

PRE- BID

T.E. NO.: GMSCL/EQ. PURCHASE/MICROBIOLOGY-1/2015-16

DATE: 26/05/2015

TIME: 11.00 Hrs.

Name of Item : Domestic Refrigerator with Digital Temperature Display

[A]	Required Specifications
	Refrigerator (410 liter)
1	Refrigerator providing a temperature of 2-10°C
2	Double door, 400 liters capacity, Auto defrost
3	Toughened, Glass Shelves, Inbuilt stabilizer.
4	Should provide 3 years warranty
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparison.

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T.E. NO.: **GMSCL/EQ. PURCHASE/MICOBIOLOGY-2/2015-16**

DATE: 26/05/2015
TIME: 11.00 Hrs.

Name of Item : **Incubator**

[A]	Required Specifications
	Incubator Digital (Mammert Type)
A	Technical specifications:- Must have the following Construction: ISI :IS 3118
1	Chamber should be of Stainless steel.
2	Inner chamber- S.S.304. Chamber Size: 400-455" x 400-455" x 450-455" mm (W x D X H)
3	Outer chamber should be of Powder coated stainless steel.
4	60-70 mm gap between the outer and inner wall
5	Walls should be filled with glass wool / insulation material for insulation/heat loss.
6	Double Door – Inner door Glass window
7	Inner Circulating Fan and Air Ventilating system.
8	Adjustable Shelves. Racks made of Stainless steel.
B	Electronic and electrical features:
1	Temperature range-up to 60 to 60 Degree C.
2	Digital Display Temp Controller cum indicator. P.I.D. Controller
3	Adjustable overshoot alarm & heater cut off.
4	In –built soft start for heaters.
5	Suitable to work on 220 V, single phase, 50 Hz, AC supply.
C	Other requirements:
1	ISO certificates to be attached.
2	Product catalogue, manufactures authorizations letter and customers lists to be attached.
3	Rates should also be quoted for comprehensive maintenance (CMC) for 5 years.
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparison.

PRE- BID

T.E. NO.: GMSCL/EQ. PURCHASE/MICROBIOLOGY-3/2015-16

DATE: 26/05/2015

TIME: 11.00 Hrs.

Name of Item : Water Bath

[A]	Required Specifications
	Construction:
1	Complete inner chamber made of highly polished stainless steel.
2	Outer chamber made of powder coated stainless steel.
3	Gap between the walls is filled with special grade wool for proper insulation.
4	Provided with drain plug.
5	Pyramidal shaped cover (Aluminum Lid) and perforated removable diffuser.
6	Immersion heating elements.
7	Temperature Control: Temperature is generally controlled by an electronic digital temperature controller –cum- indicator from ambient to 100°C +/- 0.5°C with digital temperature display and 0.1 C readability, microprocessor controlled.
8	Control Panel: Thermostat control knob, On/ OFF switch two pilot lamps
9	Capacity: Anti-corrosive 4 chambers each with capacity of 3-4 lit.
10	Microprocessor based PID temperature controller
11	Other requirements:
a	ISO/ CE certificates to be attached.
b	Product catalogue, manufactures authorizations letter and customers lists to be attached.
c	Three years of warranty.
d	Easy in laboratory recalibration & maintenance.
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparison.

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T.E. NO.: **GMSCL/EQ. PURCHASE/MICROBIOLOGY-4/2015-16**

DATE: 26/05/2015
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Name of Item : **Biosafety cabinet type 2A**

