PARAFILM® M Material should be thermoplastic, semi-transparent, odorless, colorless, flexible, moldable, waterproof, self-sealing and rolled into a 4IN. x125FT. interwound with paper. It should be provided with a foldable dispensing cardboard box with brand/cat no printed on it. The manufacturing origin must be USA/Europe and of M brand or equivalent.	30 Rolls
81	PCR tubes (0.2mL) Made of polycarbonate and must have a feature of contamination shield on a hinged lid. Compatible for in all major brands of thermo cyclers with 0.2mL or 0.6 mL block format. It must have side labeling surface and thin walls for temp. precision. It must have flat, pierceable and frosted caps with smooth surfaces and ergonomic design. Free form DNase, RNase and endotoxin. Autoclavable to 121°C for 20 minutes and freezable to -90°C. Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	50,000
82	PCR tubes (0.6 ml) - Made of polycarbonate and must have a feature of contamination shield on a hinged lid. It should be compatible for in all major brands of thermo cyclers with 0.2mL or 0.6 mL block format. It must have side labeling surface and thin walls for temperature precision. It must have flat, pierceable and frosted caps with smooth surfaces and ergonomic design. Free form DNase, RNase and endotoxin. Autoclavable to 121°C for 20 minutes and freezable to -90°C. Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	10,000
83	Disposable petri plates with lid (Fully stackable 100x15 mm) It should be molded from biomedical grade poly-styrene, must have clear and flat surface, must include a raised straight ridge around top for stable stacking and three venting ribs in the underside of the lid to prevent condensation buildup. It should be in diameter and should be packed in sealed sleeves of 20 (Gamma sterilized). Biologix-USA/NEST/ equivalent. Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	20,000
84	Pipette tips [200 µl (white / yellow)]Made of poly-propylene with a ribbed top and beveled end. Endotoxin, RNase and DNase free. Should have a low binding feature and must be free of protease and human DNA. Outer wall graduated with flush calibration lines. Compatible with VITLAB micro-pipette. Autoclavable to 122°C. Biologix, USA or equivalent. Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	100,000 each
85	Pipette tips [10 µl] Made of polypropylene with a ribbed top and beveled end. certifiably be endotoxin, RNase and DNase free. Tips should have a low binding feature and must be free of protease and human DNA. Its outer wall should be graduated with flush calibration lines. It should be certifiably compatible with VITLAB micropipette. It must be autoclavable to 122°C. Biologix, USA or equivalent. Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	20,000
86	Thin layer chromatography plates Merck TLC plates or equivalent (pack of 25 plates) silica gel 60 F254, Aluminium Sheets 20 x 20 cm. Supplier should be sole agent of the manufacturing company	20 Packts
87	Universal filter pipette tips (10 µl) Sterilized, RNase & DNase Free, Polypropylene, Autoclavable, Graduated. Origin should be Europe or USA; Supplier should be sole agent of the manufacturing company	10,000

### Important Note:-

1. A soft copy of the financial quotation should also be provided on a W/RW CD or USB along with your quotation, please.
2. The financial bid must be prepared on the following pattern (A).

(A)	S.No	Description	Cat No./ Make	Unit Price	Packing	Status of GST
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**NATIONAL INSTITUTE FOR BIOTECHNOLOGY AND GENETIC  
ENGINEERING JHANG ROAD, FAISALABAD**

