

**SPECIFICATIONS FOR MULTICHANNEL MONITORS**

- Easy to operate, at bedside and in transit.
- Multichannels monitor (diagnostic 12 lead ECG, non-invasive blood pressure, respiration, Spo2, capnography).
- Large colour SVGA display.
- Long battery backup.
- Lightweight.
- Wired and wireless connectivity with central monitoring station.

**SPECIFICATIONS OF CENTRAL MONITORING SYSTEM**

- LCD Display
- Display up to 10-bed information simultaneously.
- 4 disclosure waveforms per bed with key focusing window monitor showing all waveforms and parameters.
- 24 hours waveform disclosure review.
- Light and sound alarm indicator.
- Supports LAN and WLAN.

**Specifications of C-arm compatible OT table:-**

- Fully automatic C-arm compatible OT table with longitudinal shift
- Five sectional, X-ray translucent top,
- C-arm compatible electric OT table with longitudinal shift,
- Split type leg section removable and adjustable pneumatically

**Accessories:-**

- Rubber mattress, orthopedic attachments, lateral cassette holder.
- SS top arm board, Anesthesia screen

**SPECIFICATIONS AND LIST OF EQUIPMENTS REQUIRED IN THE  
DEPARTMENT OF PARAMEDICAL SCIENCES, HIMSR**

<b>SN</b>	<b>INSTRUMENTS</b>	<b>Specification</b>	<b>QUANTITY</b>
1	CPR Manikins baby and Adult		01each
2	First Aid and Trauma Manikins		01
3	ACLS Training System		01
4	Intubation Model and Tracheal light band		01each
5	Airway Management Trainer		01
6	IV Torso, foot, arm and hand		01
7	Portable External Defibrillator		01
8	Mask different sizes		
9	Resuscitator		01
10	Suction unit and Accessories		01
11	Collar different sizes		
12	Spine Board and straps		01
13	Beds		02
14	Equipments to record Vitals i. BP Instruments < Digital = Omnitrom (Japan) ii. BP Instruments < Manual = Monophone iii. Stethoscopes = Novaphone		06 each
15	ECG machine (Multichannel)		02
16	Ambo bag, LMA, I Gel and intubation tubing		01 each different sizes adult and pediatrics 32
17	Autoclave	35 ltrs. Portable High Pressure Wing nut type	01
18	Bacterial loop		10
19	BOD Incubator	175 Ltrs. (Double Volt finished inner S.S 316 Mirror Polished Full acrylic Door permit inspection of specimen without disturbing the temperature, PID Controller with auto tuning facility with accuracy of $\pm 0.5^{\circ}$ C, temperature deviation Audio visual alarm, safety thermostat for overshooted temperature.	02
20	Candle Filter	Permanent candle, replicable filter Medium, completely closed system, leak proof tongue, flange, joint, blow back, back washing	01
21	Centrifuge	High speed, 17000 RPM, 12X10 ml	03
22	Dessicator	Knob lid pattern, heavy soda glass with knob cover, accurately grooved top and rim	01
23	Electrolyte Analyzer	Siemens 614	01

24	Elisa Reader & Washer	Reader: Micro plate type, 96 well plate, all 38 well plate, and 1x8 flat bottom stripes (16 Channels) Washer: Auto strip washer, DLx50's, compact 96 and 384 well strip	01
25	Faculty Microscopes	Binocular (Build-in Koehler Illuminator 6V/30W Halogen Bulb	06
26	Hand Magnifying lens		02
27	Improved Tripleruled neubauer counting chamber	German Make with cover slide	20
28	Vertical Laminar Flow Air flow	Fully washable synthetic, pre filter units, capacity to hold 0.3 microns	01
29	Loviband comparators	Model 2000 + with two cell of 13.5 mm	01
30	Sahli's Hemoglobinometer	As per specifications used earlier	20
31	Spirit lamps	Brass or steel body	20
32	Student Microscopes	Binocular ( Spare bulb, blue filter , fuse, immersion oil, dust cover, Illumination 110V / 220V 6V20W Condenser –Abbe 1.25 N.A	60
33	Thermometer	Upto 200 <sup>0</sup> C	02
34	Timers (stop watch)	As per specifications used earlier	03
35	VDRL Shaker	Heavy duty motor 250 RPM, Rubber disk to hold flasks	02
36	VDRL Slide	Non corrosive frosted glass live 75x56x3 mm, beveled polish edges with several concavities diameter of each concavity = 16mm x1075 mm deep	05
37	IV Stands	Portable, double hook, Adjustable	04
38	View Box (X Rays)	Size 355 mm, LX 560 mm AX, 150 mm D, SS box tube & electrical fitting inside box	06
39	Emergency drug tray	Steel medium size	06
40	OT Tray	Steel medium size	06
41	Laryngoscopes	ENF before 85 <sup>0</sup> field view, 130 <sup>0</sup> Angulation flexible	02 Each of adult, pediatric
42	Nebulizer	Compact, patent pump design with carrying case	01