[A]	Required Specifications
	<u>Specifications</u>
1	Should be type 2A Biosafety cabinet, should provide protection for operator, environment and product from aerosols and microorganisms.
2	Size – HxWxD – 1560-1600mmx1300-1350mmx800-850mm
3	Design and Construction
a	18 gauge SS 304 interior and epoxy coated steel exterior,
b	fully closing front door, front door openable to a height of 10 inches and made up of ¼” clear tempered glass,
c	should provide drain pan
4	Work area – 16 gauge SS, seamless, dished work surface, removable with external knobs
5	Airflow velocity – Inflow – 100fpm, down flow – 60+/-10fpm, 70% recirculation and 30% exhaust
6	Plenum – negative pressure plena surrounding the work area and should be made up of metal
7	HEPA filters – Twp HEPA filters (Exhaust and Supply), Should be of 99.9% efficiency at 0.1 and 0.3µ
8	Sound emission - <65db
9	UV light – should be provided with UV light and UV interlock system to cut the UV light automatically if the door opens accidentally
10	Fluorescence light – Should be provided with fluorescence light
11	Ports – should be provided with gas connection ports
12	Electrical socket outlets – socket for 5 and 15 amp
13	Microprocessor controlled display for – airflow velocity
14	Audiovisual alarms for –
a	Excessive opening of sash
b	Airflow failure or slow airflow (optional)
15	Operating environment – should be capable of operating in 20-35°C and relative humidity of 80%
16	Power supply – 210-240V, 50Hz
17	Compliance with – NSF49 /ANSI49 / EN 12469 / certifications
18	Certification – FDA / CE certified/ISO
19	Safety requirements –shall meet latest IEC or equivalent BIS requirements of safety for electromagnetic compatibility
20	Accessories-should provide the following:
a	Suitable voltage stabilizer and UPS
b	Replacement filter
c	Stand with leveling screws and castors
21	Services required:
a	Onsite installation and validation
b	Calibration certificates
c	Operation manual
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparison.

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T.E. NO.: **GMSCL/EQ. PURCHASE/MICROBIOLOGY-5/2015-16**

DATE: 26/05/2015
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Name of Item : **Hot Air Oven**

[A]	Required Specifications
1	Should have double wall.
2	Inner chamber should be polished SS AISI 304 grade. Inner chamber size: 606-605" x 600-605" x 600-605" mm
3	Outer chamber of powder coated steel sheet
4	60-70mm gap between the walls filled with special grade glass wool for insulation/heat loss.
5	3 Adjustable Shelves. Shelves made of SS sheet.
6	Inner Air Circulating Fan and Air Ventilating ports.
7	Electronic and electrical features:
A	Temperature range ambient up to 250 Degree C. +/- 1 Degree C.
B	Digital Temp Display Controller cum indicator.
C	Digital thermostatic control & fitted with an automatic electric cut out
8	Other requirements:
A	ISO certificates to be attached.
B	Product catalogue, manufactures authorizations letter and customers list.
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparison.

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T.E. NO.: GMSCL/EQ. PURCHASE/MICROBIOLOGY-6/2015-16

DATE: 26/05/2015
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Name of Item : Deep Freezer (-20°)

[A]	Required Specifications
	<u>Specifications</u>
1	Should provide a temperature range of -20°C
2	Capacity: 450 -650 liter.
3	Built in voltage stabilizer
4	Digital display temperature,
5	The gap between inner & outer wall is fitted with high grade glass wool to avoid heat loss.
6	should have provision to liquefy ice formed on the inner door.
7	Operation at ambient temperature of 15-32 ° c and Humidity 10-90%
8	Body is mounted on a sturdy angle iron- frame & is mounted on castor wheels.
9	Other requirements:
a	ISO/CE certificates to be attached.
b	Product catalogue, manufactures authorizations letter and customers lists to be attached.
c	Three years of warranty.
d	Easy in laboratory recalibration & maintenance.
10	Rates should also be quoted for comprehensive maintenance (CMC) for 5 years.
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparison.

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T.E. NO.: GMSCL/EQ. PURCHASE/MICROBIOLOGY-7/2015-16

DATE: 26/05/2015

TIME: 11.00 Hrs.

Name of Item : Electronic Weighing machine

[A]	Required Specifications
	<u>Specifications</u>
1	Electronic analytical balance which is fast, accurate, reliable and easy to operate
2	Draft shield chamber with sliding door on both sides.
3	Digital LCD/LED display
4	Readout should have at least 4 decimal places.
5	Readability : 0.1 mg
6	Minimum weighing capacity: ≤ 0.01g
7	Maximum weighing capacity: 40 to 60 gms
8	Operating temperature 10° c to 40 °c.
9	Electrical Requirement : 230 V/50-60 Hz (supplied with AC Adapter)
10	Tare/Zero function, Calibration Facility should be there
11	Instruction manual and spare fuses
12	should be CE/FDA/ISO /marked and certified.
13	Warranty of the instrument: At least 24 months from the date of successful installation.
14	CMC of the instruments for 5 years from the date of completion of warranty period.
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparison.