**Tender No. 12/2017**

**Date of Opening-  
07-05-2018 at 1500 hrs.**

Note:- **SINGLE STAGE -TWO ENVELOP PROCEDURE**

Sr.#	Description	Qty.
1	<p><b>Table type vacuum machine</b>            Digital control panel            Stainless steel construction            Clear see-through lid            Bladder activated sealing            Vacuum chamber size: 38.5*28*5cm atleast            Sealing size: 260*10mm, provided with removable seal bars with option of a thinner seal with hot wire cut-off.            Out put: 2-4 times. min            Voltage: 220V            Pump power: 450W, atleast 6m<sup>3</sup>/hr, Busch pump or equivalent, (certifiably guaranteed to meet ETL,UL &amp; NSF standards)            Sealing power: 700W            Dimension: 60*46*45cm            Provided with schuko style plug &amp; 8 ft cord.            Hard copy of instruction/ installation manual must be provided (spiral binding/ full colour) and PDF version</p> <p><b>Accessories:</b>            Food grade vacuum packing bags made from a top quality, laminated, 9-layer poly-nylon film are required.            Sizes: 12*17cm (1bag of 100pcs)                      15*22cm (1bag of 100pcs)                      20*30cm (1bag of 100pcs)</p> <p>Voltage stabilizer (1 no), compatible with the table top vacuum machine. (Imported brand) 3000 watts maximum capacity alongwith 20Amp circuit breaker            Compatible with 50Hz/60Hz.            Output Voltage: AC220V+/-4%.            On/Off switch with indicator lamp            Analog meter on front of unit shows exact output voltage            3 outlets on front of unit ~ Two Universal outlets accept local plugs.            An input selection switch at the rear of the unit.            Insulated power cord is hard wired with a European Shucko plug, also good for Asian outlets            Heavy-duty metal casing and durable design            Fuse protected            Two extra fuses included</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b></p> <ol style="list-style-type: none"> <li>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment</li> <li>ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</li> <li>iii. Certificates giving 2-3 year warranty on parts and labor</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent..</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way.</li> <li>vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the</li> </ol>	01 no

	goods are to be shipped or supplied	
2	<p><b>Home Milk pasteurizer:</b>  It should be constructed of 304 stainless steel.  It must have vacuum cooling to seal in natural flavor and vitamins.  It must have automatic control for temperature and time.  It must have Inner and outer stainless steel or aluminium buckets.  It must have a chart recorder with digital indicating thermometers, airspace heater, agitator and temperature controller.  It must have heating/cooling tank with circulation pump for cooling milk after pasteurization.  Thermostat should have auto shut off feature.  It must have pasteurizer hose with faucet adapter.  Provided with schuko style plug &amp; 8 ft cord.  Hard copy of instruction/ installation manual must be provided (spiral binding/ full colour) and PDF version</p> <p><b>Technical specifications:</b>  Capacity: 2-4Gallons  Pasteurizing temperature: 156-159 °F  Product temperature (outlet): 34 -38°F  Pasteurization time: 15s  Voltage: 110-220V  Power: 1200-1800W  Voltage stabilizer (1 no), compatible with the home milk pasteurizer. (Imported brand) 3000 watts maximum capacity alongwith 20Amp circuit breaker  Compatible with 50Hz/60Hz.  Output Voltage: AC220V+4%.  On/Off switch with indicator lamp  Analog meter on front of unit shows exact output voltage  3 outlets on front of unit ~ Two Universal outlets accept local plugs.  An input selection switch at the rear of the unit.  Insulated power cord is hard wired with a European Shucko plug, also good for Asian outlets  Heavy-duty metal casing and durable design  Fuse protected  Two extra fuses included</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b></p> <ol style="list-style-type: none"> <li>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment</li> <li>ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</li> <li>iii. Certificates giving 2-3 year warranty on parts and labor</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent.</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way.</li> <li>vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied.</li> </ol>	01 no
3	<p><b>Gerber cheese Butyrometer:</b>  It must be made of resistant borosilicate glass.  It must have precision calibration.  It must feature permanent graduations.  It must have special acid resistant rubber stoppers and stopper pusher.  Hard copy of instruction/ installation manual must be provided (spiral binding/ full color)</p> <p><b>Technical specs:</b>  Sample capacity: 3g  Size: 40%  Subdivision: 0.5%</p> <p><b>Accessories:</b>  <b>Gerber Centrifuge:</b>  It must be specified for fat determination according to Gerber</p>	01 no

