



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

(0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

No. GCOPA/Store/Projects-Equip/2023-24/ 811

Date: 09.08.2023

Subject: Quotation for supply of Lab Equipments of Projects.

Dear Sir,

I have to request you to kindly quote your lowest reasonable rates for the following item and send the quotation in the sealed cover, so as to reach the undersigned on or before Dt. 23.08.2023 Date of Opening Dt.24.08.2023.

Sr. No	Specifications	Qty. Required
	MODROB Projects :	
1.	<p>Flash Chromatography :- To perform all type of flash chromatography purifications under normal and reversed phase conditions. With facility to change parameters during the run. With real time method control. With all necessary software for running and calibration of the equipment. Safety regulatory requirements such as vapor sensor and over pressure Sensor and automatic shut down facility.</p> <p>With following general specifications: Solvent Delivery: Two maintenance free valve less metering pumps; Certification: CE. Programmable gradients: four solvent inlets with high pressure binary gradient of linear, step or isocratic mode. Flow rate: Flow rate of 300 ml/min. Rate Pressure: Pumping system with maximum pressure capacity of 300 psi (20 bar). Column sizes: 4g to 330 g, Minimum 10 nos. Reusable/ Refillable 12gm, 40gm, 120gm, High performance Silica Gel, C18, Alumina, Microns, Cyno, Diol, SAX & SCX 40-63 Microns. A Universal sample load cartridges. Minimum 10 nos. Single use, disposable column of various size. On-line UV detection: Integrated PDA variable wavelength UV -visible detector with automatic collection of fractions at all available wavelengths from 200 to 400 nm or more. Sample Injection: Injection valve for solid & liquid sample injection with automatic self cleaning at the end of the run. Fraction collection: Automated fraction collection with min 150 tube capacity and unlimited rack changes. Automatic sensing of test tube size & fraction volume. Solvent level sensors in all solvent inlet & waste bottles for solvent management. Tube size and rack: racks for 16 & 25 mm tubes, 480 ml bottles and other containers. Power options: 230 VAC / 50 Hz With software for peak Tracking. Automatic sensing of column size, media & column history. And one adjustable solid load cartridge and one empty sample load cartridge. With necessary additional spares. Controller: Touch screen control software with real time method editing, column size & media sensing, fraction collector rack sensing & method scale up feature. Supplied with PC windows operating system, 15.6" screen and 500GB hard disk. Built in 2 COM ports, HDMI & VGA port allows versatile</p>	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

☎ (0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

	applications with necessary additional features. Safety features like over pressure sensor, vapor sensor & grounded solvent path.	
2.	<u>Sprey Dryer :</u> Evaporation rate of water: Approx.1500ml/hrs, • Air inlet temp. range: 40 °C to 250 °C , • Drying air throughput: Variable from 30 to 70 m3/hrs, • Heater capacity: Approx.3kw, • Spray system: 2 fluid nozzle with 0.5 mm jet with Deb locking Device & option of large diameter, • Sample feed: Peristaltic pump with flow rate 0-1200 ml/hrs, • Spray/Hot air flow: Downward co-current • Inert loop for Solvent Recovery Including all additional / optional accessories.	01 No.
3.	<u>Cone and Plate Viscometer :</u> Torque resolution:0.1-100 nNm, • Position resolution:10 -50 nrad, • Torque Range : 0.05µNm - 250 mNm, • Angular velocity range: 10-500 nrad, • Normal force range : 0.001N -50N, • Speed Range: 0.01-250 RPM, • Temperature range: -150°C to 500°C, • Tool master measuring system & software Including all additional / optional accessories.	01 No.
4.	<u>Student Physiograph :</u> • Main console. • 11 chart speeds as 0.1 ,0.2, 0.5, 1, 2, 5, 10, 20, 25, 30, 50 mm / Sec. Speed selection is easy and instantaneous. Channel width is 70 mm. Ink writing pen is 120 mm in length to minimize arc distortion. The main amplifier is fitted in the console having Switch selectable sensitivity • range from 50 microvolts per cm to 100 millivolts per cm in eleven steps as 50, 100, 200, 500, µv / cm and 1, • 2, 5, 10, 20, 50, 100 mv / cm. • Couplers: • Bio-potential with 3 pin junction. • box, EEG, EMG electrodes and paste. • EKG coupler with 5 pin junction box, Limb & Chest Electrodes and jelly. • Straingage Coupler for measurement of pressure and volume changes of cannulated animals. Pulse Respiration Coupler with respiration transducer. • Temperature coupler with temperature transducer. • Isotonic coupler for isolated tissue measurements. Including all additional / optional accessories.	02 Nos.
5.	<u>Non – Invasive BP Measurement System :</u> SIMULTANEOUS measurement on TWO RATS: Non Invasive Blood Pressure Analysis System to operate on 230Volt 50Hz : 1.Two Specimen Platforms exclusively designed to accommodate rats with highly sensitive LED/Photodiode pulse sensing technology, amplifier and brass tail-cuff. 2. One Master Control Unit with power supply, control solenoids, air pump and vacuum fluorescent display.	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

