UNIVERSITY OF CALICUT DEPARTMENT OF BIO TECHNOLOGY, KSCSTE PROJECT

RE-TENDER NOTICE

Sealed superscribed open tenders are invited from reputed firms/distributors for the supply of various equipments and accessories to the KSCSTE major Research Project. The Tenders should be submitted in the prescribed tender form which can be had from the Purchase Division or can be downloaded from the University Website. Rate quoted should be inclusive of taxes and other charges if any. Sealed tenders with cost of tender form i.e.0.2 % of the quoted amount rounded to the nearest multiple of 100, subject to a minimum of 420/-including VAT at 5 % and EMD (1% of the quoted amount subject to a minimum amount of Rs. 1500/-) drawn in favor of Finance Officer, should be submitted to the undersigned on or before 17/04/2017

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SI.No.	Item	Quantity
	I. Specifications for Western blot apparatus	
	1. Vertical Electrophoresis Unit :1 no	
	• Number of gels - 2 Gels [Can be upgraded to 4-Gel]	
	 Precast gels (Ready Gel precast gels) & 	
	• Handcast gels Gel size (W x L) -Precast: 8.6 x 6.8 cm	
	-Handcast: 8.3 x 7.3	
	cm	
	• Total buffer volume for 2 gels -700 ml	
	• Total buffer volume for 4 gels -1,000 ml	
	• Typical run times for SDS-PAGE -35-45 min (at 200 V constant)	
	• Should come with sample loading guide , casting module with side- by- side casting stand , Stain Free SDS PAGE Kit & Broad range Protein Marker	
	• Should be a modular system	

- Should be supplied with transblot module
- 2. Mini Format Western Transfer Apparatus : 1 no
- System should provide rapid, high quality western transfer
- Must accommodate atleast two mini gels of size at least 10 * 7.5 cm
- Transfer time for both gels must be supported in a time frame of One hour
- Overnight transfer must also be taken care
- Preferably with a cooling unit to take care of heat generated
- The unit should be mountable on a Magnetic Stirrer and should also be cold room compatible.
- Buffer requirement should not exceed 450 ml 500 ml per run
- Modularity of same tank to run PAGE gels must be available.
- Should be available either as a stand-alone apparatus or as a module 1 compatible with mini SDS Page Gel running apparatus
- Transfer cassettes & electrodes should be color coded to ensure proper orientation of the gel during transfers.
- The apparatus should come complete with Gel Holder cassettes, foam pads, modular electrode assemblies, cooling unit within Tank, lower buffer tank and lid with power cables.

3. Power Supply for SDS PAGE Blotting Apparatus

- Output range (programmable): 10–300 V, fully adjustable in 1 V steps 4–400 mA, fully adjustable in 1 mA steps 75 W maximum
- Type of output: Constant voltage, constant current with automatic crossover
- Output terminals: 4 pair recessed banana jacks floating in parallel
- Timer: 1–999 min, fully adjustable
- Pause/resume run function: YES
- Display: LED

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- Operating conditions: 0–40°C; 0–95% humidity in the absence of condensation
- Safety compliance: EN-61010

	EMI: Conforms to CE Standards for Emissions and Immunity class A, tested only at 230 V; TÜV EMC certification Safety features: No-load detection, sudden load change detection, overload/short circuit protection, input line protection, auto power-up after power failure Input protection: Fuse on both hot and neutral Input power (actual): 90–120 or 198–264 VAC, 50 or 60 Hz, autoswitching
II. S	pecifications for CO2 Incubator
•	Chamber Volume: 145 to 150 litres
•	The unit should be built with corrosion resistant, stainless steel interior (304) with electro polished finish.
•	Easy install shelving with travel stop should be provided.
•	Fan assisted directed active airflow distribution system should be provided along with the system.
•	Heated outer door and directly heated humidity water reservoir system should be provided along with the system. Equipment should have stacking option.
•	The equipment should be supplied with moist heat decontamination feature. During decontamination routine all the sensors and fixtures should be in place, with convenient push button operation and a cycle indicator.
•	Bright, easy to use, door mounted control panel, featuring glove-friendly membrane keyboard and large LED displays should be supplied along with the system.
•	Independent over temperature protection with independent temperature sensor should be provided along with the system.
•	Auto-Start function and automatic calibration mode should be supplied

• Long life dual channel thermo conductivity CO2 detector with platinum thermistor should be provided along with unit.

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• <u>Temperature</u>

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- a. Control : Microprocessor PID, 0.1°C
- b. Setpoint : 0.1°C
- c. Range : $+4^{\circ}$ C above ambient to 53° C or better
- d. Uniformity : +0.6°C @ 37°C
- e. Sensor : platinum PT1000
- f. Display : panel mounted LED

• <u>CO2</u>

- a. Control : Microprocessor PID, 0.1
- b. Sensor : long service life in-chamber thermal conductivity sensor
- c. Readability : 0.1%
- d. Range : 0-20%
- e. Display : panel mounted LED, 0.1% increments

• Relative Humidity

- a. Range : >90%
- b. Water Reservoir: integral, rapid recovery pan-less water system is preferred.

• <u>Shelves</u>

- a. Construction: 304 stainless steel, perforated
- b. Standard : 3 should be provided
- c. Maximum : 8 or more option should be there.
- Certifications: CE