List of equipments for the department of Skin & STD

SI. No.	Name of Equipments
1	ND Yag Laser - Q switch ND Yag system with standard accessories, Dye impregnated polymers, wavelength 1064 nm/532 nm / 585 nm / 650 nm pulse with 5-20 nsec/<7 nsec, maximum fluence - 2mm - 8mm, 2.0J/cm2 - 14 J/cm2, Maximum rep rate 10 Hz, Aiming beam red
2	V Beam pulse Dye laser with standard accessories
3	Two-in-One laser (Pulse Dye+ND Yag) - Lazer type - Pulse Dye - ND Yag, wave length - 585 nm & 1064 nm, pulse width 0.5msec to 40msec wth pulse dye 0.3msec to 300msec wth ND yag, Spot size - 5mm to 12mm with Pulse dye / 3mm - 15mm with ND Yag, Max fluence - 40J/cm2 with pulse Dye at 5mm, 300J/cm2 with ND yag at 3mm, Rep Rate - 2 Hz with 585nm & 5Hz with 1064nm, Aiming beam - Amber / Red
4	CO2 laser - Should have Fractional, incisional & Excisional capabilities for Skin cutting slough Removal, Skin Resurfacing / 10600nm wave length / have 60 watts power / continuous wave & Ultra pulse / Non swquentional pulsing / Pulse Energy of 2-225mJ (Adjustable) / Deliver Max power to tissue of 240 wats per pulse / User selectable repetition Rate 600 pulses / second / Pulse duration of 0.1ms / Repeat delay of 0.1 to 5.0 seconds / 5-100% coverage/pass / Depth of penetration : Up to 4000 micro meter/pulse / Computer Pattern generator (CPG) Gun / Scan area up to 15mm x 15mm / Transmission by Durafite Articulated Arm, 360 degree rotation 1.5 meter (5') / Aiming Beam of Helium of Diode Laser / Half contained, closed cycle cooling system / CE, LU, CSA standards / UPS to 6 KVA / Supplied with operator & patient Safety goggles / Supplied with internal cornea shield & applicator / Turbo smoke Evacuator should be supplied with the equipment / True collimated Hand piece of 2mm Fractional Hand pieces : Spot Size : 1.3mm & 0.12mm / Focused incisional hand pieces : Spot size : 0.2mm and 1mm hand pieces) / US FDA approved
5	PUVA + NBUVB chamber

SPECIFICATION FOR FRACTIONAL CO2 LASER

Normal mode:

Wavelength 10.6µm, far-infrared laser

Pulsed radiofrequency 1 – 30 W

Hyper-pulse Max Power: 102W

Pulse 1. Average power: 1-20 W

2. Pulse frequency: 33.3 Hz

Matrix mode:

Scan Graphics Square. Rectangle, round & Oval

Dot quantity 400 dots maximum

Working state Hyper-pulsed mode

Sean mode Sequence scan or Random scan.

Pulse energy 20-65mj is optional for each dot in each

energy repeat.

Max energy $65 \text{ mj } \times 5 = 325 \text{ mj in each dot}$

Technical specification:

Laser apparatus Sealed - off laser device stimulated by DC

Condenser focus f = 100 mm

Beam divergence angle 0.3 mrad

Spot size 0.2mm at the focus

Max power intensity 75,000 W / cm²

Radiation time 0.01 - 1 sec

Interval time 0.01 - 1 sec

Aiming beam < 2mW, 6354 nm red semiconductor laser

Beam transport device Articulated arm with six segments

-Power supply 230V

TECHNICAL SPECIFICATION OF ND YAG LASER, SI.No. C-1

Laser Type	Crystal Q - Switched Nd: YAG
Wave Length	1064 nm
Energy Range	0.2 to ≤ 15 mJ (in single pulse mode)
	10 to ≤ 25 mJ (in double pulses mode
	20 to ≤ 45 mJ (in triple pulses mode)
Pulse width	4 ns
Treatment Spot Size	8µm
Burst Mode	1, 2 or 3 pulses per shot, selectable
Mode Structure	Fundamental, diffraction limited
Avg. Air Breakdown	≤ 2.1 mJ (in air) & ≤ 1.5 mJ (in liquid solution)
Cone Angle	16°
Treatment Beam offset Range	± 500 µm, continuously variable
Laser Repetition Rate	Upto 3.0 Hz

Broad based QR for 42 lamps UV Therapy Whole Body Chamber

- 1. The Compact Chamber should have 21 PUVA and 21 Narrow Band Lamps Of 2 meters length Lamps of 120W each.
- 2. The Chamber Exterior Dimensions should not be less than:

Closed: 1,267 X 1,327 X 2,310 mm Open: 1,357 X 1,539 X 2,310 mm

- 3. The interior Dimensions should not be more than: 939 X 2,000mm
- 4. The weight of the unit should not be more than: 405 kg
- 5. The height of the unit should not be more than 2400 mm
- 6. The Chamber should be One Phase; 230V; 50HZ; current consumption should be 28A.
- 7. The chamber should operate in ambient Temperature of 0° to 35°C
- 8. The Chamber should have the following Safety features:
 - a) UV sensor System.
 - b) Operated via Touch Screen.
 - c) Shut Off when Opened.
 - d) Viewing Panel.
 - e) Grab Rails.
 - f) Acrylic Glass Panels.
- 9. The Chamber should have the following Efficiency and Comfort for the Patients:
 - a) Cooling and Filter System.
 - b) Mirror-Finish Interior Reflectors
 - c) Illumination.
 - d) Interior Operating Panel.
 - e) Double Wing Door.
 - f) HR Foam Pedestal
- 10. Protective UV goggles- 2 Nos.
- 11. Equipment should confirm to CE and ISO norms.