	<p>It must have strong sheet steel housing with an acid-resistant paint work.  It must have cover lock to prevent opening of the centrifuge during operation.  It must have unbalance shut-off through uneven filling or sudden glass break  It must have motor with elastic bearing for smooth run.  It must have front panel digital read out.  It must have microprocessor control.</p> <p><b>Technical specs:</b>  Timer: 0 - 60 minutes  Power: 115/230 VAC  Frequency: 60/50 Hz  Heating: 600 W adjustable up to 65 °C  Rotor: with 8 bushing of brass  Warranty: 1 year  Test certificate: CE  Provided with schuko style plug &amp; 8 ft cord.  Hard copy of instruction/ installation manual must be provided (spiral binding/ full color) and PDF version  Voltage stabilizer (1 no), compatible with the gerber centrifuge. (Imported brand) 3000 watts maximum capacity  alongwith 20Amp circuit breaker  Compatible with 50Hz/60Hz.  Output Voltage: AC220V+/-4%.  On/Off switch with indicator lamp  Analog meter on front of unit shows exact output voltage  3 outlets on front of unit ~ Two Universal outlets accept local plugs.  An input selection switch at the rear of the unit.  Insulated power cord is hard wired with a European Shucko plug, also good for Asian outlets  Heavy-duty metal casing and durable design  Fuse protected  Two extra fuses included</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b></p> <ol style="list-style-type: none"> <li>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.</li> <li>ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</li> <li>iii. Certificates giving 2-3 year warranty on parts and labor</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent.</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way.</li> <li>vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied.</li> </ol>	
4	<p><b>Vacuum Desiccator:</b>  It must be made up of borosilicate glass.  It must be durable and efficient.  It must draw maximum vacuum of 29.9" Hg  It must have rugged 24/29 standard taper stopcock with tooled hose connection.  It must require desiccator plates of 140mm diameter.  Provided with schuko style plug &amp; 8 ft cord.  Hard copy of instruction/ installation manual must be provided (spiral binding/ full color) with PDF</p> <p><b>Technical specification:</b>  Chamber Volume (Liters): 2.4  Clearance Above Plate (mm): 81  Material: Glass  Color: Clear</p> <p><b>Accessories:</b>  Porcelain desiccator plate: 140mm</p> <p><b>Gast-high capacity vacuum pump</b>  It must have free-air capacities up to 2.2 cfm</p>	01 no

(62.3 L/min)

Its shaded-pole, fan-cooled motor must have thermal overload switch to protect the pump system

It must runs dry

Gauge/Reg; 1.0 cfm/24"Hg60psi/220V

**Technical specs.**

Wetted Parts: 304 Stainless Steel

Free-Air Capacity (LPM): 28.3

Max Flow Rate (Liters/min): 28.3

Max Pressure (PSI): 60

Max Pressure (bar): 4.14

Max Vacuum (mbar): 200.7

Noise Level (dB): 68

Max Temperature (° C): 38

Duty Cycle: Continuous

Power (VAC): 220

Power (amps): 2.2/1.9

Power (Hz) 50

Motor Type: permanent split capacitor

Stages: 1

Motor hp: 1/8

**Accessories:**

1. Inlet condensate trap, its wetted parts should be of glass.
2. Pyrex cold trap, 40ml, 10mm OD or compatible with quoted vacuum pump.
3. Pyrex cold trap, 70ml, 16mm OD or compatible with quoted vacuum pump.

**Tygon Tubing:**

It must be formulated with ND-100-65

It must be constructed of Non-DEHP, phthalate free and must have non-wetted surface

It must be certified of : USP Class VI, REACH, ISO 10993

It must work within temperature range of 44 to 165°F (-42 to 74°C)

It must be autoclavable and sterilized with ethylene oxide, or irradiation.

**Specifications**

Tubing OD/ID (in): 1/4 \*1/2"

or

3/8"\* 5/8"

Wall Thickness (in): 1/8

Color: Translucent

Clarity (translucent) Yes

Working Pressure (PSI) 55 or 40

Max Pressure (PSI) 55 or 40

Min Temperature (° C) -48

Max Temperature (° C) 73

Length (ft) 50

**In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):**

- i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.
- ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )
- iii. Certificates giving 2-3 year warranty on parts and labor
- iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent.
- v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)
- vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way.
- vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied

