प्रति,

विषय: शासकीय वैद्यकीय महाविद्यालय, बारामती वा संयुक्त जीवरसायनशास्त्र विभागासाठी यंत्रसामग्री खरेदी करण्यासाठी दर्पणक्रम सादर करण्यावाच.

या संचालन्याचे जीवरसायनशास्त्र विभागासाठी यंत्रसामग्री खरेदी करण्यासाठी मोहरवंद पाकिटातच दर्पणक्रम मागविभागवांचे आवेदन आहेत. तरी सदर मुख्यालयात आपण बिनंती करण्यासाठी वेळेच वेळी आपण खाती नमुद केलेल्या वंत व उपनिवेशवाची मोखं जोडलेल्या विविधता आणि जीवरसायनशास्त्र विभागासाठी व कार्यालयाच्या रुपांतरणाच्या प्रयत्नात अणू ५००, एम.ए.विडीएच. एच.एच. व शासकीय वैद्यकीय महाविद्यालय, बारामती प्लांट पी-१००, एम.ए.विड.पिज. अस्पतालतल्यासाठी वागवांती जी.पी. क्लेश. ११:०० रे ५:०० पर्यंत सदर करणी.

<table>
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<th>अ.क.</th>
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<td>सोबत खाती जोडलेली आहे.</td>
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दर्पणक्रम मोहरवंद पाकिटातच सादर करणी. प्रत्येक वस्तुसाठी व्यवस्था दर्पणक्रम मोहरवंद पाकिटात हलका सादर करणी.

म्हणजेच एक पाकिटात एक प्रकारे दर्पणक्रम सादर करण्यासाठी व. दर्पणक्रम मो-पाकिटातच व कार्यालयाचा पद्धतक्रम, दिनांक, बस्तूचे नाव व दर्पणक्रम स्त्रोतीसाठी अल्पस दिनांक नमुद करणा. दर्पणक्रम स्थापनाच्या सर्व अधिकार संयुक्त गाँव ठेवलेले आहेत.

जा.प.व. शासकीय वैद्यकीय महाविद्यालय, बारामती.

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प्रति: प्राध्यापक व विभागप्रमुख, जीवरसायनशास्त्र विभाग, शासकीय वैद्यकीय महाविद्यालय, बारामती.
<table>
<thead>
<tr>
<th>SR. No.</th>
<th>Name Of Item</th>
<th>Specification</th>
<th>No. Required</th>
</tr>
</thead>
</table>
| 1       | Analytical Balance : upto 200g/1gm increment | **Description of Function**  
Electronic Balance is required for precision weighing of Lab samples.  
Operational Requirements  
Microprocessor based single pan Analytical Balance with High accuracy & precision is required.  
Reading of the weight by digital display.  
The balance should have dynamic weighing with automatic and manual start and provision for data interface  
**Technical Specifications**  
Weigh accurately, Weighing capacity 210 gm  
Settling time 2 second  
Suitable internal and external adjustment weights. LCD Display  
**Power Supply**  
Power input to be 220-240VAC, 50Hz. | 2 |
| 2       | Urinometers calibrated (Mercury based instruments to be replaced with other Iternatives) | **Urinometers**  
Urinometers calibrated.  
Urinometers (set requires a small amount of urine for testing.) | 20 |
| 3       | Hot air oven (More than 200 litres) | **HOT AIR OVEN**  
Digital display controller equipment suitable for daily usage.  
Should have double walled construction, special high quality insulated steel.  
Facility for adjustable shelves, 10 removable shelves to be provided.  
Size of inner chamber approx 55x55x70 cm approx with internal lighting facility (more than 200 Liters)  
Insulated door fitted with heavy hinges, mechanical door lock.  
Temperature range 30-250oC, digitally temperature setting accuracy  
Temp sensor and display for temperature (LCD).  
Forced uniform air circulation, Digital safety thermostat.  
Delayed start and stop function, high quality heating element  
Supplied with cord & plug, operate at 220V/50 Hz AC supply | 2 |
<table>
<thead>
<tr>
<th>No.</th>
<th>Equipment</th>
<th>Description</th>
</tr>
</thead>
</table>
| 4   | Digital Colorimeters                          | **Digital Colorimeters**  
Calorimeters  
- Filter photo Colorimeter Digital Photo.  
- Colorimeter with 8 filters,  
mains operated  
Power Supply  
Power input to be 220-240VAC, 50Hz. |
| 5   | Student Microscopes                           | Monocular Research Microscope with LED Light source  
With coaxial coarse and fine motion  
Coaxial mechanical stage, Movable condenser and having coated objectives, three eye pieces 10x, 40x & 100x oil immersion, 10x eye piece. |
| 6   | Glucometer with strips                        | Battery Operated Total Automatic Compact size |
| 7   | Thermometer                                  | **Thermometer- Digital**  
Thermometers 0-250°C Digital, Battery Operated. |
| 8   | Boiling Water baths                           | **Boiling Water baths**  
Useful for dual purpose. It is a combination of serological and routine rectangular water bath with holes and concentric rings.  
Standard double wall construction.  
Immersion heaters are provided for heating to attain temperature range from 5°C above ambient to 110°C ± 1°C.  
Should having lids and 8-12 Holes.  
Digital temp. Indicator-cum-Controller. The equipment to work on 220v AC 50 Hz single phase. |