(0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

	<p>Future software upgradable without opening the equipment to replace program storage components.</p> <p>3. Non breakable Specimen Holders: 4 Numbers of autoclavable rat specimen holders up to 550grams made of light weight aluminum and epoxy coated.</p> <p>4.Power cable , 5.Communication cable, 6.Accessory kit</p> <p>7.Instruction manual , 8. Dedicated Software for NIBP.</p> <p>The system is warranted against defects in material and workmanship for one year from date of installation. Free upgrades on software</p>	
6.	<p><u>Individually Ventilated Caging (IVC) System for Mice & Rat:</u></p> <p>Air Handling Unit: Silent operation fans with high efficiency motor. Fan speed adjusted automatically to meet the set value of supply ACH & exhaust. Supply & Exhaust Pre-filter of grade G4 & HEPA filter of grade H14. Parameters can be monitored through Programmable Logic Controller with TFT touch screen of size 7". Error logs and data logs options. Facility to set upper and lower limits for detecting error logs for temperature, RH & ACH. Facility for H2O2 mode in the PLC for disinfection. Easy selection of cage model, number of cages, ACH, positive and negative pressure mode. -</p> <p>Quantity: 01</p> <p>IVC Rack for mice cage: Single side rack with capacity to hold 48 mice cages. Made of S.S. 304 material. Each rack is fitted with: Auto closure type Air supply and exhaust rack valves leading rack valve opening only when cages are loaded and valve closing when cages are not loaded in the rack. Common rail for mounting the cage in the rack with docking indicator. Duct couplers and end caps in special grade rubber construction. Castor wheels 2 nos. free moving & 2 Nos. lockable Flexible air hose for supply air & exhaust air connections. - Quantity: 01</p> <p>IVC Cage for Mice: Cage Tray: Made of polysulfone material, with lid and tray both has provision for stacking.</p> <p>Cage Lid: Fitted with self closing valve for air supply, exhaust and water bottle inlet. Cage lid has provision for mounting 0.2micron breather filter; breathing filter area should not be less than 90cm sq. Cage must be fitted with autoclavable silicon gasket for making the lid and tray locking airtight.</p> <p>Cage floor area : Not Less than 480 cm². Accessories supplied with each set : Water bottle of 300ml of polysulfone with S.S. 304 cap. Card holder Cage grill in SS 304 construction with provision for placement of food pellets and water bottles. - Quantity: 48 sets</p> <p>IVC Rack for Rat cage : Single side rack with capacity to hold 24 rat cages. Made of S.S. 304 material.</p> <p>Each rack is fitted with : Auto closure type Air supply and exhaust rack valves leading rack valve opening only when cages are loaded and valve closing when cages are not loaded in the rack. Common rail for mounting the cage in the rack with docking indicator. Duct couplers and end caps in special grade rubber construction Castor wheels 2 nos. free moving & 2 Nos. lockable Flexible air hose for supply air & exhaust air connections. -</p> <p>Quantity: 01</p> <p>IVC Cage for Rat: Made of polysulfone material, Cage lid and tray both should have provision for stacking.</p>	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