5	<p><b>Portable pH meter</b>  It must be designed specifically for HACCP compliant testing.  It must have Compact, heavy-duty, and waterproof protected casing.  It must be dually calibrated.  It must have Automatic Temperature Compensation (ATC).  It must have a LCD display screen.  It must have battery life indicator.  It must have battery Error Prevention System (BEPS).  It must have FC202D glass body pH electrode.  Its pH electrode must contain a free diffusion sleeve type reference junction.  Its pH electrode must feature a rugged, easy to clean PVDF body with a conical tip  It must have shock proof rubber boot  It must contain buffer (pH 4.01, pH 7.01 and pH 10.01) and electrode cleaning solution in sealed form (20ml sachets in packs of 25 OR 500ml bottle). Shelf life must be two years at the time of delivery  Warranty: 2Years (Probe 6 months)  Evidence certificate for its application in dairy sample must be provided.  It must provided with schuko style plug &amp; 8 ft cord.  Hard copy of instruction/ installation manual must be provided (spiral binding/ full color)  <b>Technical specification:</b>  <b>pH:</b>  Range: -2.00 to 16.00 pH  Resolution: 0.01 pH  Accuracy ±0.02 pH  Temperature Compensation: automatic from -5.0 to 105.0°C (23 to 221°F)  <b>Temperature:</b>  Range: -5.0 to 105.0°C; 23.0 to 221.0°F  Resolution: 0.1°C; 0.1°F  Accuracy ±0.5°C (up to 60°C), ±1.0°C (outside); ±1.0°F (up to 140°F), ±2.0°F (outside)  Electrode: Internal temperature sensor, DIN connector and 1 m (3.3') cable  Battery Type / Life 1.5V AAA (3) / approximately 1200 hours of continuous use  Auto-off after 8 minutes of non-use  Environment 0 to 50°C (32 to 122°F); RH max. 100%  ( pH meter, pH buffer and electrode cleaning solution should all be from the same company  <b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b>  i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.  ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )  iii. Certificates giving 2-3 year warranty on parts and labor  iv. Certificates from Manufacturer / Principle stating that the country of origin /manufacturing source is either US, EU or equivalent.  v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)  vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way.  vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied</p>	01 no
6	<p><b>Stomacher:</b>  It must be capable of 250µl to 80ml sample processing.  It must offer 5000 fold improvement in cell recovery and viability from traditional Sample processing must be diluent free.  There should not be cross contamination between samples  Processing time and paddle speed should be adjustable  It must provide 6-8ft power cord and schuko plug.  Hard copy of instruction/ installation manual must be provided (spiral binding/ full color) with PDF  <b>Technical specification:</b>  Voltage supply: 220V/65Hz  Speed: between 200-300rpm  <b>Accessories:</b></p>	01 no

	<p><b>Stomacher bags</b> It must be of irradiated, sterile packing. Sample size of bag must be 5-80ml</p> <p><b>Standard bags</b> Bag size:105*155mm Pack Quantity: 2000 (Sachet of 50)</p> <p><b>Strainer bags</b> Bag size:105*155mm Pack Quantity: 200 (Sachet of 10)</p> <p><b>Micro bags</b> Bag size:60*185mm Pack Quantity: 50 Sample size: 250µl-80ml</p> <p><b>Stomacher rack</b> It must be made from high grade plastic polymer. It must be easily dismantled and cleaned with lab disinfectants Capacity: 10 Place Dimension: 30*11*12cm Weight: 0.9kg</p> <p><b>Stomacher Bag opener</b> It must be made from high grade plastic polymer. It must be compatible with stomacher bag sizes It must be stable on bench-top or scales It must be easily cleaned with lab disinfectants Capacity: 1 Place Dimension: 7*7*14cm Weight: 0.1 kg</p> <p><b>Disposable straws:</b> It must be of irradiated, sterile packing. Length: 177mm atleast Volume: 0.1-2ml atleast Internal diameters: 4.1-4.2mm Capacity: 200 (8 sachets of 25 each) Dimension: 24*18*18cm Weight: 3.7 kg</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b></p> <ol style="list-style-type: none"> <li>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.</li> <li>ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</li> <li>iii. Certificates giving 2-3 year warranty on parts and labor and after sales support</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent. (China is not acceptable).</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. Country in which case an explanation is to be given of the countries which are involved and in what way. (No transaction involving China will be acceptable)</li> <li>vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied</li> </ol>	
7	<p><b>Texturometer</b> It must be specific for the food testing It must offer both compression and tension. It must have seven test modes including a calibration check. It must offer choice of five load ranges up to 50kg. It must offer choice of two adjustable base tables for versatility of sample testing. It must offer up to 10 additional customized test methods. It must have easy-to-read display and easy-to-use, intuitive controls. It must provide a "real life" insight into physical properties. It must conform fully with GME and GMIA monograms for gelatin Bloom assessment; includes built-in Bloom Test function.</p>	01 no