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T.E. NO.: **GMSCL/EQ. PURCHASE/MICROBIOLOGY-8/2015-16**

DATE: 26/05/2015
TIME: 11.00 Hrs.

Name of Item : **ELISA Reader**

[A]	Required Specifications
1	The system should be automated open system, 96 well plate ELISA reader system and should be able to accommodate all type of microtitre plates
2	Optical system should have capacity of 5- 6 filters on filter wheel. The 4 standard wavelengths 405nm, 450nm, 490nm and 630nm should be available.
3	Reading mode: Single, dual or multiple wavelength reading applications.
4	Optical measurement range should be 0.000 – 3.500 OD with a Precision of 0.01 OD. Photometric accuracy < $\pm 3\%$, Linearity: $\pm 1\%$ for the range of 0.0 – 2.5 OD.
5	Should have automatic interpretation of results such as raw data, absorbance value, cut off etc.
6	Equipment should be programmable for about 50 different types of assays or tests and save them in memory data files.
7	Results should be directly displayed and printed. Should have an inbuilt OD values printer on thermal paper
8	It should have 13 channel speedy Optical Reading System (1-Reference & 12 –Read channels) capable of reading in about 10 to 15 seconds for single wavelength or about 20 to 30 seconds for dual wavelength
9	Should have self diagnostic checks for electronics plate motor, optics filter motor & lamp or other faults at startup time.
10	It must be easily controlled by external PC or stand alone capability
11	Calibration –Verification plate should be supplied with the machine. A calibration certificate should be provided.
12	Equipment must be supplied with a compatible external printer of standard size for printout purposes.
13	Must be supplied with one acrylic dust proof cover cabinet with locking device.
14	Spares to be supplied: 6 extra lamps.
15	Power in put to be 220-240V, 50Hz
16	CE marked / FDA approved / ISO marked
17	Suitable UPS with maintenance free batteries for minimum 1 hour back up should be supplied
18	Should provide 2 years warranty & quote for 3 years CMC
19	Must provide end user list.
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparision.

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T.E. NO.: **GMSCL/EQ. PURCHASE/MICROBIOLOGY-9/2015-16**

DATE: 26/05/2015
TIME: 11.00 Hrs.

Name of Item : **ELISA washer**

[A]	Required Specifications
1	Programmable ELISA washer required to wash the 96 Well-ELISA plates and strips. Should be able to wash various types of plates – flat bottom, U-bottom and V-bottom.
2	Wash Heads: interchangeable 8 way or 12 way head.
3	The fluid Reservoirs capacity for Wash-buffer and wash waste should be at least 2 liters.
4	Should provide non pressurized bottles
5	Should have in built vacuum and dispensing pumps for accurate washing
6	Should have Level sensor/ alarm for wash bottles and level sensor alarm for waste bottles preferred.
7	Dispensable Washing volume range: 50 – 999 µL in 1 µL steps.
8	Dispense Precision: 3-5 % CV, low well to well variations.
9	Programmable washing and Soak time and volume
10	It should have memory storage of at least 20 user programmed different wash protocols for priming, dispensing, soaking and aspiration steps.
11	Automatic monitoring of Vacuum and Pressure, automatic rinse cycle,
12	Low Residual Volume < 1 µL for U and V bottom plates and < 5 µ for flat bottom plates
13	Washing time for a typical 5 cycle wash protocol with 8 way head should be < 4 minutes.
14	It should have separate nozzles for aspiration and dispensing to avoid cross contamination.
15	Equipment must be supplied with one acrylic dust proof cover
16	Suitable on-line UPS with maintenance free batteries for 1 hour backup must be supplied with the machine.
17	Spares : Extra one set of all Wash bottles, waste bottles and wash head and tubings must be supplied
18	CE marked / FDA approved / ISO marked
19	Should provide 2 years warranty & quote for 3 years CMC
20	Must provide end user list
	Warranty for 2 years & CMC price next 5 years, which should include cost of labour spares, entire equipment. The CMC cost will be taken into consideration for price comparison.