

## Specifications of Minor Equipments (not Available on GeM)

Sr. No.	Instrument	Specifications
1.	Bio-safety cabinet	<ul style="list-style-type: none"> <li>• Class II, Type A2( Provision for circulation of air 70% or more</li> <li>• Dimension: 5 ft or more</li> <li>• Automatic Air flow adjustment for user, product and environment safety</li> <li>• Microprocessor control of air velocities in real time with display</li> <li>• Smooth interiors and exteriors</li> <li>• Low Noise level</li> <li>• With lock facility and castors</li> <li>• Highly resistant to corrosion. Easy to clean</li> <li>• Powerful UV tube lights with optical reflectors to ensure uniform intensity distribution of the UV radiation throughout the cabinet along with white light.</li> <li>• Control system for the choice of timed UV exposure from 5 to 30 minutes</li> <li>• With Pre-filter and HEPA filters with efficiency more than 90%</li> <li>• Auto Speed increase on door opening for maintaining air velocity</li> <li>• NSF and EN certified</li> <li>• Audible and visual alarms for HEPA filter failure, blower failure, air flow speed failure</li> <li>• Provision for vacuum, water and non-combustible gas</li> <li>• Door sensors for auto switch off of UV lamps if door flap is opened.</li> <li>• Spare UV tube, Spare white light.</li> <li>• Ports for cable access.</li> <li>• Steel Trolley with Cupboard</li> </ul>
2.	Drying cabinet	<ul style="list-style-type: none"> <li>• Key locks on main door</li> <li>• Digital display for temperature and humidity</li> <li>• With lock facility and castors</li> <li>• Re-circulatory with HEPA filters</li> <li>• Heater to maintain ambient temperature</li> <li>• Corrosion proof interior design</li> <li>• A drain outlet with flexible hose</li> <li>• Inside space to provide full length hanging with removable shelves for storage or smaller items</li> </ul>
3.	Pre-treatment water purification plant	<ul style="list-style-type: none"> <li>• Pre filtration system to remove suspended matter from tap water.</li> <li>• 5 micron and 1 micron wrapped type depth filter</li> <li>• Inbuilt pretreatment cartridge with anti-scaling compound, activated carbon and 0.5 micron filter.</li> <li>• High flux thin film composite polyamide RO membrane with 95-99% rejection.</li> </ul>

		<ul style="list-style-type: none"> <li>• Conductivity cells before and after RO</li> <li>• Mixed bed electro deionization module, EDI module should contain active carbon beads at cathode</li> <li>• System should contain a display which also indicates system performance</li> <li>• Reservoir size: 100L or better</li> </ul>
4.	Suction unit	<ul style="list-style-type: none"> <li>• Easy to use portable surgical aspirator.</li> <li>• High vacuum/High flow suction type.</li> <li>• Equipped with vacuum regulator and vacuum display.</li> <li>• Supplied with a graduated Autoclavable 1 liter secretion collector.</li> <li>• Variable suction speed.</li> <li>• Should be supplied with aspiration pipes.</li> </ul>
5.	Mix Mate	<ul style="list-style-type: none"> <li>• Electrical requirements: 220V, 50 Hz</li> <li>• Mix Mate with 3 tube holders: PCR 96, 0.5ml, 1.5/2.0mL</li> <li>• Low volume mixer with integrated vortex function including 3 tube holders: PCR 96, 0.5ml.1.5/2.0ml</li> <li>• Mixing in a 3-in-1 formats</li> <li>• Mixes Plates up to 96 formats</li> <li>• Vortexing different tube formats, Pre-programmed direct selection keys</li> <li>• 2D Mix-Control and Anti-spill technology</li> <li>• Automatic imbalance detection and extremely quiet operation</li> <li>• Mixing frequency: 300-3000 rpm (in 50 rpm increments)</li> <li>• Touch vortexing frequency: 3,500rpm</li> <li>• Adjustable mixing time</li> </ul>
6.	Thermo-mixer	<ul style="list-style-type: none"> <li>• Temperature control range from ambient to 99°C, incubation accuracy: <math>\pm 0.5^{\circ}\text{C}</math> above ambient temperature</li> <li>• Temperature setting in the increments of <math>0.1^{\circ}\text{C}</math></li> <li>• Mixing frequency: 300-2000rpm</li> <li>• Instruments should have the flexibility to accommodate different tube formats and plate formats like micro titre plates, deep well plates, 96 well plates</li> <li>• Blocks should have sensors, calibrated and exchange should be simple and instrument should be able to identify the blocks automatically and their respective speed and temperature</li> <li>• With vortex and short mixing facility, 3D shake facility, anti-spill and anti-vibration technology</li> </ul>
7.	Plate Centrifuge	<ul style="list-style-type: none"> <li>• Multipurpose refrigerated micro centrifuge with aerosol tight rotors for 96 well plate, 1.5ml/2ml tubes, 15 ml/50ml tubes.</li> <li>• Automatic rotor recognition and imbalance detection.</li> <li>• Maximum speed: 12000rpm or more for 1.5ml/2ml tubes; 6000 rpm or more for 15ml/50ml tubes; 3500 rpm or more for 96 well plate.</li> <li>• Acceleration time to maximum speed: 15 sec or better.</li> <li>• Deceleration time from maximum speed: 15 sec or better.</li> </ul>

		<ul style="list-style-type: none"> <li>• Low noise level.</li> <li>• Fast and ergonomic lid locking.</li> <li>• Automatic lid opening at the end of run.</li> <li>• Water proof keypad and program keys.</li> </ul>
8.	Water bath Temp controlled	<ul style="list-style-type: none"> <li>• PID temperature control for optimal temperature stability</li> <li>• Working Temperature range from +20 to 99.9 °C or better</li> <li>• Adjustable shaking frequency from 20 to 200 rpm</li> <li>• Integrated circulation pump for temperature homogeneity</li> <li>• Bath tank and other parts that contact the water should be made of high quality stainless steel</li> <li>• Removable bottom plate and shaking inserts</li> <li>• LED display for indication of temperature, shaking frequency, etc.</li> <li>• Built in timer for setting the running time</li> <li>• Seamless and water proof keypad</li> <li>• Drain screw for emptying of water bath</li> </ul>
9.	Gel Electrophoresis system with power supply	<ul style="list-style-type: none"> <li>• Agarose Gel electrophoresis system along with power supply</li> <li>• Agarose Gel Electrophoresis system <ul style="list-style-type: none"> <li>➤ Gel Size (W X L in cm): 7 x 7 or 7 x 10 or better</li> <li>➤ Tank should accommodate at least two combs per gel.</li> <li>➤ Gel casting gates for tape free casting.</li> <li>➤ Clear plastic construction for easy sample visualization.</li> <li>➤ Color coded labeled electrodes, base for correct positioning of lid.</li> <li>➤ Provision of easy lid removal to prevent buffer spillage.</li> <li>➤ Easy to replace electrode assemblies.</li> <li>➤ UV transparent gel trays, with fluorescent ruler.</li> </ul> </li> <li>• Power supply Unit: <ul style="list-style-type: none"> <li>➤ Atleast three sets of output terminals to deliver constant voltage or current.</li> <li>➤ Output range: Voltage: 10 – 300V, Current: 4-400 mA, Power: 75 Watts or better</li> <li>➤ LED display for voltage, current, power and time.</li> <li>➤ Safety features: Overload/short-circuit detection; overvoltage protection etc.</li> </ul> </li> </ul>