(0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

	<p>Each Cage Lid should be fitted with two air supply and two air exhaust valves for air supply and exhaust respectively. Each cage lid should be fitted with self closing valve for air supply, exhaust and water bottle inlet. Cage lid should have provision for mounting 0.2micron breather filter, breathing filter area should not be less than 160cm. sq. IVC Cage must be fitted with autoclavable silicon gasket for making the lid and tray locking airtight using suitable locks. Cage should have minimum floor space of 870 cm. sq. and maximum floor space should not be more than 970 cm sq. Cage grill in stainless steel 304 construction with provision for placement of food and water bottle. Accessories supplied with each set: Water bottle of 500ml of polysulfone with stainless steel 304 cap, Card holder. - Quantity: 24 sets</p> <p>Warranty, Qualification and Documentation: Warranty: Three years warranty and five years AMC after expiration of warranty period should be included with the system. IQ, OQ, PQ documents should be provided with system. HEPA filter test report. On site tests to be done: Smoke test, vibration level, noise level, Air velocity at animal level.</p>	
7.	<p><u>Digital flurometers :</u></p> <ul style="list-style-type: none">• Simple-to-use fluorometers provide quantitation with a single standard or multiple standards.• Configuration: Single Beam Filter Fluorometer Sensitivity Levels: 25 pg/mL dsDNA in 2 mL assay volume 30 ppt QSO4 in square cuvettes, 20 ppt FITC in square cuvettes.• Bandwidth: 5-200 nm (depends on filters selected) Concentration Range: 0.00-9999.99 (ppt, ppm, ppb, ug/dl, ug/ml, ng/ml) Excitation Range: 340-750 nm• Wavelength accuracy: 1.5-10 nm (depending on filters selected)• Automatic gain setting. Data output: RS-232 Serial Interface for printer or computer. Display: 2 x 24 LCD Gain and Range Select: automatic, 6 orders Lamp life: Quartz Halogen Lamp (6 V, 20 W = 10,000 hours) Linearity: 1.00% Menu Driven Software: Std. Curve Storage, 2 to 9 point Std. Curves, Storage Operating temperature range: 20° to 38°C Dimensions (D x H x W): 15.5 x 6.7 x 11.5" Sample holders: 12.5 x 12.5 x 45 mm sq. cuvettes 24 month warranty.• Complete accessories with Installation and demonstration.	01 No.
8.	<p><u>Titration :</u></p> <ul style="list-style-type: none">• Main Unit containing Magnetic stirrer, Burette drive, burette, electrode for acid base and non aqueous titration, electrode cable plug F 1M, USB cable, Buffer sachets set of 4/7/9/ pH (3 x 10 x 30 ml), electrolyte 3M KCl, Electrolyte LiCl in ethanol, TEABr in ethylene glycol, storage solution 250 ml, Combined glass electrode for acid base titration capable of working in pH range 0 to 14 pH, Temperature range 0 to -80OC It should have ceramic pin diaphragm.• 1 No Combined glass electrode for non aqueous titration capable of working in pH range 0 to 14 pH, Temperature range 0 to 70 OC.• It should have separable ground joint diaphragm.• 1 No Combined Silver electrode for chloride / Argentometric / precipitation titration having measuring range-2000 to 2000 mV, Temp. Range -5 to +80 OC.	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