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Baramati, Dist-Pune
<table>
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<tr>
<th>9</th>
<th>Constant temperature water bath Tank Capacity: (Temperature range 5 to 80 degree Celsius)</th>
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<tbody>
<tr>
<td></td>
<td>Useful for dual purpose. It is a combination of serological and routine rectangular water bath with holes and concentric rings. Standard double wall construction. Inner chamber made out of highly polished stainless steel sheet and exterior made out of thick mild steel duly finished power coated paint. Immersion heaters are provided for heating to attain temperature range from 5°C above ambient to 80°C ± 1°C. Digital temp. Indicator-cum-Controller. The equipment to work on 220v AC 50 Hz single phase. Chamber size in mm &amp; inches L x W x H 300 x 225 x 175 mm Approx Capacity approx 15 ltrs. Approx.</td>
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</table>

| 10 | Complete chromatographic unit for Paper & T.I.C: Specifications: Chromatography tank with cover for plates of different sizes. Size 20x20 cm, Moveable applicator with inbuilt thickness arrangement between 0 to 2mm (minimum div. 0.25mm) in further consists of the following components. Spreader (applicator) made of electroplated brass,. Perspex base of 114x23 cm to support glass plates,. Plate rack aluminium, anodised for ten 20x20cm or 20x10cm plates,. Developing tank with lid. with all Accessories for T.I.C. Apparatus |