	<p>It must have Gelatin Bath System for sample conditioning.  It must be supplied with Texture Loader software to allow creation of up to 10 customized tests  It must be used with optional software, TexturePro CT to easily create custom reports and graphs.  It must provide 6-8ft power cord and schuko plug.  Hard copy of instruction/ installation manual must be provided (spiral binding/ full color)</p> <p><b>Parameters Measured:</b>  It must measure food samples:  Elasticity, Hardness, Cohesiveness, Burst Strength, Breaking Point, Fracturability, Gel Strength, Ripeness, Yield Point, Spreadability, Tackiness, Consistency, Relaxation, Pliability, Adhesiveness, Firmness.</p> <p><b>Specification:</b>  Load Range / Resolution: 0-1000g / 0.10g  Trigger Point Range/Resolution: 0.2-100g / 0.10g  Speed: 0.01 – 0.1 mm/s  Accuracy ±0.1% of setpoint  Position:  Range: 0-100mm  Resolution: 0.1mm  Accuracy: 0.1 mm  Output: USB Port, RS232 compatible serial port.  Environmental Conditions: 5° - 40° (41° - 104°F) temperature range  20-80% relative humidity  Non condensing atmosphere</p> <p><b>Accessories:</b>  Temperature probe, USA origin  TA-WSP, Wire shear plate, USA origin  TA-CEF, cheese extensively fixture, USA origin</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b></p> <ol style="list-style-type: none"> <li>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.</li> <li>ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</li> <li>iii. Certificates giving 2-3 year warranty on parts and labor</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent. (China is not acceptable).</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way. (No transaction involving China will be acceptable)</li> <li>vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied</li> </ol>	
8	<p><b>Hot air oven</b>  Forced air circulating type with Fresh air: admixture of pre-heated fresh air by electronically adjustable air flap.  The unit should be constructed of stainless steel (ASTM 304) with all round deep-drawn ribs to integrate large area heating with ceramic metal sheath.  Fully insulated stainless steel door with lock.  Must be provided with atleast 3 textured zinc plated, perforated stainless steel grid shelves (height adjustable and removable)  It must have high-temperature connectors on the rear of the appliance for single-phase power connection acc. to national &amp; IEC standards.  It must have internal data logger with a storage capacity of at least 10 years.  It must have PID microprocessor control with integrated auto-diagnostic system.  Digital readout (in English) on single front mounted TFT color graphical display with touchscreen. Digital backwards counter with target time setting, adjustable from 1 min to 99 days. Also the touchscreen should display temperature, fan speed, exhaust air flap position, program time, real time clock with time zone setting option  must have Double over temperature protection</p> <p><b>Technical Data:</b>  Min. working temperature range:10 K (UF) above ambient temperature to + 300 °C  Setting temperature range: 20 to 300 °C up to 99.9 °C: 0.1 K</p>	01 no

	<p>Setting accuracy: from 100 °C: 0.5 K  Chamber volume: 108 liter  Inside dimension: 560*400*480mm  Outside dimension: 745*584*867mm  International protection class: IP64 Dust- tight and protected against splashing water  Connection: mains cable with plug (German type) CEE plug for 400V.  Voltage stabilizer (1 no), compatible with the hot air oven. (Imported brand) 5000 watts maximum capacity alongwith 20Amp circuit breaker  Compatible with 50Hz/60Hz.  Output Voltage: AC220V+/-4%.  On/Off switch with indicator lamp  Analog meter on front of unit shows exact output voltage  3 outlets on front of unit ~ Two Universal outlets accept local plugs.  An input selection switch at the rear of the unit.  Insulated power cord is hard wired with a European Shucko plug, also good for Asian outlets  Heavy-duty metal casing and durable design  Fuse protected  Two extra fuses included</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b></p> <ol style="list-style-type: none"> <li>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.</li> <li>ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</li> <li>iii. Certificates giving 2-3 year warranty on parts and labor</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent.</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way. (The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied.</li> </ol>	
9	<p><b>Burette and Burette stand kit:</b>  It must have high-quality borosilicate glass.  It must features a carefully drawn tip for a reliable drainage rate.  It must have a non-contaminating, 2-mm, straight-bore PTFE stopcock  It must have brown-colored permanent graduations.  It must have accuracy and durability.  It must have nickel-plated zinc, double-burette clamp and clamp holder.  It must have lab stand with aluminum rod and chemical-resistant porcelain base.  The burette clamp must have the ability to hold up to two burettes  Hard copy of instruction/ installation manual must be provided (spiral binding/ full color)</p> <p><b>Technical feature:</b>  Capacity: 50ml  Tolerance: 0.1</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no. v is to be given at the time of delivery only):</b></p> <ol style="list-style-type: none"> <li>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.</li> <li>ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</li> <li>iii. Certificates giving 2-3 year warranty on parts and labor</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent. (China is not acceptable).</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which</li> </ol>	01 no