☎ (0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

	<ul style="list-style-type: none">• It should have ceramic pin diaphragm.• 1 Combined Platinum electrode for redox titration having measuring range –2000 to 2000mV, Temperature range –5 to +80 OC.• It should have ceramic pin diaphragm.• 1 No Burette drive, Dosing unit for non aqueous titrations – 20 ml, dosing unit for redox titration LL. Comb. Pt. ring electrode WOC 20 ml, Dosing unit for argentometric titrations Comb. Ag. Ring electrode WOC – 20 ml.• Instrument should be supplied with 4 burettes for four different titrations completely separate along with separate tubing's and titrant path.• Instrument should be supplied with various spares for trouble free operation for three years.• Spares including 'O' rings, magnetic stirring bars, tubingsetc should also be supplied along with instrument.• One additional pH glass electrode should be quoted as spare item.• Wearing parts of burette piston should be quoted for 3 years operation.• Any other wearing part / Consumable for 3 years should be included in the quote.	
9.	<p><u>Water Purification System :</u> For supply of Type I and Type II grade water which will be used for Analytical instruments as HPLC, GC, and Organic analysis.</p> <p><u>General specifications:</u> Water Quality display with feed water 0 to100 μ/cm, Temp. 0 to 99.9OC Ultra pure UP to 18.3M-cm. with microprocessor and touch technology controller and display to 16x2 character backlight LCD digital. Product flow rate Max 15L/Hr, Product water quality RO product: 0 to 30μs/cm UP product up to 18.3 Mohams-cm. Pump rerunning pressure 0 to 10 kg/cm² Feed water temperature 2 to 35OC Max fouling index (SDI) <5 0.2 μm final filter, 254/185 UV lamp, MW 5000 UF filter, PVD ¼ Dispensing gun, Including filter and accessories like pre-filter, super A/C filter, Human RO pack, Power UP pack, Level sensor, Manual, Hand lever, Power cord etc. Safety function Low pressure of tap water, Auto/ manual operating modes, Automatic pump stop functions for low pressure, Tank full, Suspension of tap water supply. Complete accessories with Installation and demonstration.</p>	01 No.
10.	<p><u>Laboratory Oven :</u></p> <ul style="list-style-type: none">• Heat Circulation : Horizontal Fan Assisted ; Usable Volume : 3.375 cubic feet.• Capacity : Up to 4 perspiro METER Units; No. of Shelf's : 2 Stainless Steel Shelves (Detachable)• Maximum Temperature : Ambient to 250 °C• Least Count : 1 °C; Accuracy : + 2 °C; Heater Capacity : 750 watt x 2 Heaters = 1500 Watt• Electric Supply: 220 + 10% Volt. 50 Hz Single Phases. AC.• Rate of Heating Thermostat (19) 20 % : 1° C Per 1 ½ Minute• Thermostat at (19) 50 % : 2° C Per Minute; Thermostat at (19) 100 % : 3° C Per Minute• Overall Dimensions of the UNIT : 550 (L) x 700 (W) x 820 (H) mm. 21.5" (L) x 27.5" (W) x 32.5" (H) Inch.	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

☎ (0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

	<ul style="list-style-type: none">• Net weight of the unit : 84 kg. (185 lbs)• Complete accessories with Installation and demonstration.	
	RGSTC Project :	
11.	<p><u>Texture Analyser :</u></p> <ul style="list-style-type: none">• Load range : 0-4500gm;• Load resolution: 0.5 gm upto 4500 gm;• Load accuracy: better then $\pm 0.5\%$ of full scale;• Load repeatability: better than 0.5 % of full scale;• Position range :0-100mm;• Position accuracy: 0.1mm;• Position setting resolution : 0.01mm;• Position measuring resolution : 0.1mm\pm;• Test speed range : 0.01-0.1mm/s in;• Increment of 0.01 mm/s;• Test speed accuracy: better than 0.1% of full scale;• Speed accuracy: better than $\pm 0.1\%$ of set point;• Test modes: single , hold, repeat/tpa, cycle, compression, tension;• Data output options: USB port, rs232 compatible serial port.• Data acquisition: 26 data sets per second;• Protection: load cell overload protected by electronic stop in both direction and by mechanical stop in compression.• Approvals: CE marked.• Security: Software password different levels of user;• Protection is required for excessive dust. Operation temperature: 5oc to 35oc;• power supply: 230 v ac 50hz; power code.230 v ac 50hz with includes operating.• texture analyser software with fixture base table attachment. Accessory : muco adhesion test accessory; film support fixture for penetration test and spread test fixture.	01 No.
	DST – SYST Project :	
12.	<p><u>Multi Scan Micro Plate Reader (Multi Mode):</u></p> <ul style="list-style-type: none">• Detection modes: Absorbance, Fluorescence intensity and Luminescence; • Read methods: End-point, kinetic, area scanning, multipoint and kinetic spectra; • Light Source: Absorbance: Xenon flash lamp; Fluorescence : Halogen lamp; • Detector Type: Absorbance: photodiode; Fluorescence : Photomultiplier Tube; • Micro plate types: 6- to 384-well micro plates; • Reading Options: Top and bottom (96- and 384-well plates, cuvette, μDrop Plate); • Measuring Range: Up to 6 Abs; • Software Type: Onboard software with predefined protocols and standard for further data analysis; • Shaking: Linear, Orbital, double-orbital; • Cuvettes: Yes; • Wavelength Selection/ Optical System: Absorbance: Monochromator, Fluorescence intensity: excitation and emission monochromator or Filter based Top Fluorescence and Luminescence. Includes LUM cube; • Wavelength Range: Absorbance: 200-1000 nm. Fluorescence intensity: Excitation: 300 to 700 nm, Emission: 270 to 840 nm, Luminescence: 360 to 670 nm; • Photometric Linearity: 0 - 4	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