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| 11 | Centrifuge clinical for 8 tubes | CENTRIFUGE  
Operational Requirements  
Aerodynamic compact construction for vibration free performance  
Table top version  
Technical Specifications  
Tube Capacity : No. 24 – 36 : Size 5 – 15 ml  
Should have a digital timer /RPM adjustor  
Body should be made of strong fabricated & corrosion resistant steel  
Control panel – for start/stop switch, dynamic brakes, step less speed regulator with zero start switch & speed indicator with timer and protective fuses. Door interlock  
Maintenance-free brushless drive motor with exact speed preselection and display. Speed range 100 to 6000 rpm and above.  
RPM : Up to 6500-7000, System Configuration Accessories, spares and consumables Centrifuge complete with Swig and basic rotors and four buckets- 01 set.  
Power Supply  
Power input to be 220-240VAC, 50Hz as appropriate |
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<tr>
<td>12</td>
<td>pH meters of wide</td>
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</tbody>
</table>
P H meters  
Digital pH meter  
• Digital with LCD display  
• PH range from 4-14  
• Replacable electrode  
• Resolution 0.1  
• Accuracy ± 0.01 |
| 13 | Complete Electrophoresis apparatus with power supply (Paper, PAGE, agarose) |  
Complete Electrophoresis apparatus with power supply (Paper, PAGE, agarose)  
Technical Specifications:  
Horizontal Gel Apparatus  Gel tanks sizes 8x11 inches (midi gel apparatus) and 3x 6 inches (mini gel apparatus) with platinum electrodes and dams. Supply at least 6 Nos. of 1.0 mm thick comb for 8-20 samples, Compatible DC Power supply  
Compatible microprocessor based power supply to run at least 2 units at constant voltage or current  
Output range programmable, 10-500V, 4-500 mA in 1 mA step, 100 W maximum Easy to read digital display  
Power Supply  
Power input to be 220-240VAC, 50Hz fitted with Indian plug |
<table>
<thead>
<tr>
<th>14</th>
<th>Bottle dispensers</th>
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</thead>
<tbody>
<tr>
<td><strong>Bottle dispenser</strong></td>
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<tr>
<td>It should be designed for performance handling of liquids from a large variety of bottles and flasks, the dispensers combine the latest in dosing technology, high tech materials and ergonomic design. As a result, users benefit from universal chemical compatibility, ease of operation, superior safety and low maintenance. Volumes range 0.25 to 100 mL, Superior chemical resistance, Long lasting performance stability</td>
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<thead>
<tr>
<th>15</th>
<th>All glass distillation apparatus</th>
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<tr>
<td><strong>ALL GLASS DISTILLATION APPARATUS</strong></td>
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<tr>
<td>Technical specifications: The glassware should be made of high quality borosilicate glass to withstand high heat. Apparatus capacity should be of 4 litres/hr. double stage metallic stand and other accessories. Standards heating elements of 2.5-3KW to be used. An automatic cut off device should be attached. Apparatus should consist of high quality Borosilicate Boiler with built in water leveller. Output water should be pyrogen-free distillate temp 65-75 degC. Automatic cut off device or safety control module. Power input to be 220-240 VAC, 50 Hz.</td>
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<tr>
<th>16</th>
<th>Vortex mixers</th>
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<tbody>
<tr>
<td><strong>Vortex mixer</strong></td>
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</table>
| Vortex mixer, Designed with a heavy cast aluminum body to provide optimum bench-top stability.  
- The mixer has two modes of operation: Continuous operation when you need to mix a quantity of tubes in sequence; intermittent operation is activated by touching the cup attachment with a test tube.  
- Equipped with a single tube mixing cup for single tube mixing and a soft foam pad and mixing platform for mixing 1 - 4 test tubes simultaneously.  
- To be supplied with a fractional workable motor on 220V AC completed with indicator, plug & cord, Speed- 100 - 3000rpm, |