	<p>are involved and in what way. (No transaction involving China will be acceptable)</p> <p>vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied</p>	
10	<p><b>Lactoscan ultrasonic milk analyzer</b>  Portable and compact design with high quality plastic construction (ABS with polycarbonate)  It must provide quick analysis of milk and liquid dairy products.  It must be self-calibrated. (two sample calibration), Calibrations: Cow, Sheep-UHT  Must work in ambient temperatures of 10-40 degree centigrade and relative humidity range of 30% -40%.  It must require small quantity of milk sample for analysis at Milk temp: 1-40°C  It must analyze sample within 30-60sec.  It must work two with high end peristaltic pumps.  It must have low power consumption (30W max).  It must offer adjustments of the measurement accuracy by the RRS 232 interface.  It must have ESC POS printer support.  It must have a wide digital display on front with backlit display (English language).  It must have an integrated pH meter with temperature compensation and a built-in conductivity sensor.  It must have built-in cleaning function.  Must be provided with built-in milk data management software.  Must have built-in knee joint input pipes for different sample holders.</p> <p><b>Measuring range:</b>  Fat 0,01– 45% ±0,01%  Solids-non-fat (SNF) 3- 15% ±0.15%  Density 1015 – 1040 kg/m<sup>3</sup> ±0,3kg/m<sup>3</sup>  Protein 2% – 15% ±0,15%  Lactose 0,01% – 20% ±0,2%  Added water 0% – 70% ±3  Milk sample temperature 1°C – 40 °C ±1%  Freezing point –0,4°C – 0,7°C ±0,001%  Salts from 0,4% – 1,5% ±0,05%  PH 0 – 14 ±0,05%  Conductivity 2 – 14 [mS/cm]±0,05%  Total solids 0 –50% ±0,17</p> <p><b>Accessories:</b>  Hoses (spare pipes) – 1 pc  Sample holders (plastic mugs) – 2 pcs  Packing cardboard box  CD/USB-service pack  Operation Manual Standard (hardcopy &amp; PDF)  Provided with a USB and accessories for data transfer to computer.</p> <p><b>Switching adapter:</b>  -input: 100-240 V  ~1.6 A max. 50-60Hz  Output: +12V 4.17A min.  Output power: 50- 65W  Voltage stabilizer (1 no), compatible with the lactoscan. (Imported brand) 3000 watts maximum capacity alongwith 20Amp circuit breaker  Compatible with 50Hz/60Hz.  Output Voltage: AC220V+/-4%.  On/Off switch with indicator lamp  Analog meter on front of unit shows exact output voltage  3 outlets on front of unit ~ Two Universal outlets accept local plugs.  An input selection switch at the rear of the unit.  Insulated power cord is hard wired with a European Shucko plug, also good for Asian outlets  Heavy-duty metal casing and durable design  Fuse protected  Two extra fuses included</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b></p> <p>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.  ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</p>	01 no