☎ (0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

	<p>Abs (96-well plate) at 450 nm, $\pm 2\%$; 0 - 3 Abs (384-well plate) (at 450 nm, $\pm 2\%$); • Bandwidth: ≤ 5 nm; • Accuracy (Photometric): 0.003 Abs or $\pm 2\%$, at 200 - 399 nm (0 - 2 Abs); 0.003 Abs or $\pm 1\%$, (at 400 - 1000 nm (0 - 3 Abs)); • Incubator Temperature: Ambient + 2°C to 45°C</p> <p>• Precision: SD < 0.001 Abs or CV < 0.5%, (at 450 nm (0 - 3 Abs)); • Sensitivity: Fluorescence intensity (top reading): < 0.4 fmol fluorescein/well (black 384-well plate); Luminescence: < 7 ATP/well (white 384-well plate); • Dynamic Range: Fluorescence intensity: top reading > 6 decades; Luminescence: > 7 decades; • Measurement Speed: Reads a 96-well plate in 12-15 sec., a 384-well plate in 23-45 sec., and a 1536-well plate in 135 sec. (minimum times); • Spectral Scanning Speed: < 2.2 s/well 400 to 500 nm, 1 flash, 2 nm Step; • computer control, ports for printer connection and USB flash drive, power supply compatible; • Includes: μDrop plate. • Compatibility: Automation; • Cuvette Size: 40-58 x 12.5 x 12.5 mm (H x W x D); • Supply with all Accessories. • Warranty: 3 year</p>	
	DST – FIST Project :	
13.	<p><u>High Performance Liquid Chromatographic System Quaternary gradient equipped with RI Detector :</u> CONFIGURATION: HPLC system Pump- Quaternary gradient Pump, Detector- RI detector, Injector- Manual injector, Column Oven, Four columns (C8 and C18- 2 No. each) In line degasser, Software with scope for RI, PDA, fluorescence detection, Sign wave UPS-Inverter, Computational hardware for running the software.</p> <p>Refractive Index detector :</p> <ul style="list-style-type: none"> • Detection of components without UV chromophores • Countercurrent heat exchanger • Repeatable detection technique • Thermally isolated optics bench for temperature stability <p>Auto-zero, auto-purge, and LED-displayed diagnostic programming</p>	01 No.
14.	<p><u>UV-VIS-NIR Spectro Photometer :</u> CONFIGURATION: Double Beam system for the UV to NIR</p> <ul style="list-style-type: none"> • Scanning mode and multi wavelength measurement • Quartz coated optics for high long term stability • Passing all pharmacopeia demands (optical resolution, wavelength accuracy, photometric Accuracy and reproducibility and more) • Large sample compartment • Measurement of extremely diluted samples using cells up to 100mm • Powerful Windows UV VIS Software for system control, result storage and presentation • Wavelength range 190 nm ... 1100 nm • Spectral resolution 0.5, 1, 2, 4 nm • Quartz standard cells, 10 mm path length, 4 pieces • Microcuvette -250 microlitre cuvette • Wavelength range 200 - 1100nm, inside diameter 75 mm <p><input type="checkbox"/> For transmission and diffuse reflectance measurements for solid, liquid and powder.</p>	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

