ANNEXURE-A

Item No.1: Specifications of the Laparoscopic Set

Detail approximate

1) Laparoscopic Video Monitor (High definition Television) HDTV: 1 no.
   Full digital HDTV compatible, superhigh resolution image with stable and flicker free
   image quality. Large LED screen provides clear, easy –to- see image with lower
   power consumption.

2) Laparoscopic Camera with control unit: HD camera: 1 no.
   It should have unprecedented colour reproduction and highest degree of fidelity. It
   also should have horizontal image resolution. Compatible with all flexible
   videoscopes and video laparoscopes. Autoclavable manual and auto white balancing
   system.

3) Light source Xenon (>=300 watt): 1no.
   It should have high intensity for sufficient illumination of whole abdomen and
   compatible with HD camera. Light intensity continuously, manually adjustable.

4) Fiber optic cable (5 mm & 250 cm): 1no.

5) HD Video system with video recorder.

6) Laproflattor: 1 no.
   Electronic CO₂ laproflattor with tubings. High degree of safety, large display for
   status checking and powerful 35 L/min insufflations and responds to abdominal gas
   leaks by quickly returning to the preset level with automatic overpressure release for
   patient safety.

7) Laparoscopic suction irrigation machine or pelvis cleaner system –Laparo –pump &
   holder for irrigation stand reusable tube set, power supply cable, Hygine filter for
   aspiration, aspiration container, 3L autoclable pack & mounting for securing
   aspiration container to irrigator stand & suction irrigation tube set.

8) Electro-surgical unit with accessories:
   It should have high frequency surgical unit more than adequate for all surgical
   procedures, can set a lower limit. Power –pack system gives intelligent cutting and
   coagulation support for initial incisions for all situations. Bi –polar coagulation has to
   be included in the above unit. Sophisticated self –check program: Minimum power
   consumption and patient’s safety in top quality must be present. Cut control for
   consistent regulation of cutting quality & soft coagulation with no carbonization to
   reduced adhesive effect. Neutral electrode safety system. Auto start and auto
   coagulation during bipolar coagulation. Digital error code displays electronic
   memory.

Hand instruments for Laparoscopy:

i) Veress needle : It should be with spring action blunt style
   12 cm : 1 no
   10 cm : 1 no
   8  cm : 1 no
ii) Trocar and cannula:

<table>
<thead>
<tr>
<th>Size</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 mm</td>
<td>2 nos</td>
</tr>
<tr>
<td>7 mm</td>
<td>1 no.</td>
</tr>
<tr>
<td>5 mm</td>
<td>6 nos</td>
</tr>
</tbody>
</table>

It should consists of trocar, cannula with insufflation stopcock and multifunctional valve and must have pyramidal tip.

iii) Reducer /reduction sleeve 5 mm: 1 no.

iv) Telescopes:

<table>
<thead>
<tr>
<th>Size</th>
<th>Angle</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 mm</td>
<td>0°</td>
<td>1 no</td>
</tr>
<tr>
<td></td>
<td>30°</td>
<td>1 no</td>
</tr>
<tr>
<td>5 mm</td>
<td>30°</td>
<td>1 no</td>
</tr>
</tbody>
</table>

Rigid rod lens system provides good resolution and the better dept perception. It should have uniform image brightness and autoclavable. The 30° forward oblique angle and permits for greater latitude for viewing underlying areas under difficult anatomical conditions.

v) Suction Cannula:

<table>
<thead>
<tr>
<th>Size</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 mm</td>
<td>1 no</td>
</tr>
<tr>
<td>5 mm</td>
<td>1 no</td>
</tr>
</tbody>
</table>

vi) Laparoscopic scissors:

Curved (Monopolar Metzenbaum dissector 5mm diameter): 1 no
Straight (Bipolar): 1no
Peritoneal scissor: 1 no

vii) Unipolar forceps (Hook & spatula): 2 nos.
viii) Bipolar forceps: 2 nos.
ix) Atraumatic forceps: Maryland Dissector forceps: 2 nos.
Fenestrated forceps: 2 nos.

x) Needle Holder (flat jaw) with handle: 2 nos.
xi) Monopolar cable (reusable): 1 no.
xii) Bipolar cable (reusable): 1 no.
xiii) Allis (double row of teeth) grasper: 1 no.
xiv) Aspiration needle: 1 no.
xv) Reducer/Reduction sleeve (5mm): 1 no.
xvi) Grasping forceps (toothed & rachet 5mm): 2 nos.
xvii) Laparoscopic knot pusher: 1 no.
xviii) Clip applicator (reusable): 5mm - 1 no.
Fenestrated 10 mm: 1 no.
xix) Uterine Manipulator: 1 no.
xx) Clips (medium & large): 1 no.
xxi) Drilling needle: 1 no.
xxii) Infiltration needle: 1 no.
xxiii) Biopsy forceps (toothed punch biopsy) : 1no
xxiv) Myoma fixation screw : 2nos
xxv) Tissue morcellator with base unit & accessories : 1no
xxvi) Vessel sealing: Enseal :

9) 3 KVA UPS for use of Laparoscopic set.

Item No.2: Specifications of Hysteroscopy set

Detail approximate

Permit viewing of cervical cannula & active causes of the purpose of performing diagnose surgical procedures.