	<ul style="list-style-type: none"> <li>iii. Certificates giving 2-3 year warranty on parts and labor</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent. (China is not acceptable).</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way. (No transaction involving China will be acceptable)</li> <li>vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied.</li> </ul>	
11	<p><b>Liquid Nitrogen LN2 Tank</b></p> <ul style="list-style-type: none"> <li>• It should be portable, durable, and lightweight; not weigh more than 18 lbs. empty Constructed using aircraft grade aluminum alloy.</li> </ul> <p>The dewar tank should be a double-walled flask of metal or silvered glass with a vacuum between the walls (vacuum guarantee of atleast 3 years guarantee from manufacturer)  Volume ; 10-15 L, Neck Diameter; 1.97" (50 mm) atleast  Comes with 6 canisters and ½ cc straws (built-in) for biological sample storage, Depth of canisters; 4.33" atleast &amp; Diameter of canister; 1.38" atleast  An insulated padded cover with straps should also provided for transport.  Static holding time for this tank should be atleast 60 days.  To be provided with Long cuff Cryogenic Gloves, Waterproof, Low Temperature Resistant (-268°C) . Should have 3 layers, 2 layers composite insulating material and 1 layer cotton.  To be provided in three Sizes: small-38cm/14.96", Medium-48cm/18.9", Large-68cm/26.77". (one pair each)</p> <p><b>In addition: the vendor/principle must provide verifiable certificates for the following at the time of technical bidding: the same to be provided at the time of delivery as well (Certificate no.v is to be given at the time of delivery only):</b></p> <ul style="list-style-type: none"> <li>i. Certificate from both the manufacturer and vendor stating that the onsite installation shall be done by a principle trained engineer, who is fully competent for installation/commissioning of the said equipment.</li> <li>ii. Certificate from vendor guaranteeing complimentary preventive maintenance visits (atleast 02 )</li> <li>iii. Certificates giving 2-3 year warranty on parts and labor</li> <li>iv. Certificates from Manufacturer/Principle stating that the country of origin /manufacturing source is either US, EU or equivalent. (China is not acceptable).</li> <li>v. Certificates from manufacturers of new purchase of the given equipment with model no and serial no) by the vendor from them, (date of purchase MUST Be after the award of tender contract and no third party transaction will be acceptable)</li> <li>vi. The vendor must supply a manufacturer issued certificates explaining the manufacturing origin as being a single country or multiple country in which case an explanation is to be given of the countries which are involved and in what way. (No transaction involving China will be acceptable)</li> <li>vii. The vendor must supply a certificate endorsed by the manufacturer stating the country from which the goods are to be shipped or supplied.</li> </ul>	02 No

### Important Note:-

**1. A soft copy of the financial quotation should also be provided on a W/RW CD or USB along with your quotation, please.**

**2. The financial bid must be prepared on the following pattern (A).**

(A)	S.No	Description	Cat No./ Make	Unit Price	Packing	Status of GST
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*NATIONAL INSTITUTE FOR BIOTECHNOLOGY & GENETIC ENGINEERING  
PAKISTAN ATOMIC ENERGY COMMISSION, P.O.BOX NO.577, JHANG ROAD  
FAISALABAD-38000*