(0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

15.	<p><u>Fluorescence Photodiode Array Detector For HPLC :</u> CONFIGURATION:</p> <p>a) Fluorescence Detector-</p> <ol style="list-style-type: none">1. Multiple detection modes with reduced time to develop fluorescence detection compatible with item 1. ,2. Compatible to be added with Item I HPLC software and Instrument.3. Axially-illuminated flow cell with less stray light and more path length.4. Three-dimensional spectral scanning.5. Multi-channel fluorescence monitors.6. Low noise performance.7. Integral calibration for wavelength accuracy <p>b) Photo Diode Array Detector-</p> <ol style="list-style-type: none">1. Maximal signal-to-noise across the entire wavelength range with Deuterium lamp.,2. Optimized sampling rate and time constant.,3. Compatible to be added with Item I HPLC software and Instrument.,4. Wide, linear dynamic range with constant optical.,5. Low noise performance <10 μAU.,6. Simultaneous quantification of components within a single chromatographic separation.,7. Compound identification & co-elution detection.,8. Lamp optimization for the best performance of a Deuterium lamp.,9. Console software for monitoring10. Thermal management.	01 No
16.	<p><u>Digital balance (High precision and sensitivity) :</u> CONFIGURATION: Advanced performance unbloc balances. Capacity: 135 gm Display: 0.01 mg Repeatability: 0.05 mg or better Response time for race measurement: 2s or less Pan size: 90 - 100 mm or better Calibration: Internal Supplied with Ionizer-speed ac discharge for static electricity Removal, Included Mol Conversion Function.</p>	01 No.
17.	<p><u>Digital Moisture Analyzer :</u> CONFIGURATION: Pan Size: 90- 100 mm or better Data Management and Easy Operation Various Measurement Modes Alternative Drying Modes Automatic Starting Mode Capacity: 60 - 70 g Display: 0.001 g (1 mg)</p>	01 No.
18.	<p><u>Digital Microscope 3 MP :</u> CONFIGURATION: Microscope Specifications: Binocular, 45° inclined, 360° rotatable, Wide field focusable paired eyepiece, with foldable eye guard, lockable, antifungal coating. Quadruple nosepiece (ball bearing type) with rubber grip. Achromatic objectives 4x, 10x, 40x (spring loaded), 100x (spring loaded, oil), Mechanical stage with co-axial drive, highly smooth on ball slides, stainless steel holders for slide, Sub-</p>	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

☎ (0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

	<p>stage abbe condenser with aspheric lens. Iris diaphragm with snap-in blue filter. Rack and pinion movements on metal guides. Co-axial coarse and fine focusing on ball drive system for smooth movement. Halogen illumination with variable illumination control. Halogen lamp life- 2000 hours or better</p> <p>Camera specifications: Digital camera module 3.0 megapixel or 5 megapixel, Sensor: ½" 3.0 megapixel or better, Sensor resolution: 2048 x 1536 pixels or better, Scan mode: progressive, Pixel size: 2.2µm x 2.2 µm or better, Digitization: 12 bit or better, Pixel clock: 48 mhz or better, Dynamic range: 56 db or better, Frame rate: 30 fps or better</p> <p>Software specifications: Image analysis software for capturing and analyzing still Images and videos.</p> <p>Control Features should be included for white balance and auto exposure , Picture quality adjustments, annotations, Measurement functions & calibration, selection of region of Interest , Software compatible with windows operating system.</p>	
	RPS Project :	
19.	<p><u>Gel Electrophoresis System (Horizontal and Vertical) with Centrifuge and UV-Trans illuminator :</u></p> <p>Horizontal Electrophoresis : System refers to equipment widely used for separation of DNA & RNA on their size/mass and/or electrical charge in molecular biology, cell biology laboratories in agarose gels.</p> <ul style="list-style-type: none"> • Principal Material: Acrylic • Tank Size L x W x H (in cm): 22 x 15 x 9.5 or more • Gel Tray Size (in cm): 9 X 11 or more • Sample Capacity (Nos.): 24 or more • Max. Buffer Volume (in ml): 600 or more • Comb Configurations (teeth): 10 & 14 or more • Comb thickness: 1.5mm polycarbonate • Voltage Limit: 150 volts • Accessories: Gel Casting Apparatus; Well Comb: (10 well & 14 well); Detachable Electrodes (Anode, Cathode); Connecting Cable: 1 Set (Black & Red). Supply with Electrophoresis Power Supply Output • Voltage (V): 10-300; Output Current (mA): 4-400; Type of Output: Constant Voltage /Constant Current. • Warranty in Years: 3 <p>Vertical Electrophoresis : System refers to equipment widely used for separation of Protein on their size/mass and/or electrical charge in molecular biology, cell biology laboratories in PAGE & SDS PAGE gels.</p> <ul style="list-style-type: none"> • Gel size: 8.3×7.3 cm (W×L) • Short plate: 10×7.3 cm (W×L) • Spacer plate: 10×8.3 cm (W×L) • Total buffer volume: 900 ml • Typical run times for SDS-PAGE: 45 minutes (at 200V). • With ACCESSORIES: Electrical cables; Tank; Lid; Clamping Frame; Electrode Assembly; Notch on U-Shaped Gasket; Cell Buffer Dam; Spacer Plate (1.0mm); Short Plate; Casting Stand; Casting Stand Rubber Pad; Casting Frame; comb(1.0mm, 10well); comb(1.0mm, 15well); Sample Loading Guide(10well); Sample Loading Guide(15well); Gel releaser • Safety feature: Overload/short circuit detection; over voltage protection 	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

