

**TENDER DOCUMENT
FOR
SCIENTIFIC EQUIPMENTS**



**DEPARTMENT OF PHARMACY
KAKATIYA UNIVERSITY
VIDYARANYAPURI, WARANGAL – 506 009**

SCHEDULE FOR PURCHASE OF SCIENTIFIC EQUIPMENT

Schedule No: 07/ Pharmacy/ UC/ KU/2016

Date: 08th March 2016.

Name of the Firm with address

Please quote the lowest rates for the items, listed in the annexure. The sealed quotations should reach this office on or before **30th March, 2016 at 3.00 p.m.** The tenders will be opened later at the Coordinator office (UGC Unit), Kakatiya University, Warangal. The University will not be responsible for any postal or other delay in the delivery of tenders.

The tender is subjected to the following conditions:

1. The bidder has to quote basic Price. The prices should be for destinations. Sales tax, Insurance, customs and import duties if any, packing and forwarding charges if any, freight charges, any other taxes and charges should be quoted in terms of percentage on basic cost or fixed amount. Any vague statements such as "Etcetera" (etc.) are not accepted.
2. The payment will be made within a reasonable time after the receipt of goods in good condition and successful installation and demonstration.
3. The company invoice with all supported vouchers should be submitted.
4. The equipment should comply with the description, particulars and specifications supplied by the institution and the specifications offered by the bidder, which are accepted by the institution. Any deviations are liable for rejection of the tender (or) rejection of the equipment even after supply.
5. The period of delivery from the date of placement of order should be clearly mentioned.
6. The time of installations should be clearly mentioned and any delays on the part of suppliers for supplying equipment and installation and demonstration will be penalized.
7. The quotation must accompany the list of reputed organizations, laboratories and educational institutions having at least 5 years standing for which the equipment is supplied.
8. The companies must be ready to demonstrate the equipment in front of an expert committee at the Kakatiya University, Warangal at their own cost if required. The decision of expert committee is final.
9. It is not binding on the institution to accept the lowest of the tenders.
10. The institution reserves the right to place order for individual items with different tenders. The quantities indicated herein can be modified without any intimation. The decision of expert committee is final.
11. All the tenders must be sent in registered post, acknowledgement due. The university will not be responsible for any postal delay or loss of tenders.
12. The purchase will not pay separately for transit insurance and the supplier will be responsible till entire items/equipment contracted for are delivered and installed in good condition at the destination.
13. If the equipment delivered at site is rejected, the University is not responsible for paying any charges and the supplier is solely responsible for removing the equipment. If such equipment is not removed from the site within a period of two weeks, the university reserves the right to remove it

from the site and the risk has to be borne by the supplier. The institution reserves the right to recover handling and storing charges in case of such event.

14. In the case of a dispute between the institution and supplier, the dispute shall be referred to Indian arbitration. Venue of arbitration shall be at Warangal.
15. The supplier has to give a guarantee for the equipment and its performance as per specifications for a minimum period of Thirty six months from the date of installation and commission. If during the above said period, it is found that the performance is not up to the mark, the decision of the purchaser in that behalf is final and is binding on the supplier. The supplier has to rectify/replace such defective equipment at his own cost. Otherwise suppliers have to pay compensation.
16. The supplier shall provide servicing facilities throughout the warranty period by trained people at his own cost.
17. The quotation with overriding condition will be summarily rejected.
18. Only those firms should respond who are the manufacturers or authorized dealers. A certificate to this effect duly signed by the manufacturer should be attached by tenders (s).
19. Bidder should enclose with the bid, income tax and commercial/sales tax clearance certificates issued by competent authorities for the last financial year for which the assessment exercise has been completed by the relevant tax authorities.
20. The tenders should be addressed to Prof.Y.NARSIMHA REDDY, Principal Investigator, AICTE Sponsored - RPS, University College of Pharmaceutical Sciences, Kakatiya University, Warangal - 506 009.
21. The envelope must be super scribed with reference No. and Item name for which quotations are being submitted.

Annexure for Specifications

1. Power Lab Instrument

Data recorder, 2 & 4 Channel data recorder with Software

NIBP System for Rat, Rodent restrainer, Rodent tail cuff holder, Membrane and O-rings for rat tail cuff(10pk)

2 Channel Data Recorder: Suitable for research and teaching applications, data recorder have a TTL trigger input, analog inputs and 2 analog outputs (differential mode only). While cost-effective, the 26 Series have a maximum 100 kS/s sample rate and >95 dB CMRR and are used in a wide range of research applications.

data recorder come with software.

Expansion Ports

I2C expansion port: Power and control bus for front-end units. Supports a number of front-ends equal to number of PowerLab analog inputs. Interface communications rate of up to 10 kbit/s

Four Channel Data Acquisition System Include

- It should have at least 4 channel input and should be capable of performing a broad range of human and animal experiments. it should be capable of recording up to 100 000 samples per second on each channel (400 000 samples per second aggregate) and features individually selectable input sensitivities, analog output for stimulation or pulse generation, high speed USB.
- It should have a built-in isolated stimulator, built-in dual bio amplifier and a powerful internal processor along with low- and high-pass filters.
- The unit also must allow a wide range of low-pass filters, AC or DC coupling, digital inputs and outputs for external instrument control.
- It should use a high-speed USB 2.0 interface for connection to computers with a maximum throughput of 400 000 samples/s aggregate.