1) Should have unique bipolar hysteroscopic system in saline when combined with versa point.
2) A slim profile and outer diameter not to exceed 4.5 mm
3) Optics to be between 9-12 degree.
4) Should have provision for continuous flow irrigation.
5) Should have at least 6 fr and preferably 7 fr working channel.
6) Should supply a 3m length suitable fibre optic cable and necessary light guide adapters
7) Should supply kink resistant sealing caps for instruments of 3 to 7 fr size
8) Should supply a suitable sterilization tray for the compact hysteroscope.
9) Should supply the following compatible accessories
   i) Grasping forceps : 1 no
   ii) Flexible scissors : 1no
   iii) Biopsy forceps : 1no
   iv) Hook scissors : 1no
   v) Cannula : 1no
   vi) Button electrode /hook :
   vii) HF Needle :
   viii) HF connecting cable & cutting electrode.

HysteroFlow with HysteroBalance

i) Should be a closed system for accurate and easy fluid loss measurement.
ii) Intelligent software and automatic instrument recognition for accurate measurement of the intrauterine pressure.
iii) One stand for easy handling.
iv) Extra large display for clearly fluid –loss information.
v) Should be quoted with requisite tuning and adapter set for un-hindered working.

HysteroBalance will have the foll features:
Width 710 mm
Height 1400 mm
Depth 810 mm  
Weight 27 Kg  
(when used with pump “Hystero Flow”)
Max. Dimensions of fluid bags to be used  
Width 300 mm  
Height 440 mm

**Hysteroflow will have the features:**

**Power supply**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>220-240V</td>
</tr>
<tr>
<td>Frequency</td>
<td>50-60 Hz</td>
</tr>
<tr>
<td>Max power consumption</td>
<td>82 W</td>
</tr>
<tr>
<td>Fuse</td>
<td>2xT3,15A,UL-recognised</td>
</tr>
<tr>
<td>Size</td>
<td>Suitable</td>
</tr>
<tr>
<td>Width</td>
<td>360 mm</td>
</tr>
<tr>
<td>Height</td>
<td>130 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>305 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>6.5 Kg</td>
</tr>
<tr>
<td>Safety</td>
<td>Suitable</td>
</tr>
<tr>
<td>Protection class</td>
<td>1. type BF</td>
</tr>
<tr>
<td>Pump</td>
<td>Suitable</td>
</tr>
<tr>
<td>Flow rate</td>
<td>30-500 ml/min</td>
</tr>
<tr>
<td>Pressure range</td>
<td>15-150 mm Hg</td>
</tr>
<tr>
<td>Overpressure</td>
<td>molar cuts off over 200 mm Hg</td>
</tr>
</tbody>
</table>

**Item No. 3:** **Specifications of Video Colposcope with electrical zoom capability:**

**Detail approximate**

i) Signal processing: Digital signal processor  
ii) AGC/white balance: auto  
iii) Min. Illumination: 2500 lux or 0.2 lux  
iv) Focus distance: 30 cm to 60 cm  
v) Video output signal  
vi) Light intensity: Full milky white  
vii) Light source: super bright circular set of L.E.D  
viii) Colour temperature: 6500 k  
ix) Focus: Auto and manual  
x) Green Filter: Electronic  
xi) Magnification: 6x to 40x

**Accessories**

i) Image capture system  
ii) Printer  
iii) Bivalve speculum  
iv) Vaginal side wall retractor  
v) Sponge holding forceps
vi) Long dissecting forceps (at least 20 cm)

vii) Endocervical Speculum

viii) Endocervical curette

ix) Cervical Punch Biopsy forceps

x) Long artery straight forceps

xi) Tray

xii) Vaginal Wall retractor

xiii) Sims Speculum.

xiv) Suitable UPS

Item No. 4:- Specifications of Cardiotocography (CTG):

Detail approximate

i) Colour TFT with tilt adjustment

ii) Wave form display and digits simultaneously.

iii) Advanced digital signal process

iv) Battery backup upto 2-3 hours

v) High resolution thermal printer

vi) Patient data storage of 10 km

vii) Automatic fetal movement detection,

viii) Accessories.

Item No.5:- Specifications of Pulse Oxymeter:

(Plathysmograph probe for adult & neonate, heart rate, PO₂ (digital).

Item No.6:- Specifications of Obstetric labour table :-

- Dimension 72” x 27” approximately
- Stainless top in three sections.
- Trendlenburg position adjustment
- Leg support adjustable with screw
- Hand support
- Drip stand (adjustable with screw)

Item No.7:- Specifications of Cardic Defibrillator :

(With Bi phasic wave facilities)

Item No.8:- Specifications of Vacuum Extractor:-

i) Metallic cup with Medium size 4 nos.

ii) Silastic cup with Medium size 4 nos.
Item No.9:- **Radiant warmer**

Item No.10:- **Specifications of Cryosurgery equipment:**

i) Compressed gas cylinder N₂O or CO₂  
ii) Cryo-Probes  
iii) Cryotherapy gun with handle grip & trigger  
iv) Yoke with a tightening knob & flexible gas conveying tube  
v) Pressure gauge showing cylinder pressure  
vi) Silencer (outlet)  
vii) Examining table  
viii) Adequate light source

Item No11:- **Specifications of Electrosurgical generator for LEEP:**

**Detail approximate**  
i) Voltage-115V/230V  
ii) Frequency-45-65 Hg  
iii) Current-6.25 Amps/4.5 Amps  
v) Low frequency leakage <= 100 micro amps

**Electrical output:**

**Detail approximate**  
i) Frequency-450Khz  
ii) Cut/Blend power : 6-99 watts @ 500 ohm load  
iii) Activation type : Hand switch /Food switch  
v) Smoke evacuation.  

**Accessories:**

i) Ball electrode  
ii) Macro needle type electrodes  
iii) Loops

---

Prof. S. Sekharjit Singh  
Director,  
Regional Institute of Medical Sciences,  
Imphal.