TENDER NOTICE NO. \_\_\_\_\_ FOR THE PURCHASE OF \_\_\_\_\_

TERMS AND CONDITIONS

1. The rates should be quoted on F.O.R. (NIBGE) FAISALABAD destination basis on the enclosed proforma as per accounting/measuring units given therein against each item and in no other accounting /measuring unit, as it entails conversion which is at time difficult in order to determine lowest bidders.
2. The unit and total price should be quoted for all the item. The total price should be summed up for all items as or for each section of the tender in order to show the aggregate price.
3. In case the items are quoted as substitute or an alternate, it should be indicated in the remark column.
4. All clarifications regarding drawings/specifications or otherwise may be sought prior to submitting offers. No excuse will be entertained thereafter that a particular drawing/specifications etc. were not clear to the supplier.
5. Date and time of receipt/opening of bids will be the same as published in the newspapers pertaining to this tender. Tenders can be sent through registered mail or can be delivered in person. Tenders received after the opening date and time, will not be considered but will be returned to the supplier.
6. Validity of rates shall not be less than 90-days from the date of opening.
7. Delivery period shall not be more than 30-days from the date of issue of supply ordered which in exceptional circumstances may be extended with the consent of this Institute.
8. The earnest money at the rate of 2% of the total quoted value in the shape of Deposit-at-Call duly affixed Revenue Stamps according to its value (Cheque, Bank Draft and Demand Draft not acceptable) in the name of Accounts Officer, NIBGE, FAISALABAD only must accompany the offer, failing which the offer is liable to be rejected.
9. Advance payment shall not be possible.
10. Conditional/Telegraphic/Fax offers will not be entertained.
11. Quotation may be sent in closed/sealed Envelope.
12. Supplier on whom the order is placed would be responsible to get the samples approved and deliver the stores within the stipulated delivery period given in the supply order. Stores can be delivered without sample approval but in case of rejection, the Institute will not be responsible for any claim arising thereof.
13. Stores should be dispatched with freight pre-paid. Demurrage charges levied due to non-observance of this clause will be deducted from the bill of the supplier for which Institute will not be responsible.
14. All items should suitably be packed with sufficient cushioning material to withstand rough handling during transit. The supplier will be liable to bear any loss due to improper or inadequate packing.
15. Packages should be marked clearly showing consignee as well as the consignor alongwith supply order number an date.
16. Checking and Inspection of stores will be got done by the supplier or his authorized representative on receipt of stores at this Institute (NIBGE) otherwise deficiency/rejection if any, will have to be made good/replaced by the supplier.
17. Part supply will be acceptable, however part payment may not be possible.
18. The supplier on whom the supply order is placed, will provide a warranty/guarantee certificate that stores supplied are brand new and quality conforms to specifications given with supply order. The supplier including freight charges from to NIBGE to supplier's premises and back will replace any defective parts/stores free of all charges.

19. In case the supplier fails to make the full supply within the stipulated period or abandon during the currency of supply order without reasonable excuse in writing, then the balance of the stores would be arranged through some other agency at the sole Risk & Cost of supplier without any reference in this regard thereof. The judgment of reasonability of excuse rest solely with this Institute.
20. In case the supplier does not supply the stores within the stipulated delivery period, this Institute will be at liberty to confiscate 2% earnest money at the quoted value of the tender even without any reference to the supplier.
21. Quality verification and processing of bills for payment to the supplier will be made on presentation of following documents:-
  - I) Original TR./RR/Airway bill, if the stores are booked in the name of this Institute (NIBGE).
  - II) 4-copies of Delivery Challan.
  - III) 3-copies of Bill/Invoice.
22. While sending the quotation, envelope should be marked with tender number and date of opening .
23. Calculation mistakes if any found in supply order, be intimated to this office for rectification.
24. This Institute will not be responsible for any loss sustained by the supplier as a result of cancellation of supply order.
25. The Competent Authority reserves the right to accept or reject any or all the quotations.
26. Owner, proprietor or his authorized representative may sign for acceptance of these terms and conditions with a copy of certificate of ownership, proprietorship and authorization.
27. **The rates should be in full rupee inclusive of 17% General Sales Tax. If GST not mentioned as Exclusive or Exempted in quotation, the quoted rates shall be considered as Inclusive of 17% GST. Any decimal figure shown with quoted rates shall be considered as deleted/ignored. Writing as “GST as per Govt. rules” will also be deemed as misleading and shall be considered as inclusive of GST.**
28. **The financial bid must be prepared on the following pattern (A)**

(A)

S.No	Description	Cat No./ Make	Unit Price	Packing	Status of GST
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The Supply Order will be issued to those Firms/suppliers which are REGISTERED with Sales Tax Department, having their Sales Tax Registration Number on their Tenders/Quotations/Invoices/Bills etc.

**Note:- The supplied material may be reordered against same price & specifications for three following years subject to consent of supplier and approval of competent authority.**

- **Writing as “GST as per Govt. rules” will also be deemed as misleading and shall be considered as inclusive of GST.**
- **All the firms who are interested to participate should not be black listed by any establishment of Pakistan Atomic Energy Commission of Pakistan.**
- **A soft copy of the financial quotation should also be annexed preferably on a RW CD in the bid-envelop.**

**SR. ADMIN OFFICER (PROCUREMENT)**

The above mentioned terms and conditions are acceptable to us:

Signature:.....

Telephone #.....

Name of the bidder with designation:

Fax #.....

National Identity Card No.

E-mail #.....

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Internet/Web site.....

Name of Firm with address.....

Telex #.....

Grams/Cable address.....

