



List of Equipments selected to purchase for “Pharmaceutical Science”

Assam down town University

List of Proposed Equipment required for next semester (D. Pharm, B. Pharm and M. Pharm) [Price of the individual equipment is approximately more than INR. 1 L]

S No	Name of the Instruments	Quantity	Specifications
1	Grip Strength Meter	01	<ul style="list-style-type: none"> • Should automatically stores the peak force achieved by the limbs. • Each system should be supplied with 2 sets of grips for mice and rat • Fit Rats & Mice with a simple change of Grip Accessories • Stand-alone system, no need for a computer • Zero key to make readings zero during operations • PC Connectivity with Software using a USB cable for data analysis & report generation • Inbuilt weight calibration & calibration report generation facility • Digital TFT Display • In-built Memory up to 150 Readings • Free to set upper and lower deviation data, automatically determine whether or not qualified • Three units for measurement available gf/N/ lbf • Warranty: 3 years or more
2	High precision water bath	01	<ul style="list-style-type: none"> • Chamber capacity: 5L • Temperature range: Ambient to 100°C • Temperature Stability/Uniformity @37°C: ±0.1°C • Inner Tank and lid made of Stainless Steel (SS-304 grade) and outer chamber is made of Mild Steel duly powder coated. • Microprocessor Based PID Digital Temperature Indicator-cum-Controller • Warranty: 3 years or more
3	Vacuum oven	01	<ul style="list-style-type: none"> • Temperature Range: RT+10°C to 200°C • Vacuum Degree: 133 Pa

			<ul style="list-style-type: none"> • Chamber Material: Stainless steel • Shelves: 2 or more • Ambient Temperature +5~40°C • Microprocessor Based PID Digital Temperature Indicator-cum-Controller • Built in alarm • Facility for easy monitoring of samples through the protective glass window • Interior Dimension (W x D x H) (mm): 400X350X350 (approx.) • Exterior Dimension (W x D x H) (mm): 750x550x550 (approx.) • Warranty: 3 years or more
4	Propeller type mechanical agitator	01	<ul style="list-style-type: none"> • Stainless steel rod with propeller type blade with microprocessor technology • Minimum 20 Liters capacity • Speed range 50 – 2200 rpm • Should have speed control and option for monitoring of set & actual speed • High torque even at low speeds • Maintenance free Brushless DC motor top ensure high torque • Easy-to-read backlit LCD for display of set & actual parameters • Last parameter recall, ideal for repetitive processes • Motor protection in case of continuous overload • Accepts shafts up to 13mm Ø • Stopper for protection of vessel & shaft • Special base design for topple free operation • Adjustable height. • Warranty: 3 years or more
5	Gas anaesthesia chamber for rodents	01	<ul style="list-style-type: none"> • The system should be portable, compact, can be used on a table-top, fume hood or other challenged work areas with limited space. • Should be designed for rodents weighing less than 1.5kg. • Isoflurane or other non-toxic gas vaporizer with safe and easy-fill components available. • Should have the box of O₂ quick flush, facility for adjustable negative flow meters easily activated with toggle switches between induction chambers and anesthesia mask for easy recovery of animal in emergency. • Precise and adjustable concentration within 0.5-5% output, and at least 120ml liquid capacity. • Gas flow rate reading from 0-5000cc/min. • The air pump should be provided for air for the animal anesthesia machine with the air flow of 15-25L/min. <p>Specifications for Gas Evacuation System</p> <ul style="list-style-type: none"> • Safely and actively remove waste gas associated with everyday inhalation anesthesia. • Waste anesthetic gases should be discharged into activated charcoal canister or any non-recirculating hood, vent, downdraft/ back draft system or snorkel.

		<ul style="list-style-type: none"> • Charcoal canister should be weighable to check its saturation. • Should have alarm, indicator light and buzzer reminder to change the canister and maintain its effectiveness. • Easy to use—simply connect to your vaporizer system and insert an activated charcoal canister. • Should be accompanied with one large piece of 830g gas filter canister. <p>Specifications for Induction Chamber</p> <ul style="list-style-type: none"> • Should have transparent plexiglas constructs for easy animal monitoring and powerful joints for eliminating chamber leakage. • Should be suitable for rats up to 500g <p>Specifications for Anesthesia Mask</p> <ul style="list-style-type: none"> • Mask should provide predictable delivery of anesthesia for rodents. • The mask must eliminate any dead space, avoiding the need for tight fitting. • Each mask should have separate inlet for delivery of anesthetic agent and outlet for connecting to Gas Evacuation System for safety of researchers. • Should be able to work together with the gas evacuation system for active gas scavenging. • Should be able to work together with neurological surgical procedures (Stereotaxic surgery, MCAO surgery, SAH surgery etc.) • Minimum 5 nose masks of suitable size for rat (suitable for weight range 100-500g) and mice (suitable for weight range 20-40g) each must be included. <p>Additional Accessories Required: The anesthesia system should be provided with accessories including:</p> <ul style="list-style-type: none"> • A stand for holding and adjusting the position of the nose mask of any size. • Heating blanket with adjustable digital temperature controller, suitable for single animal. • A suitable oxygen source like oxygen tank/cylinder. • A compact drug vaporizer module with minimum 120ml drug loading capacity.
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