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<table>
<thead>
<tr>
<th>No.</th>
<th>Item Description</th>
<th>Details</th>
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<tbody>
<tr>
<td>17</td>
<td>Incubator 37 o c</td>
<td><strong>INCUBATOR, ELECTRIC</strong>&lt;br&gt;Technical specification&lt;br&gt;Capacity: 120L with 2 compartments having light in each&lt;br&gt;compartment with UV light. Interior chamber: Stainless steel for easy cleaning. Minimum turbulence and no cross contamination. Adjusted safety thermostat for temperature, with inbuilt temperature sensor. Internal glass door for the observation. With minimum two adjustable shelves Peltier heating with continuous air circulation and heating by natural /forced convection for homogenous temperature distribution. Temperature range: +5 deg. C above ambient to 37 deg C Power Supply&lt;br&gt;Power input to be 220-240VAC 50Hz fitted</td>
</tr>
<tr>
<td>18</td>
<td>Variable and fixed volume auto pipettes</td>
<td><strong>SINGLE CHANNEL PIPETTES</strong>&lt;br&gt;- Spring Loaded Tip Cone for connecting tips very tightly&lt;br&gt;- Adjustment opening for adjusting pipettes to a specific liquid and volume&lt;br&gt;- Control Button with very low operating force, color indication for pipette volume&lt;br&gt;- Tip ejector with very low operating force, positioned for perfect ergonomics ACCURACY - + 1%&lt;br&gt;<strong>MULTI CHANNEL PIPETTES</strong>&lt;br&gt;- Lightweight electronic Pipette for high Professional Standards that provide optimal support in work</td>
</tr>
<tr>
<td>19</td>
<td>Fume cupboard</td>
<td><strong>Fume cupboard</strong>&lt;br&gt;Fume cupboards is a fume cabinets which localised the fume extraction systems fitted in laboratories to protect users rom harmful substances that could be inhaled. It should have a cabinet with a moveable front window made out of safety glass. It should properly functioning the fume hood exhausts hazardous gases, dusts, mists, vapors from a combined location. Cabinet Structure: Material: All steel (1.0mm cold-rolling steel or 1.0mm stainless steel) covered with electrostatic spraying after folding, welding, polishing, acid cleaning, phosphorization and chemical resistance. It should have all the accessories that is required.</td>
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<tr>
<th></th>
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<th>BALANCE ELECTRONIC 1.0 mg-Accuracy (BALANCE SEMI MICRO)</th>
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<tbody>
<tr>
<td>20</td>
<td>Digital Analytical Balance</td>
<td>Microprocessor based single pan Analytical Balance with High accuracy &amp; precision is required. Reading of the weight by digital display. Electronic top loading balances with transparent case weighing with automatic and manual start and provision for data interface Technical Specifications Weigh accurately up to 3rd decimal place of one gm., Auto zero Setting., Weighing capacity 210 gm., Readability: 0.001g., Settling time 1.5 second., Power Supply Power input to be 220-240VAC, 50Hz</td>
</tr>
<tr>
<td>21</td>
<td>Balance Micro</td>
<td>BALANCE ELECTRONIC 0.1 mg-Accuracy (BALANCE MICRO) Microprocessor based single pan Analytical Balance with High accuracy &amp; precision is required. Reading of the weight by digital display. Electronic top loading balances with transparent case weighing with automatic and manual start and provision for data interface Technical Specifications Weigh accurately up to 3rd decimal place of one gm., Auto zero Setting., Weighing capacity 210 gm., Readability: 0.001g., Settling time 1.5 second., Power Supply Power input to be 220-240VAC, 50Hz</td>
</tr>
<tr>
<td>22</td>
<td>Laptop</td>
<td>Processor- Min 2.5 GHz intel core i7, RAM min 8 GB, Hard Disk - 1 TB, Operating System- Windows 10 Home (Licensed copy with lifetime validity), Integrated graphics, Screen Size 15 inches, DVD RW, Preinstalled MS office (Licensed Copy) &amp; other necessary latest software, with accessories like laptop bag, cordless mouse, cleaning kit etc</td>
</tr>
<tr>
<td>23</td>
<td>Desktop computer with Printer</td>
<td>Desktop: All in One PC, Processor- 1.5 GHz Pentium Silver, RAM min 4 GB, Hard Disk- 1 TB, Operating System- Windows 10 Home (Licensed copy with lifetime validity), Integrated graphics, Screen Size 21 inches, DVD RW, Preinstalled MS office (Licensed Copy) &amp; other necessary latest software, wireless keyboard &amp; Mouse, with accessories like Cover, web cam, cleaning kit etc Printer: Laser type, Print output - monochrome, Speed &gt; 12 ppm, USB connectivity, Wireless connectivity, Print resolution 2400 x 600 dpi, USB Auto installable,</td>
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<tr>
<td>24</td>
<td>Photocopier &amp; Scanner</td>
<td>All in One print, scan &amp; Copy, Output - Monochrome &amp; color, Speed - 30 ppm or more, Resolution 9600 x 600 dpi or more, Wireless &amp; direct connectivity, 2 USB Ports. Supplied with installation CD, User Manual, cover, toner cartridge and other accessories</td>
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<tr>
<td>25</td>
<td>Multimedia Projector with screen</td>
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</tr>
<tr>
<td></td>
<td>Size: portable with Remote control USB &amp; HDMI input</td>
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<tr>
<td></td>
<td>Type: Optical Zoom / Focus (Automatic)</td>
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<tr>
<td></td>
<td>Focal Length: 16.9 - 20.28 mm</td>
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<td>Zoom: Up to 5x or more</td>
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<td>Lamp Life (Normal): 5,000 hours</td>
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<td>Screen should be white in colour and good quality with automatic movement with remote control screen size of 5x6 Feet</td>
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