☎ (0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

	<p>Comprehensive Warranty in Years : 3</p> <p>Centrifuge:</p> <ul style="list-style-type: none">• Rotor Capacity: 12x1.5/2.0 ml , • Centrifuge Force:14000g• Speed: 14500 rpm , • Timer: 20sec-99min• Warranty in Years : 3 <p>UV-Trans illuminator:</p> <ul style="list-style-type: none">• Gel View area: 15x15 cm or more,• Wavelength: 312nm & 365nm, with long life UV-quartz filter to view DNA & RNA gels. High intensity UV tubes with UV blocking lid. Auto shut down with timer for UV lamps. Supply with capture to view DNA, RNA and Protein gel.• Warranty in Years: 3 <p>Supply With Chemicals Pre weighted vials of Molecular Biology Grade, Agarose, Low EEO, DNase and RNase free ,DNA Electrophoresis Buffer like TAE (Tris-acetate-EDTA) and TBE (Tris-borate-EDTA) , DNA Gel Staining Solution Wash Solution , De-staining Solution, Gel Loading Dye Plasticware , Microfuge tube -Capacity 2 ml Auto clavable Micro pipet - 1000 ul , Micro pipet -200 ul , Micro pipet -0-10 ul Pipet tips -volume : 1000 ul , Pipet tips -volume : 0-10 ul Pipet tips -volume : 200</p>	
20.	<p>PCR : Purpose : PCR is a laboratory technique used to amplify segments of DNA via the Polymerase Chain Reaction Display Interface: LCD; Block Format: Fixed; Capacity of Blocks: 0.2ml x 1x96well; Maximum Heating Ramp rate in degree cycle per second: 4° C/S; Maximum Cooling Ramp rate in degree cycle per second: 2° C/S; Adjustable heating/cooling Ramp Rate: Yes; Operating Temperature range °C: 10 to 100 °C; Temperature setting accuracy in °C: ±0.3 °C; Well to well temperature uniformity in °C: ±0.4 °C; Hot Lid Temperature: 30-110°C; Input supply: Single phase (230 V, 50 Hz); Max No of Programmable Steps: 20; Max No of Programmable Cycles: Upto 100; Availability of USB ports: 2; Memory to store programs: 1000-5000; Pause/Start function: Yes; Built-in Tm Calculator: Yes; Compatible to be used with PC: Yes; Providing Online UPS: Yes; Battery backup of UPS in hrs: 1; Instruction manual to be provided: Yes; Touch Screen of display should be responsive for both gloved and ungloved finger: Yes; Auto restart after power outages: Yes; Boot up time: Not more than 1 min</p> <p>Warranty : 3 yrs Should provide all standard Consumables and all accessories.</p>	01 No.
21.	<p>ELISA Reader :</p> <p>4.3" Touchscreen color LCD display; Reads 6, 12, 24, 48 and 96 well Microplates; Can perform Endpoint, Kinetics assays and Well area Scanning (under computer control);</p> <p>On-board software features: Up to 40 user-programmable protocols; Quick menu; Create, edit or run protocols; Save results to USB thumb drive; Wavelength Range: 400 – 750 nm. Absorbance Range: 0.000 to 4.000 O.D.</p> <p>Resolution: 0.001 OD (standalone mode) : 0.0001 OD (under Gen5 Control); Light Source: Tungsten Halogen Lamp; Detector: Photodiode; Filters Supplied: 405, 450, 490 & 630nm.</p> <p>Read speed: 11 secs /96 wells; Micro plate Shaking: Linear with programmable speed and duration.</p>	01 No.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

(0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

Supply with Computer with i7 processor or higher, 8 GB RAM, 1 TB HDD, USB Ports, Colour Monitor, Keyboard, Mouse, Windows 10 Pro (64-bit) operating system, MS Excel 2016 or later (64-bit). and online UPS 5kva power backup unit. Supply with 1 Pair of quartz cuvettes (Volume: approx. 400uL)., ELISA Plates flat bottom, UV-Visible (Qty: 10 each)., Laser Printer (Duplex model). Accessories for upgrading to fluorescence polarization (on field). Accessories for upgrading to micro plate well area imaging facility. Accessories for upgrading to a gas control option (O2 & CO2) for long-term kinetics. Low volume plate.