Teaching Software :-

- Ready to use experiments with introduction pages, set up instructions with a combination of clear step-by-step instructions, preset acquisition parameters, embedded information links and interactive recording and analysis tools, take the guess work out of experiment protocols.

- Report pages include study questions as well as students' recorded data, analysis tables and graphs from their completed experiments. Students can type their answers and the reports are saved for easy review or printing.

Research Software:-

- The software should provide the data integrity, display and analysis features. Should offer easy selection of hardware settings, suitable for online and offline analysis, procedure automation, seamless extraction of experimental data with display options.
- It should allow software controlled sampling rates, range and filter setting.
- It should continuously record and display up to 32 channels of data (up to 32 calculated signals)
- It should allow user to export Binary, Axon, IGOR, MATLAB, Excel, QuickTime, Wave, Text etc. and should allow:- Different sampling rates on separate channels.
- Automated online and offline data extraction to Data Pad & then OLE to applications such as Excel allows values to be updated in an external spreadsheet application in real time.
- Comment annotation within the file during recording and after recording.
- Calculations like Arithmetic, Cycle Variables or Cyclic Measurements, Derivative, Digital Filter, Integral, Shift, Smoothing.

NIBP Specification

Measurement Cycle Time: 90–420 BPM (rats): 22 s (for 200 mmHg) 41 s (for 280 mmHg)

Cycle Control: Microprocessor based. Performs inflation, deflation, and fast deflation sequences automatically. Operation Indication: Trigger output (normally low, but high during inflation and deflation cycle). Front panel Status indicator shows inflation and deflation operation.

Fast Release Time: ~1.2 s from 280 to 40 mmHg at 40–150 BPM ~0.5 s from 280 to 40 mmHg at higher ranges Control Sources: Front panel push button; External signal source(voltage level); Remote contact closure.

Max Inflation Pressure: 200 or 280 mmHg (switch-selectable)

Manual Start/Stop Input

Operation: Contact the closure input for starting or stopping measurement cycle. Shorting the input signal results in a start or stop operation.

Remote Trigger Input Operation: Voltage level input for starting or stopping NIBP cycle. TTL compatible input. High level operates a start/stop. Input Voltage: 3–5 V, Minimum Trigger Pulse: 1 ms,

Pulse Input

Input Impedance: Differential Input: 10 G Ω , Single-ended Input: 1 M Ω , Input Signal Range: High gain differential input: (0–25 μ V) up to (0–75 μ V), depending on rear panel Gain, Adj setting. Low gain single-ended input: (0–50 mV) up to (0–150 mV), depending on rear panel Gain Adj setting. Bandwidth: 40–150 BPM: 0.7–2.5 Hz; 90–420 BPM: 3–7 Hz; 240–600 BPM: 4–10 Hz, Pulse Output Max: \pm 5 V

Trigger Output

Operation: High (+5V) output level during measurement cycle. Otherwise zero.

Pressure Output (Cuff Pressure)

Sensitivity: 0–1 V : 0–300 mmHg (factory calibrated)

Frequency Response: DC to 10 Hz

2. Stereotaxic Apparatus (Digital)

- Ability to perform surgeries on both mice , rats and Guinea Pigs on the same base. Includes a 100 micron 3 axes, left hand manipulator arm, separate rat and mouse adaptors, dual sided (18⁰ and 45⁰) rat ear bars, triple point mouse ear bars, corner clamp probe holder.
- Rat & Guinea Pig Stereotaxic instrument with Rat adapter.
- Electrical burr variable speed Supplied with 6 pcs of Burrs / Drills.
- Animal experimental table for Stereotaxic work with stainless steel top.
- Portable overhead lamp on castors for horizontal movement and Vertical telescopic height adjustment for Stereotaxic work.

3. Auto Analyzer

- Light source: Tungsten halogen lamp.
- Wavelength range: 340, 405, 450, 505, 546, 578 & 690 nm.
- Photometric range: 0.000 to 3.000A. Linear upto 2.500.

- Detector: Photocell.
- Temperature display on LCD.
- Cuvette system: Quartz micro-flow cell, measuring volume 25 μ L and 10 mm optical path.
- Aspiration system: Built in peristaltic pump driven by stepper motor programmable aspiration volume from 200-1000 μ L.
- Measurement modes: Absorbance, Endpoint, Two-point, Kinetics.
- Printer: thermal printer ,Fast speed and low noise.
- Data management software optional.
- Data storage:Memory capacity 1000 results.Reagent blank value storage for reagent blank chemistry.
- Power requirement: Power supply:AC 220V \pm 10%,50HZ \pm 2%,Power:80VA.