

Appendix

Table 1: Brief Table of Items and their manufacturer as per Standard/Imported/ Quality Brands

S. No.	Name of Equipment / Instrument	QTY	Suggested Best OEM Brands (International / National)
1	Liquid Nitrogen Storage Tank (30–50 L) with racks for cryovial storage	1	Thermo Scientific / PHCbi (Panasonic) / MVE (Chart Industries) / Haier Biomedical
2	Water Bath (37°C, Digital)	1	Thermo Scientific / Memmert / Julabo / Remi
3	Magnetic Stirrer with Hot Plate	1	IKA / Heidolph / Thermo Scientific / Remi
4	Digital pH Meter	1	Mettler Toledo / Thermo Scientific (Orion) / Hanna Instruments / Eutech / Oakton
5	Mycoplasma Detection System / Kit	1 (100Rx)	Lonza / MycoAlert / Thermo Fisher Scientific / Merck (Sigma-Aldrich) / HiMedia
6	Micropipettes (0.1–2 µL range)	1	Eppendorf / Thermo Scientific (Finnpipette) / Gilson / Sartorius
7	Serological Pipettes (Sterile)	10,000 quantities (including 5ml, 10 ml, 25 ml)	Corning / Thermo Scientific (Nunc) / Eppendorf / HiMedia
8	Pipette Aid / Controller	1	Eppendorf / Thermo Scientific / Sartorius / Accumax
9	Vortex Mixer	1	Thermo Scientific / Eppendorf / IKA / Remi
10	Mini Centrifuge	1	Eppendorf / Thermo Scientific / Remi / Neuation
11	Filter Units (0.22 µm)	Quantity 200	Merck Millipore / Sartorius / Corning / HiMedia
12	T25, T75, T175 flasks; Cell culture dishes; Multiwell plates (6, 12 well)	As per given in the details	Corning / Thermo Scientific (Nunc) / Eppendorf / HiMedia

DETAILED SPECIFICATIONS OF EQUIPMENT / ITEMS

The detailed specifications (make as mentioned) of each equipment/item are as follows, these makes are fulfilling almost all standard criteria:

1. Medical Equipment – Liquid Nitrogen Storage Tank (30–50 L) with Racks/ canister for Cryovial Storage

Make: Thermo Scientific / PHCbi (Panasonic) / MVE (Chart Industries) / Haier Biomedical

- The volume of the tank can be accepted up to **minimum 20 liters**, however **make and canister-based storage system as per above is mandatory.**

2. Medical Equipment – Water Bath (37°C, Digital)

Make: Thermo Scientific / Memmert / Julabo / Remi

- Minimum **15 liters capacity**
- Should include **6 concentric adaptors** for warming various-sized samples

3. Medical Equipment – Magnetic Stirrer with Hot Plate

Make: IKA / Heidolph / Thermo Scientific / Remi

- Heating temperature range: **50–320°C**
- Speed range: **100–2000 rpm**
- Stirring bar length: **20–80 mm**

4. Medical Equipment – Digital pH Meter (Table Top)

Make: Mettler Toledo / Thermo Scientific (Orion) / Hanna Instruments / Eutech / Oakton

- Table-top, laboratory use, digital
- pH range: **-2.00 to 16.00**
- Accuracy: **± 0.01 pH**

5. Mycoplasma Detection System / Kit (100 Tests)

Make: Lonza / MycoAlert / Thermo Fisher Scientific / Merck (Sigma-Aldrich) / HiMedia

- Should be **ultrasensitive, rapid, and simple fluorescence microscopic assay**
- Suitable for detection of **mycoplasma infection in cell cultures**

6. Medical Equipment – Micropipettes (0.1–2/2.5 µL Range)

Make: Eppendorf / Thermo Scientific (Finnpipette) / Gilson / Sartorius

- Preferably with **stainless steel tip cone**
- Random error: **±12% (0.1 µL)**
- Systematic error: **±48% (0.1 µL)**

7. Serological Pipettes (Sterile)

Make: Corning / Thermo Scientific (Nunc) / Eppendorf / HiMedia

- Minimum quantity: **10,000 units**
- Volume distribution:
 - 5 mL – 50 bags
 - 10 mL – 50 bags
 - 25 mL – 25 bags
- Individually **paper/plastic wrapped, sterile polystyrene**

8. Pipette Aid / Controller

Make: Eppendorf / Thermo Scientific / Sartorius / Accumax

- Electronic, rechargeable
- Compatible with **0.1 mL to 100 mL pipettes (plastic/glass)**
- Battery backup: **minimum 8 hours**

9. Vortex Mixer

Make: Thermo Scientific / Eppendorf / IKA / Remi

- Speed range: **250–2500 rpm**
- Modes: **Touch and continuous**
- Features: **Low vibration, anti-slip base, interchangeable attachments**
- Must include:
 - Standard cup head

- Universal platform
- Tube inserts (1.5–2 ml and 10–20 mm)
- One-hand attachment
- Microplate attachment
- Flask holder
- Flat rubber platform

10. Mini Centrifuge

Make: Thermo Scientific / Eppendorf / IKA / Remi

- Combi rotor for **15 mL & 50 mL tubes with adapters**
- Timer: **1–99 min + infinite mode**
- RPM/RCF switchable display
- Brushless DC motor: **500–4500 rpm**
- Microprocessor-controlled precise RPM
- Enhanced airflow for quiet operation
- Lid-lock safety with auto opening
- Compact and lightweight design

11. Filter Units (0.22 µm / 0.45 µm)

Make: Merck Millipore / Sartorius / Corning / HiMedia

- Minimum quantity: **200 units**
- PES membrane, high flow rate, low protein binding
- Pressure tolerance: **up to 10 bar**
- Luer-lock inlet, luer-slip outlet
- 33 mm housing
- Individually sterile packed
- Suitable for filtration of aqueous solutions, buffers, and proteins

12. Cell Culture Consumables (Flasks & Plates)

Make: Corning / Thermo Scientific / Eppendorf / HiMedia

Supply of **sterile, tissue culture-treated, clear polystyrene, non-pyrogenic, DNase/RNase free consumables:**

- 25 cm² Flask (vent cap) – **200 units**
- T125 Flask – **200 units**
- T175 Flask – **200 units**
- Costar 6-Well Plates with lid – **100 units**

- Costar 12-Well Plates with lid – **100 units**
- Products should ensure **uniform cell growth surface and sterility for routine applications**