TERMS AND CONDITIONS FOR QUOTATIONS

The quotation should be submitted as per **TWO ENVELOPE SYSTEM ONLY**. Both the Bids (Technical as well as Commercial) shall have to be submitted. Bids not submitted will not be entertained.

i) Envelope No.1: Technical Bid

Technical Envelope shall contain following documents:-

- Technical literature/ Leaflet/ Samples/ Information/ of the make and model no etc quoted.
- GST / CST registration certificate.
- Authorization certificate from manufacturer.
- No deviation certificate.
- List of users with complete address, name of contact persons, contact numbers and email address.

ii) Envelope No.2: (Commercial Bid)

- The rate should be quoted only for the items specified in the Technical Bid (Envelope No.1) and should be for items of given specification / Make /Model/ Manufacture.
- Bidder should not quote his offer any where directly or indirectly in Technical Envelope (T1), failing which the Commercial Envelope (C1) shall not be opened and his tender shall stand rejected.
- Inspection charges if any are to be borne by the supplier.

Validity: The rates offered should be valid up to 31st March of year from the date of opening of Quotations.

Delivery: Rates quoted will be considered FOR destination, Installation & training at College Premises unless otherwise stated.

Payment: Payment will be made as and when the grant is available after receiving the goods in satisfactory conditions and satisfactory demonstration/Installation etc. at the consignee's destination at cost of supplier.



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

(0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

Taxes: Rates quoted will be considered **inclusive of all taxes**, if not stated separately in the quotation. (Statement like taxes extra or as applicable will not be considered).

General Note:-

- The supply shall be executed according to instruction by Institute.
- The **technical support shall be provided by the vendor/ supplier without any additional charge during guarantees/ warranty period.**
- In lieu of any defect in material, the agency shall replace the material.
- For any quoted brand if Authority letter from the company in original stating that he is authorized to participate in the quotation and minimum three quotations are not available it will be rejected.
- Do not quote for the brand for which authority letter is not available.
- Manufacturer / supplier should submit the signed and stamped rate catalogue/ booklet whenever demanded by us so as to enable us to know which make is quoted along with model no / sr. no. of the item / code no etc.
- Rate quoted as per authorized pricelist will be considered. Any change / deviation in the rate of any item should be informed in advance and will be only applicable if approved by purchase committee.
- The supplier has to submit copy of authorization letter from the company.
- Proof of permission to manufacture the equipment/ item mentioned in the tender document from competent authorities.
- Proof of permission for sales/trading of the equipment/ item or of similar kind mentioned in the quotation document from competent authorities.
- The Institute reserves the right to reject any or all quotations without assigning reason therefore.
- Warranty and AMC if applicable.
- **The dispatch number of this office should necessarily be superscripted on the Envelope.**
- Supplier must furnish following Registration Description on separate sheet with technical bid.
- Supplier also give the details of CMP registration no. for on line payment.

Description of Registration to be filled up by Agency



GOVERNEMENT COLLEGE OF PHARMACY

Kathora Naka, AMRAVATI 444 604

(0721) 2531690 (O)
www.gcopamravati.ac.in

Fax. No. (0721) 2531242 2531827
e-mail: gcopamt@gmail.com

(PAN card, GST, Professional Tax, Service Tax)

Sr. No.	Description of Registration	Registration No.	Validity Period	Copy attached	
				Yes	No
1.	<u>PAN card</u>				
2.	<u>GST</u>				
3.	<u>Professional Tax</u>				
4.	<u>Service Tax</u>				

Signature & Name of the authorized person
of quoting agency with the seal of the firm

Date:


Principal

Govt. College of Pharmacy,
Amravati.