**SPECIFICATIONS AND LIST OF ARTICLES NEEDED FOR THE  
DEPARTMENT OF FORENSIC MEDICINE**

<b>S.No.</b>	<b>Article</b>	<b>Quantity</b>
1.	Weighing machine, dial type human	2
2.	Equipment for reporting height	2
3.	Balance chemical	1
4.	Balance, single pair for weighing foetus	1
5.	Weighing machine for Weighing dead bodies	1
6.	Weighing machine for organs	2
7.	Folding metal scale to measure upto 7 ft.	1
8.	Steel tape roll	2
9.	Warnier calipers	1
10.	Autopsy table positive or negative embossed top.  Fixed (with 4 height adjustable feet) or mobile (with 4 castors with breaks) installation. Removable headrest, flex. shower, hot / cold water supply, drainage system into bucket or to floor etc. Sink size: 500 x 400 x 200mm deep Dimensions: 2600(L) x 850(W) x 850(H) mm Weight: appr.190 kgs net. Stainless steel body	2
11.	Styker autopsy saw, with accessories Autopsy Saw Blades Motor unit Variable speed foot switch Fitted case Double arbor completer with two 1-3/8 saws Circular saw blades (1-5/8" dia) (2) Curretting burrs (2) Slotting burrs (6) Twist drill (4) Allen wrench (2) End wrench (1) Oscillating saw blade (2 dia) Cutaway Oscillating blade (2Diameter) Oscillating bone scoop (3/4) Single blade arbor (For oscillating blades) chuck key	3
12.	Hacksaw	4

<b>S.No.</b>	<b>Article</b>	<b>Quantity</b>
13.	Dissection sets, consisting of cartilage knife bone cutting forceps scissors, straight and curved Enterotome Scaples, knives with spare blades,probe metal scale graduated in cms. Etc.	4
14.	Rib. Shears, right and left	4
15.	Viscerotome with attachment for illumination (Battery operated)	1
16.	SLR camera with accessories	1
17.	Microscope student type	25
18.	Microscope Binocular, research	3
19.	Stopwatch	2
20.	X'ray view box one in four	4
21.	X ray View Box Two in one	3
22.	B.P. Apparatus	4
23.	Anthropometric set	1
24.	Automatic tissue processing machine. Pre-programmable provision for dehydration cycle (user selectable). Safety device to protect tissues in wax during electric failures Fixed easy to clean circular platform. 1 litre beaker with cover and individual carriers for safety. Digital controlled wax bath with overheat cut out safety features. Tissue Basket is suitable for Stainless Steel tissue containers or disposable cassettes. Wax Bath: 2 nos. Stainless Steel Basket: 1 no. Tissue Containers: 10 nos. 24 Hr. timing calibrated timing discs : 6 nos. Dust Cover Basket Rotary	1
25.	Microtome with knife	1
26.	Hot plates	1
27.	L.Modes	16
28.	Leather Strops	2
29.	Parafin Bath Embedding	1

S.No.	Article	Quantity
30.	Slide Warming Table	1
31.	Stone Carbarandon	2
32.	Water bath (Tissue Flowing)	1
33.	Distillation plant	1
34.	Brain knife	8
35.	Black Holder	50
36.	Digital Spectrometer	1
37.	Digital PH meter	1

Display		3 1/2 digit LED
Range	pH	0 to 14.00
	mV	0 to + 1999
Resolution	pH	0.01
	mV	1
Accuracy	pH	+0.01
	mV	+1
Temperature		Auto 0 to 100°
Compensation		Manual 0 to 100°
Slope Correction		80 to 120%
Power		230V + 10%
Dimensions		76 x 275 x 175
Accessories Combination pH Electrode, Buffer Tablets 4pH & 7pH, Operation		

Manual, Electrode Stand, Dustcover
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38.	Electric Auto slide projector	1
39.	Glass cutting Pencil	1
40.	Hand Set heat Sealer	1
41.	Spectroscope Lens with adjustable slit	2
42.	Refrigerator double door, 250 litres	3
43.	Digital Video Camera 12 megapixel, 4 x optical zoom	1
44.	Color Television 21 inch	1
45.	DVD player	1

## **TECHNICAL SPECIFICATIONS FOR SUPERCRITICAL FLUID (CARBON DIOXIDE) PARTICLE FORMATION SYSTEM**

Consisting both processes Rapid Expansion of Supercritical Solutions (**RESS**) processing is used to prepare microspheres and the **SAS (Supercritical fluid anti-solvent process)**.

The systems should have necessary components such as CO<sub>2</sub> pump, co-solvent pump/ chillers/heat exchanges/extraction vessel/Reactors and particle collector that are mounted in cart, easy to move and fully controlled through PLC & PC Based software to carry out the recipes.

**System should be capable of performing RESS and SAS process.**

**Suitable for RESS and SAS particle formation/design system featuring**

- 500 ml finger tight vessel SAS with pressure activated seals. CO<sub>2</sub> pump Flow rate 50g/min.
- 100 ml finger tight reactor with pressure activated seals & single crystal sapphire high pressure windows.
- S/W controlled electronic back pressure regulator.
- Electrical heat exchange module.

- Shell & tube cooling heat exchanger.
- Electric motor driven dual-head CO<sub>2</sub> pump with built in pressure sensor & stainless steel heads providing flow rates up to 10 mL/min mass flow.
- Electric motor driven Co- solvent pump with high pressure static mixer.
- 500 ml finger tight cyclone style SS separation/collection vessel with drain valve.
- RESS and SAS precipitation vessel with integrated S/w controlled heated nozzles.
- Circulating cooling bath with minimum capacity of 10 L.
- Safety features includes rupture discs & electronic pressure control
- S/W includes method programming flow & pressure control modes and data logging
- A suitable PC pre-loaded with SFE Particle formation software.
- System rests on movable cart.
- Warranty: 3 years installation: at site by Factory trained Engineers.
- Spare parts for 3 years.